

English Language Education

Gonca Yangın-Ekşi
Sedat Akayoglu
Leonora Anyango *Editors*

New Directions in Technology for Writing Instruction

 Springer

English Language Education

Volume 30

Series Editors

Chris Davison, School of Education, The University of New South Wales, Sydney, NSW, Australia

Xuesong Gao, School of Education, The University of New South Wales, Sydney, NSW, Australia

Editorial Board Members

Stephen Andrews, Faculty of Education, University of Hong Kong, Hong Kong, China

Anne Burns, University of New South Wales, Ryde, NSW, Australia

Yuko Goto Butler, Penn Graduate School of Education, University of Pennsylvania, Philadelphia, PA, USA

Suresh Canagarajah, Depts of Applied Linguistics and English, Pennsylvania State University, University Park, PA, USA

Jim Cummins, OISE, University of Toronto, Toronto, ON, Canada

Christine C. M. Goh, Nanyang Technological University, National Institute of Education, Singapore, Singapore

Margaret Hawkins, Dept of Curriculum & Instruction, University of Wisconsin, Madison, WI, USA

Ouyang Huhua, Faculty of English Language & Cultu, Guangdong University of Foreign Studies, Guangzhou, Guangdong, China

Andy Kirkpatrick, Department of Humanities, Lang & Soc Sci, Griffith University, Nathan, QLD, Australia

Michael K. Legutke, Institut für Anglistik, Justus Liebig University Giessen, Gießen, Hessen, Germany

Constant Leung, Dept of Educ & Prof Studies, King's College London, University of London, London, UK

Bonny Norton, Language & Literacy Educ Dept, University of British Columbia, Vancouver, BC, Canada

Elana Shohamy, School of Education, Tel Aviv University, Tel Aviv, Israel

Qiufang Wen, Box 45, Beijing Foreign Studies University, Beijing, China

Lawrence Jun Zhang, Faculty of Education & Social Work, University of Auckland, Auckland, New Zealand

This series publishes research on the development, implementation and evaluation of educational programs for school-aged and adult learners for whom English is a second or additional language, including those who are learning academic content through the medium of English. The series has a dual focus on learners' language development and broader societal and policy-related issues, including the implications for teachers' professional development and policy support at the institutional and system level. The series seeks to engage with current issues in English language teaching (ELT) in educational institutions from a highly situated standpoint, examining theories, practices and policies with a conscious regard for historical lineages of development and local (re)contextualisation. By focusing on multiple educational contexts and adopting a comparative perspective, the series will transcend traditional geographical boundaries, thus will be relevant to both English-speaking countries and countries where English is a very much an additional, but important language for learning other content. This series will also cross disciplinary and methodological boundaries by integrating sociocultural and critical approaches with second language acquisition perspectives and drawing on both applied linguistics and educational research. In drawing together basic and applied policy-related research concerns, the series will contribute towards developing a more comprehensive, innovative and contextualized view of English language education internationally. Authors are invited to approach the Series Editor with ideas and plans for books. For more information, please contact the Publishing Editor, Natalie Rieborn. E-mail: Natalie.Rieborn@springer.com

Gonca Yangın-Ekşi • Sedat Akayoglu
Leonora Anyango
Editors

New Directions in Technology for Writing Instruction

 Springer

Editors

Gonca Yangın-Ekşi 
Gazi University
Ankara, Turkey

Sedat Akayoglu 
Abant İzzet Baysal University
Bolu, Turkey

Leonora Anyango
South Campus
Community College of Allegheny County
West Mifflin, PA, USA

ISSN 2213-6967

ISSN 2213-6975 (electronic)

English Language Education

ISBN 978-3-031-13539-2

ISBN 978-3-031-13540-8 (eBook)

<https://doi.org/10.1007/978-3-031-13540-8>

© The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature Switzerland AG 2022

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Introduction

Technology has changed our lives dramatically. Language instruction and learning how to write in particular are not an exception. Teachers need to adapt their pedagogical practices in the teaching of writing to effectively integrate technology.

This book aims at responding to the changes and needs of English language learning by offering insight into online writing pedagogical platforms and atmospheres. Language learning enriched with technology, web tools, and applications has become a necessary ingredient in language education internationally. This volume aims at providing an in-depth understanding of writing practices that are responsive to the challenges for teaching and learning writing in local and global contexts of education. It also provides succinct knowledge at the intersection of technology with teaching, learning, and research. The chapters herein creatively take advantage of the affordances of digital platforms and further critiques their limitations. The book also delineates knowledge on concepts, theories, and innovative approaches to digital writing in the field of teaching and learning English. The chapters focus on reviews and guide on practical use of Web 2.0 and multimedia tools. Digital platforms and applications to benefit from in academic writing courses are presented and exemplified. The book also presents research about technology integration in writing classes.

Moving from face-to-face learning to online spaces requires new directions of language learning that will be relevant in the twenty-first century to respond to the rapid changes that underlie teachers work. The importance of disseminating knowledge about national and transnational trends of remote and online learning pedagogies makes the work of this book necessary, if not mandatory.

Inside this volume are three parts that are interrelated. Part one discusses how the advancement in technology can be used in the modern-day language instruction for effective teaching and learning, backed by relevant feedback through engagement of various approaches from a multimodal perspective. One of such approaches is genre-based writing. Genre, understood most simply, is a term for grouping texts together, representing how writers typically use language to respond to recurring situations. Its importance in second language writing instruction is in the way it allows teachers to understand, and make explicit to students, the ways that texts can

be written to achieve particular purposes (Hyland, 2018, p. 2359). Genre-based learning can foster the students' writing ability because the approach asks students to analyze the text's organization and the composition strategies. In order to make writing become systematic, the application of genre-based writing is the key. Genre-based writing has provided a powerful way of understanding situated language use since it is a way of grouping together texts that have similar purposes, structures, and contexts (Visser & Sukavatee, 2020). While extant complexity research has demonstrated that syntactic complexity of L2 English student writers' texts is influenced by topic, genre, and first language, there is lack of studies that examine the impacts of allocating instructional attention to syntactic complexity in in EAP writing contexts as well as those that examine whether or not such pedagogical considerations are worthwhile (Casal & Lu, 2021). This makes Korkmazgil's work in this chapter of particular importance in illuminating GBW.

In Chap. 2, Kaygisiz discusses the affordances and constraints of multimodal writing tasks. This chapter is clear in its advancement of ideas that suggest and persuade the reader to see the importance of multimodal writing tasks. Digital multimodal text making is about combining modes and media functions to make a meaningful entity. It is a staple of technology age and a teaching tool that cannot be ignored. Using digital and multimodal resources means increased possibilities to create a digital story. Digital multimodal text making requires knowledge and skills beyond print-based text making, including photography skills, film skills, film editing skills, image search skills, and audio recording skills, and may involve other literacy learning disciplines, such as art and technology (Dahlstrom, 2021). Alobaid (2021) sees ICT multimedia learning tools like YouTube as an online open-source learning platform with respect to its affordances of captions and their adjustable settings like font size and color (i.e., enhanced captions of videos) that can be efficiently used and recommended for the development of learners' L2 writing accuracy due to their positive and enhancing multimedia learning effects (p. 13). Suggestions on how to ameliorate the constraints that include more efficient ways to assess multimodal writing and prescriptions for teachers' change of attitude make this chapter a crucial part of this book.

In Chap. 3, Yas explores the literature available on wikis for language teaching and learning. The outbreak of COVID-19 brought serious changes that made technology and its access mandatory to L2 learners. This change was abrupt, and many teachers were not prepared to teach language in emergency online schools. Current trends in the field of technology have changed not only the ways of teaching but the methods of learning as well. The use of technology has reached its potential stage in teaching and learning. ELT teachers and learners are mostly involved in utilizing social media platforms and wikis in the process of teaching and learning in their classrooms. Accordingly, teachers who have the ability to use social media for their students in terms of writing will give better results while compared to the ones untrained on how to use social media (Haidari et al., 2020). The development of new technological tools has allowed the convergence of different learning environments, traditional face-to-face learning and virtual or online learning, increasing the possibilities that people have to learn a L2. In a study, pre-service teachers perceived

that the use of wikis and discussion boards used to develop the E-activities allowed them to improve their writing skills in English and promoted autonomous and collaborative learning in a B-learning environment (Sanchez-Gomez et al., 2017). Such support from research helps determine the continued importance of wikis in language learning.

In Chap. 4, Asik elevates the importance of digital storytelling in assisting English language learners to improve writing skills. Storytelling is one of the methods used in English language teaching and learning. Many cultures around the world utilize storytelling in learning and meaning-making. While traditional storytelling has been utilized in teaching for years, digital storytelling has become more prominent as technology's importance rises. Digital storytelling involves incorporating digital media such as audio, videos, and images into the desired applications. It was found to be appealing to the students because it combines the handling of digital tools with their current skills (Ahmad & Yamat, 2020). With the advent of information communication technologies, an escalating number of youths is communicating, creating, and sharing narratives via Web 2.0 social networks. To ensure the continuity between in-class and out-of-class literacy practice, digital storytelling has become increasingly prevalent in educational settings (Chiang, 2020). Digital storytelling can be utilized as a writing tool for fruitful communication as it has the potential of allowing learners to transmit their designed messages in various modes by enlarging their representation in the EFL/ESL classrooms (Kazaoglu & Bilir, 2021).

In Chap. 5, Kiyamaz discusses audio feedback and illumines its importance to language teaching and learning. This study gives in-depth information on how students and teachers can gain from audio feedback. Typically, online instructors provide comments to students in text form. The use of audio comments through MP3 files has become an alternative. Another trend that has influenced research on feedback in general, and audio feedback, in particular, has been the development of online classes. Students have a greater ability to detect nuance more effectively, understand content more thoroughly, and engage with the instructor at a more personal level through audio feedback than through written feedback. Students in the study noted that the instructor's tone was quite favorable when receiving audio comments (Cavanaugh & Song, 2014). Along with increased involvement and enhanced learning community interactions between the students and the teacher, audio feedback was associated with increased retention of content. The advances in technology over the last decades have opened new possibilities for feedback in the form of podcasts or other digitally recorded means, such as Telegram or WhatsApp. Needless to say, more research on examining the effect of using oral feedback at different language proficiency and education levels will enlighten both teachers and teacher educators (Solhi & Eginli, 2020). This chapter broadens the knowledge on the topic.

Savasci and Akcor's Chap. 6 takes a keen look at screencasting as a way of providing meaningful multimodal feedback to distance learners. Research has underscored the importance of screencasting in online teaching and learning. In a 2018 screencast study, audio feedback is given credence. The results of the study suggest

that screencast technology can offer particularly beneficial affordances not only for writers in the EMI classroom but also for academics who wish to deliver quality formative feedback and engage students in the learning process (Kim, 2018, p. 46). In another study, majority of students perceived screencast feedback positively for being clear, personal, specific, supportive, multimodal, constructive, and engaging. Screencast feedback proved effective in improving EFL students' essay writing skills. Students in this study demonstrated a positive attitude toward feedback and perceived it to be succinct, unambiguous, multimodal, personal, feed forward, and motivating. Ali (2016) stated that future studies are needed to explore the use of screen casting on developing other language skills (Ali, 2016). This chapter is a contribution to that need.

Ayar's chapter on using Vlogs to improve ELL's writing prowess is a welcome addition to this volume. Today, mobile technology is changing the landscape of language learning and is seen as the next frontier being researched for its potential in enhancing the teaching and learning of ESL (Hashim et al., 2018). Technology-improved learning is able to motivate the learning process and enhance its outcomes. Mobile phones have effectively integrated into the youths' lives, thus becoming an important part of their life. The attractiveness of mobile technologies among learners keep nudging educators to pay attention to using it as an educational tool. The integration of mobile devices in the writing lessons can assist student in developing their levels in writing skills (Jassim & Dzakiria, 2019). In Chap. 8, Yesilel furthers the importance of Mobile-Assisted Language Learning (MALL) by showing how it has been proven to bring many benefits for students. Several researchers have indicated that students can and do access e-books and demo classes through their mobile phones anywhere and at any time. Today, there is a shift from teacher-led learning to technology-led learning, and many students are using MALL software for different language learning and believe that this technology-led learning is more effective in acquiring knowledge and preparing them for the future (Habib et al., 2022). In the age of digital natives, therefore, this chapter gives the book an edge in having reviewed studies on this topic for teachers and learners to rely on.

Part II of the book digs deep into technology's role in academic writing. The section begins with Cangir's bold approach to using corpus tools for academic writing. Corpus is generally defined as a large collection of authentic texts in electronic format. Corpus-based language teaching has been praised as a revolution in teaching (Guzal, 2022). The corpus consultation was shown to be the most successful for checking simple grammatical points and collocations and finding proper synonym or antonym. The inclusion of language reference tools such as concordance tools and online dictionaries can improve students' ability to proofread and edit the surface levels of their writing. Research shows that corpus tools enable learners to build up their confidence in writing by checking their hypotheses and going beyond their current linguistic repertoire (Kotamjani et al., 2017). Guzal (2022) posits that although the application of some software and tools is time consuming and/or may demand some additional training out of the classroom, the effectiveness of corpus-based DDL technologies was successfully applied and warmly welcomed in

designing classroom materials by English language teachers. In this chapter, the author shows how learning can enhance and guide academic writing for learners. Better still, the chapter offers ideas on how corpus tools can be used in hands-on settings.

Chapter 10 takes a close look at Automated Writing Evaluation (AWE). In the chapter, Ersanli and Yesilel show the effectiveness of this software to quickly provide necessary feedback to students. Research on the effects of Written Corrective Feedback (WCF) provided by Automated Writing Evaluation (AWE) systems in the ESL classroom illustrates three main benefits. Such feedback can alleviate teacher workload, improve learners' L2 development, and promote learner autonomy and motivation to write (Woodworth & Barkaoui 2020, p. 238). It can be concluded that software feedback might support learners' writing achievement when teacher feedback is elusive or it can be used as supplementary to the teacher feedback. Automated feedback tools can be viewed as a cost-effective way to fix and improve learners' written outputs by providing timely and limitless feedback. They could also reinforce the learners to put efforts to accomplish the given tasks and sustain their motivation in the long term (Taskiran & Goksel, 2022). Given the time invested by teachers in grading student work, this software is a breath of fresh air in an otherwise daunting task.

Chapter 11 offers a conglomeration of research-based writing practices used in technology. This collection of writing practices is one that would serve language teachers well. In order for English teachers to prepare their students for the literacy demands of the twenty-first century, they need a critical framework and pedagogical practices that engage with the ever-evolving information, media, popular culture, and technology. Critical media literacy offers the theoretical framework and critical pedagogy necessary to begin this journey to better prepare teachers for the literacy demands of today and tomorrow (Share & Mamikonyan, 2020). Today, more than ever before, English language educators recognize the importance of using digital resources to teach students in a variety of modalities. Current circumstances have caused schools, universities, institutes, and colleges all over the world to rethink the way we teach and learn. The demonstration of language competence is clearly moving from pencil and paper toward digital platforms (Sartor, 2020), thus the importance of this chapter to this collection.

Chapter 12 outlines the possibilities of myriad technological tools in improving writing instruction. In it, Yuksel et al. provide varied examples of tools from research as they also add samples that would readily benefit teachers. The hegemony of technology and its dominance over education caused the necessity to make changes in the philosophy of language teaching (Ipek & Mutlu, 2022). Learners have a strong belief in the efficacy of digital learning activities of English beyond classroom. Unlike conventional teaching activities, which has been teacher centered, the participants exhibited an awareness of using digital technologies to learn English beyond a formal classroom. The learning activities could be conducted by means of available social networking sites, i.e., Youtube, WhatsApp, Facebook, Instagram, and Google Classroom (Nugroho & Atmojo, 2020). The challenge inherent in these tools is the availability of stable internet connections, especially for low-income

families. However, this availability ought to be ensured for both teachers and students for effective and smooth e-learning; otherwise, online teaching will not be able to deliver quality education whatsoever (Sahal et al., 2022, p. 8).

In Chap. 13, Uney discusses plagiarism and ways to ameliorate this problem in the academic circles that has been exacerbated by the use of technology in writing. Many universities turn to software detection for help in detecting and dealing with it (Graham-Matheson & Starr, 2013). Source-based writing research has received much attention in recent years, which generally shows that both novice and expert EFL (English as a foreign language) writers have difficulties in writing from sources. Many institutions of higher education attach increasingly more importance to publications in international journals. It may be necessary to think realistically that it is not only professors who should take charge of teaching skills to avoid plagiarism. University curriculum developers and institutions also have a role to play because, on the one hand, they structure the training and exit profile of students and, on the other hand, it is the institutions that certify the degrees awarded (Peters & Cadiuex, 2019, p. 12). The issue of plagiarism, therefore, is a crucial part of this book.

Part III, “Research in Action,” is a chapter that sheds light onto teaching and learning tools and activities that move teachers into action. In this part, teachers are seen acting and reacting on their knowledge of technology and how it enhances their teaching activities. In Chap. 14, Bal-Gezegin et al. take us back to corpus, and this time focusing more on it in action. Showing how preservice teachers use corpus, the authors give us an inside look into real situations in teachers’ voices on how they utilized corpus. In recent years, corpus-based technologies have received unparalleled expansion and development. Along these lines, corpora have extended into various educational contexts, especially in language teaching and learning. Teachers do not have deep knowledge of corpus linguistics and the role of corpora in language teaching and learning (Xodabande & Nazari, 2022). Through corpus-based techniques, teachers and students can become aware of which academic words are frequent in course texts, and teachers can use this information to guide instruction. Instruction in academic vocabulary is a vital way to stress language development within SCLT (Donley, 2001). CL has evolved, continuing its dynamic internet-based period in the 2010s into the present to become a go-to approach in empirical investigations of language variation and use. A teacher-trainer developing materials about oral respect markers in a task-based business interaction may construct a corpus of naturally occurring speech in the workplace (Friginal, 2018). Seeing teachers excited about corpus gives it longevity in the circles of teaching writing.

Bilki and Irgin, in Chap. 15, discuss how blogging can build collaboration in revision in L2 writing. They highlight the effectiveness of blogging as effective in providing a space for learners to conduct peer review for their academic writing. Nezaratgoo and Fathi (2019) found that blog-mediated writing instruction resulted in the enhancement of metacognitive and cognitive elements of learner autonomy. He also discussed how through experiencing the blog-mediated writing course, the students gained a sense of more confidence and autonomy in their learning because

they learned how to learn on their own outside the class, in addition to being instructed by their teacher inside the class (p. 184). L2 writing instructors should be aware of the focus of the peer comment training process and should explicitly train L2 writers in the types and provision of comment areas in the writing practices experienced in a blog-based writing platform. This present study that presents a process-based writing procedure in an online setting can be an inspiration for writing instructors in building a blog-based writing course and peer review culture. A process-based writing procedure in an online setting can be an inspiration for writing instructors in building a blog-based writing course and peer review culture (Bilki & Irgin, 2021).

Meri-Yilan, in Chap. 16, discusses how online journals can enhance interaction and autonomy for both teachers and learners. Promoting meaningful learning and improving learners' motivation are essential for students' success, and teachers should become involved in this process. The use of ICT in the classroom is one of the options available in many educational institutions to increase student motivation. Penzu helps increase the motivation of students through the use of technology, and it also allows for the enhancing of metacognitive skills (Bort-Mir, 2021). The personal nature of journals is a good way of enhancing student writing as the learners engage their minds while also focusing on improving their writing. Reading about students' perceptions bring other teachers closer to the knowledge that students gain in writing the journals via Penzu and email.

In Chap. 17, Cengiz provides the readers with practical lessons learned from using wikis. The use of virtual workspaces fosters TEFL students' linguistic competencies of the target language and collaborative work. Students perceived that the instructions offered were clear, and they could work in a positive learning environment that allowed equal participation for everyone (Castilo-Cuesta et al., 2022). Pre-service teachers considered online classroom management important. Group work and collaboration were found to be advantageous, emphasizing the teachers' role in promoting online collaboration. In addition, creating online learning communities was seen as essential to boost learners' sense of belonging to the online class, leading to improved engagement and reduced feelings of isolation (Taghizadeh & Amirkhani, 2022). This chapter therefore provides information that extends knowledge on the practicality of wikis by providing an example of a writing course. Readers get to see the practicality of wikis after reading earlier theoretical chapters on the same topic.

The overarching aim of this book is to provide tools that would make L2 teachers and learners stay motivated as they learn and improve their writing through technology. The book ends on a high note with its final chapter focusing on motivation of learners. Zeybek et al. discuss the use of Wattpad in motivating learners. When peer comment activity is well-designed to train the students in the classrooms either with or without technological supports, it remains effective in terms of helping students to enhance their writing skills (Ho et al., 2022). This final chapter is all important in the advice for motivation when it comes to motivation of students in online environments.

Acknowledgements This book project would not have been possible without LET-IN R&D, a non-profit research group based on the use of technology in language teaching.

Bibliography

- Ahmad, W. I., & Yamat, H. (2020). Students perceptions on learning English language through conventional and digital story telling. *International Journal of Academic Research in Business and Social and Sciences*, 10(2), 484–504.
- Ali, A. D. (2016). Effectiveness of using screencast feedback on EFL students' writing and perception. *English Language Teaching*, 9(8), 106–121.
- Alobaid, A. (2021). ICT multimedia learning affordances: Role and impact on ESL learners' writing accuracy development. *Heliyon*, 1–15.
- Bort-Mir, L. (2021). Using PenzuTM for academic online diaries to enhance metacognitive skills in higher education. *The EuroCALL Review*, 28(2), 50–63. <https://doi.org/10.4995/eurocall.2020.12756>
- Casal, J. E., & Lu, X. (2021). Maybe complicated is a better word: Second language English graduate student responses to syntactic complexity in a genre-based academic writing course. <https://doi.org/10.3828/ijeap.2021.7>
- Castillo-Cuesta, L., Ochoa-Cueva, C., & Cabrera-Solano, P. (2022). Virtual workspaces for enhancing collaborative work in EFL learning: A case study in higher education. *International Journal of Emerging Technologies in Learning (iJET)*, 17(2), 4–18. <https://www.learntechlib.org/p/220471/>
- Cavanaugh, A. J., & Song, L. (2014). Audio feedback versus written feedback: Instructors' and students' perspectives. *MERLOT Journal of Online Learning and Teaching*, 10(1), 122–138.
- Chiang, M. (2020). Exploring the effects of digital story telling: A case study of adult L2 writers in Taiwan. *IAFOR Journal of Education: Language Learning in Education*, 8(1), 65–82.
- Dahlstrom, H. (2021). Students as digital multimodal text designers: A study of resources, affordances and experiences. *British Journal of Educational Technology*, 53, 391–407.
- Donley, K. M. (2001). Using corpus tools to highlight academic vocabulary in SCLT. *TESOL Journal*, 10(2–3), 7–12.
- Friginal, E. (2018). *Corpus linguistics for English teachers* (Vol. 10, p. 9781315649054). Routledge.
- Graham-Matheson, L., & Starr, S. (2013). Is it cheating or learning the craft of writing? Using Turnitin to help students avoid plagiarism. *Research in Learning Technology*, 21, 1–13.
- Guzal, N. (2022). Corpus-based data driven learning to develop senior students' research writing skills: Practical insights. *Bulletin of Science and Practice*, 8(1), 236–246.
- Habib, S., et al. (2022). Mobile assisted language learning: Evaluation of accessibility, adoption and perceived outcome among students of higher education. *Electronics*, 11, 1113. <https://doi.org/10.3390/electronics11071113>
- Haidari, M., Katawazai, R., & Mohd Yusof, S. (2020). *The use of social media and wikis in teaching writing skills: A review article*. International Association of Online Engineering. Retrieved June 4, 2022 from <https://www.learntechlib.org/p/217808/>
- Hashim, H., et al. (2018). Learning through mobile: exploring the views of Polytechnic ESL learners. *Journal of Teaching and Learning English in Multicultural Contexts*, 2(1), 57–62.
- Hyland, K. (2018). Genre and second language writing: Framing the issue. *The TESOL Encyclopedia of English Language and Teaching*.
- İpek, Ö. F., & Mutlu, H. T. (2022). English outside the classroom in the age of technology: A concurrent triangulation mixed method study. *International Online Journal of Education and Teaching (IOJET)*, 9(1), 104–122.
- Jassim, L. L., & Dzakiria, H. (2019). The effect of utilizing on developing English writing skills. *Opcion*, 19, 2128–2143.

- Kazazoglu, S., & Bilir, S. (2021). Digital story telling in L2 writing: The effectiveness of Storybird Web 2.0 tool. *TOJET: The Turkish Online Journal of Educational Technology*, 20(2), 44–50.
- Kim, V. (2018). Technology-enhanced feedback on student writing in the English-medium instruction classroom. *English Teaching*, 73(4), 29–53.
- Kotamjani, S. S., et al. (2017). Online corpus tools in scholarly writing: A case of EFL postgraduate student. *English Language Teaching*, 10(9), 61–68.
- Nezaratgoo, B., & Fathi, J. (2019). Second language writing through blogs: An investigation of learner autonomy. *Iranian Journal of Applied Language Studies*, 11(2), 165–190. <https://doi.org/10.22111/ijals.2019.5448>
- Nugroho, A., & Atmojo, A. E. P. (2020). Digital learning of English beyond classroom: EFL learners perception and teaching activities. *Journal of English Education and Linguistics Studies*, 7(2), 219–243.
- Peters, M., & Cadieux, A. (2019). Are Canadian professors teaching skills and knowledge students need to prevent plagiarism? *International Journal for Educational Integrity*, 15, 10. <https://doi.org/10.1007/s40979-019-0047-z>
- Sahal, S., et al. (2022). Teaching during the pandemic: Do university teachers prefer online teaching? *Heliyon*, 8, 1–9.
- Sancez-Gomez, et al. (2017). The impact of wikis and discussion boards on learning English as a second language. A mixed methods research. *Digital Education Review*, 32, 35–59.
- Sartor, V. (2020). Digital age pedagogy: Easily enhance your teaching practice with technology. *English Teaching Forum*, 58(3), 2–9.
- Share, J., & Mamikonyan, T. (2020). Preparing English teachers with critical media literacy for the digital age. *Contemporary Issues in Technology and Teacher Education*, 20(1), 37–54.
- Solhi, M., & Eginli, I. (2020). The effect of oral feedback on EFL learner's writing. *Journal of Language and Linguistic Studies*, 16(1), 01–13.
- Taghizadeh, M., & Amirkhani, S. (2022). Pre-service EFL teachers' conceptions and strategy use in managing online classes. *System*, 104.
- Taskiran, A., & Goksel, N. (2022). Automated feedback and teacher feedback: Writing achievement in learning English as a foreign language at a distance. *Turkish Online Journal of Distance Education – TOJDE*, 23(2), 120–139.
- Visser, P., & Sukavatee, P. (2020). Effects of the genre-based writing instructional model in a blended environment. *Journal of Education Naresuan University*, 22(2), 1–15.
- Woodworth, J., & Barkoui, K. (2020). Perspectives on using automated writing evaluation systems to provide written corrective feedback in the ESL classroom. *The Canada Journal*, 37(2), 234–247.
- Xodabande, I., & Nazari, M. (2022). Impacts of corpus linguistics course on in-service ESL teachers' corpus literacy. *Computer Assisted Language Learning Electronic Journal*, 23(1), 318–346.

Contents

Part I Web 2.0 and Multimodality

Technology-Enhanced Genre-Based Writing	3
Sibel Korkmazgil	
Affordances and Constraints of Multimodal Writing Tasks	17
Seval Kaygısız	
Wikis for Language Teaching and Learning	33
Ece Yaş	
Digital Storytelling: An Alternative Method and a Multimodal Task to Improve Writing Skill of English Language Learners	69
Asuman Aşık	
Pedagogically Sound: Audio Feedback as an Alternative to Written Feedback in Distance Education: EFL/ESL Students' and Teachers' Perceptions and Its Effectiveness	81
Merve Kıymaz	
Multimodal Technology-Mediated Feedback in Second Language Writing Classes Through Screencasting	107
Merve Savaşçı and Gizem Akçor	
The Advantages of Using Vlogs for English Language Learners' Writing Performance	123
Zülal Ayar	
Utilizing Mobile Technology to Improve Writing Skill	147
Deren Başak Akman Yeşilel	

Part II Using Technology for Academic Writing

Using Corpus Tools for Academic Writing in EFL Settings: A Data-Driven Learning Approach	171
Hakan Cangır	
The Use of Automated Writing Evaluation Tools to Foster ESL Writing Instruction	193
Ceylan Yangın Ersanlı and Deren Başak Akman Yeşilel	
Digital Writing Practices in the Information Age: Possibilities and Implications for English Language Teachers and Learners	211
Ömer Özer and Ceyhun Yükselir	
Academic Writing Instruction Beyond the Classroom Walls: New Possibilities and Implications for English Language Teachers and Learners	233
İlknur Yüksel, Banu Çiçek Başaran Uysal, Emine Eren Gezen, and Ümit Özkanal	
Avoiding Plagiarism in the Information Age: Tools and Recommendations	259
Mertcan Üney	

Part III Research in Action

“Corpus Made My Job Easier”: Preservice Language Teachers’ Corrective Feedback Practices in Writing with Corpus Consultation	279
Betül Bal-Gezegin, Erdem Akbaş, and Ahmet Başal	
Blogging to Build Collaborative Evaluation in L2 Writing	297
Zeynep Bilki and Pelin Irgin	
Exploring Student-Teacher Interaction and Learner Autonomy Through Writing Online Journals via Emails and Penzu: A Mixed-Method Analysis of Turkish Students’ Perceptions	317
Serpil Meri-Yılan	
Using Wikis for Collaborative EFL Writing: Lessons Learned from an Online Writing Course	339
Behice Ceyda Cengiz	
The Effect of an Online Writing Community on ELT Students’ Academic Writing Motivation	367
Gülin Zeybek, Nihan Erdemir, and İdil Sayın	

Part I
Web 2.0 and Multimodality

Technology-Enhanced Genre-Based Writing



Sibel Korkmazgil

Abstract Writing has gained greater attention in today's increasingly text oriented world. Technological advances have not only led to the emergence of new digital genres and new writing skills, but also provided new opportunities for learning to write in a second/foreign language. Thus, this chapter aims to discuss how genre-based writing (GBW) mediated through technology can create invaluable opportunities for second language (L2) writers to have knowledge and practice of writing within different genres in- as well as out-of-the class. In this respect, the chapter begins with a brief discussion on the GBW including the concept of genre, sociocultural theories of learning underlying GBW, benefits and challenges of integrating GBW in L2 writing, and the teaching-learning cycle as a teaching methodology that might be used in L2 writing classes. Then, the chapter provides practical suggestions with regard to the integration of several technological tools through GBW tasks and concludes with a sample task which illustrates the stages and procedures in a writing class following a genre-based approach to digital storytelling.

Keywords Genre-based writing · L2 writing · Technology for language writing

1 Introduction

Writing has become one of the most essential skills in today's highly text-oriented world. Success in many fields necessitates advanced writing skills. It might be very common for L2 writers to use Word-processing tools, e-dictionaries, e-translators or google a topic to collect information before writing. Several other digital tools are available for L2 writers to generate ideas, connect information in new ways and edit their texts. Using such digital tools and having much of our writings online clearly

S. Korkmazgil (✉)
Sivas Cumhuriyet University, Sivas, Turkey
e-mail: skorkmazgil@cumhuriyet.edu.tr

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_1

necessitate new literacy skills for L2 writers (Godwin-Jones, 2015). Recent research has stressed the significance of knowledge and skills on L2 writing (Chen, 2016; Chun et al., 2016; Elola & Oskoz, 2017; Kern et al., 2017). Besides, technological advances have had a major impact on the ways we write, the genres we create, and the ways we engage with readers. L2 writers will need “a wide repertoire of writing skills and genre knowledge, from applying the appropriate language register when participating in social media to ensuring language is grammatically correct in writing formal reports” (Godwin-Jones, 2018, p. 1). Thus, integrating technology in writing not only helps L2 learners develop their language proficiency but also gives them opportunities to practice new literacy and research skills that they will definitely use in their future occupational, social and personal lives.

Two main approaches have been traditionally used in L2 writing instruction. These are the product and the process approaches. While the first focuses on the students’ final production, the latter concentrates on the writer and the steps s/he follows to produce a text. However, Genre-based writing (GBW), which focuses on the reader and the ways in which the writer engages with a group of audience in a particular social context, has gained greater attention and popularity in recent years. GBW considers writing as a social practice or a communicative act (Hyland, 2003; Martin, 1992; Swales, 1990). Adopting a genre based approach to writing, language teachers can encourage L2 learners to gain information about a given genre and with that knowledge, they can create their writings within that genre. Considering the indispensable nature of the relationship between text, writer and reader, genre-based collaborative writing tasks mediated through technology can provide invaluable opportunities for L2 writers to have knowledge and practice of writing within different established and newly emerging genres in-class as well as out of the class.

2 Genre-Based Writing

We write to achieve several purposes. We write, for example, to tell stories, to communicate ideas, to interact with others (e-mails, chat messages, thank-you cards), to remember (shopping lists, to do lists, dairies), to give information (journal articles, ads) as well as to get information. Thus, we write to achieve some purpose and we follow some conventions for organizing our messages so that our readers can understand our purpose. As Hyland (2003) points out, “(t)hese abstract, socially recognized ways of using language for particular purposes are called genres” (p. 18). Three important elements of writing might be inferred out of the above explanation: that is, the audience, the purpose and the form. Social purposes of some genres of schooling identified as critical to success in educational contexts are shown in Table 1.

Considering the potential audience and his/her purpose of writing, a writer conveys his or her message using several language structures and vocabulary. The reader, on the other hand, interprets the writer’s purpose in his or her own way, without overlooking what the writer wants to convey. Thus, using the patterns of a

Table 1 Some educational genres

Social purpose	Genre
To provide information about a particular person, place or thing ⁷	Description
To provide information about a class of things	Information report
To tell someone how to do something	Procedure
To tell what happened	Recount
To explain how or why a phenomenon takes place	Explanation
To explore the human condition through storying	Story genres
To respond to a literary text or artistic work	Response genres
To mount an argument	Exposition

Adapted from Derewianka (2003, p. 137)

genre acknowledged by readers for accomplishing their purposes, writers can establish a working relationship with readers. For example, when we write a letter of complaint to a company for a broken product, when we write a letter of intention to apply for a graduate program or when we write recipes, the genres appropriate for those occasions help us organize the information so that readers can more easily make sense of what we are trying to convey. Thus, “it is through genres that individuals develop relationships, establish communities, and achieve their goals. Without the familiar structure that genres give to social events, we would be unable to conduct the most basic interactions of everyday life” (Hyland, 2004, pp. 1–2). It is possible, then, to define genre as an abstract, goal oriented, staged and socially recognized process through which members of a community interact to achieve some goals (Halliday, 1994; Martin, 1992; Swales, 1990).

Three approaches to genre have been evident in educational contexts: English for Specific purposes (ESP), New Rhetoric studies and systemic functional linguistics (Hyland, 2003; Hyon, 1996; Johns, 2002). ESP is mostly concerned with helping learners recognize and learn the patterns of language that various academic and occupational contexts demand. While “ESP scholars’ focus lies in analyzing communicative purpose and formal language features of genres in these contexts” (Hammond & Derewianka, 2001, p. 186), New Rhetoric focuses more on the social and cultural contexts where genres occur. Systemic functional linguistics (SFL), on the other hand, suggests that the forms and structures of genres are not fixed but situated and considers language as a resource for making meaning in a particular context of use (Halliday, 1994).

Considering the popularity of GBW in recent years, Hyland (2004) argues that “genre pedagogies have emerged in L2 writing classes as a response to process pedagogies, as an outcome of communicative methods, and in consequence of our growing understanding of literacy” (p. 7). Process approaches, widely used in L2 writing classes, are generally criticized for not providing learners with necessary instruction about the linguistic knowledge, grammar and the text structure and for assuming a restrictive view of writing process that consists of a universal pattern that might be applied to any piece of writing regardless of the content and the context. Perhaps because of its emphasis on the use of skills such as planning, drafting

and rewriting, these approaches might deal mostly with certain school-sponsored types of writing while the ignoring other socially recognized ones (Lin, 2006). GBW, on the other hand, suggests that L2 learners need not only explicit instruction provided through analyzing and studying models of genres, they also need opportunities both to collaborate with others and compose texts individually. With its focus on the processes of meaning making and language use in context to achieve some communicative purposes, GBW provides invaluable benefits both for L2 teachers and learners. Hyland (2004) summarizes the main advantages of GBW as follows:

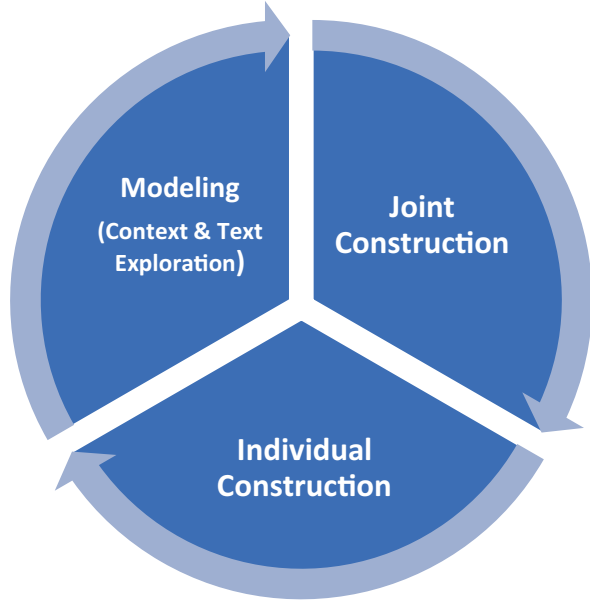
- Explicit. Makes clear what is to be learned to facilitate the acquisition of writing skills
- Systematic. Provides a coherent framework for focusing on both language and contexts
- Needs-based. Ensures that course objectives and content are derived from student needs
- Supportive. Gives teachers a central role in scaffolding student learning and creativity
- Empowering. Provides access to the patterns and possibilities of variation in valued texts
- Critical. Provides the resources for students to understand and challenge valued discourses
- Consciousness raising. Increases teacher awareness of texts to confidently advise students on their writing (Hyland, 2004, pp. 10–11)

2.1 Teaching- Learning Cycle in GBW

GBW highlights the importance of purpose of writing, the intended audience and social and cultural context, which determines linguistic features and structures of a text. Since the focus is on the writer-reader interaction through several genres that necessitate socially recognized ways of using language forms to achieve different purposes, GBW highlights the explicit teaching of the linguistic conventions of a genre with regard to language features, vocabulary choice and schematic structure. Many writing teachers who adopt a genre-based approach to writing often use the teaching-learning cycle (Derewianka, 1990; Hammond et al., 1992) that involves mainly three phases (shown in Fig. 1); these are:

- (a) modeling (including context exploration and text exploration) where the teacher encourages students to discuss and analyze the social function of a given genre, the context, linguistic features and text structure,
- (b) joint negotiation / construction where teacher and students construct text together,
- (c) independent construction where students, going through several stages of writing such as drafting, rewriting and editing compose their own text following the patterns and conventions within that genre.

Fig. 1 Teaching-learning cycle



GBW instruction does not prescribe a single set of teaching techniques since L2 learners all over the world might have different learning goals, needs, motivation and characteristics. Hyland (2003) describes this method as “a process of contextualizing-modeling-negotiating-constructing” (p. 21) and this cycle outlines the staged tasks suggested in a writing class which has chosen a genre as its central focus. The teaching-learning cycle begins with context-exploration and forming a knowledge base, and proceeds with text exploration based on modeling texts (Derewianka, 1990). It is important to note that instruction begins with a focus on the whole text and social and cultural context where that piece of writing is written; in other words, learners are encouraged to recognize the structures at the discourse level rather than language features at sentence level. Activities move from more controlled and guided to the independent. As students gradually grasp the procedures and patterns of the genre, they are given more autonomy and control over their writing. Joint construction of a text is conducted through cooperative learning that might have different interaction patterns such as teacher to students and students to students in pair or group works. Following the joint construction, learners are invited to write individually their own texts of the genre being learned.

3 Integrating Technology into Genre-Based L2 Writing

GBW can encourage L2 learners to employ several technological tools in and out of the classroom while going through the stages of the teaching-learning cycle discussed in the previous section. Even a simple google search might help them find

authentic examples of a given genre and study its conventions and linguistic features or collect information for their writing. The most commonly used Word-processing tools such as cutting, copying, pasting text and images, and spelling or checking grammar might well help them revise and edit their writings. L2 writers might need help for a wide range of topics while including vocabulary selection, referencing and guides for writing process, research, and writing in different genres. Online Writing Labs (OWLs), for example, which many colleges and universities offer freely, can be a good source for L2 learners interested in writing especially academic-genres. The OWL at Purdue University, Guide to Grammar and Writing by Capital Community College, Writing@CSU (Colorado State University) and The Excelsior College OWL can be given as examples of such OWLs.

While learners are constructing a text together with their peers or going through several stages of writing in their individual construction of a text following the patterns and conventions within a specific genre, L2 teachers can encourage learners to refer to corpus-based tools (i.e. The Corpus of Contemporary American English, Linggle, Voyant and Sketch Engine) to gain access to examples of authentic language use in collections of electronic texts, and review vocabulary and linguistic features to make appropriate choices in their writing. Research focusing on corpus-based pedagogies, data-driven learning, has yielded promising results with regard to fostering learner writer autonomy and language learning (Chen, et al., 2015; Crosthwaite et al., 2021; Li et al., 2017; Yoon, 2008). The Corpus of Contemporary American English (COCA) is one of the most widely used corpus tools of English. It contains more than one billion words of text from different genres such as spoken, fiction, popular magazines, newspapers, academic texts, web pages and blogs. When L2 learners search for a word, COCA allows them to use five options called as translate, google, image, pron/video and book. Translation of the word is given in several languages while the google and image options bring the texts or the images where that specific word is used. Pron/video allows users to connect to YouGlish which makes it possible to watch the segments of several videos published on YouTube where that word is uttered. Finally, the book section shows the books including the word that they are interested in. It is also possible for L2 writers to discover or check collocations and synonyms.

At the last stage of the teaching-learning cycle in GBW, learners are encouraged to write individually their own texts following the conventions and the patterns of the genre being learned. In this regard, learners might benefit from the corrective feedback that technological tools might offer to revise and edit their writings. Automated writing evaluation (AWE) systems, developed through Natural language processing (NLP) techniques and machine learning, can provide both native speakers and L2 learners with automated corrective feedback regarding their writings (Shermis et al., 2013). The ETS Criterion, Turnitin and Writing Pal are some examples of widely used AWE systems. The ETS Criterion, for instance, is an online commercial writing assessment tool, which automatically scores essays and provides L2 learners with immediate feedback on their grammar, usage, mechanics, writing style and organization. In addition to the holistic score and automated individualized feedback, Criterion provides an essay-planning tool and the Writer's

Handbook that helps users understand the identified errors and use the feedback provided. Furthermore, this AWE system allows for teacher and peer feedback. Thus, it can be used for several purposes in GBW. Teachers, for instance, can design a prewriting activity in which learners use the tool to plan their essays, create assignments for learners to complete in the ETS Criterion and facilitate a peer-feedback activity. L2 learners can also use this AWE system as a reference tool to revise their writings before they submit to the teacher.

3.1 Genre-Based Collaborative Writing & Technology

The methodology applied within the genre approach has largely been based on the socio-cultural theories of learning. Vygotsky's (1978) idea of Zone of Proximal Development (ZPD) and Bruner's (1983) conceptualization of scaffolding have been influential in L2 classrooms. Vygotsky suggests that learning occurs best when learners engage in tasks within their ZPD. The notion of ZPD refers to the difference between what a learner can do on his or her own without help and what he or she can accomplish with guidance or assistance. "Learning evolves from verbal interaction and task negotiation with a more knowledgeable person, and the teacher has a central role in "scaffolding" this development." (Hyland, 2003, p. 21) Thus, GBW highlights that writing is a social activity and learners learn best when they work together, support one another to encourage new ways to form, construct and reflect on knowledge. Rather than working alone in a writing task, collaborative writing allows L2 students to engage in negotiation and creation of meaning. The view of writing as a social act, which was heavily emphasized at GBW, has sparked an increased interest in collaborative writing. The role of technology in GBW becomes paramount when it comes to collaborative writing activities since technology offers invaluable opportunities which facilitate online collaboration and effective communication while learners are working on a joint construction of a text following a specific genre. In fact, the last decade witnessed a growing interest in L2 writing using Web 2.0 tools, social media sites, the computer-mediated communication (CMC) and telecollaboration.

Google Docs, for example, as a tool for collaborative writing is developed by Google Inc. and it is a free online word processor which allows users to create, edit and share Google Docs files. Google Docs offers opportunities different from traditional word processing software or other collaborative tools such as wikis and blogs since it allows multiple users to collaborate in real time on a shared file. Different colors indicate which user is writing or editing and Google Docs automatically keeps a composing and revision history. L2 learners can publish their writings online or download them in different file formats. "The simultaneous writing and editing functionality Google Docs supplies supports the interaction hypothesis of SLA, namely that learners profit in their language learning from communication interactions with others" (Godwin-Jones, 2018, pp. 4–5).

In their study, Kessler et al. (2012) explored collaborative writing practices of thirty-eight Fulbright scholars in an orientation program who used Google Docs to collaboratively plan and report on a research project. The participants were found to collaborate successfully in groups and appreciate various aspects of this collaborative writing experience such as playing an important role in the construction of the writing, getting feedback from group members and feeling that their contributions were valued by group members (Kessler et al., 2012, p. 106). Likewise, Google Docs can be used as an effective online tool for collaborative writing tasks in GBW. To illustrate, let us assume that the genre of 'information report' is chosen as the central focus of a writing class. Having gone through context and text exploration based on modeling reports and learned about the linguistic conventions and text structure of that genre, L2 learners might be divided into groups and using Google Docs each group might be asked to produce an information report that provides information about a different class of things. Using it for group collaboration, teachers can assign each group with its own shared online writing space. Group members can brainstorm as a group, collaborate and get feedback in real time on their report, plan and edit their writing. If the teacher connects all the pages to his or her Gmail account, then s/he can monitor all the writing process and provide feedback as well.

CMC tools can facilitate collaboration and feedback at various stages of writing (Oskoz & Elola, 2014). L2 writers, for example, can benefit greatly from mind-mapping tools for planning and outlining their genre-based writings. Mind maps are great tools that facilitate meaningful learning since they encourage learners to analyze and find relevant and meaningful connections between the newly learned and existing information. These visual thinking tools help us structure, analyze and comprehend the new information because it displays hierarchy and relationship, allowing us to see a big picture. Online mind-mapping tools (i.e. Bubbl, MindMeister, Mindomo and Popplet) offer several advantages when compared to mind maps written on paper. To begin with, learners can easily rearrange branches by adding, deleting or changing the hierarchy of the structure and they can save and export the map they have constructed. Furthermore, mind maps can be employed to facilitate collaboration since students can work with their classmates collaboratively on a shared map outside the classroom. Some of the online mind mapping tools allow users to add text notes to the branches of a map, which helps users plan and discuss their outline with others.

As far as GBW is concerned, Wikis can also provide a space for collaborative writing and collective knowledge development such as poetry or story writing. Several studies have provided positive results regarding using wikis in collaborative writing to develop L2 learners' writing skills (Elola & Oskoz, 2010; Kesler, 2009; Li & Zhu, 2017; Oskoz & Elola, 2014). Oskoz and Elola (2014), for example, examined the use of chats and wikis embedded within a module of writing designed to teach two genres, namely, argumentative and expository essays. They found out "when collaborating at each phase, learners constructed or reconstructed their content knowledge, engaged with various writing conventions and were able to adopt an appropriate, genre-specific language register" (Oskoz & Elola, 2014, p. 143).

Blogs, mostly recognized as an online self-publishing journal, have also been used in education for several purposes such as encouraging reflection and critical thinking, supporting in-class discussion and interaction, and developing reading and writing skills (Williams & Jacobs, 2004; Yang, 2009). The fact that writers can interact with their audience through comments can give L2 learners a purpose for writing and motivate them to write. “Students blogging to each other in a group develop their ideas through interaction with peers and teachers, and construct meaning within the social context of the blog network” (Walker & White, 2013, p. 76). Thanks to these features, blogging as a genre might be explored as a communicative act in a writing class. Teachers might encourage L2 learners to have individual blogs or invite them to engage in collaborative blogging.

3.2 *Emerging Genres and GBW*

Technology has led to the emergence of rapidly evolving written genres such as emailing, texting, blogging, microblogging and social networking, and created opportunities to reach wider audiences. Reviewing the developments in L2 online writing, Godwin-Jones (2018) points out, “the importance and recognition of genre in both student work and writing theory have grown considerably among practitioners and researchers” (p. 1). Technology can be integrated into L2 writing classes to provide in-class and out-of the class opportunities for L2 learners to learn not only established school-sponsored genres but also these emerging genres.

Social media sites and microblogging, a specific form of blogging, have attracted an increased attention in recent years. Twitter, Facebook, Instagram and LinkedIn are among the widely used microblogging platforms. Microblogging allows users to publish micro posts usually accompanied with links, images, audio and video. Twitter, for instance, has 140-character limit for the text messages (tweets). In addition to posting their tweets in their account, users can read or repost others’ tweets. The use of ‘hashtags’ and the function of having ‘followers’ help create a community and increase interaction among users. Considering that much of our writing takes place online and microblogging is very popular in today’s world, these emerging genres might offer opportunities for L2 writing instruction. Walker and White (2013), for example, offer the following suggestions for L2 teachers to integrate Twitter as a microblogging site in language learning:

- Follow an ESOL or language ‘guru’ and learn from their tweets
- Send a word or idiom a day to other ‘followers’ in the same class, or post a new word, which the others have to guess the meaning of.
- Tell a story, with each person taking it in turn to add a line of the story. The students can choose the best tweets to summarize into a final story, which is posted as a blog.
- Tweeting ‘in character’... You could also tweet as a historical character, which others have to guess, or pretend you are commenting on a historical event you are all present at.

- Use Twitter to start discussions, such as ‘What does pollution mean to you?’ or ‘How can we solve the economic crisis?’ which can then be followed by a classroom discussion or by collating the opinions into a website.
- Tweet about the learning process as you work on a written assignment – sharing good resources, tips and difficulties (Walker & White, 2013, p. 68).

Combining text with multimedia – as users do in microblogging – has led to the increasing use of multimodal L2 writing projects. Digital storytelling, one of the popular genres in multimodal writing (for a review, see Oskoz & Elola, 2016), might also facilitate collaborative writing through Web 2.0 applications. Some of the digital applications and tools for digital storytelling are BoomWriter, Buncee, Little bird tales, StoryJumper, Storyboard That and Wakelet. StoryJumper (<https://www.storyjumper.com/>), for example, allows users to build a story from scratch or choose one of the story templates with writing prompts. Learners then can add text, images, and objects, and record their voice for stories. Teachers using this tool can create folders for their classrooms and invite their students to work collaboratively on a story. Learners can publish their own finished stories online and read and/or listen to other stories shared by others. This tool also allows completed books to be professionally published and ordered. Digital storytelling might be used in different teaching contexts with all ages. However, this approach might offer invaluable opportunities especially for young learner ESL and EFL classes considering the benefits of storytelling such as providing authentic, real-life language in meaningful and rich contexts, fostering vocabulary and language development in context, improving learners’ critical thinking skills and emotional intelligence (Cameron, 2001; Ghosn, 2013).

4 Sample Task

The following task is designed to illustrate how L2 teachers following a genre approach can design their lessons to teach the conventions of storytelling and encourage their students to write digital stories. All of the activities in the task are organized around the genre of ‘digital storytelling’. The suggested task might be completed over the course of a couple of lessons. The target learners are intermediate level EFL learners at the age of 10. As discussed earlier in the chapter, GBW attaches great importance to provide learners with different types of scaffolding and support during the tasks organized based on the teaching-learning cycle including modelling, joint and individual construction. In this regard, technology is integrated into this lesson task to provide learners with a variety of digital tools which help them build knowledge of a digital story, plan, and revise their plot, script and staging details for their stories. Furthermore, they are given opportunities for collaboration and different channels of feedback through technological tools such as Google Docs. L2 learners have a chance to share their digital stories with others on StoryJumper or classroom blog and reflect on the content, form and their language usage. Table 2 provides a summary of these stages with some suggestions for lesson procedures.

Table 2 Stages of a sample task following a genre-based approach to digital storytelling

Stages of the teaching-learning cycle	Procedures of lessons with suggested activities
MODELLING (Context & Text-exploration)	<p>This stage aims to help learners learn about the genre and build knowledge of a digital story.</p> <ul style="list-style-type: none"> • Teacher first wants learners to reflect on their storytelling experiences from their childhood, talk about their favorite stories and characters. Then, they brainstorm about the common features found in stories. • Showing digital stories, Teacher explains the organization of a story that includes a beginning, middle and an end. Students use story maps both to practice the organization and the plot, and to analyze the characters with regard to the examples given within that genre. • Through language exercises, Teacher guides them to recognize and practice linguistic features of stories.
JOINT STORY CONSTRUCTION	<p>This stage aims to scaffold learners to create a digital story in collaboration.</p> <ul style="list-style-type: none"> • Students work in groups of 4 or 5. They are given pictures of the scenes from the stories examined in the previous cycle. They first put them in order. Then, using the plot illustrated through the pictures, they collaboratively write the story but with a different ending on a Google Doc file. This digital collaborative writing tool also allows the teacher to monitor the entire writing process and give corrective feedback when needed. • The familiarity with the story provides scaffolding they need and the creative ending allows them to add creativity into the process. • When the story is finished, students work collaboratively to turn the text into a digital story on StoryJumper by adding visuals, objects and scenes.
INDEPENDENT STORY CONSTRUCTION	<p>This stage aims to allow learners to compose and publish their own digital stories on StoryJumper. Depending on the proficiency levels of learners, the following activities can be used at this stage.</p> <ul style="list-style-type: none"> • The story written collaboratively in the joint-story construction cycle can be used as the starting point for individual rewritings. At this stage, individual students can write their own version of the story. For example, they might use the same plot but different characters or the same characters with different plots. Another option might be turning that story into a personalized story by replacing the characters or the places with the ones from their own cultures or lives. • Following the conventions of the genre shown in the previous cycles, students may compose an original digital story from scratch as well. They choose a story theme, write a script and design a story map illustrating the plot, decide on the multimodal elements and arrange the pages of the mini-book on StorJumper. When the digital story is created, they are required to record their own voices for the story, edit and publish their digital story.
PUBLISHING & SHARING STORIES	<p>This last stage of the lesson unit provides learners to share their own digital stories and appreciate the work of others. Depending on the privacy settings, the stories might be open to public or their links might be shared with a limited group of people such as parents or school via links to classroom blogs or wikis.</p>

5 Conclusion

Genre-based approach to writing can help learners study the conventions and linguistic features through models of a given genre, and then with the knowledge and feedback gained, they can write within that genre. Technology might be integrated into GBW through almost all the staged tasks organized around the “process of contextualizing-modeling-negotiating-constructing” (Hyland, 2003, p.21) while teaching different genres. Furthermore, the view of writing as a communicative and meaning-making social act, social constructivist perspective on L2 writing and opportunities for online collaborative writing have gained great attention and the role of technology in GBW may become apparent as new digital genres continue to evolve in today's highly text-driven world. In this respect, L2 teachers can employ GBW in order to support L2 writers to engage not only in the established genres but also in new genres of writing in the digital era.

Integrating technology into GBW can also help teachers overcome some concerns about the genre approach to writing. One concern is that since teacher has a role that controls and designs the activities and provides the models of texts, learners might become passive during the instruction. Besides, the genre approach is criticized because of the possibility that it puts too much emphasis on the conventions and features of genres, which in turn might inhibit learners' self-expression and limit their creativity. As Hyland (2003) points out, “this ‘reproductive’ element has been criticized as running the risk of a static, decontextualized pedagogy” (p. 22). Considering the genuine interest and communicative purpose underlying the genre approach, another concern might be regarding how the genre as ‘a communicative act’ can be explored in an artificial classroom where it is hard to engage with the relevant audience (Çakmak, 2017). One might well assert that teachers and L2 learners can benefit greatly from technology integration into GBW since several technological tools can be used to provide scaffolding and contextualizing that L2 learners might need while following the conventions of a specific genre. Besides, these tools can provide L2 learners with choice and feedback to foster learner autonomy and creativity, and offer a collaborative environment with a chance to reach a wider audience. Considering that technology is changing rapidly, L2 teachers should develop themselves professionally to keep up with the development of new technologies that will provide L2 writers with invaluable opportunities in- and out of the classroom to develop advanced writing skills.

References

- Bruner, J. (1983). *Child's talk*. Norton.
- Çakmak, F. (2017). A case study on teacher practice of genre-based writing and classroom interaction patterns at an advanced level. *The Literacy Trek*, 3(2), 114–129.
- Cameron, L. (2001). *Teaching languages to young learners*. Cambridge University Press.

- Chen, T. (2016). Technology-supported peer feedback in ESL/EFL writing classes: A research synthesis. *Computer Assisted Language Learning*, 29(2), 365–397. <https://doi.org/10.1080/09588221.2014.960942>
- Chen, M. H., Huang, S. T., Chang, J. S., & Liou, H. C. (2015). Developing a corpus-based paraphrase tool to improve EFL learners' writing skills. *Computer Assisted Language Learning*, 28(1), 22–40. <https://doi.org/10.1080/09588221.2013.783873>
- Chun, D., Kern, R., & Smith, B. (2016). Technology in language use, language teaching, and language learning. *Modern Language Journal*, 100(1), 64–80. <https://doi.org/10.1111/modl.12302>
- Crosthwaite, P., Luciana, & Schweinberger, M. (2021). Voices from the periphery: Perceptions of Indonesian primary vs secondary pre-service teacher trainees about corpora and data-driven learning in the L2 English classroom. *Applied Corpus Linguistics*, 1(1), 1–13. <https://doi.org/10.1016/j.acorp.2021.100003>
- Derewianka, B. (1990). *Exploring how texts work*. Primary English Teaching Association.
- Derewianka, B. (2003). Trends and issues in genre-based approaches. *RELC Journal*, 34(2), 133–154. <https://doi.org/10.1177/003368820303400202>
- Elola, I., & Oskoz, A. (2010). Collaborative writing: fostering foreign language and writing conventions development. *Language Learning & Technology*, 14(3), 51–71.
- Elola, I., & Oskoz, A. (2017). Writing with 21st century social tools in the L2 classroom: New literacies, genres, and writing practices. *Journal of Second Language Writing*, 36, 52–60. <https://doi.org/10.1016/j.jslw.2017.04.002>
- Ghosn, I. (2013). Humanizing teaching English to young learners with children's literature. *CLELE Journal*, 1(1), 39–57. <https://doi.org/10.5281/zenodo.322598>
- Godwin-Jones, R. (2015). Emerging Technologies: Contributing, creating, curating: Digital literacies for language learners. *Language Learning & Technology*, 19(3), 8–20.
- Godwin-Jones, R. (2018). Second language writing online: An update. *Language Learning & Technology*, 22(1), 1–15.
- Halliday, M. A. K. (1994). An introduction to functional grammar.
- Hammond, J., & Derewianka, B. (2001). Genre. In R. Carter & D. Nunan (Eds.), *The Cambridge guide to teaching English to speakers of other languages* (pp. 186–193). Cambridge University Press.
- Hammond, J., Burns, A., Joyce, H., Brosnan, D., & Gerot, L. (1992). *English for Special Purposes: A handbook for teachers of adult literacy*. Macquarie University.
- Hyland, K. (2003). *Second Language Writing*. Cambridge University Press.
- Hyland, K. (2004). *Genre and second language writing*. University of Michigan Press.
- Hyon, S. (1996). Genre in three traditions: Implications for ESL. *TESOL Quarterly*, 30(4), 693–722. <https://doi.org/10.2307/3587930>
- Johns, A. M. (2002). *Genre and the classroom*. Erlbaum.
- Kern, R., Ware, P., & Warschauer, M. (2017). Network-based language teaching. In N. Van Deusen-Scholl & S. May (Eds.), *Second and foreign language education. Encyclopedia of language and education* (pp. 197–209). Springer.
- Kessler, G. (2009). Student-initiated attention to form in wiki-based collaborative writing. *Language Learning & Technology*, 13(1), 79–95.
- Kessler, G., Bikowski, D., & Boggs, J. (2012). Collaborative writing among second language learners in academic web-based projects. *Language Learning & Technology*, 16(1), 91–109.
- Li, M., & Zhu, W. (2017). Explaining dynamic interactions in wiki-based collaborative writing. *Language Learning & Technology*, 21(2), 96–120.
- Li, Z., Dursun, A., & Hegelheimer, V. (2017). Technology and L2 writing. In C. A. Chapelle & S. Sauro (Eds.), *The handbook of technology and second language teaching and learning* (pp. 77–92). Wiley-Blackwell.
- Lin, B. (2006). Vygotskian principles in genre-based approach to teaching writing. *NUCL JLCC*, 8(3), 69–83.
- Martin, J. R. (1992). *English text: System and structure*. John Benjamins.

- Oskoz, A., & Elola, I. (2014). Promoting foreign language collaborative writing through the use of Web 2.0 tools. In M. González-Lloret & L. Ortega (Eds.), *Technology and tasks: Exploring technology-mediated TBLT* (pp. 115–148). John Benjamins.
- Oskoz, A., & Elola, I. (2016). Digital stories: Overview. *CALICO Journal*, 32(2), 155–173. <https://doi.org/10.1558/cj.v33i2.29295>
- Shermis, M. D., Burstein, J., & Bursky, S. A. (2013). Introduction to automated essay evaluation. In M. D. Shermis & J. C. Burstein (Eds.), *The handbook of automated essay evaluation: Current applications and new directions* (pp. 1–15). Routledge.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge University Press.
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Walker, A., & White, G. (2013). *Technology enhanced language learning*. Oxford University Press.
- Williams, J. B., & Jacobs, J. (2004). Exploring the use of blogs as learning spaces in the higher education sector. *Australasian Journal of Educational Technology*, 20(2), 232–247. <https://doi.org/10.14742/ajet.1361>
- Yang, S.-H. (2009). Using blogs to enhance critical reflection and community of practice. *Educational Technology & Society*, 12(2), 11–21.
- Yoon, H. (2008). More than a linguistic reference: the influence of corpus technology on L2 academic writing. *Language Learning & Technology*, 12(2), 31–48.

Sibel Korkmazgil is an assistant professor in the English Language Teaching (ELT) at Sivas Cumhuriyet University. She received her B.A. in English Language and Literature from Ankara University and she holds MA and PhD degrees in ELT from Middle East Technical University. She has given several courses in the Department of Foreign Language Teaching including language skills courses, methodology courses and translation courses. Her research interests include pre- and in-service teacher education, continuing professional development, technology enhanced language learning and teaching English to young learners.

Affordances and Constraints of Multimodal Writing Tasks



Seval Kaygısız

Abstract The increasing prominence of digital technologies has promoted a shift in focus away from traditional writing practices towards more innovative practices in second language writing classrooms. As an innovative writing practice, multimodal writing refers to composing texts in different modes of communication that go beyond merely using alphabetic written words such as image, audio, and video by utilizing digital tools. Only over the last decade has the zeitgeist for explaining the use of multimodal writing tasks such as digital video production, academic posters, presentations, and digital comics in language classrooms grown rapidly in the literature. This book chapter therefore attempts to imbue in-service and pre-service English language teachers with the use of multimodal writing tasks by (i) providing an insight into their affordances and constraints, and (ii) teasing out recent attempts in the literature to assuage these constraints to promote further integration of multimodality into writing classrooms. More specifically, multimodal writing tasks provide such affordances as shaping learner identity, heightening motivation, fostering autonomy, providing a means for expressing emotions, developing metalanguage, and increasing self-revision behaviors. On the contrary, there are some concerns germane to their impact on language development, determining assessment criteria for these tasks, and teachers' negative attitudes such as feeling resistant. At the end of the chapter, suggestions for pedagogical implications have been provided for language teachers as well as recommendations for digital tools.

Keywords Second language writing · Multimodal composition · Second language teacher education · Digital writing tools · Multimodal writing tasks

S. Kaygısız (✉)
Gazi University, Ankara, Turkey
e-mail: sevalkaygisiz@gmail.com

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_2

1 Introduction

The developments in digital technologies have paved the way for novel practices in teaching and learning second language writing given the increasing omnipresence of the internet and social media among language learners. As such, second language learners are nowadays exposed to a wide range of multimodal writing tasks in their academic contexts as well as out-of-school contexts through the online platforms and social media, which concomitantly nudges them towards engaging in composing multimodal texts in their own language learning process. Multimodal composition refers to the process of combining words with various modes of communication such as images, sounds, and videos by using digital tools to construct texts. More specifically, multimodal writing tasks include designing, *inter alia*, a website (e.g., Vandommele et al., 2017), digital posters (e.g., Archer, 2011; D'Angelo, 2010, 2016; Dzekoe, 2017), citizen journalism (e.g., Chen, 2019), digital videos (e.g., Cimasko & Shin, 2017; Hafner & Miller, 2011; Jiang, 2017), and digital comics (e.g., Unsworth & Mills, 2020).

The number of studies on the use of digital multimodal writing tasks in language classrooms has mushroomed in the literature over the last decade (e.g., Chen, 2019; Dzekoe, 2017; Jiang, 2018; Li, 2020; Shin et al., 2020; Unsworth & Mills, 2020; Vandommele et al., 2017), and they offer a plethora of affordances such as identity construction (e.g., Jiang, 2018; Tardy, 2005), promoting autonomy (e.g., Hafner & Miller, 2011), fostering motivation (e.g., Hafner, 2014; Jiang & Luk, 2016), and language development (e.g., Dzekoe, 2017). Due to the recent paradigm shift to multimodal writing practices in writing classrooms, Yi and Angay-Crowder (2016) addressed that “teacher education classrooms should be reconceptualized as semiotic spaces that allow learners to use a wide range of linguistic and multimodal resources for teaching and learning” (p. 995). In this respect, Farias and Veliz (2019) attempted to explore pre-service teachers’ and teacher educators’ perceptions toward using multimodality. They indicated the necessity of preparing second language (L2, henceforth) teachers for implementing multimodal practices in their classrooms. Nowadays, it is of pivotal importance for L2 writing professionals to be aware of the shift from traditional paper-and-pencil writing practices to multimodal composing practices and to a sense of their “co-existence” (Elola & Oskoz, 2017, p. 58). This chapter therefore aims to shed light on main affordances and constraints of multimodal writing tasks and offer some practical ideas in an effort to embolden L2 teachers’ digital literacy. The following section presents the theoretical background of multimodal writing tasks.

2 Multimodal Pedagogy and Second Language Writing

Multimodality has recently gained momentum among L2 writing scholars thanks to the developing multimedia and communication technologies. *Multimodality* refers to using several means of making meaning through the *mode* which means “regularized and organized set of resources for meaning-making, including, image, gaze, gesture, movement, music, speech, and soundeffect” (Jewitt & Kress, 2003, p. 1), and a “socially shaped and culturally given semiotic resource for meaning-making” (Kress, 2010, p. 79). As such, it is necessary to consider the semantic relations among speech, image, and writing while explaining the meaning (Kress, 2000). Additionally, *modality* could be delineated as “a channel of linguistic communication (e.g., speaking, writing, reading, listening)” (Yi et al., 2020, p. 2).

Multiliteracies pedagogy was, in fact, first introduced to the field of language education by the New London Group (1996) in order to supplement the traditional literacy pedagogy by cobbling together the linguistic and cultural differences of society. The scholars further argued that achieving this goal requires “understanding and competent control of representational forms” (p. 61) such as the relationship between images and written words. Afterwards, *multimodal pedagogy* has been used as an overarching trend and described as “curriculum, pedagogy, and assessment practices which focus on mode as a defining feature of communication in learning environments” (Stein & Newfield, 2006, p. 9). In essence, Yi et al. (2020) underscore the importance of reconceptualization of L2 writing from a multimodal perspective and posit the idea of “legitimate text” (p. 4) as a broad term that encompasses both composing and text. In this regard, legitimate texts include a wide spectrum of ‘multimodal writing tasks’, which is the term adopted throughout this chapter, ranging from a presentation slide and digital comics to video projects used in both language classrooms and academic contexts.

Building on the multimodal pedagogy, an array of L2 studies has been carried out on various multimodal writing tasks such as videos, digital posters, comics, and presentation slides in L2 writing classrooms so far, and these studies are enmeshed in construing multimodal composition from theoretically different lenses such as systemic functional linguistics (Alyousef, 2013; Mills & Unsworth, 2018; Shin et al., 2020; Unsworth & Mills, 2020); a social semiotics approach (Archer, 2010, 2011; Cimasko & Shin, 2017; Oskoz & Elola, 2016; Shin, 2018; Smith, 2019), and a genre-based approach (D’Angelo, 2010, 2016). Nonetheless, multimodal pedagogy is still in its infancy in second language teacher education programs and merits further attention. The following section therefore reviews recent studies on digital multimodal writing tasks conducted in L2 contexts and discusses their affordances and constraints.

3 The Affordances and Constraints of Multimodal Writing Tasks

This section aims to elucidate the affordances and constraints of using multimodal writing tasks in L2 classrooms in lieu of previous research. Foremost, multimodal writing tasks offer a myriad of affordances such as promoting learner autonomy (Hafner & Miller, 2011), developing multimodal communicative competence (Cimasko & Shin, 2017; Shin et al., 2020), improving oral task performance (Rubin & Kang, 2008), and shaping identity (Cimasko & Shin, 2017). These tasks further provide ample opportunities for bridging in-class and out-of-class learning (Cummins et al., 2015; Jiang, 2017; Vandommele et al., 2017), fostering collaborative learning (Hafner & Miller, 2011; Jiang & Luk, 2016; Jiang, 2017; Li, 2020), expressing emotions (Mills et al., 2017; Mills & Unsworth, 2018; Unsworth & Mills, 2020), facilitating noticing and self-revision (Dzekoe, 2017), increasing genre awareness (Cimasko & Shin, 2017; Li & Akoto, 2021), and metalanguage development (Shin et al., 2020). Nevertheless, some of these studies “did not directly address L2 development” (Zhang et al., 2021). In this sense, the relevant literature is far from settled in terms of three main constraints: language development, ascertaining assessment criteria for the multimodal writing tasks, and teachers’ (negative) attitude.

3.1 *The Affordances*

When considered carefully, previous studies provide crystal-clear evidence regarding six main affordances of multimodal writing tasks in terms of promoting autonomy (e.g., Hafner & Miller, 2011), increasing motivation (e.g., Ryu & Boggs, 2016), fostering identity and voice (e.g., Cummins et al., 2015; Cimasko & Shin, 2017), expressing emotions (e.g., Unsworth & Mills, 2020), developing metalanguage (e.g., Shin et al., 2020), enhancing self-revision behaviors (e.g., Dzekoe, 2017). First of all, some studies indicated that implementing multimodal writing tasks helped to foster learner autonomy. For instance, Hafner and Miller (2011) assigned university-level science students to carry out a digital video project collaboratively and share their videos on YouTube. Based on the findings, they purported that students were able to “take responsibility for, monitor, and reflect on their learning” (p. 75). As such, they used English independently while preparing the videos, they found online resources themselves, and they provided peer feedback. Jiang and Luk (2016) similarly implemented a digital video project employing university-level students and teachers, and the ensuing findings demonstrated that students experienced “a stronger sense of autonomy” (p. 6) since they had more opportunities for topic selection and using various modes. These findings were further reiterated by Jiang (2017) who argued that “hav[ing] choice over mode, time, topic, and tool” (p. 420) might foster learner autonomy.

Secondly, a large body of research studies (e.g., Hafner & Miller, 2011; Jiang & Luk, 2016; Li, 2020; Ryu & Boggs, 2016; Vandommele et al., 2017) illustrated the positive impact of multimodal writing tasks on enhancing motivation. Among these studies, Ryu and Boggs (2016) explored teachers' perceptions, and the teachers expressed that multimodal writing tasks bolstered their students' motivation. In another study, Vandommele and her colleagues (2017) conducted an experimental study in which adolescents designed a website, and they attributed students' learning gains in terms of text length and syntactic complexity to their enhanced motivation. In a different study, Li (2020) examined in-service and pre-service teachers' perceptions about integrating multimodal writing tasks into their classrooms through semi-structured interviews and acknowledged that teachers were motivated to integrate multimodal projects into their own teaching contexts although they held some concerns. Based on these findings, since writing is a complex and demanding skill, it could be suggested that L2 practitioners attempt to bring enjoyable and appropriate digital tasks into their classroom practices to motivate their students. Besides, tailoring these tasks according to their proficiency level could help to minimize the complexity of the writing process. Given the existing literature, however, more research is warranted to explore teachers' perceptions especially after they bring multimodal practices into their classrooms.

Another significant affordance of multimodal writing tasks is that they lend themselves well to the development of voice, agency, and identity (e.g., Cimasko & Shin, 2017; Cummins et al., 2015; Dzekoe, 2017; Hafner, 2014; Jiang, 2018; Rowsell, 2020; Tardy, 2005). Cope and Kalantzis (2009) construed "agency" as an expression of identity, and they further claimed that "[w]hat the meaning maker creates is a new design, an expression of their *voice* which draws upon the unique mix of meaning-making resources, the codes and conventions they happen to have found in their contexts and cultures" (p. 177). Matsuda (2001) delineates "voice" as the "amalgamative effect of the use of discursive and non-discursive features that language users choose, deliberately or otherwise, from socially available yet ever-changing repertoire" (p. 40). Based on these definitions, previous research indicated that multimodal writing tasks enabled language learners to express or voice their identity, subjectivity, and agency. For instance, in a case study, Cimasko and Shin (2017) analyzed a second language learner's composing processes of a remediation project, i.e. transforming an argumentative essay into a digital video, which enlightened her rhetorical choices. The findings showed that the learner adopted a different linguistic identity to accomplish her rhetorical goals. Previously, Hafner (2014) documented that a digital video project contributed to university-level students' development of discursive identity, which refers to the "textual presentation of self which aligns the author with the values of the relevant discourse community" (p. 657). In a different study, Jiang (2018) investigated the changes in three university-level students' identities for one academic year and acknowledged that they experienced different patterns of change. Accordingly, a student changed from a resistant writer to a committed one, another student developed a discursive identity, and the other student remained unchanged. The researcher ascribed these findings to "students' commitment" and "to the contextual influences of sociocultural

norms and ideological practices” (p. 70). In addition to these studies in which university-level students were employed, multimodal pedagogy could also exert a profound impact on younger students’ enhanced voice and identity by strengthening their literacy engagement and their interactions with the wider society (Cummins et al., 2015) and by offering them “the space to wrestle with the harder edges and complexities of being a young person today” (Rowse, 2020, p. 2).

Closely related to the affordance mentioned above, multimodal writing tasks provide a springboard for students to materialize their emotions (e.g., Mills et al., 2017; Mills & Unsworth, 2018; Oskoz & Elola, 2016; Rowse, 2020; Shin & Cimasko, 2008; Unsworth & Mills, 2020). Language learners could leverage non-linguistic modes such as images to articulate their emotions (Shin & Cimasko, 2008) since their stance, which means “the claims that we make and the stories that we tell”, could be manifested through visuals (Rowse, 2020, p. 2). The findings in Oskoz and Elola (2016) further demonstrated that students preferred music as well as images to express their emotions in their digital stories. More specifically, Mills and her colleagues (2017) were concerned with teaching primary and secondary students how to express their emotions through a series of digital imagery workshops, and they found that students were able to demonstrate a range of positive and negative emotions such as happiness and unhappiness, satisfaction and dissatisfaction, confidence and insecurity via digital photography. These findings were further reiterated by Mills and Unsworth’s (2018) study that examined student-created animations at an upper primary school. In another similar study, Unsworth and Mills (2020) investigated digital comics designed by a similar group of students and documented that they were able to develop a metalanguage for attitudinal expressions.

Furthermore, previous empirical studies showed that multimodal writing tasks were conducive to the development of metalanguage (e.g., Shin, 2018; Shin et al., 2020). For instance, Shin (2018) examined a sixth-grade bilingual student’s metalanguage development while he was engaged in writing an argumentative multimodal letter and found that he was able to “create ideational meanings in the text” (p. 240) by orchestrating images. Likewise, Shin and her colleagues (2020) investigated another six-grade student’s composing process of PowerPoint slides and multimedia texts. They reported that he similarly used images “for ideational meaning to construct the main ideas of the texts” (p. 11). Based on the findings, the scholars further claimed that both linguistic and visual modes offered more opportunities to convey the main ideas of the text than the other modes such as music or video. This could be a possible explanation for why digital videos helped to foster motivation and autonomy (Hafner & Miller, 2011; Jiang & Luk, 2016) rather than developing metalinguistic awareness.

A final affordance is that some studies proved that learners developed self-revision behaviors (e.g., Dzekoe, 2017; Jiang, 2017). For instance, Dzekoe (2017) examined whether multimodal writing tasks facilitated students’ self-revision behaviors or not and assigned university-level students to design digital academic posters. To this end, their revision history was recorded via Google Docs while they were composing and revising their written drafts, and each of them was working on a single draft to be able to track the changes. The findings indicated that multimodal

composing yielded content-level revisions, and students could also “notice linguistic and rhetorical elements in their writing and revise for effective communication” (p. 86). Additionally, Jiang (2017) carried out a digital multimodal composing project for which university-level students created digital videos. The findings indicated technological, social, and educational affordances. As a technological affordance, he claimed that the project offered a chance for constant and self-paced revision, which in turn enabled students to overcome “their fear of failure and making mistakes in English” (p. 420).

3.2 *The Constraints*

Three main issues have remained unsolved in the existing literature so far: language development, assessment of the multimodal writing tasks, and teachers’ (negative) attitude. They have been expounded below along with some suggestions gleaned from the existing literature to diminish the concerns about multimodal practices. First of all, as to *language development*, some scholars argue that multimodal writing tasks might not be conducive to L2 learners’ language development unless learners “work with and through language in an attempt to create meaning” (Manchón, 2017, p. 95) whereas other scholars claim that these tasks could pave the way for language development (Belcher, 2017; Hafner, 2020), and “additional communicative means” (Belcher, 2017, p. 2). Hafner (2020) espouses the latter idea by acknowledging that implementing multimodal writing tasks refers to “learning how language can combine with other modes to strategically make meaning” (p. 140) rather than neglecting language development. Dzekoe (2017) carried out a study with advanced-low proficiency university-level students for sixteen weeks and proved that designing digital academic posters promoted language development, noticing, and self-revision behaviors. Similarly, in an experimental study, Vandommele and her colleagues (2017) asked adolescents, low-proficiency learners between 12 and 16 years old, to design a website and collected data for two weeks in a pre- and post-test design, and they documented language gains in the end. In addition, Unsworth and Mills (2020) examined digital comics created by fifth-grade students and reported that they developed their linguistic repertoires to express different types of attitudinal meaning such as affect, judgment, and appreciation. In another study, Kim and Belcher (2020) compared the effectiveness of traditional essay writing and multimodal projects employing university-level students and found that traditional essays led to more syntactic complexity; however, there was no statistically significant difference between the groups in terms of accuracy. Based on these findings, they claimed that “multimodality use does not lessen attention to language” (p. 98). With all these in mind, we can allege that multimodal writing tasks might yield positive learning gains among different target groups with different proficiency levels as long as the selection of multimodal tasks is clearly justified in terms of the linguistic goal set for the predetermined teaching plan. Last, but certainly not least, in order to promote further language development, Polio (2019)

suggests bringing “explicit language instruction” and “writing-to-learn-language activities” such as dictogloss, reformulation of the model texts, and story continuation into multimodal composing to shift attention to a language point (p. 3). Nevertheless, more empirical studies are needed to shed more light on the effectiveness of multimodal writing tasks on language development in various language classrooms and learning contexts.

Another notable constraint of implementing multimodal tasks in language classrooms is the paucity of well-established criteria for assessing these tasks. In a study, Yi and Angay-Crowder (2016) integrated multimodal pedagogy into preservice and in-service teachers’ classroom practices and asked them to prepare a five-minute digital story, and they expressed that deciding on how to assess these tasks was quite challenging. Yi and her colleagues (2019) also echoed this constraint by stating that teachers often felt concerned about assessing a multimodal task and they relied upon such components as content, organization, and styles used for grading a traditional essay. In yet a very recent study, Hafner and Ho (2020) carried out a case study aiming at ascertaining the dimensions of multimodal communicative competence by employing seven teachers. The data came from their classroom practices of assessing multimodal digital projects, namely a digital video scientific documentary designed by tertiary-level students enrolled in the English for science course. Teachers participated in a semi-structured interview session and commented on their assessment processes of the videos. Based on the findings, the researchers determined seven assessment criteria: (i) creativity and originality, (ii) organization, (iii) language, (iv) delivery, (v) modal interaction, (vi) variety, and (vii) genre. Li (2020) further designed a rubric for grading multimodal writing tasks based on these findings from Hafner and Ho (2020). In her study, she attempted to integrate multimodal projects into a second language teacher education program, in which eight pre-service and in-service teachers designed multimodal projects such as digital books, digital flashcards, videos, and electronic posters. In order to assess these projects, the researcher determined the assessment criteria as “content, technology, graphic design, language and mechanics, and creativity” (p. 4). When closely examined, these two studies offer a rudimentary framework for assessment, and they will most likely nurture and guide further multimodal practices in L2 writing classrooms.

Finally, some scholars argued that L2 writing practitioners might preserve using traditional instructional methods rather than experiencing a shift to multimodal genres (Elola & Oskoz, 2017) or they might construe multimodal composing “as a waste of time and deviation from their main job” (Dzekoe, 2021, p. 222). Besides, teachers might feel concerned about implementing such practices due to “limited digital pedagogy expertise” (Belcher, 2017, p. 4). These trepidations mostly stem from the fact that, as Canagarajah (2016) posited, paradigm shifts require a reconfiguration of teachers’ current classroom practices since they need to restructure their pedagogies in accordance with a sensitivity to their students and to the “changing contexts of writing” (p. 266). Canagarajah further claimed that this restructuring needs to be accomplished “in the light of competing knowledge and beliefs” (p. 266).

In line with these concerns, some studies revealed that teachers showed resistance when they were asked to carry out multimodal tasks in their classrooms. For instance, Hundley and Holbrook (2013) collected data over a three-year period to portray pre-service teachers' perceptions of multimodal composition, and they put forth that the pre-service teachers "resisted the call to expand print notions of writing, affirming beliefs that "real writing" meant conventional print texts" (p. 506) although they were capable of using technology very well. This finding seems plausible given the well-established fact that beliefs are resistant to change. In another study, Yi and Angay-Crowder (2016) examined the challenges a teacher educator experienced while implementing multimodal composition into a teacher education program and pointed to teachers' resistance. In this regard, Yi and Angay-Crowder (2016) postulated that teachers' "psychological barriers" (p. 994) could constrain implementing multimodal pedagogy in second language teacher education programs. They also emphasized the importance of changing "our preconception that text-based linguistic modes and recourses are more legitimate than non-linguistic modes and resources (e.g., image, sound)" (pp. 994–995). Likewise, Farias and Veliz (2019) unearthed teacher educators' concerns about a lack of resources and emphasized the necessity for teacher preparation due to the paradigm shift. Unlike these studies, Jiang (2017) explored both language teachers' and students' perceptions of multimodal composition employing five teachers and twenty-two students and reported several perceived affordances such as self-paced and individualized learning, opportunities for out-of-school learning and peer interaction, and "meaning-making beyond the limits of language" (p. 417). In a more recent study, Li (2020) similarly examined pre-service and in-service teachers' perceptions of multimodal composition and documented such affordances as professional development and possibilities for content learning and digital learning despite such constraints as time management, topic selection, and technology use. Bluntly put, all these concerns point to the significance of teacher beliefs and practices of multimodal pedagogy, which is an under-researched area and deserves further attention.

To put it succinctly, it seems that the affordances of multimodal writing tasks outweigh its constraints. Once the previously discussed constraints are reconciled, teachers could enjoy using multimodal tasks. Given their affordances, therefore, it is necessary to deepen our understanding of multimodal pedagogy in teacher education programs to harness them in students' favor. Otherwise, as Dzekoe (2021) acknowledged, "...helping students develop digital literacy in the language classroom is no longer optional. Not doing so is to do great disservice to our students" (p. 222). Nonetheless, "...there is still much we do not know about how best to encourage and support them." (Belcher, 2017, p. 5). To this end, suggestions for designing multimodal tasks were provided below so that L2 practitioners could leverage them in their classrooms. In addition, some recommendations for digital tools were made.

4 Suggestions for Classroom Implications

4.1 *Multimodal Writing and Digital Tools*

A wide range of multimodal writing tasks have been utilized in the existing literature so far; however, as Lim and Polio (2020) acknowledge, various definitions and understandings of multimodal writing tasks lead to controversy over their use in both language classrooms and academic contexts. Therefore, they attempted to clarify the varied use of multimodal writing tasks in language classrooms and academic contexts by analyzing 161 undergraduate-level course syllabi from different disciplines (teacher education, science, engineering, social science, and humanities) and interviewing seven professors from these fields to reveal their descriptions of the syllabi and assignments. Based on the findings, the researchers categorized multimodal writing tasks based on their goals (disciplinary versus creative expressions), linguistic modes (written versus spoken words), and tasks (individual versus collaborative work). One significant finding is that some tasks such as in-class presentation, academic papers including data analysis, journals and lab notes, digital videos, and online discussion posts include disciplinary expressions and could be used for “effective disciplinary practice” (p. 6). On the other hand, some tasks such as transferring essays into a video, in-class presentation, reflection papers, digital videos, and portfolios convey more creative expressions, thus enabling students to “communicate their meaning effectively” (p. 6) without following any conventions. These findings could provide a catch-all framework so that L2 writing practitioners could implement multimodal writing tasks in their teaching context based on their learners’ needs and learning goals.

Succinctly, it could be claimed that animations could be used to express emotions (Unsworth & Mills, 2020); digital videos could be utilized to foster autonomy and motivation (e.g., Hafner & Miller, 2011; Jiang & Luk, 2016); digital posters could be used for the pursuit of the language development (e.g., Dzekoe, 2017). Moreover, the digital video seems to be one of the most beneficial multimodal writing tasks by offering several benefits such as developing identity (Cimasko & Shin, 2017; Jiang, 2018), yielding peer interaction and a sense of belonging (Jiang, 2017), heightening motivation (Li, 2020), fostering autonomy (Hafner & Miller, 2011), and contributing to content learning (Hafner & Miller, 2011). In order to utilize all these affordances of multimodal writing tasks in language classrooms, language teachers could embellish these tasks for their students with the digital tools or technological platforms listed below:

- Video production: [Animoto](#), [WeVideo](#), [Animaker](#), [Adobe Spark](#), [Headliner](#)
- Digital posters: [Glogster](#), [Canva](#), [PosterMyWall](#)
- Comics and digital stories: [Storybird](#), [Vyond](#), [Powtoon](#), [Toontastic](#), [Pixton](#)
- Presentation: [Nearpod](#), [Prezi](#), [Emaze](#)
- Magazines: [Milanote](#), [Madmagz](#)
- Online composing: Google Docs

4.2 *Implementation of Multimodal Writing Tasks*

As a preparatory phase for multimodal projects, learners could be informed about the prerequisites juxtaposed by Li (2020, p. 4) as follows:

- (a) fully demonstrate their newly learned knowledge on the selected topic;
- (b) fully explore the affordances of the selected technology tool(s) for communication;
- (c) effectively combine multimodal resources (e.g., texts, images, sounds), and use visuals/images to construct meaning and engage audience;
- (d) use correct grammar and appropriate language; and
- (e) utilize multimodal resources and represent knowledge in a creative and insightful way.

With regard to the implementation phase, L2 writing practitioners could follow Hafner's (2020) suggestion of "just in time" (p. 140), which means engaging learners with certain skills once they need them. In other words, learners might complete the given task by following these strategies whenever they are necessary and relevant: (i) doing the internet search to gather information about the topic; (ii) critically evaluating this information in the classroom; (iii) deciding on whether the sources are reliable or not; (iv) writing the scripts for the project. From the genre-based perspective, Hafner (2020) further suggests these pedagogical strategies: (a) deciding on a multimodal genre; (b) identifying the contextual factors such as the audience and the communicative purpose of the genre; (c) analyzing the textual features of the genre in terms of organization, vocabulary, and grammar; and (d) analyzing relevant samples and models. More specifically, to utilize digital videos, L2 practitioners could take the following steps enumerated by Jiang (2018, p. 63) into consideration:

- (i) reading,
- (ii) grouping and discussing,
- (iii) script-writing and storyboarding,
- (iv) performing, filming, and collecting/creating multimodal resources,
- (v) producing video/audio recordings, editing, and
- (vi) in-class sharing and Internet-disseminating.

Additionally, Ryu and Boggs (2016) recommended several tasks that could invigorate multimodal writing practices in language classrooms: (a) summarizing a text by using tables or graphs; (b) making a story using pictures or photos; (c) students bringing belongings and creating a story related to their belongings; (d) writing a script about one's self before shooting a movie; and (e) writing a summary of a movie or a book (p. 6). Given all the issues discussed above, a sample multimodal writing task was prepared using Milanote and Powtoon as seen in Fig. 1. Powtoon is a popular video production tool that offers numerous templates for designing comics and creating videos. Milanote is another digital tool that helps prepare visual posters or plans as seen in the screenshot below. It helps to organize ideas using

Which one do you think helps to improve foreign language learning, watching movies with subtitles or listening to podcasts?

Readings:

- Read Blog I about the role of using Podcasts in foreign language learning
- Read Blog II about using subtitles to learn a foreign language
- Read the article titled the effects of subtitles on language development

Instruction: Prepare a 3-minute video in which you argue the roles of watching movies with subtitles and listening to podcasts in improving foreign language. Which one do you think contributes to language development more? Please support your position by giving examples. You can follow these steps:

1. Read
2. Discuss your ideas in class (or in groups)
3. Write your script for your digital project (Google Docs could be used to see the revision history)
4. Film or create visuals (You can use Powtoon, Toontastic, Vyond)
5. Produce and edit your video (You can choose Powtoon or Aminato)
6. Share your video (on YouTube, Flipgrid, Edmodo or Google Classroom)

Assessment Criteria
Your products will be assessed based on:

- Content
- Technology
- Graphic design
- Language and Mechanics
- Creativity

Fig. 1 Sample multimodal writing task. (Created using Milanote and Powtoon)

different boards or panels on the computer screen. Thus, this tool could be used during the brainstorming part of any writing class. Besides, individuals could easily drag the boards into the center of the screen and work collaboratively on the same project, thereby enabling students to design different posters or magazines both individually or collaboratively in language classrooms. To encapsulate all these points, the sample assignment below was prepared based on the following aspects:

Topic: Writing an argumentative essay

Multimodal task: Preparing a 3-minute video

Age: From young adults to adults

Proficiency level: From B1 to C2

4.3 Grading Rubrics and Assessment of Multimodal Writing Tasks

There are two main well-established grading rubrics that could be availed in language classrooms. Hafner and Ho (2020)'s and Li (2020)'s grading rubrics could be taken into consideration while assessing multimodal writing tasks. As illustrated and exploited in the assignment above, Li (2020) suggested five main criteria based on Hafner and Ho (2020)'s suggestions: (a) content, (b) technology, (c) graphic design, (d) language and mechanics, and (e) creativity" (p. 4). Accordingly, *content* refers to learners' content knowledge, and *language and mechanics* means using grammar and mechanics accurately, both of which are also considered in traditional paper-and-pencil writing assignments. Furthermore, *technology* means using technological tools effectively; *graphic design* means using visuals appropriately to convey the intended message, and finally *creativity* refers to learners' creativity in

representing knowledge while designing multimodal tasks. Hopefully, these practical suggestions might assuage in-service and pre-service teachers' concerns about implementing multimodal writing tasks in language classrooms.

5 Concluding Remarks

Multimodal composing will probably hold sway in the future of L2 writing pedagogy, thereby pushing traditional writing practices onto the back burner. As also echoed by Yi et al. (2020), “[m]ultimodal composing is not an option anymore. Students need to be able to interpret, design, and evaluate multimodal texts. In other words, they should be able to orchestrate apt semiotic resources into multimodal ensembles (texts)” (p. 2). Therefore, this chapter has attempted to provide a nuanced understanding for L2 writing practitioners of multimodal writing tasks and their use in language classrooms since the fact that technology use is interwoven with language classrooms galvanizes the importance of making use of digital tools in language learning processes day by day. As Kress (2000) argues, “...language is no longer the carrier of all meaning” (p. 339), and “non-linguistic modes are as important as linguistic modes in L2 writing” (Yi et al., 2020, p. 2). Now that the ubiquitous availability of digital tools encourages language learners to compose multimodal writing tasks using non-linguistic modes in both in-class and out-of-school contexts, the learners “will reap the benefits as they use new modes to ultimately participate in a wider writing community.” (Elola & Oskoz, 2017, p. 58).

Further studies could focus on how to minimize the effects exerted by the paradigm shift on teachers' resistance. In this regard, it is necessary to unravel their beliefs and perceptions to shape their future practices. It should be borne in mind that digital literacy and multimodal writing skills will be honed through practice, and thus integrating multimodal practices in second language teacher education programs is of pivotal importance to prepare pre-service language teachers for the future. Last but not least, there is a dearth of studies on collaborative multimodal writing tasks, and this warrants further studies since, in a meta-analysis, Elabdali (2021) reports that “collaboratively written texts are more accurate than individually written texts” (p. 13). In this regard, carrying out multimodal writing projects collaboratively could yield more language gains, which is *per se* a matter of concern in the literature.

References

- Alyousef, H. S. (2013). An investigation of postgraduate business students' multimodal literacy and numeracy practices in finance: A multidimensional exploration. *Social Semiotics*, 23(1), 18–46. <https://doi.org/10.1080/10350330.2012.740204>
- Archer, A. (2010). Multimodal texts in higher education and the implications for writing pedagogy. *English in Education*, 44(3), 201–213. <https://doi.org/10.1111/17548845.2010.11912415>

- Archer, A. (2011). Clip-art or design: Exploring the challenges of multimodal texts for writing centres in higher education. *Southern African Linguistics and Applied Language Studies*, 29(4), 387–399. <https://doi.org/10.2989/16073614.2011.651938>
- Belcher, D. D. (2017). On becoming facilitators of multimodal composing and digital design. *Journal of Second Language Writing*, 38, 80–85. <https://doi.org/10.1016/j.jslw.2017.10.004>
- Canagarajah, S. (2016). Translingual writing and teacher development in composition. *College English*, 78(3), 265–273. <https://www.jstor.org/stable/44075117>
- Chen, C. W. (2019). Citizen journalism as a form of multimodal composing: Understanding students' self-reported affordances, constraints, and follow-up learning goals. *Innovation in Language Learning and Teaching*, 14(5), 481–495.
- Cimasko, T., & Shin, D.-S. (2017). Multimodal resemiotization and authorial agency in an L2 writing classroom. *Written Communication*, 34(4), 387–413. <https://doi.org/10.1177/0741088317727246>
- Cope, B., & Kalantzis, M. (2009). “Multiliteracies”: New literacies, new learning. *Pedagogies*, 4(3), 164–195.
- Cummins, J., Hu, S., Markus, P., & Kristiina Montero, M. (2015). Identity texts and academic achievement: Connecting the dots in multilingual school contexts. *TESOL Quarterly*, 49(3), 555–581. <https://doi.org/10.1002/tesq.241>
- D'Angelo, L. (2010). Creating a framework for the analysis of academic posters. *Language Studies Working Papers*, 2, 38–50.
- D'Angelo, L. (2016). *Academic posters: A textual and visual metadiscourse analysis*. Peter Lang.
- Dzekoe, R. (2017). Computer-based multimodal composing activities, self-revision, and L2 acquisition through writing. *Language Learning & Technology*, 21(2), 73–95. Retrieved from <http://llt.msu.edu/issues/june2017/dzekoe.pdf>
- Dzekoe, R. (2021). English language education and digital literacy in the 21st century. In P. Vinogradova & J. K. Shin (Eds.), *Contemporary foundations for teaching English as an additional language: Pedagogical approaches and classroom applications* (pp. 217–226). Routledge.
- Elola, I., & Oskoz, A. (2017). Writing with 21st century social tools in the L2 classroom: New literacies, genres, and writing practices. *Journal of Second Language Writing*, 36, 52–60. <https://doi.org/10.1016/j.jslw.2017.04.002>
- Elabdali, R. (2021). Are two heads really better than one? A meta-analysis of the L2 learning benefits of collaborative writing. *Journal of Second Language Writing*, 100788.
- Farias, M., & Veliz, L. (2019). Multimodal texts in Chilean English teaching education: Experiences from educators and pre-service teachers. *Profile Issues in Teachers Professional Development*, 21(2), 13–27. <https://doi.org/10.15446/profile.v21n2.75172>
- Hafner, C. A. (2014). Embedding digital literacies in English language teaching: Students' digital video projects as multimodal ensembles. *TESOL Quarterly*, 48, 655–685. <https://doi.org/10.1002/tesq.138>
- Hafner, C. A. (2020). Digital multimodal composing: How to address multimodal Communication forms in ELT. *English Teaching*, 75(3). http://journal.kate.or.kr/wp-content/uploads/2020/09/v75_3_07.pdf
- Hafner, C. A., & Ho, W. Y. J. (2020). Assessing digital multimodal composing in second language writing: Towards a process-based model. *Journal of Second Language Writing*, 47, 100710. <https://doi.org/10.1016/j.jslw.2020.100710>
- Hafner, C. A., & Miller, L. (2011). Fostering learner autonomy in English for science: A collaborative digital video project in a technological learning environment. *Language Learning & Technology*, 15(3), 68–86.
- Hundley, M., & Holbrook, T. (2013). Set in stone or set in motion? Multimodal and digital writing with preservice English. *Journal of Adolescent & Adult Literacy*, 56(6), 500–509. <https://doi.org/10.1002/JAAL.171>
- Jewitt, C., & Kress, G. (Eds.). (2003). *Multimodal literacy*. Peter Lang.

- Jiang, L. (2017). The affordances of digital multimodal composing for EFL learning. *ELT Journal*, 71(4), 413–422. <https://doi.org/10.1093/elt/ccw098>
- Jiang, L. (2018). Digital multimodal composing and investment change in learners' writing in English as a foreign language. *Journal of Second Language Writing*, 40, 60–72. <https://doi.org/10.1016/j.jslw.2018.03.002>
- Jiang, L., & Luk, J. (2016). Multimodal composing as a learning activity in English classrooms: Inquiring into the sources of its motivational capacity. *System*, 59, 1–11. <https://doi.org/10.1016/j.system.2016.04.001>
- Kim, Y., & Belcher, D. (2020). Multimodal composing and traditional essays: Linguistic performance and learner perceptions. *RELC Journal*, 51(1), 86–100. <https://doi.org/10.1177/2F0033688220906943>
- Kress, G. (2000). Multimodality: Challenges to thinking about language. *TESOL Quarterly*, 34(2), 337–340.
- Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. Routledge.
- Li, M. (2020). Multimodal pedagogy in TESOL teacher education: Students' perspectives. *System*, 94, 102337. <https://doi.org/10.1016/j.system.2020.102337>
- Li, M., & Akoto, M. (2021). Review of recent research on L2 digital multimodal composing. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, 11(3), 1–16.
- Lim, J., & Polio, C. (2020). Multimodal assignments in higher education: Implications for multimodal writing tasks for L2 writers. *Journal of Second Language Writing*, 47. <https://doi.org/10.1016/j.jslw.2020.100713>
- Manchón, R. M. (2017). The potential impact of multimodal composition on language learning. *Journal of Second Language Writing*, 38, 94–95. <https://doi.org/10.1016/j.jslw.2017.10.008>
- Matsuda, P. K. (2001). Voice in Japanese written discourse: Implications for second language writing. *Journal of Second Language Writing*, 10(1–2), 35–53. [https://doi.org/10.1016/S1060-3743\(00\)00036-9](https://doi.org/10.1016/S1060-3743(00)00036-9)
- Mills, K. A., & Unsworth, L. (2018). iPad animations: Powerful multimodal practices for adolescent literacy and emotional language. *Journal of Adolescent & Adult Literacy*, 61(6), 609–620. <https://doi.org/10.1002/jaal.717>
- Mills, K., Bellocchi, A., Patulny, R., & Dooley, J. (2017). Indigenous children's multimodal communication of emotions through visual imagery. *Australian Journal of Language and Literacy*, 40(2), 95–108. <https://eprints.qut.edu.au/104762/14/104762.pdf>
- Oskoz, A., & Elola, I. (2016). Digital stories: Bringing multimodal texts to the Spanish writing classroom. *ReCALL*, 28(3), 326–342.
- Polio, C. (2019). Keeping the language in second language writing classes. *Journal of Second Language Writing*, 46. <https://doi.org/10.1016/j.jslw.2019.100675>
- Rowell, J. (2020). “How emotional do I make it?” Making a stance in multimodal compositions. *Journal of Adolescent & Adult Literacy*, 63(6), 627–637. <https://doi.org/10.1002/jaal.1034>
- Rubin, D. L., & Kang, O. (2008). Writing to speak: What goes on across the two-way street. In D. Belcher & A. Hirvela (Eds.), *The oral/literate connection: Perspectives on L2 speaking, writing, and other media interactions* (pp. 210–225). University of Michigan Press.
- Ryu, J., & Boggs, G. (2016). Teachers' perceptions about teaching multimodal composition: The case study of Korean English teachers at secondary schools. *English Language Teaching*, 9(6), 52–60. <https://fsu.digital.flvc.org/islandora/object/fsu:378395/datastream/PDF/view>
- Shin, D. (2018). Multimodal mediation and argumentative writing: A case study of a multilingual learner's metalanguage awareness development. In R. Harman (Ed.), *Bilingual learners and social equity: Critical approaches to systemic functional linguistics* (pp. 225–242). Springer.
- Shin, D. S., & Cimasko, T. (2008). Multimodal composition in a college ESL class: New tools, traditional norms. *Computers and Composition*, 25(4), 376–395. <https://doi.org/10.1016/j.compcom.2008.07.001>

- Shin, D. S., Cimasko, T., & Yi, Y. (2020). Development of metalanguage for multimodal composing: A case study of an L2 writer's design of multimedia texts. *Journal of Second Language Writing, 47*. <https://doi.org/10.1016/j.jslw.2020.100714>
- Smith, B. E. (2019). Collaborative multimodal composing: Tracing the unique partnerships of three pairs of adolescents composing across three digital projects. *Literacy, 53*(1), 14–21. <https://doi.org/10.1111/lit.12153>
- Stein, P., & Newfield, D. (2006). Multiliteracies and multimodality in English in education in Africa: Mapping the terrain. *English Studies in Africa, 49*(1). <https://doi.org/10.1080/00138390608691341>
- Tardy, C. M. (2005). Expressions of disciplinarity and individuality in a multimodal genre. *Computers and Composition, 22*, 319–336. <https://doi.org/10.1016/j.compcom.2005.05.004>
- The New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review, 66*(1), 60–93. <https://doi.org/10.17763/haer.66.1.17370n67v22j160u>
- Unsworth, L., & Mills, K. A. (2020). English language teaching of attitude and emotion in digital multimodal composition. *Journal of Second Language Writing, 47*, 100712. <https://doi.org/10.1016/j.jslw.2020.100712>
- Vandommele, G., Van den Branden, K., Van Gorp, K., & De Maeyer, S. (2017). In-school and out-of-school multimodal writing as an L2 writing resource for beginner learners of Dutch. *Journal of Second Language Writing, 36*, 23–36. <https://doi.org/10.1016/j.jslw.2017.05.010>
- Yi, Y., & Angay-Crowder, T. (2016). Multimodal pedagogies for teacher education in TESOL. *TESOL Quarterly, 50*(4), 988–998. <https://doi.org/10.1002/tesq.326>
- Yi, Y., Shin, D. S., & Cimasko, T. (2019). Multimodal literacies in teaching and learning English in and outside of school. In *The Handbook of TESOL in K-12* (pp. 163–177).
- Yi, Y., Shin, D., & Cimasko, T. (2020). Multimodal composing in multilingual learning and teaching contexts. *Journal of Second Language Writing, 47*. <https://doi.org/10.1016/j.jslw.2020.100717>
- Zhang, M., Akoto, M., & Li, M. (2021). Digital multimodal composing in post-secondary L2 settings: A review of the empirical landscape. *Computer Assisted Language Learning, 1*–28.

Seval Kaygısız is working as a research assistant in the ELT Program at Gazi University, Turkey. She is also a PhD candidate in the field of Teaching English as a Foreign Language at the same university. Her main research interests include instructed SLA, writing in a second/foreign language, and teacher education.

Wikis for Language Teaching and Learning



Ece Yaş

Abstract Wikis can be useful instruments for achieving various purposes in educational settings by offering novel and authentic ways of designing activities, assignments, group projects, etc. The objective of the article is to review the literature of wikis in language instruction related to the research design of the studies, the educational contexts in which wikis utilized, and the key findings of the selected articles covering potential benefits granted to the students, challenges encountered when exploiting these social networking sites in language instruction, and possible solutions to achieve more pleasing outcomes in our classrooms. Relevant studies hunted through Education Resources Information Center (ERIC) and Google Scholar by using the following keywords (1) Wikis, (2) Wiki tools in education, and (3) Wikis for foreign/second language teaching. Besides, bibliographies of related articles were checked. Six major themes were discovered: (1) Collaborative learning, (2) Improvement in language skills, (3) Motivation, and (4) Cultural awareness, (5) Learner Autonomy and (6) Audience Awareness. However, there can be some challenges when implementing wikis in educational settings, which include lack of training, inappropriate posting and unintentional deletions, the dominance of instructors in wiki tasks, and inappropriate task design. Moreover, there is a need for research going beyond case studies to produce more generalizable judgments on the significance of wikis for foreign language education in terms of improving writing, reading, listening, speaking skills, grammatical and vocabulary knowledge, and developing cultural awareness. Finally, most of the studies have centered on the potentials of wikis on boosting learning opportunities at the tertiary level; however, similar studies might be conducted at a secondary level of education.

Keywords Wikis · Wiki tools in education · Wikis for foreign/second language teaching and learning

E. Yaş (✉)

Bolu Abant İzzet Baysal University, Bolu, Türkiye

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_3

1 Introduction

In mainstream classrooms, most of the materials consist of textbooks, teacher notes, ready-made worksheets, teacher-made materials, or posters, which are mainly text-based (Basal & Aytan, 2014). Broadening the repertoire of teaching practices becomes essential to create a dynamic and interactive atmosphere inside and/or outside the classroom to achieve more desirable outcomes in language learning, meet expectations of learners, and keep up with the advances arising in today's world.

By taking innovative steps of technology integration, ESL (English as a second language) and EFL (English as a foreign language) instructors have a wide range of possibilities to utilize to enhance the effectiveness of teaching. Especially, Web 2.0 tools provide chances to generate an appealing, interactive, and motivating atmosphere for ESL/EFL learners if the task design is performed appropriately by considering learners' interests, needs, or background (Basal & Aytan, 2014). Even if there is no agreement on the definition of Web 2.0, it usually refers to the second generation of the World Wide Web that empowers its users to collaborate, share information online and enhance creativity as being different from Web 1.0 technologies (Reinhardt, 2019). Referring Web 2.0 as a move from static HTML Web pages to a vibrant atmosphere that offers more organized and wide-ranging Web applications (e.g., social networking sites, wikis, blogs, and hosted services webinars, streaming audio and video, and RSS) to users, it holds the potential to promise open communication and sharing information among Web-based communities of users (Cronin, 2009).

What's more, the constant enhancement of affordable, portable, and accessible digital information and communication technology and Web 2.0 has given rise to an escalation in the number of social media and its usage since the 2000s (Reinhardt, 2019). Social media is usually described as any application or technology that permits a person to engage in, produce, and share media sources and interact with different individuals through digital networking (Reinhardt, 2019). Although social networking sites usually do not offer any particular instructional prospects in the first place, it has earned a place in classrooms by granting novel modes of learning and forming networks of knowledge and expertise for the learners over the past few years (Friesen & Lowe, 2012). The integration of Web 2.0 tools in education can have potential if they are used appropriately since many studies were conducted in this field to investigate the positive affordances of these tools in language teaching settings.

The central attention of this paper will be on the use of wikis in the language instruction, potential benefits it grants to the students, challenges and possible solutions to the difficulties to achieve more pleasing outcomes in our classrooms. The selection criteria of the state-of-art article as stated in the following:

1. The selection of articles had to be the ones applying various research methodologies. Conceptual and review papers are excluded.
2. The data analysis section had to be clear in explaining the reported outcomes of student learning associated with the use of wikis appropriately and consistently.
3. The studies had to be published in English between 2008 and 2020.

The electronic databases utilized in this review were Education Resources Information Center (ERIC) and Google Scholar by using the following keywords (1) Wikis, (2) Wiki tools in education, (3) Wikis for foreign/second language teaching and learning. Also, it was checked bibliographies of related articles to reach notable studies that meet the selection criteria for the review. After a thorough search of articles, 40 of them found relevant to the aforementioned selection criteria.

1.1 Wikis

Technological advances have altered the way of communicating with others, such as turning to a collection of collaborative work instruments from postal mail and telephones to e-mail, instant messaging, and software tools. As aligned with that, it is inevitable to have groundbreaking innovations of teaching tasks in educational settings. Being developed approximately in 1995 as a part of Web 2.0, Arreguin (2004) simply named wiki as a collection of websites offering a place for content sharing and editing easily (as cited in Duffy & Bruns, 2006). Today, Web 2.0 technologies offer a sheer amount of wiki engines and software packages such as UseMod, MediaWiki, PB Wikis, or TWiki, which mostly differ in the programming languages of wikis and the server platform required for a wiki to operate (Wei et al., 2005). Being interconnected and organized wikis build a profoundly versatile context for knowledge management since they are not displayed by default in any predetermined order (Duffy & Bruns, 2006). Further, wikis play a major role in building and trading information by suggesting a simplistic route of generating HTML pages with the help of their novel characteristics of expandable spatial structure (Parker & Chao, 2007). They usually enable its users to express opinions as associations between pages by creating an environment for a network of interrelated and contextualized topics and allowing personal or collaborative contributions (Duffy & Bruns, 2006). Additionally, they grant possibilities for users to track the revisions and/or development of individual pages in time (Duffy & Bruns, 2006). Another feature of wikis is related to their security controls. The authority for modifying the content can be assigned for the selected groups to prevent anonymous edits by unauthenticated users (Wei et al., 2005). Also, hyperlinking is an important feature of wikis that allows the users to insert links from other resources- not only to other pages in the wiki but also to other web pages.

When it comes to the current position of wikis in language instruction, educators have noticed its potential value of increasing deeper learning both in and outside the classroom by promising a way of facilitating communication and collaborative knowledge building through exploring, forming, and sharing the content (Reinhold, 2006 as cited in Parker & Chao, 2007).

2 The Research Design of Wiki-Focused Studies

Numerous types of research designs were employed in the selected articles to investigate the wiki-enhanced instructional practices. The outstanding preference was determined to be an inclination to the research adopting mixed method research approach, experimental design, and case study design. The majority of studies conducted in this area were attempted to employ various data collection tools to reach valid and reliable outcomes even if the scale of most of the studies was relatively small and limited.

Fusing qualitative and quantitative methodology, a mixed-method approach to research design was employed to integrate the findings and deliver a coupled analysis (Ahlholm et al., 2017; Aydın & Yıldız, 2014; de Arriba, 2017; Ducate & Steckenbiller, 2013; Elola & Oskoz, 2010; Franco-Camargo & Camacho-Vásquez, 2018; Hsu, 2019; Kuteeva, 2011; Ma, 2020; Martin, 2011; Matthew et al., 2009; Miyazoe & Anderson, 2010; Nami & Marandi, 2014; Özkan, 2015; Sánchez-Gómez et al., 2017; Zou et al., 2016).

Case studies were usually fostered to utilize various resources of information to search, understand, and describe the participants' attitudes, beliefs, judgments, and performances by investigating in its natural setting combining various research methods and enabling an examination of the case from different standpoints and guaranteeing the validity of the findings through triangulation (Alyousef & Picard, 2011; Coniam & Lee, 2008; Dault & Walker, 2014; Kwan & Yunus, 2015; Li & Zhu, 2017; Lin & Yang, 2011; Matthew et al., 2009; Nami & Marandi, 2014; Salaber, 2014; Zorko, 2009).

Other noteworthy research designs are experimental and quasi-experimental studies to understand the worthiness of wiki-enhanced instructional cases by manipulating the variables to support or reject the hypotheses of the selected studies (Al-Johali, 2019; Awada & Diab, 2018; Chen, 2008; Chin et al., 2015; Çelik & Aydın, 2016; Kassem, 2017; Khany & Khosravian, 2014; Mak & Coniam, 2008; Nikiforou, 2019). Even if the amount of experimental research on wikis is quite limited due to the difficulty of manipulating treatments and controlling the effects, it is a valuable and comprehensive approach to explain causal relationships between variables (Bhattacharjee, 2012).

Some of the studies utilized single research methodology. There were five qualitative studies (Kost, 2011; Lin & Yang, 2011; Nikiforou, 2019) and one quantitative study (Wichadee, 2010). The researchers have utilized various data collection tools, including observation diaries, the comments on wiki- tools, interviews, rubrics, questionnaires, reflection logs group-interviews, language tests, achievement scores, field notes, and instructor comments.

3 Study Context of Wiki-Focused Studies

Bestowing a shred of substantial evidence for the generalizability of any results that arose from the data is another motivation of this article. Concentrating on the studies embodying diverse cultures and countries was significant to explore the themes revealing the impact of wikis on students' performances and to give insights for prospective studies. The distribution of the studies displayed in Table 1 indicates that Taiwan, China and the United States are the leading figures in conducting studies intending to investigate the significance of wikis in educational settings.

Springing from the beginning of the 21st century, there is a slight increase in the number of studies casting wikis as an object of the studies; however, it was found that most of the studies conducted with the students of tertiary level as demonstrated in Table 1. It seems that the potentials of wikis in instructional settings were relatively ignored in contexts of K-12 and postgraduate education and needed to be addressed to encourage the integration of wikis into their instructional practices to promote deeper learning and other positive outcomes offered by wiki-tools.

4 Integrating Wikis into Classroom Settings

4.1 Collaborative Learning

Collaborative learning requires groups of learners to work together to solve a problem, perform a task or create an output; consequently, learners support each other to accomplish mastery in their language skills and performances. The unique characteristics of wikis make them a beneficial instrument of collaborative learning in various educational fields as in the light of the conclusions drawn upon from the studies focusing on wikis (de Arriba, 2017; Coniam & Lee, 2008; Doult & Walker, 2014; Hsu, 2019; Kessler & Bikowski, 2010; Kwan & Yunus, 2015; Matthew et al., 2009; Özkan, 2015; Salaber, 2014; Wang, 2015; Zorko, 2009).

With the emergence of novel approaches to language teaching and learning through technological advances, web-based social networking tools have been practiced as collaborative instruments for foreign language teaching (Wang, 2015). In Wang's experimental study (2015), the actual purpose is to promote Taiwanese students' English writing skills for business by centering on enabling ESP learners to benefit from collaboration through Wikispaces (wikispaces.com), which was preferred due to the practicality and rapidity of deployment. Ensuring fruitful outcomes in collaborative writing, wikis were found useful in obtaining mastery in business writing through a collaborative learning environment (Wang, 2015). Also, Kwan and Yunus (2015) attempted to discover the use of wikis in ESL collaborative writing among gifted students. Although the students were inclined to working individually, some participants contributed to all stages of the writing task; consequently, they were able to create meaningful and well-designed essays. Additionally,

Table 1 Summary of the studies

Study	The objective of the study	Contexts & participants	Tasks & projects	Methods & instruments
Ahlholm et al. (2017)	Seeking to explain what wiki can disclose about students' knowledge construction, development, and division, as well as their collaborative writing abilities	Finland; one 7th grade class of 25 13–14-year-old students and a student teacher (assisted by one mentor teacher)	Write an article in pairs	Following mixed-method research design; the data drawn from homework, grading standards, draft and final text versions, observation diaries, and wiki comments
Al-Johali (2019)	Investigating the effectiveness of wiki-based vocabulary instruction	Saudi Arabia; 31 teenage students	A vocabulary wiki on Wikispaces with illustrative presentations and podcasts	Employing a quasi-experimental design; the data collected with pre- and post-tests, as well as an observation
Alyousef and Picard (2011)	Researching how Master of Commerce ESL students used the wiki, exploring the purpose and function of this assessment activity and the meta discourse markers of the wiki discussion pages and the report	Australia, six English as a Second Language (ESL) students learning Intermediate Financial Reporting	A problem-based learning activity which requires six group members to participate in online discussions that will culminate in co-authoring a report	A case study with mixed-methods approach, which included a description of the assessment tasks, discourse analysis of the wiki discussion pages and the report, as well as interviews
Awada and Diab (2018)	Illuminating the efficiency of Google Earth and Wiki tools in improving English as a Foreign Language (EFL) learners' oral presenting skills and increasing their enthusiasm to learn	Middle East; 81 participants in private institutions between the ages of 19 and 23	Research writing and PowerPoint presentations	Adopting experimental research design; the data gathered from an oral presentation skills rubric and reflection logs

(continued)

Table 1 (continued)

Study	The objective of the study	Contexts & participants	Tasks & projects	Methods & instruments
Aydın and Yıldız (2014)	Using wikis for collaborative writing by rigorously and investigating the role of three different meaning-focused assignments	Turkey, 34 intermediate level university students	Working in groups of four on 3 distinct wiki-based collaborative writing projects (argumentative, informational, and decision-making)	Mixed method research; conducted in the form of a face-to-face semi-structured focus-group interview and a questionnaire about their overall learning, motivation, group interaction, and technological use
Castañeda and Cho (2013)	Establishing how much wiki writing helps college students enhance their linguistic competence in Spanish as a second language	The United States, 53 college students enrolled in Elementary Spanish II	In small groups composing four stories collaboratively based on four separate YouTube videos linked on each group's wiki page by the instructor	A descriptive study; a grammar test in Spanish, obtaining data from a four-part survey measuring writing experience on a wiki
Çelik and Aydın (2016)	Investigating the impact of a wiki-based writing environment on EFL writing achievement	Turkey; 42 pre-service English teachers	Process-based writing tasks via wikis	Experimental study using a background questionnaire, a writing achievement pre- and a post-test
Chen (2008)	Examining the effectiveness of using wikis in terms of student learning outcomes, changes in students' attitudes toward language learning, the communication channels in wikis that help students interact in an e-learning environment, and students' experiences with wikis	Taiwan; 97 college students	Dictating a list of conversation dialogues	A quasi-experimental study; collecting data with weekly test, The English Learning Questionnaire, The Wiki Use Questionnaire; semi-structured interview

(continued)

Table 1 (continued)

Study	The objective of the study	Contexts & participants	Tasks & projects	Methods & instruments
Chin et al. (2015)	Investigating the effectiveness of collaborative process writing	Singapore, 60 Secondary School students	Chinese narrative essay	An experimental study; using students' pre-, mid- and post-writing test; feedback; face-to-face interviews
Coniam and Lee (2008)	Examining the possibility of introducing wiki into the writing classroom	China, 29 students studying at Institute of Vocational Education	Collaborative writing project	Adopting a case study design; using survey reports to collect data
de Arriba (2017)	Determining if wikis can be used to offer successful collaborative learning approaches to large groups	Spain; 110 college students	A group project which entails jointly constructing a wiki on some of the world's economic issues	Employing mixed -method research design; using the statistical data provided by the Wikispaces platform, the postings' content, as well as the modified text
Doult and Walker (2014)	Probing whether using wikis will result in a shift in writing habits and attitudes	The United Kingdom, 26 students aged 9–10	A group report on the solar system as a group via wiki	Following a case study design; the data drawn from teachers' observations, the wiki texts, group interviews with the students

(continued)

Table 1 (continued)

Study	The objective of the study	Contexts & participants	Tasks & projects	Methods & instruments
Ducate and Steckenbiller (2013)	Revealing whether close readings of authentic texts on a variety of cultural topics from German-speaking countries, thorough discussion, and then a critical review of the topic areas in the form of student essays could result in a better grasp of German-speaking countries' cultures, and probably one's own culture	The United States; 192 students studying at higher education institution	Reading authentic cultural texts about the target culture, discussion, create a wiki post for the other classes to read on Wikispaces	A mixed method study; employing pre-test and posttest
Elola and Oskoz (2010)	Analyzing personal and communal writing in wikis, writing approaches, as well as students' collaborative synchronous interactions	The United States; 8 university students	Argumentative essays via PBwiki	Following mixed method research design; employing wiki pages, survey, and discussion notes
Franco-Camargo and Camacho-Vásquez (2018)	Exploring the effects of integrating wikis and videos in cooperative writing tasks	Colombia; 7 students in Higher Education	Cooperative writing tasks	Adopting mixed-method approach; collecting data through journals, pre and post writing tests, semi-structured interviews and aptitude test
Hsu (2019)	Focusing on the form of the students' interaction during wiki collaborative writing, as well as the possible link between wiki collaboration and individual L2 writing growth	Taiwan; 26 EFL students studying at a university	Expository essay via Wikispaces	Embracing mixed -method approach; wiki posts used to analyze content, organization, and language

(continued)

Table 1 (continued)

Study	The objective of the study	Contexts & participants	Tasks & projects	Methods & instruments
Hsu and Lo (2018)	Discovering the impact of wiki-mediated collaborative writing on learners' individual writing growth	Taiwan; 52 university students	Expository essay on a topic that is relevant to their surrounding context	An experimental Study; using pre-test and post-test essays
Kassem (2017)	Finding out how wikis affected the development of business writing abilities and the reduction of writing anxiety among Business Administration students	Saudi Arabia; 60 college students	A wiki-based business writing	An experimental study; gathering the data through pre-test and post-test intervention, Test of Business Writing Skills (TBWS) and Writing Anxiety Inventory (WAI)
Kessler and Bikowski (2010)	Exploring the nature of individual and group behavior, as well as the students' collaborative autonomous language learning skills when attending to meaning in a long-term wiki-based collaborative activity	Mexico, 40 pre-service teachers	A class wiki synthesizing the course content on culture	A qualitative study with interviews and wiki pages
Khany and Khosravian (2014)	Determining if using Wikipedia texts to improve the vocabulary knowledge of Iranian EFL students	Iran; 36 students studying a language institute	Wiki-pages to expand students' vocabulary growth	An experimental Study, utilizing Oxford Placement Test as a pre-test and a researcher-teacher-made vocabulary test as posttest
Kost (2011)	Exploring the use of wikis for collaborative writing assignments	Canada; 8 college students	Narrative and expository essay on PBwiki	A qualitative research, using wiki pages and surveys

(continued)

Table 1 (continued)

Study	The objective of the study	Contexts & participants	Tasks & projects	Methods & instruments
Kuteeva (2011)	Describing how the course wiki was used to teach academic and professional writing, as well as to examining the effects of using the wiki on the writer–reader interaction	Sweden; 14 college students	Argumentative essays	A case study employing participant observation, text analysis and a self-report questionnaire
Kwan and Yunus (2015)	Investigating the use of wikis in ESL collaborative writing among gifted students, with a focus on group involvement and interaction	Malaysia; 4 gifted students as national gifted center	Persuasive essay writing collaboratively	A case study embracing mixed-method approach; employing questionnaires, online interviews and observations
Li and Zhu (2017)	Examining if there was a link between wiki-mediated peer interactions and wiki writing product quality	China; 9 EFL students at a college	Narrative expository, and argumentative essays on Wikispaces	A case study adopting qualitative approach; using data of wiki pages, and interviews
Lin and Yang (2011)	Analyzing whether wikis, as a collaborative platform, could help students enhance their writing abilities	Taiwan; 32 sophomore college students	Composition	A qualitative study using self-reported reflections, observations of student learning, interviews and surveys
Ma (2020)	In an English for Academic Purposes (EAP) environment, investigating the role of inter-group peer online feedback on wiki authoring	China; 37 first year students at a university	A total of nine wiki chapters	Mixed method approach with online peer comments, online teacher comments, essay scores, online student questionnaire
Mak and Coniam (2008)	Explore how students use wikis to collaborate on writing and the impact of collaborative authoring on the final output using a wiki	China; 24 secondary school students	A school brochure	Mixed method using wiki pages to gather data

(continued)

Table 1 (continued)

Study	The objective of the study	Contexts & participants	Tasks & projects	Methods & instruments
Martin (2011)	Looking at the impact of utilizing an Online German Homework Wiki, as well as other factors, on the language progress of undergraduate students	Ireland; 18 students at a college	Online assignments	Mixed method research, Questionnaires, online data in wiki; field notes; handwritten records on assignment submission and attendance; language tests
Matthew et al. (2009)	Exploring how preservice teachers enrolled in a language arts techniques program responded to contributing to a class wiki	The United States; 37 preservice teachers	A class wiki about course content on PBwiki	A mixed- method study, the data drawn from online observations of the wiki pages' progress, students' reflections, final reflections, e-mail exchanges, interview, and researcher notes
Miyazoe and Anderson (2010)	In formal university education, the effectiveness of three different online writing activities: forums, blogs, and wikis are examined	Japan; 61 college students	Translating English course content into Japanese collaboratively	Mixed method research, employing using survey, interview, and wiki posts
Nami and Marandi (2014)	Gaining a better understanding of wiki-based student engagement in EFL settings and exploring the effects of student participation in a threaded wiki on their learning	Iran; 20 students in a private language institution	A class wiki created for out-of-classroom discussions	Mixed method research, wiki post being analyzed qualitatively and quantitatively
Nikiforou (2019)	Assisting in the creation of collaborative online dictionaries in the field of ESP	Cyprus; 29 college students	An online biomedical dictionary on PBwiki	A qualitative study utilizing Grounded theory approach, the data drawn from wiki pages; surveys; interviews

(continued)

Table 1 (continued)

Study	The objective of the study	Contexts & participants	Tasks & projects	Methods & instruments
Özkan (2015)	Finding out how learners feel about utilizing collaborative and cooperative technologies for foreign language acquisition	Turkey; 44 undergraduate students	Group- writing about a famous person	A mixed method research; gathering data through a questionnaire and follow-up interview
Sánchez-Gómez et al. (2017)	Attempting to show pre-service teachers' views on the implementation of wikis and discussion boards to develop English writing abilities and encourage independent and collaborative learning in a blended-learning environment	Spain; 358 pre-service teachers	Collective texts	Mixed-method research; a pre-test and a post-test, and a semi-structured interview
Salaber (2014)	The influence of wiki-based activities on student involvement and collaborative learning in a large postgraduate international management course is investigated in this research	The United Kingdom; 76 postgraduate students	Problem-solving tasks in groups of four or five students	A case study adopting mixed-method approach, using student questionnaires, instructor comments, Moodle logs, and a personal remark from the lecturer
Wang (2015)	Ascertaining the value of wikis in terms of enhancing business English writing abilities among Taiwanese students	Taiwan; 24 college students	Business writing on Wikispaces	An experimental study; two writing tests and a survey questionnaire
Zorko (2009)	Analyzing the determinants that affect how students contribute on wikis	Slovenia; 40 sociology students	Collaborative report writing task	Qualitative case study; interviews, survey; wiki history

(continued)

Table 1 (continued)

Study	The objective of the study	Contexts & participants	Tasks & projects	Methods & instruments
Zou et al. (2016)	Ascertaining the influence of collaborative work in error correction for English as a Foreign Language learning	China; 32 university students	Writing Newspaper article writing, job-application; essays; correcting errors	Mixed-method research, the data drawn from students' error corrections and comments on wiki, interviews, and pre- and post-tests
Wichadee (2010)	Exploring the impact of wikis on learners' writing abilities and attitudes	Thailand; 35 university student	Writing summaries	A quantitative study with writing tests, questionnaires, and written reflections

dialogic interaction in the process of collaborative writing enhances mutual support among learners (Hsu, 2019). For instance, they are willing to solve each other's problems by giving and receiving advice or offer help to improve their group task (Hsu, 2019).

Using wikis for collaborative writing tasks has become a quite common practice of language instructors; however, there can be other ways of exploiting wikis in educational settings. Surprisingly, the results of a case study conducted in a Hong Kong post-secondary institute indicated that offering a novel way of collaborative tasks through wikis encourages learners to consider them as tools for performing group projects on different courses (Coniam & Lee, 2008). Adopting a wiki as a facilitator for engagement and collaboration rather than a medium of online discussions, Salaber (2014) pronounced that postgraduate students from an international management module showed a thorough investment into their learning through collaboration. In a different context, it was indicated that the collaborative tasks were profoundly useful to processing and learning the materials among the pre-service teachers by actively engaging in the process of knowledge creation instead of performing a passive role to grasp knowledge (Matthew et al., 2009).

Moreover, de Arriba (2017) indicated that the experience of using wikis in large groups encourages collaborative learning because there is no limited time and space for each student, and they may contribute as many times as they wish. Although this might create an increase in the workload of instructors, they may follow each student's progress and contribution through wikis. Zorko (2009) noted the positive agents facilitating collaborative learning through wikis: the visibility of everyone's work, user-friendliness, teacher's feedback, and knowing your work to be assessed. When it comes to the factors inhibiting collaborative behavior in wikis, they were portrayed as technical difficulties encountered in wikis and preference of publishing only polished materials and utilizing tools that enable instant and fast communication (Zorko, 2009).

4.2 *Improvement in Language Skills*

Numerous theories, methods, techniques, or tools have been introduced to establish an authentic environment for practicing the target language by passing a busy route for seeking a cure for language learners (Khany & Khosravian, 2014). The majority of task designs shaped through the wiki-tools center on developing collaborative writing skills; however, some studies have confirmed wikis as beneficial tools for improving other language skills as well, even if they are restricted in amount (Al Johali, 2019; Awada & Diab, 2018; Aydın & Yıldız, 2014; Castañeda & Cho, 2013; Çelik & Aydın, 2016; Chen, 2008; Kassem, 2017; Khany & Khosravian, 2014; Kwan & Yunus, 2015; Lin & Yang, 2011; Ma, 2020; Miyazoe & Anderson, 2010; Nikiforou, 2019; Wang, 2015; Zou et al., 2016).

Wiki-based writing projects may broaden the writing skills and encourage language learners to reflect on each other's works, compared to traditional learning practices. In an experimental study conducted at the tertiary level, Kassem (2017) unveiled that wikis were valuable in decreasing learner anxiety encountered in writing classes. Moreover, Ma (2020) investigated to what extent the inter-group peer online feedback given on a wiki writing homework for an EAP (English for Academic Purposes) course has the potential to enrich the students' writing competence. As the results implied, students strived to give feedback concerning the appropriacy of language in writing assignments. Instead, they have concentrated on eliciting feedback about the content of their peers' works though the prior research usually noted that the students are inclined to give form-focused feedback rather than meaning-focused ones in wiki-enhanced tasks (Ma, 2020). It is quite promising that correcting each other's mistakes through Wikispaces enabled Chinese students to enhance their formal writing performance with the aid of both error correction and constructive feedback and ongoing interaction between native speakers (Zou et al., 2016).

Besides, wikis can help improve the learners' grammar even if some of the participants stated their discomfort in editing their peers' works and their doubt in the accuracy of others' editing (Castañeda & Cho, 2013). More importantly, it was indicated that using wikis in collaborative tasks might enhance the grammatical competence and the content and language fashion in language learners' writing pieces (Wang, 2015). To better understand the use of social tools in learners' individual and collaborative writing, Elola and Oskoz (2010) indicated that when students worked together, they discovered that analyzing and criticizing their ideas improved not only the content but also the general quality of their essays. According to the findings of Kost's (2011) study on the use of wikis in collaborative writing projects, students appreciated being able to correct each other's mistakes, and one participant said that "catching my partner's errors was much easier than catching my own." Another participant, perhaps dubious of his or her own language abilities, cited one significant benefit as "having a friend to correct my grammar (Kost, 2011)". Valuing wiki-writing tasks, the students were quite aware of the benefits of giving and receiving feedback and learning from each other (Lin & Yang, 2011).

Aligned with this idea, integrating wiki technology and peer feedback into an English writing course enables students to enrich their language mechanics in a short period (Lin & Yang, 2011).

Wikis were perceived as much more favorable than blogs and forums by pointing to advancement in EFL learners' ability to distinguish the writing fashions in the target language (Miyazoe & Anderson, 2010). Learners showed mastery in content, organization, discourse markers, vocabulary, sentence formation, and mechanics with the help of process-based writing instruction through wikis (Çelik & Aydın, 2016). Moreover, Chinese learners of English had a chance to discover the essential points for building the essays from English students when they were going over their written products in terms of content, lexis, syntax, and organization (Zou et al., 2016). Li and Zhu (2017) reported that students' collaborative efforts in task negotiation and text construction, as evidenced by group members' mutual engagement in language functions, writing change functions, and scaffolding strategies, aided students in developing a paper with a clear rhetorical structure and high degree of coherence. Moreover, Hsu and Lo (2018) determined that wiki-mediated collaborative writing has a substantial impact on the content quality and linguistic accuracy of learners' individual writing in the second language although its impact on organization and linguistic complexity was less noticeable.

It is an undeniable fact that vocabulary plays a crucial role in language learning. Without lexical items, they can hardly express the message they wish to convey even if they have some control of grammar either in their native language or second language (Kilickaya & Krajka, 2010). Language instructors usually follow various paths to teach vocabulary. To exemplify, some of them favor adhering to the activities in their course books, or some put vocabulary memorization at the center through lists covered with native language equivalents of the lexical items. On the other hand, the rest wishes to search for more authentic and meaningful tasks embellished with the technological tools to cultivate more desirable outcomes related to vocabulary development. When it comes to using wikis in vocabulary teaching, it is not a common practice embraced by language teachers; however, wikis can be viewed as a prospective medium for contributing to learners' vocabulary growth, which acts as a critical figure for authenticity in teaching tasks. Intending to demonstrate its importance in improving the vocabulary knowledge of EFL learners, Khany and Khosravian (2014) selected Wikipedia as an object of their experimental research in which 36 intermediate Iranian EFL students participated. Excelling the control group, the performances of the experimental group confirmed that Wikipedia could aid EFL learners to contribute positively to their vocabulary growth. Wikis can be a beneficial and motivating instrument for building vocabulary knowledge in EFL contexts if the task design is desirable to embrace the objectives of vocabulary courses designed by the instructors (Al-Johali, 2019). In the light of Nikiforou's study (2019), we can assert that the consistent and coherent task design in wiki workspaces can be promising in learners' professional vocabulary growth as well as other language skills. What's more, Martin (2011) discovered that the features of storing and hyperlinking in wikis could enhance contextualize vocabulary and grammar.

In an experimental study, Awada and Diab (2018) endeavored to find out the effectiveness of Google Earth and Wiki spaces in enhancing the oral presentation skills of EFL learners enrolled in writing classes. By exercising factorial design mixed-methods pre-test/post-test control group experimental design, the experimental group utilized Google Earth and Wiki tools to carry out research and deliver an oral presentation while a regular oral presentation and paper-pen research task were given to the control group (Awada & Diab, 2018). As the results hinted, the experimental group outperformed the control group in mastering oral presentation skills in the target language thanks to visualization agents and the structure of wikis that aid collaboration and scaffolding (Awada & Diab, 2018). Considering the difference between texts met in classroom settings and the ones language learners come across the outside world, there ought to be an increase in the number of tasks that provide learners the skills and strategies not only to operate and interpret visuals and images but also to comprehend the written language in order to overcome this pedagogical chasm (Serafini, 2012). Also, Chen (2008) shared one of the unexpected findings suggesting that the experimental group excelled in the control group in terms of listening and reading comprehension. Therefore, wiki workspaces can be exploited to offer language learners a meaningful and authentic environment to improve their reading skills in the target language.

4.3 *Motivation*

Motivation sets the initial steps to maximize competence in a language irrespective of learners' talent and the reasons which are either self-motivated or determined by external factors for learning a new language (Chalupa & Haseborg, 2014). In the case of wiki-enhanced learning environments, it is believed that wikis can be helpful to achieve sustained motivation and create fruitful learning outcomes when the activities and tasks are designed by considering the learners' needs, interests, and also the instructional goals and objectives in any educational settings, including second or foreign language learning.

To illustrate, students are more likely to get benefit from flexible learning environments to practice autonomy (Kessler & Bikowski, 2010). Autonomy is usually associated with motivation. Therefore, it can be said that autonomous and flexible learning environments created through wiki can increase motivation. In addition to the general outcomes of the study, Al-Johali (2019) confirmed that wiki technology in educational settings can be regarded as motivating since it enriches the teaching and learning practices with novelty and modernity entailing curiosity among learners. Curiosity leads to sustained motivation and commitment to complete the assigned vocabulary tasks in this context (Al-Johali, 2019). The interesting cosmos of Wiki projects ensure high motivation, creativity, and innovation both inside and outside the classroom and enable learning experiences to flourish in anxiety-reduced settings (Awada & Diab, 2018). Finally, language instructors should utilize

wiki-based activities to enrich the repertoire of their teaching practice by keeping in mind wiki as a motivation tool (Özdemir & Aydın, 2015).

4.4 Cultural Awareness

With the rise of communication across cultures, intercultural competence has deserved an important place in granting opportunities for individuals to communicate effectively with each other (Arcagok & Yılmaz, 2020). Here comes to the scene the question of how to teach culture and how students acquire intercultural competence among EFL or ESL instructors (Ducate & Steckenbiller, 2013). In their project, they favored employing wikis for systematic integration of culture and authentic texts in a beginner-level German course in higher education in the USA (Ducate & Steckenbiller, 2013). The preliminary objectives of the study were accomplished as a result of students' active engagement in the analysis of authentic cultural passages to extend their knowledge of values, practices, and beliefs both of the target culture and their own culture. Also, the activities can create a familiarity of cultural values, traditions, or history of the target community while they are given a chance to improve writing abilities in the target language (Sánchez-Gómez et al., 2017).

In today's world, having cultural sensitivity has become inevitable considering the fact that globalization has strengthened mutual dependency and multicultural communications (Dunnett et al., 1986). As in the case of the EFL context, learners have a limited likelihood to expose authentic language learning environments. Nevertheless, integrating cross-cultural projects into language classrooms through wiki workspaces can overcome the possibility of undergoing culture shock in real-life communications with foreigners. Moreover, it enables learners to embrace cultural sensitivity, open-mindedness, compassion, and tolerance for people having various cultural backgrounds (Dunnett et al., 1986). It may be a good idea to integrate wikis into classrooms to cultivate intercultural sensitivity and cultural awareness.

4.5 Autonomous Learning

Proceeding to learn outside the classroom is essential to maximize one's skills and knowledge of the target language; therefore, language instruction should aim to create self-reliant learners who are able to take control of learning with the help of meaningful activities and tasks. Learner autonomy is usually interpreted as a concept that entails a desire to taking control of their learning which embraces the choices linked to learning intentions, types of activities, and assessment (Sinclair, 2000). Adding a dynamic nature to its definition, Little (2007) and Benson (2001) suggested that autonomous learning embodies not only learners' capabilities but also a continuous process of the interaction between students and the teacher.

Autonomous learning bears importance to maximize motivation and confidence in investing in language learning. Technology grants flexible learning chances that may aid in self-directed learning practices. When performing language tasks, the language learners acted not only as an individual but also as a collaborative group member by contributing information to the group tasks (Kessler & Bikowski, 2010).

Being aware of flexible learning opportunities granted through wikis and other synchronous and asynchronous Web 2.0 tools becomes quite powerful to build a sense of control that empowers students to make the most of the learning space. As the results unveiled in Sánchez-Gómez et al.'s study, pre-service teachers believed that wikis and discussion boards supported learner autonomy and collaborative learning in a blended course by stating that they created collaborative texts based on their individual and group contributions. Abandoning the conventional focus of previous literature concentrating on learners' collaborative behavior, attention to form, and attitudes towards wikis in document mode, Nami and Marandi (2014) shifted their focus to the instructional power of wikis, like discussion forums, in thread mode. The nature of the tasks made the instructor passive in the process while students took the responsibility of their learning by determining the content, posts, and discussion topics according to their interests and concerns (Nami & Marandi, 2014). The instructors' reactive position and flexible learning space proved wikis' role in building a more student-centered learning environment; that is, learners worked collaboratively, exchanged their ideas, and built meaning and knowledge without the involvement of the instructor (Nami & Marandi, 2014).

All things considered, we can assert the idea that the learner autonomy achieved through the integration of wikis into language instruction provides desirable outcomes linked to language performance, student motivation to invest their language development, knowledge building, and becoming active learners since wikis offer a more interactive and flexible atmosphere for language learners.

4.6 Audience Awareness

Audience awareness is one of the prominent figures having a positive influence on the written products created through online tools, such as wikis, blogs, forums, and so forth since it pushes the authors to build more reader-oriented texts. To clarify, writers attempt to adjust the content, organization, discourse markers, vocabulary, and language mechanics to convey the meaning effectively and efficiently to their audience. It was indicated that language learners paid more attention to the certain characteristics of their written texts on wikis when compared to their paper-pen texts (Ahlholm et al., 2017; Awada & Diab, 2018; Chin et al., 2015; Kuteeva, 2011; Mak & Coniam, 2008).

To exemplify, Mak and Coniam (2008) attempted to explore the implementation of wikis as authentic writing practice for secondary school ESL learners. In this project, students were expected to create a collaborative school brochure with limited involvement of the instructor by using wikis and the final product was printed

to be distributed to the parents (Mak & Coniam, 2008). Because there is a real reader community and their audience mostly pays more attention to meaning-related issues in their brochures rather than syntactical and lexical appropriateness, the pupils might feel the need for enrichment in content and creativity in their written texts (Mak & Coniam, 2008). In another study, Kuteeva (2011) indicated that the majority of students used interactional meta discourse markers -mostly preferred engagement markers, self-mentions, and attitude markers- in their argumentative texts. It strengthens the point that students are aware of the reader community and modify their texts by taking their audience into account even if the choice of using interaction markers alters among the students (Kuteeva, 2011). As specified in Alyousef and Picard's (2011) case study, the employment of multiple meta-discourse markers by students demonstrates that they are well-versed in the diverse characteristics of various genres. This suggests that the wiki project helped ESL business students become more aware of their target audience for each genre (Alyousef & Picard, 2011). In another study, Wichadee (2010) focused at and compared students' abilities to write English summaries before and after they were taught using wiki, a valuable asset for fostering collaborative learning settings among students. According to the findings of the study, wikis are great learning tools that can help students enhance their writing skills (Wichadee, 2010). On the other hand, students understood that their written work was read, examined, and corrected by all team members, which resulted in a considerable improvement in the participants' score (Wichadee, 2010).

Briefly, collaborative writing tasks in wikis might help the language learners to raise a sense of the reader-writer relationship; correspondingly, students can enrich their written products in terms of content, creativity, and language mechanics.

5 Wiki-Based Tasks and Activities

Wikis are a form of the collaborative learning environment in which people can work together to create communal outputs (Lund, 2008). Wiki tools were mostly used for writing tasks in classrooms such as writing articles in pairs (Ahlholm et al., 2017), group reports (Doulton & Walker, 2014; Zorko, 2009), compositions (Lin & Yang, 2011; Zou et al., 2016), newspaper articles, and job applications (Zou et al., 2016), argumentative essays (Aydın & Yıldız, 2014; Elola & Oskoz, 2010; Kuteeva, 2011), narrative essays (Chin et al., 2015; Kost, 2011; Li & Zhu, 2017), expository essays (Hsu, 2019; Hsu & Lo, 2018), persuasive essays (Kwan & Yunus, 2015), informational and decision-making essays (Aydın & Yıldız, 2014), summaries (Wichadee, 2010), collaborative writing projects (Coniam & Lee, 2008; Franco-Camargo & Camacho-Vásquez, 2018; Özkan, 2015 Sánchez-Gómez et al., 2017); process-based writing tasks (Çelik & Aydın, 2016); and wiki-based business writings (Kassem, 2017; Wang, 2015).

Aside from those writing tasks, several authors made use of wiki tools for assigning online assignments (Martin, 2011), dictating a list of conversation dialogues (Chen, 2008); creating a school brochure (Mak & Coniam, 2008), reading authentic cultural texts about the target culture, discussion and creating a wiki post for the other classes to read on Wikispaces (Ducate & Steckenbiller, 2013). Moreover, wikis were used for promoting learners' vocabulary growth by generating a vocabulary wiki on Wikispaces with illustrative presentations and podcasts (Al-Johali, 2019; Khany & Khosravian, 2014) and an online biomedical dictionary on PBwiki (Nikiforou, 2019). For instance, Alyousef and Picard (2011) created a problem-based learning activity that requires six group members to participate in online discussions that will culminate in co-authoring a report. Also, Miyazoe and Anderson (2010) utilized wikis to create a page that requires translating English course content into Japanese collaboratively. Finally, a distinctive example of the use of wiki tools was a class wiki synthesizing the course content on culture (Kessler & Bikowski, 2010).

6 PB Works/PB Wiki

PB Works or PB wiki is a public web service offering a user-friendly collaborative authoring tool for its users (Yundayani et al., 2020). It has various facilities. Firstly, it is easy to create student accounts without using email accounts to open up a space for teamwork through PB wiki. With the help of automated notifications, easy editing and sharing features make PB works as a practical tool for integrating technology into language classrooms. Finally, its users can easily access their workspaces via their computers, tablets, or smartphones.

6.1 *Creating Teacher Account*

First of all, to create a workspace on PB Works, you can go to the following link: <https://www.pbworks.com/>. Next, click on *Get Started*, and then *EDU Hub*. Among three available plans- *Campus*, *Classroom*, and *Basic*, you can choose the *Basic* option if you do not want a paid membership (See Figs. 1 and 2).

Then, you can write down a name for your workspace and select the non-commercial use only option and sign up by using your email (See Fig. 3). After that, you can select either *anyone* or *only people I invite or approve* options to designate who will be allowed to view your workspace for security settings (See Fig. 4). After accepting PB Works Terms of Service, your account will be set up.

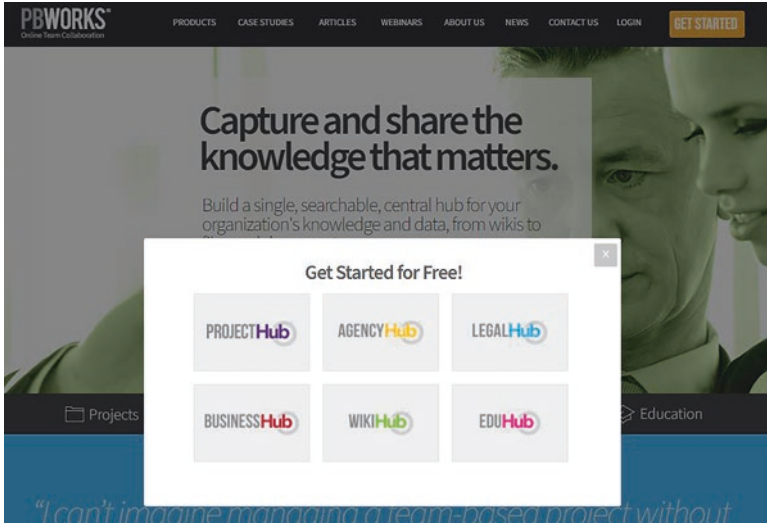


Fig. 1 Homepage of PB Works

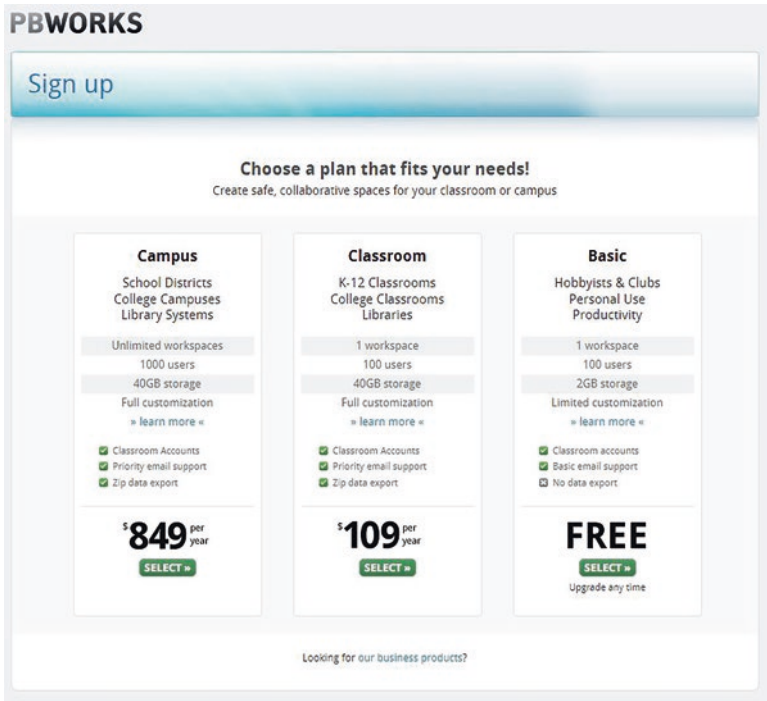
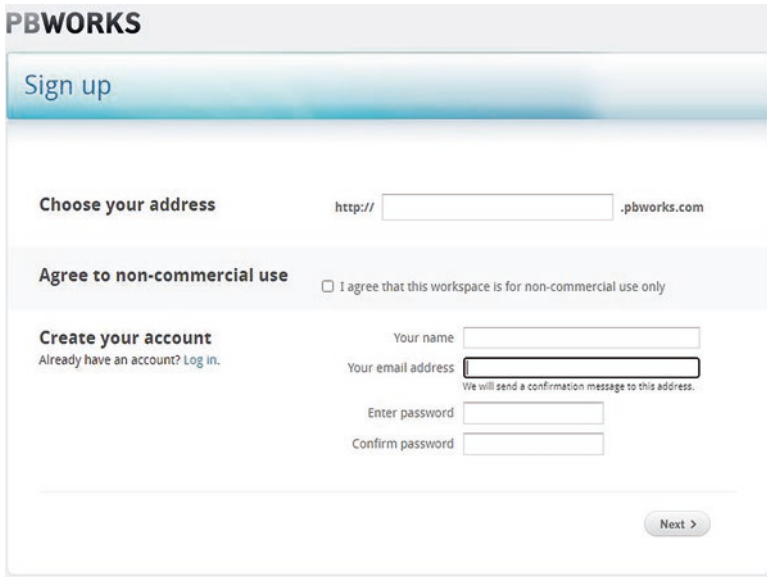


Fig. 2 Pricing plans



PBWORKS

Sign up

Choose your address http:// .pbworks.com

Agree to non-commercial use I agree that this workspace is for non-commercial use only

Create your account
Already have an account? [Log in.](#)

Your name

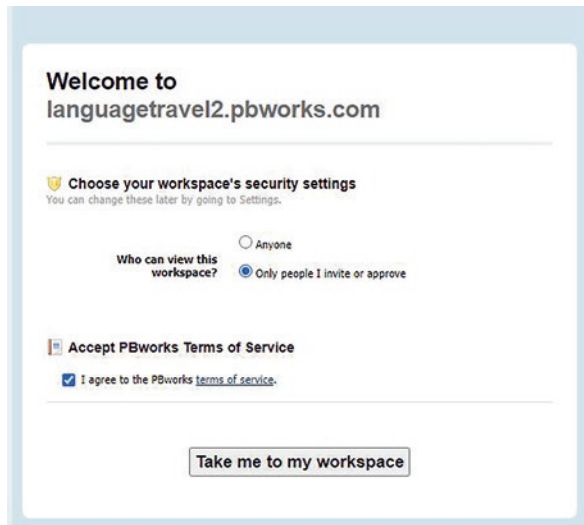
Your email address
We will send a confirmation message to this address.

Enter password

Confirm password

Fig. 3 Creating a teacher account

Fig. 4 Security settings and terms of service



Welcome to
language travel 2.pbworks.com

Choose your workspace's security settings
You can change these later by going to Settings.

Who can view this workspace?

Anyone

Only people I invite or approve

Accept PBworks Terms of Service

I agree to the PBworks [terms of service.](#)

6.2 Creating Student Account on PB Wiki

Once you have created your workspace on PB Wiki, you can easily create your students' accounts with the following steps provided in this section.

PB wiki offers two options for creating classroom accounts: generating student accounts with/without emails. In this part, the following steps help you to give access to your students to your workspace without using their emails. First, you can click on the *Users* tab on the main page, and then press *add more users* (Fig. 5). If you wish to generate classroom accounts, click on *create accounts for your students* option (Fig. 6).

Next, you can decide how many students will be registered and their permission level: reader, writer, editor.

- *Reader* option allows your students to read pages, but not to add and delete content.
- *Writer* option allows your students to read and add content, but not to add and/or delete it.

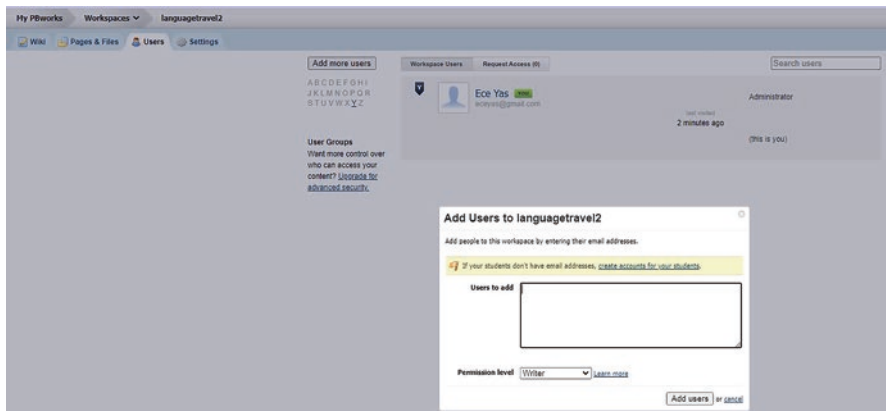


Fig. 5 Adding users to your workspace

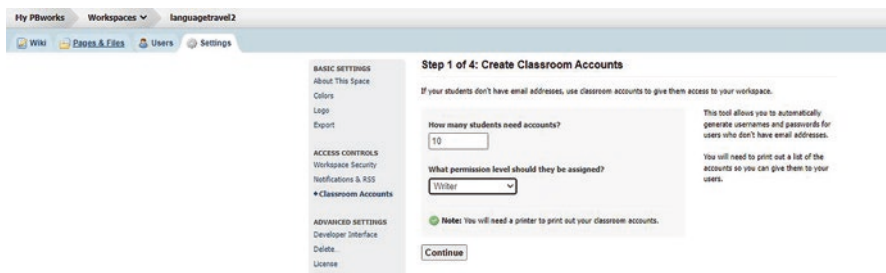


Fig. 6 Creating classroom accounts

- *Editor* option allows your students to read, add, and delete the content.

Then, you can either enter your students' names or generate nicknames and passwords automatically (Fig. 7). In order to share usernames with your students, you can print out the user list and distribute them (Fig. 8).

After generating classroom accounts, it is possible to modify or delete students' accounts easily, if needed (Fig. 9).

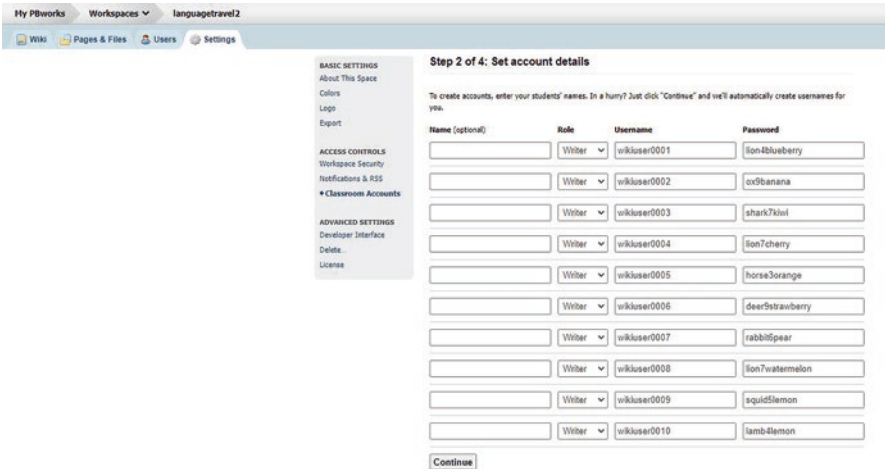


Fig. 7 Usernames and passwords

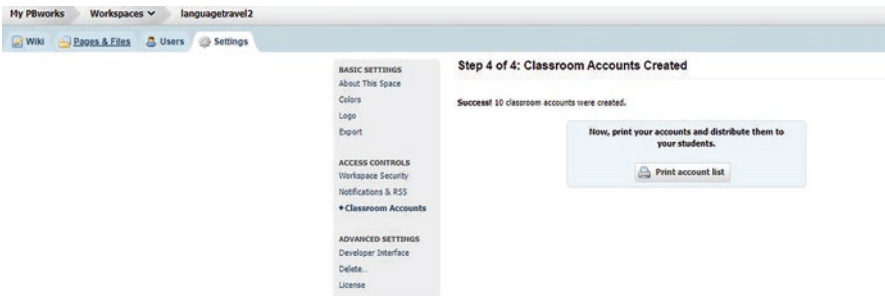


Fig. 8 Sharing usernames and passwords

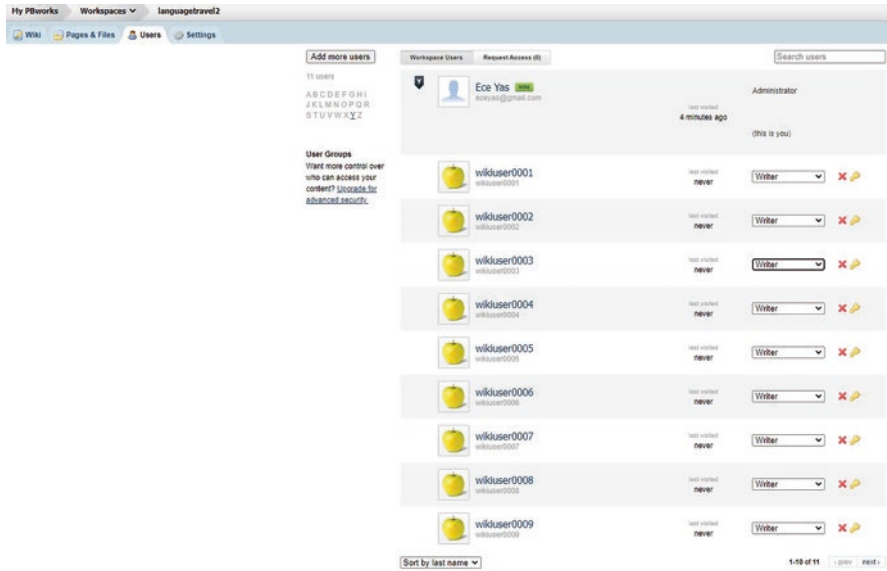


Fig. 9 Modifying and deleting classroom accounts

7 Challenges and Possible Solutions

Integrating technology into education can be a challenging attempt due to several reasons; however, anticipating the possible obstacles and generating contingency plans for them might diminish the undesirable experiences.

7.1 Lack of Training

When utilizing any synchronous and asynchronous sites and applications in language instruction, training students become crucial to make the most of the activities and tasks designed on wiki workspaces since most of the difficulties encountered emerged from technical problems and unfamiliarity of the wiki platform (Al-Johali, 2019; Chen, 2008; Franco-Camargo & Camacho-Vásquez, 2018). It is a good idea to conduct a face-to-face training session to maximize students' ICT competency. Considering the heavy burden of the instructors, group leaders can be trained to assist their peers in collaborative tasks on wikis. Besides, videos that include detailed instruction on how to use wiki-platform can be a way of solving the potential predicaments.

7.2 Inappropriate Posting and Unintentional Deletions

As stated earlier, wikis are usually utilized for collaborative writing tasks; nevertheless, there might be some instances creating disappointment and demotivation on the part of the learners in collaborative tasks on wikis when other members of the group attempted to edit inappropriately and/or remove the content accidentally (Augar et al., 2004; Doult & Walker, 2014; Özkan, 2015). Reducing the inappropriate posting and unintentional deletions among the members of wiki groups is possible when the instructors set clear written guidelines in terms of editing the content (Augar et al., 2004). Besides, the unique features of wiki tools—authentication and tracking allow wiki users to trace the alteration made in the content and secure wiki content against previously mentioned problems (Augar et al., 2004).

7.3 The Role of Instructors

One of the key benefits of wiki-based tasks is to create a flexible and interactive environment for students to take control of their learning and to become autonomous learners who determine the content, posts, and discussion topics according to their interests and concerns. Students are not merely content-creators in the social collaborative sites but they negotiate and collaborate with their peers to agree on the accuracy, meaning, relevance, and so forth. However, the dominance of the teacher might restrict the chance of students becoming self-aware, motivated, and self-sufficient individuals. Therefore, the instructors should play the role of facilitator, coordinator, counselor, or coach not the sole owner of the wiki platforms.

7.4 Task Design

Another problem that is encountered when utilizing wikis in language instruction emerges from the inappropriate task design in collaborative tasks since task design bears importance to ensure fruitful reflection and evaluation of their work as a group to raise the quality of collaborative group works and to invest in language development (Özkan, 2015). For instance, it was demonstrated that even if the pupils showed much more investment in the project at the beginning, student participation decreased through the end of the semester due to the problems and challenges; that is the unavailability of assessment of wiki-tasks and gradual increase of task difficulty (Salaber, 2014). On the other hand, students might not have a clear distinction between collaborative and cooperative tasks. Instead of dividing up the tasks, students should be able to create a work or build knowledge jointly through ongoing

interaction, negotiate the necessary points together and produce a jointly-created product at the end of the process. The reason why students tend to divide the tasks is associated with showing less effort for peer-review, meeting course requirements only, and not embracing the intention of the project, task, or activity (de Arriba, 2017). To prevent this, the instructor should offer learners a clear image of expectations and guidelines for the tasks designed in wikis and other social networking sites.

8 Summary

A wiki is an open user-friendly space allowing its users to locate, create, edit, and share information quickly (Trocky & Buckley, 2016). The unique affordances of wikis have caught the attention of educational experts, instructors, and researchers since technological advances have pushed instructors to move beyond the traditional teaching methods and approaches. The objective is to review the literature of wikis in educational contexts by providing information related to the research design of the studies, the educational contexts in which wikis are used, and the key findings in the selected articles. Overall findings will be summarized in this section.

Firstly, researchers favored employing various research designs to explore the potentials of wikis for teaching and learning. The most frequent research designs were case studies, mixed-method and experimental research conducted in different contexts ranging from the Middle East to South and North America. Another significant point to mention is that most of the studies carried out in higher education. K-12 education and post-graduate education remain scarce in this field. The tendency to performing projects at the tertiary level might be associated with the maturity of the students since wiki-enhanced activities require a certain level of technological competency. It is a good idea to open up a space for wiki workspaces in secondary or maybe primary levels when we consider the positive influences of wikis on learning.

Moreover, the prior research confirmed the advantages of wikis for language teaching and learning in light of the studies conducted in different contexts and fields. The nature of wiki tools made them a perfect medium of learning collaboratively, particularly collaborative writing. It is demonstrated that collaboration promotes the performances of the learners as a result of mutual support through giving, receiving advice, or offering help (Lin & Yang, 2011). Peer corrections in wiki-writing tasks enabled students to learn from each other's mistakes. Moreover, wiki tools have the potential of improving other language skills, including writing, grammar, vocabulary, and speaking, and so forth. It was also noted that wikis could be motivating and engaging instruments both inside and outside the classroom and enable learning to prosper in anxiety-reduced settings (Awada & Diab, 2018). What's more, intercultural competence is regarded as the fifth skill in second language learning, and it is deemed important to manage effective and smooth

communication with other individuals from the target culture. In other words, holding only grammatical competence is not sufficient to achieve effective and smooth communication. To fulfill that aim, wikis can be advantageous workspaces to create a familiarity of cultural values, traditions, or history of the target community among the participants through collaborative tasks with native and non-native students (Sánchez-Gómez et al., 2017). Further, there is growing support for the notion that social collaborative sites might maximize the opportunities of developing a sense of control that empowers students to make the most of the learning space; that is called autonomous learning. Flexible learning environments granted by wikis make it possible for learners to continue learning outside the classroom with the help of ongoing interaction and negotiation between peers and the instructors since learner autonomy is quite important to promote motivation and confidence in advancing language learning (Benson, 2001; Little, 2007). Another benefit of wikis in language learning is to build up learners' audience awareness in their written products. Knowing that there is a real reader community enables students to build more reader-oriented texts by modifying the content, organization, discourse markers, vocabulary, and language mechanics to convey the meaning effectively and efficiently to their audience.

In conclusion, wikis can be utilized for endless purposes in educational settings to achieve more effective, creative, and enthusiastic instructions. However, there can be some challenges when implementing wikis in educational settings, such as lack of training, inappropriate posting of the content and unintentional deletions, the dominance of instructors in wiki tasks, and inappropriate design of tasks. To overcome these difficulties, it is important to note that students should be trained on how to use wikis and their various functions, and the instructors should consider learners' needs and interests when designing activities to get the maximum benefit from wiki tools. Avoiding inappropriate content deletion and posting can be minimized through clear and simple written guidelines in terms of editing the content and exploiting unique features of wiki tools- authentication and tracking, which allows wiki users to trace the alteration made in the content and secure wiki content. Additionally, the teacher's role should be less dominant and directive to facilitate more learner autonomy in wiki tasks.

9 Sample Classroom Tasks

9.1 *Story-Writing*

This task was taken from Castañeda and Cho's (2013) study which was conducted with college students who enrolled in Elementary Spanish II course. The writing assignments in this study were used in addition to regular classroom instruction. Wikispaces (<http://wikispaces.com>) was utilized to create the website. Students are requested to form small groups of three or four people, each with a leader who set

up a master account in a wiki and encouraged all members of the group to contribute to each page as directed by the assignment. The instructor chooses group leaders based on their aptitude for leadership, responsibility, and topic. Each group has to compose four stories collaboratively based on four separate YouTube videos linked in each group's wiki page by the instructor. Within a 2-week period, each group releases two drafts of each narrative. The four video clips are allotted to the students. The wiki writing process is broken down into six basic parts:

- Step 1:** Following grammar instruction, each group is given a few minutes of class time to meet face-to-face to discuss the activity's arrangement.
- Step 2:** Each pupil visits their wiki page and views the video clip at least twice. Each participant is instructed to write at least six sentences explaining what happens in the video segment, using the target grammatical structure, and upload it to their wiki page after seeing it.
- Step 3:** The instructor gives students implicit feedback (i.e. revision prompts) in order to ensure that repair their mistakes and enhance their wiki writing as a group.
- Step 4:** The instructor gives pupils the opportunity to meet face-to-face again to discuss how to modify and move forward with the second and final revision. The story's order and coherence are discussed by the students.
- Step 5:** The students work together to revise and amend the entire manuscript (not just their individual contributions).
- Step 6:** The instructor gives overall feedback through wiki by adopting the role of facilitator in the wiki writing process.

9.2 Dictation Task

This task was taken from Chen's (2008) experimental study on the effects of incorporating wikis into language classrooms.

- Step 1:** The instructor gives a list of conversation dialogues that pupils are to dictate. A thirty- to sixty-second dialogue segment is allocated to each pupil. Within the class, each student is assigned to a separate portion than the others. Each pupil is also given a portion of dialogue from another member to critique. Also, every student in the groups is given a specific role to play and is expected to carry it out. The roles of the students are illustrated below: (a) *Checker of understanding* is functioned as group leaders who facilitate group conversations and ensure that everyone in the group understands the content; (b) *Recorder* keeps track of everyone's assignments and makes sure they are completed, (c) *Elaborator* clarifies and expands on key or ambiguous concepts and lexical items, (d) *Encourager* praises each group member's effort and invites those who remain mute to join in

the discussions, and (e) *Praiser* praises the members when they show improvement.

Step 2: Students are expected to listen to the assigned dialogue and record the dialogue in written format word by word. They have 4 days before the class meeting to submit their dictation to the wiki. Each group member is assigned to review one of his or her group members' allotted work by amending others' wiki postings. Following the submission of the assignment, the correct product is displayed to the others.

Step 3: This group task is graded, and feedback is given by the instructor. Each group work receives a 100-point mark, with each word receiving an equal score (See [Appendix 1](#)). Within the group, everyone gets the same grade. Besides, students are expected to submit out group evaluation sheets at the end of the course to dissuade freeloaders (See [Appendix 2](#)).

Appendixes

Appendix 1

Assessment Rubric.

Responsibility	Performer	Score
Dictation Assignment (Group members in one group get the same score)	All members	100
Discussion participation every week	All members	30
Post individual dictation assignment 4 days midnight before class on the wiki	All members	Yes -10/ No- 0
Critique assigned dialogue and post feedback on the wiki before class meeting	All members	Yes -10/ No- 0
Make sure members understand the course content by asking members on the wiki discussion area if anyone has any questions	Checker of understanding	0-20
Make sure the required assignment is accomplished by members on time and remind members if any assignment is not accomplished by posting reminder on the wiki discussion area	Recorder	0-20
Elaborate and explain at least 3 important vocabularies and 1 phrase or unclear concepts and vocabularies if any member asks	Elaborator	0-20
Encourage group members' contribution and ask members who participate in discussions less than twice every week by posting request on the wiki	Encourager	0-20
Praise individuals in the group when they make progress by posting on the wiki discussion area such as "Good job!" "Great idea!" "That's right"	Praiser	0-20

Appendix 2

Group Evaluation Form.

Member 1 name:

1. The extent to which the member contributes to our group work (1–10)
 2. The extent to which the member gets along with others in the group (1–10)
 3. The extent to which the member submits his/her work before due date (1–10)
 4. Recommendation or comments:
-

Member 2 name:

1. The extent to which the member contributes to our group work (1–10)
 2. The extent to which the member gets along with others in the group (1–10)
 3. The extent to which the member submits his/her work before due date (1–10)
 4. Recommendation or comments:
-

Member 3 name:

1. The extent to which the member contributes to our group work (1–10)
 2. The extent to which the member gets along with others in the group (1–10)
 3. The extent to which the member submits his/her work before due date (1–10)
 4. Recommendation or comments:
-

Member 4 name:

1. The extent to which the member contributes to our group work (1–10)
 2. The extent to which the member gets along with others in the group (1–10)
 3. The extent to which the member submits his/her work before due date (1–10)
 4. Recommendation or comments:
-

Member 5 name:

1. The extent to which the member contributes to our group work (1–10)
 2. The extent to which the member gets along with others in the group (1–10)
 3. The extent to which the member submits his/her work before due date (1–10)
 4. Recommendation or comments:
-

References

- Ahlholm, M., Grünthal, S., & Harjunen, E. (2017). What does wiki reveal about the knowledge processing strategies of school pupils? Seventh-graders as users of wiki and processors of knowledge in a collaborative writing project. *Scandinavian Journal of Educational Research*, 61(4), 448–464. <https://doi.org/10.1080/00313831.2016.1172495>
- Al-Johali, K. (2019). Teaching vocabulary through wiki. *Can It Works?*, 5(2), 45–76.
- Alyousef, H. S., & Picard, M. Y. (2011). Cooperative or collaborative literacy practices: Mapping metadiscourse in a business students' wiki group project. *Australasian Journal of Educational Technology*, 27(3), 463–480.
- Arcagok, S., & Yılmaz, C. (2020). Intercultural sensitivities: A mixed methods study with pre-service EFL teachers in Turkey. *Issues in Educational Research*, 30, 1–18.
- Arreguin, C. (2004). Wikis. In B. Hoffman (Ed.), *Encyclopedia of educational technology*. Retrieved March 6, 2006, from <http://coe.sdsu.edu/eet/Articles/wikis/start.htm>

- Augar, N., Raitman, R., & Zhou, W. (2004). Teaching and learning online with wikis. *Beyond the Comfort Zone Proceedings of the 21st ASCILITE Conference*, 39(1), 95–104. <http://www.ascilite.org.au/conferences/perth04/procs/augar.html>
- Awada, G., & Diab, H. (2018). The effect of Google Earth and wiki models on oral presentation skills of university EFL learners. *International Journal of Teaching and Learning in Higher Education*, 30(1), 36–46.
- Aydın, Z., & Yıldız, S. (2014). Using wikis to promote collaborative efl writing. *Language Learning and Technology*, 18(1), 160–180.
- Başal, A., & Aytan, T. (2014). Using Web 2.0 tools in English language teaching. In *Conference proceedings. ICT for language learning* (p. 372). *libreriauniversitaria. it Edizioni*.
- Benson, P. (2001). *Teaching and researching autonomy in language learning*. Longman.
- Bhattacharjee, A. (2012). *Social science research: Principles, methods, and practices*.
- Castañeda, D. A., & Cho, M. H. (2013). The role of wiki writing in learning Spanish grammar. *Computer Assisted Language Learning*, 26(4), 334–349. <https://doi.org/10.1080/09588221.2012.670648>
- Çelik, S. S., & Aydın, S. (2016). Wiki effect on English as a foreign language writing achievement. *Global Journal of Foreign Language Teaching*, 6(4), 218. <https://doi.org/10.18844/gjflt.v6i4.1674>
- Chalupa, C., & Haseborg, H. (2014). Improving student motivation through autonomous learning choices. *NECTFL Review*, 74, 53–85.
- Chen, Y. (2008). *The effect of applying wikis in an English as a Foreign Language (EFL) class in Taiwan* [Doctoral dissertation]. University of Central Florida.
- Chin, C. K., Gong, C., & Tay, B. P. (2015). The effects of wiki-based recursive process writing on Chinese narrative essays for Chinese as a Second Language (CSL) students in Singapore. *IAFOR Journal of Education*, 3(1), 45–59. <https://doi.org/10.22492/ije.3.1.03>
- Coniam, D., & Lee, M. (2008). Incorporating wikis into the teaching of English writing. *Hong Kong Teachers' Centre Journal*, 7(April), 52–67.
- Cronin, J. J. (2009). Upgrading to Web 2.0: An experiential project to build a marketing wiki. *Journal of Marketing Education*, 31(1), 66–75.
- de Arriba, R. (2017). Participation and collaborative learning in large class sizes: Wiki, can you help me? *Innovations in Education and Teaching International*, 54(4), 364–373. <https://doi.org/10.1080/14703297.2016.1180257>
- Doult, W., & Walker, S. A. (2014). 'He's gone and wrote over it': The use of wikis for collaborative report writing in a primary school classroom. *Education 3-13*, 42(6), 601–620. <https://doi.org/10.1080/03004279.2012.752022>
- Ducate, L., & Steckenbiller, C. (2013). Toward a better understanding of culture: Wikis in the beginning German classroom. *Language Learning Journal*, 45(2), 202–219. <https://doi.org/10.1080/09571736.2013.826715>
- Duffy, P., & Bruns, A. (2006). The use of blogs, wikis and RSS in education: A conversation of possibilities. In *Learning on the move: Proceedings of the online learning and teaching conference 2006* (pp. 31–38). Queensland University of Technology.
- Dunnett, S. C., Dubin, F., & Lezberg, A. (1986). English language teaching from an intercultural perspective. In J. M. Valdes (Ed.), *Culture bound* (pp. 148–161). Cambridge University Press.
- Elola, I., & Oskoz, A. (2010). Collaborative writing: Fostering foreign language and writing conventions development. *Language Learning & Technology*, 14(3), 51–71.
- Franco-Camargo, L. F., & Camacho-Vásquez, G. (2018). The impact of wikis & videos integration through cooperative writing tasks processes. *English Language Teaching*, 11(5), 116. <https://doi.org/10.5539/elt.v11n5p116>
- Friesen, N., & Lowe, S. (2012). The questionable promise of social media for education: Connective learning and the commercial imperative. *Journal of Computer Assisted Learning*, 28(3), 183–194.

- Hsu, H. C. (2019). Wiki-mediated collaboration and its association with L2 writing development: An exploratory study. *Computer Assisted Language Learning*, 32(8), 945–967. <https://doi.org/10.1080/09588221.2018.1542407>
- Hsu, H. C., & Lo, Y. F. (2018). Using wiki-mediated collaboration to foster L2 writing performance. *Language Learning & Technology*, 22(3), 103–123.
- Kassem, M. A. M. (2017). Developing business writing skills and reducing writing anxiety of EFL learners through wikis. *English Language Teaching*, 10(3), 151. <https://doi.org/10.5539/elt.v10n3p151>
- Kessler, G., & Bikowski, D. (2010). Developing collaborative autonomous learning abilities in computer mediated language learning: Attention to meaning among students in wiki space. *Computer Assisted Language Learning*, 23(1), 41–58. <https://doi.org/10.1080/09588220903467335>
- Khany, R., & Khosravian, F. (2014). Iranian EFL learners' vocabulary development through Wikipedia. *English Language Teaching*, 7(7), 57–67.
- Kilickaya, F., & Krajka, J. (2010). Teachers' technology use in vocabulary teaching. *Online Submission*.
- Kost, C. (2011). Investigating writing strategies and revision behavior in collaborative wiki projects. *CALICO Journal*, 28(3), 606–620.
- Kuteeva, M. (2011). Wikis and academic writing: Changing the writer-reader relationship. *English for Specific Purposes*, 30(1), 44–57. <https://doi.org/10.1016/j.esp.2010.04.007>
- Kwan, L. S., & Yunus, M. M. (2015). Group participation and interaction in ESL wiki collaborative writing among Malaysian gifted students. *Asian Social Science*, 11(2), 59.
- Li, M., & Zhu, W. (2017). Good or bad collaborative wiki writing: Exploring links between group interactions and writing products. *Journal of Second Language Writing*, 35, 38–53.
- Lin, W. C., & Yang, S. C. (2011). Exploring students' perceptions of integrating wiki technology and peer feedback into English writing courses. *English Teaching*, 10(2), 88–103.
- Little, D. (2007). Language learner autonomy: Some fundamental considerations revisited. *Innovation in Language Learning and Teaching*, 1(1), 14–29.
- Lund, A. (2008). Wikis: A collective approach to language production. *ReCALL*, 20(1), 35–54.
- Ma, Q. (2020). Examining the role of inter-group peer online feedback on wiki writing in an EAP context. *Computer Assisted Language Learning*, 33(3), 197–216. <https://doi.org/10.1080/09588221.2018.1556703>
- Mak, B., & Coniam, D. (2008). Using wikis to enhance and develop writing skills among secondary school students in Hong Kong. *System*, 36(3), 437–455. <https://doi.org/10.1016/j.system.2008.02.004>
- Martin, D. (2011). *An investigation into students' usage of an online homework wiki, its effect on language improvement and its benefit as a learning and teaching support for undergraduate German*.
- Matthew, K. I., Felvegi, E., & Callaway, R. A. (2009). Wiki as a collaborative learning tool in a language arts methods class. *Journal of Research on Technology in Education*, 42(1), 51–72. <https://doi.org/10.1080/15391523.2009.10782541>
- Miyazoe, T., & Anderson, T. (2010). Learning outcomes and students' perceptions of online writing: Simultaneous implementation of a forum, blog, and wiki in an EFL blended learning setting. *System*, 38(2), 185–199. <https://doi.org/10.1016/j.system.2010.03.006>
- Nami, F., & Marandi, S. S. (2014). Wikis as discussion forums: Exploring students' contribution and their attention to form. *Computer Assisted Language Learning*, 27(6), 483–508. <https://doi.org/10.1080/09588221.2013.770036>
- Nikiforou, E. (2019). Facilitating the development of collaborative online dictionaries in the ESP field. *ESP Teaching and Teacher Education: Current Theories and Practices*, 2019, 131–146. <https://doi.org/10.14705/rpnet.2019.33.930>
- Özdemir, E., & Aydın, S. (2015). The effects of wikis on motivation in EFL writing. *Procedia – Social and Behavioral Sciences*, 191, 2359–2363. <https://doi.org/10.1016/j.sbspro.2015.04.241>

- Özkan, M. (2015). Wikis and blogs in foreign language learning from the perspectives of learners. *Procedia – Social and Behavioral Sciences*, 192, 672–678. <https://doi.org/10.1016/j.sbspro.2015.06.102>
- Parker, K., & Chao, J. (2007). Wiki as a teaching tool. *Interdisciplinary Journal of e-learning and Learning Objects*, 3(1), 57–72.
- Reinhardt, J. (2019). Social media in second and foreign language teaching and learning: Blogs, wikis, and social networking. *Language Teaching*, 52(1), 1–39.
- Reinhold, S. (2006, August 21–23). WikiTrails: augmenting Wiki structure for collaborative, interdisciplinary learning. In *Proceedings of the 2006 international symposium on Wikis (WikiSym '06)*. Association for Computing Machinery, New York, NY, USA, 47–58. <https://doi.org/10.1145/1149453.1149467>
- Salaber, J. (2014). Facilitating student engagement and collaboration in a large postgraduate course using wiki-based activities. *The International Journal of Management Education*, 12(2), 115–126.
- Sánchez-Gómez, M. C., Pinto-Llorente, A. M., & García-Peñalvo, F. J. (2017). The impact of wikis and discussion boards on learning English as a second language. A mixed methods research. *Digital Education Review*, 32, 35–59. <https://doi.org/10.1344/der.2017.32.35-59>
- Serafini, F. (2012). Expanding the four resources model: Reading visual and multi-modal texts. *Pedagogies: An International Journal*, 7(2), 150–164.
- Sinclair, B. (2000). Learner autonomy: The next phase? In B. Sinclair, I. McGrath, & T. Lamb (Eds.), *Learner autonomy, teacher autonomy: Future directions* (pp. 4–14). Pearson.
- Trocky, N. M., & Buckley, K. M. (2016). Evaluating the impact of wikis on student learning outcomes: An integrative review. *Journal of Professional Nursing*, 32(5), 364–376.
- Wang, Y.-C. (2015). Promoting collaborative writing through wikis: A new approach for advancing innovative and active learning in an ESP context. *Computer Assisted Language Learning*, 28(6), 499–512.
- Wei, C., Maust, B., Barrick, J., Cuddihy, E., & Spyridakis, J. H. (2005). Wikis for supporting distributed collaborative writing. In *Proceedings of The society for technical communication 52nd annual conference* (pp. 204–209).
- Wichadee, S. (2010). Using wikis to develop summary writing abilities of students in an EFL class. *Journal of College Teaching & Learning (TLC)*, 7(12), 5–10.
- Yundayani, A., Kardijan, D., & Apriliani, R. D. (2020). The impact of pbworks application on vocational students' collaborative writing skill. *Jurnal Cakrawala Pendidikan*, 39(3), 694–704.
- Zorko, V. (2009). Factors affecting the way students collaborate in a wiki for English language learning. *Australasian Journal of Educational Technology*, 25(5), 645–665. <https://doi.org/10.14742/ajet.1113>
- Zou, B., Wang, D., & Xing, M. (2016). Collaborative tasks in wiki-based environment in EFL learning. *Computer Assisted Language Learning*, 29(5), 1000–1016. <https://doi.org/10.1080/09588221.2015.1121878>

Ece Yaş a first-year MA student in the English Language Teaching Program at Bolu Abant İzzet Baysal University. She graduated from Middle East Technical University with honors with a BA in Foreign Language Education in 2017. In the same year, she has begun to work as an English Teacher in a private institution. She is currently employed in the Ministry of Education, where she is an English Teacher. She hopes to pursue a doctorate degree in English Language Teaching and eventually teach at the college level.

Digital Storytelling: An Alternative Method and a Multimodal Task to Improve Writing Skill of English Language Learners



Asuman Aşık

Abstract Recently we all have witnessed the pervasive influence of technology on education leading to several differences of methodology and practices. Digital storytelling (DS), the combination of traditional storytelling and digital multimedia, has been acknowledged as one of these effective and promising methods in language teaching. Also, DS might serve as an alternative method to improve various types of literacies, such as digital literacy, global literacy, technology literacy, visual literacy and information literacy (Robin, The educational uses of digital storytelling. In: Society for information technology & teacher education international conference. Association for the Advancement of Computing in Education (AACE), pp 709–716, 2006), and a meaningful use of technology to construct knowledge and write effective narratives (Green, *School Libr Worldwide* 19(2):23–26. Retrieved January 5, 2020, from <https://digitalcommons.georgiasouthern.edu/leadership-facpubs/63>, 2013). This innovative practice offers an authentic and interactive medium for writing skill based on students' creativity and collaboration. Both process-based and product-based methodology of the writing skill can be empowered through DS tasks. Moreover, collaborative online writing tasks, another alternative method for the digital age, can also be conducted through DS. With all above mentioned motive in mind, this chapter will focus on the affordances of DS to improve writing skill in particular for foreign language classrooms. Some sample tasks and activities will also be presented along with the basic principles and guidelines on how to integrate DS into our regular language classrooms. Moreover, the chapter also aims to suggest practical suggestions with a number of sample tools and pedagogical implications for the practitioners that they might embark on their own journey for technology-enhanced writing instruction.

Keywords Digital storytelling · Multimodality · Digital writing · English language teaching

A. Aşık (✉)
Gazi University, Ankara, Turkey
e-mail: asuman.asik@gazi.edu.tr

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_4

1 Introduction

Technology-supported pedagogy has been an increasing demand and necessity for language classrooms. The use of technology in education is various and changing according to the contexts, the expertise of teachers, the learner profile, the needs of the society and many other reasons. Hughes (2005) categorized the technology-supported pedagogy in three ways: (a) replacement, (b) amplification, or (c) transformation. In this regard, the teacher can use technology just by replacing the traditional tool with any form of technological tool, or students can use technology to fulfill a task more effectively, or teachers or students can find a transformative way of technology for more innovative purposes. DS, within this perspective, is one of the innovative ways of technology use for empowering learning and teaching in line with the utilization of critical thinking skills, motivation and content learning. For English language classrooms, DS can provide students a more creative and multimodal aspect of writing in English. To this end, this chapter aims to introduce how DS can be integrated into language classrooms to improve writing skill of English language learners by suggesting some samples of implementation and implications.

2 Digital Storytelling: Definition, Usage and Integration into English Language Teaching

Traditionally, storytelling has been commonly used in education due to its nature of including rich content and language, and positive affective factors. Bakhtin (1986) pinpoints that storytelling has a crucial role in promoting interaction and negotiation of meaning in language classes with its dialogic nature. Moreover, inclusion of storytelling into foreign language classroom improves students' linguistic skills, reinforces empathy, and creativity, increases active participation and cooperation (Tsigani & Nikolakopoulou, 2018).

With the technology integration, DS has been a new way of storytelling with the integration of computer-based technologies. DS as a concept was introduced first by Joe Lambert at the Center for Digital Storytelling. In a simpler definition, DS “blends media to enrich and enhance the written or spoken word” (Frazel, 2011, p. 9). Furthermore, Robin (2006) defines DS as “combining the art of telling stories with a variety of digital multimedia, such as images, audio and video” (p. 709). For a practical outline of DS, Lambert (2010, p. 10) introduced seven steps of DS through which one can answer the guiding questions for each step. The steps are in the following:

1. Owning Your Insights:
What's the story you want to tell? What do you think your story means?
2. Owning Your Emotions:
What do you feel about your story? What does it mean to you today?

3. Finding the Moment:

What was the moment when things changed? What makes this moment a story?

4. Seeing Your Story

What images might help describe this moment? What meaning does each add?

5. Hearing Your Story

Beyond the recorded voice, would story be enhanced with other layers of sound?

6. Assembling Your Story

What is structure of your story? How will layers of audio, visual work together?

7. Sharing Your Story

Who is your audience and what is your purpose? Have these shifted?

The use of DS in education has been studied in several studies. Previous research has shown that DS improves the skills of 21st century skills (including technical, presentation, research, editing and writing skills) (Dogan & Robin, 2009), empowers learning environment, curriculum and learning experiences (Sadik, 2008), increases self-confidence of the students (Yüksel, 2011). As for learner-centred learning strategies, DS also encourages student engagement, reflection for deep learning, project-based learning and integration of technology into instruction (Barrett, 2006). Moreover, Fig. 1 illustrates how DS has the potential to converge several aspects related education ranging from multiple literacy skills to increased digital media software, or from improving the required literacies of 21st century to both students and teacher engagement.

It has also been acknowledged that DS can be effective in language teaching in particular skills. A variety of studies focused on the relationship between DS use and specific skills; DS improved listening skill of young learners (Ramírez Verdugo & Alonso Belmonte, 2007); the use of DS had a significant effect on students' reading and listening comprehension (Hamdy, 2017); learning through storytelling can be learner-centered to increase autonomy in oral proficiency (Kim, 2014); through DS, students can remember new vocabulary better, practice speaking skills more frequently, become competent in speaking target language, and improve learning performance (Hwang et al., 2016); DS has increased English achievement, critical thinking, and learning motivation (Yang & Wu, 2012); DS enhanced students' involvement in learning process and improved their reading, writing and creative skills (Nassim, 2018).

2.1 DS for Improving Writing Skill

Another affordance of DS for language classroom is related to specifically writing skill with its multimodality characteristic. In a study with third graders in an L1 writing class, Yamaç and Ulusoy (2016) also found that DS enhanced students' ideas, organization, word choice, sentence fluency. Moreover, DS increased the



Fig. 1 The convergence of DS in education. (Robin, 2008, p. 223)

sense of learning community among the students and their motivation to write. By using *Blendspace*, in an action research, Tsigani and Nikolakopoulou (2018) revealed that the use of technology contributed to a more attractive and motivating atmosphere to improve the narrative texts of the students.

Lambert (2012) asserts that DS provides multilingual writers the chance to investigate the potential for using multimodality to produce and share their stories. In a study by Bloch (2018), it has been indicated that DS enabled students to use a variety of written, visual, and aural voices for expressing their ideas, by understanding better how the relationship between text and voice could be expressed in a print text. Moreover, in a study by Balaman (2018), the DS integrated methodology has been investigated in an English as a Foreign Language (EFL) context. With the participation of 43 EFL students, the study found that the shift from the traditional literacy to multimodal literacy skills in writing classes through DS is effective for more creative, meaningful and authentic narrative writings.

DS is found effective in developing multimodal literacy of language students. Gregori-Signes (2014, pp. 241–242) asserts that DS fulfills the seven principles of multimodal learning, which are listed below:

1. With the use of words and pictures together, retention is improved in a DS, which is related to *multimedia principle*.
2. The combination of words and pictures also promotes the *spatial and temporal contiguity principles*.
3. & 4. *Coherence and modality principles* are achieved by bringing words, sounds and combining animation with narration in a DS.
5. In a DS, the content needs to be given in more than one modality (such as voice, sound, pictures, words), which is related to the *redundancy principle*.
6. *Direct manipulation principle* is used while the students should make decisions on how to combine and include all raw materials decide to include.
7. Through DS, the individual learner including high-spatial learners in the process is considered, which fulfills the *individual differences principle*.

In addition to the multimodal characteristic, DS has been accepted as one of the effective methods to develop writing skills through collaboration (Diaz, 2016; Sarica & Usluel, 2016; Tanrikulu, 2020). From a more sociocultural perspective, collaborative writing approach is described as a joint authorship of text by following the stages of writing that results in the joint responsibility and possession of the text among the learners (Nguyen, 2020; Storch, 2019). An effective collaborative writing task can allow students to learn from each other (Harmer, 2004).

Furthermore, Herrera Ramírez (2013) studied how *Storybird* as a collaborative DS writing tool influenced students' language proficiency level and writing skill. In this study, it was found that students were motivated to create narrative texts, improved their vocabulary and complex language patterns to use it in their writing. In terms of students' perceptions towards collaborative DS in a writing class, Tanrikulu (2020) found that DS positively affected the internal and external structure of the text and the multimedia feature together with the script had positive effect on writing.

2.2 The DS Writing Process

The process of writing instruction follows simple order such as prewriting, drafting, responding, revising, editing, publishing (Hyland, 2019). Likewise, the DS writing also uses this process as the basics but also requires more complex and multimodal aspects. Reinders (2011) suggests a lesson plan including DS as in the following:

1. *Preparing the student*: The teacher explains the DS elements and how to write a DS effectively. Then teachers' expectations from a DS, the rationale, the length, the content, the type of the story are explained. The teacher shows some samples to illustrate the expected final product. As for technical preparation, the teacher may introduce the DS tools or any digital tools that they may need, or consult the IT support people in the school, check the available sources and their familiarity.
2. *Conducting the activity*: The teacher arranges pairs or groups by introducing some tips or ideas, and encourages students to develop a storyboard (through

examples including visuals, pictures, scripts etc.), organizes peer feedback on each draft (a peer feedback checklist can also be given)

3. *Concluding the activity*: Students will first present their work to their classmates and publish them on school website or another platform that they are familiar. The teacher encourages them to give feedback and comments.

Another detailed stepwise approach for effective DS writing process is presented by Kent (2015). In the study, Kent (2015, p. 123) lists the following four-stage approach:

- (a) *Define, collect, decide (choosing the topic, images, audio, content),*
- (b) *Select, import, create (selecting appropriate images, audio, text, modify them according to the aim),*
- (c) *Decide, write, record, finalize (deciding the point of view, writing the script, recording the narration, finalizing the story as a video),*
- (d) *Demonstrate, evaluate, replicate (sharing the DS with others, getting feedback and running a DS workshop).*

3 DS Tools and Sample Activities

For DS activities and tasks to be implemented for language classrooms, a great deal of tools, applications and websites within Web 2.0 technology are available with free or charged options. Aşık (2016) presents evaluation of some DS tools which are tested and discussed in detail. In this section, some effective tools are presented and discussed. However, due to the rapid changes in technology, new and more effective tools may emerge at any time. Therefore, it is suggested that teachers, researchers and practitioners focus on the learning outcome of a DS task rather than the high-tech quality or trendy tools. To use a familiar tool known by both teachers and learners for a DS task might be the most appropriate option. In addition to DS tools, some online collaborative writing tools can also be checked for availability since the students will need some platforms to write together, edit, revise their stories more practically. For online collaborative writing applications, *Google Docs*, *Draft*, *Dropbox paper*, *Etherpad*, *MS Word Online* and *Penflip* can be suggested. In addition to the list below, *Windows Movie Maker*, *Photo Story 3*, *iMovie* and *Microsoft Powerpoint* are other common tools that can be used for DS. The following applications with short explanations are listed to exemplify some specific programs and websites for DS:

Storybird (www.storybird.com): The user can have the inspiration of the story to come from the pictures provided on the website. The author selects a picture according to certain art and topic among stock images and then the user can create books in different formats by adding texts. A screenshot as an example is given Fig. 2 below.

Story jumper (www.storyjumper.com) is a tool that can be used by individuals and groups. It provides its users to create stories that they can see, hear and touch.



Fig. 2 A sample story writing screen from Storybird. (Retrieved from <https://storybird.com>)

With illustration options, the user can add voice, sound effect and background music to their stories, and then can publish it as a hardcover book.

Book Creator (www.bookcreator.com): This application allows its users to create books based on their creativity. It provides combination of text, images, audio and video. With these multimodal features, one can create interactive stories, digital portfolios, and poetry books.

VoiceThread (www.voicethread.com) is a collaborative and multimedia application that allows students to upload images, record voices and narration. The completed VoiceThread can be shared and posted into a site or a blog.

Powtoon (www.powtoon.com) is an animated slideshow creator. Students can create animations by choosing some fun themes with several options and including music. (See Fig. 3 below)

Animoto (www.animoto.com) allows its users to create videos by choosing photos and clips, licensed songs. It is a cloud-based software which includes the combination of digital images, short videos, texts and music.

3.1 Sample DS Activities for Writing Skill

An example of DS task for writing skill written and suggested by Christiansen & Koelzer (2016) is given below in a shortened version.

Material: *Windows Movie Maker* and mobile phones

Level: Intermediate to advanced

Setting: Secondary/post-secondary education

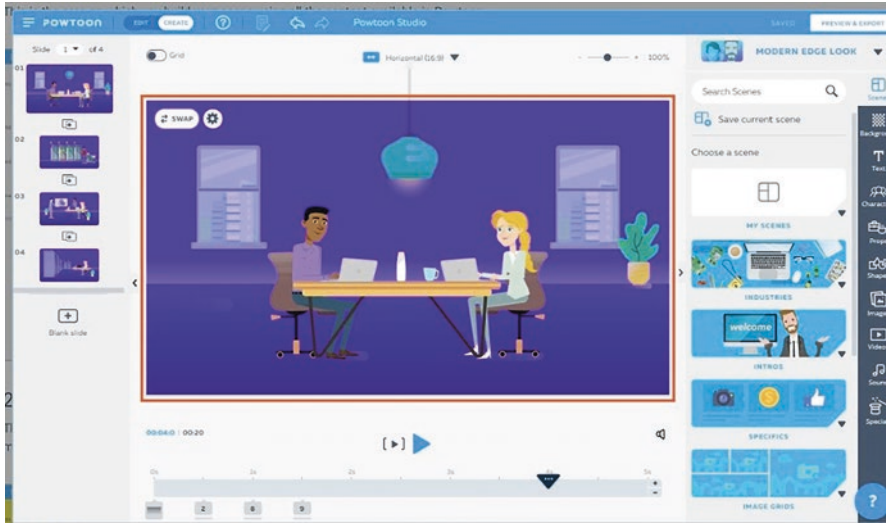


Fig. 3 A sample story writing screen from Powtoon. (Retrieved from <https://support.powtoon.com/en/article/introduction-to-the-powtoon-studio>)

Duration: Digital stories three to five minutes, four to six weeks (suggested 1–3 h per week)

Purpose: To compose a traditional research paper by following the recursive steps of the writing process approach.

Procedures

- The teacher divides the students into small groups and as a group and the students will decide on a culture they would like to learn about.
- The technological tools are introduced
- Students are required to develop a script and storyboard with their group members according to the steps of the writing process approach.
- Students may produce some simple drawings or, use *Microsoft PowerPoint* for the outline of their digital stories.
- Students are required to develop a final draft. With collaboration, each group will create their digital stories by using *Windows Movie Maker* with pictures/videos taken and adding text, audio, music and narration tracks.

Another example for DS task is related to create a book trailer through DS tool. The example below was designed by the author.

Material: *Powtoon*

Level: Intermediate

Setting: High school

Duration: Digital stories 3–5 min, 4 weeks

Purpose: To compose a DS about a book. The students are required to create book trailer about a book they read.

Procedures

- The teacher introduces *Powtoon* in detail, and then divides the class into groups of three. Each group will create a book trailer (like a movie trailer) about a book they have read. Each group should prepare their DS on a different book.
- After the task is given, the students choose a book, and research about the content, the author, main events.
- The students are required to decide on the characters, setting, animations on *Powtoon* according to their script. Students create a storyboard including all materials (audio, visual) and narrative.
- The script writing follows the writing process such as brainstorming, outlining, draft, feedback, revise and finalize.
- The students compile all the materials and create their animations on *Powtoon*. In addition to the music, the students can record their narration through Audacity.
- The students finalize their project and share it with other groups in class. The students give each other feedback according to the DS evaluation rubric (see Appendix).

4 Conclusion and Implications

This chapter aimed to introduce DS as an alternative method and a multimodal task to improve writing skill of English language learners. To this end, the description of the DS, the DS writing process and the DS tools are presented through some sample tools and examples. The multimodality affordances of DS may have significant impact on improving the writing skill and increasing their motivation and interest towards writing. Due to the digital age, the students may not be motivated to write in English unless they have an authentic and specific purpose. The studies show that the DS creation process and the final product can be proposed as an alternative activity to other writing tasks. The DS creation process through a collaborative task might also increase the sense of belonging to a community, and the joint responsibility of the students. Furthermore, the design of a DS task in a language classroom needs considerable effort which requires the selection of the right DS tool, organizing the collaborative work, script writing and selecting the appropriate multimodal materials. Moreover, to make DS more beneficial and meaningful, de Jager et al. (2017) suggests a genuine participatory approach, clear communication and negotiation on the use of DSs before the task, supporting mechanism for crafting the DS and the use of digital media.

DS is one of the effective ways for not only language teaching but also for practicing multimedia literacy. While creating a DS, language learners find opportunities to develop their digital literacy and media literacy as well, which are required under 21st century skills. Also, some practical implications and suggestions can be given on how to design DS tasks effectively:

- Since there is a variety of DS tools and applications available on the internet, while choosing the right DS tools, the teachers should focus on the learning outcome of the DS activity first, rather than the attractiveness and trendiness of the tool itself. The DS tools should be chosen according to the purpose of the activity.
- The DS tool to be used can be chosen among the tools that both the teacher and the students are familiar. The DS tool should be simple to use and supported with several multimedia options. New DS tools can also be used if the teacher introduces and trains the students about the new DS tool.
- The DS writing process should also be introduced to the students. For example, basic steps for a DS, which are define, collect, decide; select, import, create; decide, write, record, finalize (Kent, 2015), are suggested.
- The assessment of the digital stories produced by the students would be better with a rubric (see Appendix for an example) which includes the items evaluating the final product according to certain criteria.

Therefore, with the suggestions above and the previous studies discussed through the chapter, it can be claimed that the use of DS would provide multiple affordances into writing activities. The integration of DS into writing classes would enhance the learning environment, provide more creative and meaningful digital stories, allow students experience collaborative practices and chances to improve the literacies ranging from writing literacy to multimedia literacy.

Appendix

A rubric to evaluate digital stories for writing skill in language classrooms

Item	Criteria	Score (1,2,3,4,5) ^a
Point of view/ Purpose	The story has a purpose with embedded clear point of view, which is successfully expressed.	
Voice/Music/ Pacing	The audio is presented successfully with the script, or the script is narrated verbally and clearly; the rhythm and the pace of the story is within the suggested limits.	
Images	The images represent the script successfully. The images are chosen well to clarify the meaning and make the DS more attractive	
Economy	The script is concise enough to make the story clear and meaningful. (The teacher may limit the words and the duration of the DS)	
Language use	Language is used accurately and fluently. Vocabulary, grammar, and pronunciation (if any) are used successfully. Writing includes coherence and cohesive devices.	

Adapted from Kent (2015)

^aScore 5: excellent, 4:good; 3: average; 2: fair; 1: poor

References

- Aşık, A. (2016). Digital storytelling and its tools for language teaching: Perceptions and reflections of pre-service teachers. *International Journal of Computer-Assisted Language Learning and Teaching*, 6(1), 55–68. <https://doi.org/10.4018/IJCALLT.2016010104>
- Bakhtin, M. M. (1986). *Speech genres and other late essays*. University of Texas Press.
- Balaman, S. (2018). Digital storytelling: A multimodal narrative writing genre. *Journal of Language and Linguistic Studies*, 14(3), 202–212.
- Barrett, H. (2006). Researching and evaluating digital storytelling as a deep learning tool. In C. Crawford et al. (Eds.), *Proceedings of society for information technology & teacher education international conference 2006* (pp. 647–654). AACE.
- Bloch, J. (2018). Digital Storytelling in the multilingual academic writing classroom: Expanding the possibilities. *Dialogues: An Interdisciplinary Journal of English Language Teaching and Research*, 2(1), 96–110. <https://doi.org/10.30617/2.1.6>
- Christiansen, M. S., & Koelzer, M. L. (2016). Digital storytelling: Using different technologies for EFL. *MEXTESOL Journal*, 40(1), 1–14.
- de Jager, A., Fogarty, A., Tewson, A., Lenette, C., & Boydell, K. M. (2017). Digital storytelling in research: A systematic review. *Qualitative Report*, 22(10), 2548–2582.
- Diaz, M. A. (2016). Digital Storytelling with pre-service teachers. Raising awareness for refugees through ICTs in ESL primary classes. *Digital Education Review*, 30, 1–16.
- Dogan, B., & Robin, B. (2009). Educational uses of digital storytelling: Creating digital storytelling contests for K-12 students and teachers. In *Society for information technology & teacher education international conference* (pp. 633–638). Association for the Advancement of Computing in Education (AACE).
- Frazel, M. (2011). *Digital storytelling*. International Society for Technology in Education.
- Green, L. S. (2013). Language learning through a lens: The case for digital storytelling in the second language classroom. *School Libraries Worldwide*, 19(2), 23–26. Retrieved January 5, 2020, from <https://digitalcommons.georgiasouthern.edu/leadership-facpubs/63>
- Gregori-Signes, C. (2014). Digital storytelling and multimodal literacy in education. *Porta Linguarum*, 22, 237–250.
- Hamdy, M. F. (2017). The effect of using Digital Storytelling on students' reading comprehension and listening comprehension. *Journal of English and Arabic Language Teaching*, 8(2), 112–123.
- Harmer, J. (2004). *How to teach writing*. Longman.
- Herrera Ramírez, Y. E. (2013). Writing skill enhancement when creating narrative texts through the use of collaborative writing and the Storybird Web 2.0 tool. *Colombian Applied Linguistics Journal*, 15(2), 166–183.
- Hughes, J. (2005). The role of teacher knowledge and learning experiences in forming technology-integrated pedagogy. *Journal of Technology and Teacher Education*, 13(2), 277–302.
- Hwang, W., Shadiev, R., Hsu, J., Huang, Y., Hsu, G., & Lin, Y. (2016). Effects of storytelling to facilitate EFL speaking using Web-based multimedia system. *Computer Assisted Language Learning*, 29(2), 215–241. <https://doi.org/10.1080/09588221.2014.927367>
- Hyland, K. (2019). *Second language writing*. Cambridge University Press.
- Kent, D. B. (2015). Avenues for use of multimedia in language teaching: Crafting digital stories in the EFL context. In the *19th STEM international conference: How to develop movie and media materials*.
- Kim, S. H. (2014). Developing autonomous learning for oral proficiency using digital storytelling. *Language Learning & Technology*, 18(2), 20–35.
- Lambert, J. (2010). *Digital storytelling cookbook*. Digital Diner Press.
- Lambert, J. (2012). *Digital storytelling: Capturing lives, creating community* (3rd ed.). Center for the Study of Digital Storytelling.

- Nassim, S. (2018). Digital storytelling: An active learning tool for improving students' language skills. *PUPIL: International Journal of Teaching, Education and Learning*, 2(1), 14–29. <https://doi.org/10.20319/pijtel.2018.21.1429>
- Nguyen, L. T. T. (2020). Integrating ICT into collaborative writing: Are we ready yet? *The Journal of Asia TEFL*, 17(1), 243–252. <https://doi.org/10.18823/asiatefl.2020.17.2.16.562>
- Ramírez Verdugo, D., & Alonso Belmonte, I. (2007). Using digital stories to improve listening comprehension with Spanish young learners of English. *Language Learning & Technology*, 11(1), 87–101.
- Reinders, H. (2011). Digital storytelling in the language classroom. *ELTWO Journal*, 3, 1–9. Retrieved November 20, 2020, from <http://blog.nus.edu.sg/eltwo/2011/04/12/digital-storytelling-in-the-foreign-language-classroom/>
- Robin, B. (2006). The educational uses of digital storytelling. In *Society for information technology & teacher education international conference* (pp. 709–716). Association for the Advancement of Computing in Education (AACE).
- Robin, B. (2008). Digital storytelling: A powerful technology tool for the 21st century classroom. *Theory Into Practice*, 47(3), 220–228.
- Sadik, A. (2008). Digital storytelling: A meaningful technology-integrated approach for engaged student learning. *Educational Technology Research and Development*, 56(4), 487–506. <https://doi.org/10.1007/s11423-008-9091-8>
- Sarıca, H., & Usluel, Y. (2016). The effect of digital storytelling on visual memory and writing skills. *Computers & Education*, 94(2), 298–309. <https://doi.org/10.1016/j.compedu.2015.11.016>
- Storch, N. (2019). Collaborative writing. *Language Teaching*, 52(1), 40–59. <https://doi.org/10.1017/S0261444818000320>
- Tanrikulu, F. (2020). Students' perceptions about the effects of collaborative digital storytelling on writing skills. *Computer Assisted Language Learning*. <https://doi.org/10.1080/09588221.2020.1774611>
- Tsigani, C., & Nikolakopoulou, A. (2018). Digital storytelling: A creative writing study in the foreign language classroom. *Educational Journal of the University of Patras*, 5(2), 68–80. <https://doi.org/10.26220/une.2900>
- Yamaç, A., & Ulusoy, M. (2016). The effect of digital storytelling in improving the third graders' writing skills. *International Electronic Journal of Elementary Education*, 9(1), 59–86.
- Yang, Y. T. C., & Wu, W. C. I. (2012). Digital storytelling for enhancing student academic achievement, critical thinking, and learning motivation: A year-long experimental study. *Computers & Education*, 59(2), 339–352. <https://doi.org/10.1016/j.compedu.2011.12.012>
- Yüksel, P. (2011). *Using digital storytelling in early childhood education: a phenomenological study of teachers' experiences* [Doctoral dissertation, Middle East Technical University] <https://open.metu.edu.tr/handle/11511/21182>

Assoc. Prof. Dr. Asuman Aşık works as an associate professor at the Department of English Language Teaching, Gazi University, Turkey. She received her bachelor's degree from the Department of English Language and Literature, Hacettepe University, MA and PhD degree from the Department of English Language Teaching, Gazi University, Turkey. Her research interests are corpora and language teaching, classroom discourse, young learners of English, teacher training, materials development, TPACK, technology and language teaching.

Pedagogically Sound: Audio Feedback as an Alternative to Written Feedback in Distance Education: EFL/ESL Students' and Teachers' Perceptions and Its Effectiveness



Merve Kıymaz

Abstract Feedback is indispensable for language teaching and generally delivered with written commentary. However, students perceive written feedback as insufficient because written comments are not clear and engaging. From the teachers' perspective, providing students with written feedback is hard and time-consuming. In distance education, giving written feedback gets more daunting. To enhance the quality of feedback in online education settings, alternative modalities have been found and audio feedback is one of them. The purpose of this study is to explore whether giving audio feedback to language learners' assignments in online education settings is an efficient technique and how it is perceived by learners and teachers. Searches were carried out in 10 databases and 221 studies were selected as they met the inclusion criteria. In this study, four themes were identified: practicality, pedagogy, differing content, and personality. Audio feedback was found to be pedagogically sound, practical only if necessary technological training provided, more holistic in terms of content, and more personal. In the light of these findings, educational practitioners in language learning might benefit from audio feedback in distance education.

Keywords Audio feedback · Online feedback · Distance education · Teaching · EFL feedback · ESL feedback · Written feedback

M. Kıymaz (✉)
Düzce University, Düzce, Turkey
e-mail: mervekiymaz@duzce.edu.tr

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022
G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing
Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_5

1 Introduction

Feedback is one of the most important components of teaching and learning (Hattie & Timperley, 2007; Dowden et al., 2013). Nonetheless, much of the feedback given cannot be considered as effective and efficient. This might stem from the notion that the conventional feedback should be given in written forms (Mccarthy, 2020), although it has been shown that written feedback is not preferred by the students most of the time due to its lack of clarity and personal involvement by the teacher (Duncan, 2007). From the teachers' perspective giving written feedback to students' assignments can be a daunting chore as it is perceived as a quite time-consuming part of teaching. Both in general education and English as a Foreign Language (EFL) or English as a Second Language (ESL) settings, written feedback is perceived as a chore and daunting activity and not so useful in terms of clarity, engagement and wholistic approach to students' work. One could think of giving oral feedback which generally takes place in the form of face-to-face conversations and tutoring rather than the written one (Olesova, 2011); there haven't been enough studies to prove the effectiveness of oral feedback in EFL or ESL settings and its effectiveness in each language skill (i.e., writing, speaking, reading and listening) has not been investigated yet (Nakamaru, 2008). What is more, thanks to advancements in technology, foreign language education just like many other sectors has shifted its focus from in-residence delivery to the online and distant one via synchronous and/or asynchronous learning environments. In this type of distance education, one cannot deny that one conventional type of delivering feedback, namely written feedback, cannot be enough to satisfy 21st century students' who are "digital natives" expectations. Besides, the preference of teachers for written feedback might not be sufficient in distance education as online environments do not allow face-to-face interaction when further explanation is needed on the written feedback given (Cavanaugh & Song, 2014). In this sense, to ensure the effectiveness of instructor feedback and student satisfaction with the modes of feedback, several delivery methods of feedback have been started to be used.

Audio feedback is one type of alternative feedback modalities. Audio feedback can be defined as a feedback delivery form via which instructs record their voices and send their voice-recorded commentary to students' assignments (Dixon, 2015). Having a potential for more personal engagement with the course instructor (Olesova et al., 2011; Stewart, 2010), and thanks to the advancements in Web. 2.0. and educational technologies, audio feedback can be a game-changer in distance education in terms of modalities of feedback (Cavanaugh & Song, 2014; Dixon, 2015). Although audio feedback first emerged in early 1960s (McGrew, 1969; Tanner, 1964) and was used various course contents, audio feedback in EFL/ESL settings has been started to be used later and the research has been started to be done to examine its effectiveness particularly for language teaching and learning (Olesova, 2011). Although not conducted for an EFL/ESL setting, Ice et al. (2007) were the first ones to investigate its effectiveness when given in online classroom environments. Later, Olesova et al. (2011), Olesova (2011)) and Cavanaugh and

Song (2014) investigated its effectiveness and the attitudes of EFL/ESL students and teachers' towards in asynchronous online learning environments. These studies carry utmost importance in that language learning is one of a kind subject and it entails many different skills (e.g., oral, aural) to acquire a language. Taking into consideration language learning's this multifaceted nature, delivering an online English course and enhancing it with an appropriate type of feedback can be considered as a necessity and research has proven audio feedback to be effective in these online language learning environments (Olesova et al., 2011; Olesova, 2011); Cavanaugh & Song, 2014).

Overall, this review study investigates the current literature on the use of audio feedback which is given to EFL/ESL students in fully online environments and under-covers its underlying advantages and disadvantages. Along with the digitalisation, growing demand for online courses rather than face-to-face ones, and requirements of natural disasters such as COVID-19 for fully online courses, novel and transformative ideas in education such as using different types of technology-enhanced and media-enriched feedback carry utmost importance in today's fully online situation. Taking the fact that language learning necessitates different types of commentaries in that it requires many skills to be reviewed into consideration, such a novel technology like audio feedback seems to solve many problems in online EFL/ESL classrooms. Finally, current review study focuses on four themes emerged while reviewing the literature: (1) the pedagogical suitability of audio feedback (2) the practical sides of audio feedback (3) the capacity of audio feedback for more personal connections between students and teachers (4) the altering content of audio feedback when compared to other modes of feedback. By doing so, this study aims to evaluate the advantages and drawbacks of giving audio feedback to ELF/ESL learners in distance education and undercover the themes that are needed to be further investigated in such a novel research field.

2 Methods

The literature search was carried out during 3 months from March 2020 to May 2020 on ten online databases such as ERIC, ProQuest, Turkish Higher Education Council National Theses and Dissertations Database, Bolu Abant Izzet Baysal University Library Catalog and Middle East Technical University Library Catalog via remote access, Wiley Online Library, Semantic Scholar, PsychINFO, Google Scholar, and EBSCOhost Search Premier to locate and organize pertinent primary sources. In the light of the seminal review on the use of audio feedback as an alternative feedback mode by Dixon (2015), the first exploratory investigation to find out the major themes and key concepts was conducted in between March 2020 and April 2020. This search yielded the timeline of audio feedback mode ranging from 1962 to 2015 and the first emergence of the audio feedback in the field of English language teaching. After the first exploratory search, a secondary search was completed to explore the reference lists of the relevant articles via the snowball

technique and hand searched between April 2020 and May 2020. In the second round of searching, as the scope of this study was to explore the effectiveness of audio feedback and the perceptions of EFL/ESL learners and teachers about audio feedback delivered in distance education, Cavanaugh and Song's case study investigating the use of feedback in an online writing class (2014) and Ice et al.'s seminal study (2007) were used as reference points in this study because these two studies were only the ones that investigated audio feedback use in fully online environments. A Boolean strategy was exploited using keywords and phrases. The keywords used in both searches were as follows: audio feedback OR feedback OR ESL and EFL feedback OR computer-mediated feedback OR online feedback. A total of 221 studies were located via the Boolean strategy and monitored within the scope of selection criteria listed below.

2.1 Selection Criteria

In line with the purpose of this review study, some selection criteria were set to choose the studies that were going to be used. The selection criteria are as follows:

- The articles that were chosen for this review should be published in journals which are peer-reviewed. Proceedings of conferences are also included in this review. Doctoral dissertations and master's theses are also used in this study.
- Conceptual studies, review articles as well as studies that are empirical should be included as this is a general review article that reports the situation of audio feedback in language learning settings via distance education. As the purpose of this study was to explore the effectiveness of audio feedback and learners' and teachers' perceptions about it in EFL/ESL settings in distance education, not only quantitative, but also qualitative and mixed-methods studies should be included if they are relevant to the purpose of this current review study.

3 Review of Literature

3.1 Feedback

Delivering feedback is often viewed an inevitable and perhaps one the most vital aspects of teaching and learning (Azevedo & Bernard, 1995; Corbett & Anderson, 1989; Epstein et al., 2002; Moreno, 2004). In the most generic terms, feedback is defined as "information about the gap between actual level and the reference level of a system parameter which is used to alter the gap in some way" (Ramaprasad, 1983, p. 4). In the same vein, Mory (2004) defines feedback as the source of knowledge that permits to compare the results of the actual current state and the expected one. In educational settings, Hattie and Timperley (2007) delineates feedback as

“the information that comes from a channel (e.g., parent, teacher, book, experience, and self) in regards with the facets of one’s performing or understanding” (p. 81).

In addition to defining feedback, Hattie and Timperley (2007) also conceptualised a model that delineated four categories of feedback as follows:

- Task feedback
- Processing of the task feedback
- Self-regulation feedback
- Self-feedback

Hattie and Timperley (2007) defined task feedback as the comments on whether the performance is correct or not. They referred to the next category, processing of the task feedback, as the current or further strategies that can be used to achieve a task. In their model, they argued that self-regulation feedback reminds learners of the strategies (e.g., self-evaluation) in order to improve the performance. The last category they mentioned is self-feedback. In this type of feedback, personal comments on the individual self (i.e., “smart boy!”) are conveyed to the learner. Out of four categories, the most effective ones are the task feedback and the processing of the task feedback (Hattie & Timperley, 2007). The researchers also found self-regulation feedback useful only if it triggers the further effort and attention of the learners. Self-feedback was found to be useless by and large as they don’t highlight the learning process itself (Hattie & Timperley, 2007).

Besides showing the gap between the learners’ current state and the desired one, feedback seems to be in relation with learners’ motivation to learn a subject. For instance, feedback has been found to have a crucial role to motivate learning and to increase achievement (Hyland & Hyland, 2006; Narciss & Huth, 2006). However, as having complex dynamics, the effectiveness of feedback on learning is hard to observe (Shute, 2008). In her seminal systematic review article, Shute (2008) also points out the inconsistent results and findings of plethora of the research on feedback effectiveness.

3.2 Feedback Effectiveness

In order to investigate the underlying mechanisms of what makes a feedback effective or ineffective on learning, several scholars conducted research (Chickering & Gamson, 1987; Gibbs & Simpson, 2005; Hattie & Timperley, 2007; Kluger & DeNisi, 1996; Shute, 2008). To illustrate, thanks to the meta-analysis of Kluger and DeNisi (1996), receiving feedback was found to be in relation with outperforming. Yet, Kluger and DeNisi noted that the nature of the feedback can either have a facilitating or a debilitating effect on learning and performance.

According to Chickering and Gamson (1987), certain premises should be ensured to maintain the effectiveness of instructor feedback. The principles delineated by Chickering and Gamson are as follows:

- the students' need of a suitable type of feedback to make the most from the course
- the students' need of self-reflection upon their existing knowledge and the gap between their existing and further-needed knowledge
- the students' needs of assessing their own performance

Based on the basic premises of feedback effectiveness by Chickering and Gamson (1987) and Gibbs and Simpson (2005) further proposed several conditions to ensure the effectiveness of feedback. The conditions of feedback effectiveness proposed by Gibbs and Simpson are as follows:

- Effective feedback is sufficient.
- Immediate and timely feedback should be given to foster the sense of “teacher immediacy” (Arbaugh & Hornik, 2006) in the eye of the students.
- Effective feedback is the one which can be channeled to the students, can be understood by them and can be made used of by them.
- The students should take action on the basis of feedback given
- Rather than focusing students' fixed abilities and personality characteristics, feedback should focus on student's visible performance and activities for a task.
- The goals and the rubric of the assignment should align with the type of the feedback delivered.
- Effective feedback should be appropriate for the context where a task is assigned. (pp. 16–25).

In the same vein with Gibbs and Simpson's (2005) conditions of feedback effectiveness, Ramaprasad (1983) suggested that feedback effectiveness can be ensured only if the feedback meets the discrepancies between what is known and what should be known further by the students. In addition, Shute (2008) argued that feedback should be delivered in a constructivist, to-the-point and immediate manner to be effective. Also, Poulos and Mahony (2008) added that instructional feedback depend on how it is perceived by the students, coupled with its impact on them and the sense of credibility they observe in it.

The last issue to cover in feedback effectiveness is the timing of it. Along with Gibbs and Simpson (2005) and Shute (2008), Meerah and Halim (2011) also highlighted the importance of timely and instant feedback as retention or recall of what had previously done as a task could be easily forgotten if feedback was not delivered immediately. Carless (2006) also pointed out students' preference for immediate and instant feedback. Although all these studies show the importance of feedback given in a timely manner to be considered as effective, written feedback cannot be given immediately and timely most of the time owing to time and practicality drawbacks (Hennessy & Forrester, 2014). This situation yields some sort of dilemma as written feedback is the one preferred most of the time (McCarthy, 2020) and taking its lack of timeliness into consideration, written feedback cannot be argued to ensure the effectiveness. Apart from its lack of timeliness, written feedback is also criticised for its lack of clarity and constructiveness (Duncan, 2007).

In reply to the criticisms that written feedback gets, McCarthy (2020, as cited in Killingback et al., 2019) noted some various feedback delivery modes which can be

replaced with written feedback (e.g., audio or video feedback). These kinds of alternative feedback modes may provide students with opportunities to get more individualised feedback which is richer in terms of content Race (2004, as cited in Killingback et al., 2019).

3.3 *Audio Feedback*

One of the alternative feedback delivery modes is audio feedback. Hennessy and Forrester (2014) defines audio feedback as “a digital sound file containing formative or summative verbal feedback given by the tutor” (p. 778). Audio feedback is digitally created and stored in fully online learning environments and can be given to the online assignments of the students and the students are able to have a chance to listen to their feedback in the form of those digital and audible recordings (Ice et al., 2007).

Audio feedback can be considered as one of the most effective and successful modes of delivering feedback (Olesova, 2011) and it has numerous advantages compared to the written one (Carruthers et al., 2015). First, it provides more personalized comments with students (Ice et al., 2007; Hennessy & Forrester, 2014). Furthermore, it enhances Garrison’s (2000) sense of presence among the students (Ice et al., 2007). This feature of audio feedback carries utmost importance especially in distance education as students may feel a lack of social presence (Garrison, 2000) or isolated in a fully online environment where no paralinguistic, verbal cues and student to student, student to teacher, or teacher to student interaction exist, which might have a debilitating effect on students (Olesova et al., 2011).

Second advantage of the audio feedback is that the perceptions of the students’ for getting audio feedback are quite positive and audio feedback is preferred over the written one by the students most of the time (Merry & Orsmond, 2008; Parkes & Fletcher, 2017). Lunt and Curran (2010) also point out the facilitating effect of audio feedback on the students’ learning development in higher education contexts. Gould and Day (2013) uncover the underlying reason behind those positive attitudes towards audio feedback in their study and state that audio feedback is preferred more by students simply because audio feedback generates a more wholistic approach to the gap in between the students’ existing knowledge and the further needed one, rather than focusing on only the problematic parts of a task. Gould and Day also add students tend to facilitate audio feedback in many alternating and meaningful terms. When it comes to increased amount of student engagement, Nicol (2006) argues that audio feedback may result in greater student engagement as it looks like a real dialogue, which can be listened repeatedly (Hennessy & Forrester, 2014). Hennessy and Foster (2014) point out the human voice factor in audio feedback and attribute greater student engagement with audio feedback to hearing instructor’s voice, which may make students appreciate that the instructor allocates extra time and effort for them. In the same vein, Lau (2008) reports that students positive perceptions’ of getting audio feedback regarding seemingly more

effort made by the instructor and instructor was perceived “as an informed reader rather than a critical judge” (Sipple, 2007, p. 31). Finally, the human voice factor, styles of conversation, intonation, pitch and stress, and the care given by the instructor are appreciated by students and result in greater sense of community, belongingness, more involvement in the course, and higher rates of recalling of detail-oriented feedback (Gould & Day, 2013; Ice et al., 2007; Olesova et al., 2011; Rowe, 2011).

The last advantage of audio feedback is its practicality. Writing feedback is more time consuming than recording one’s voice as audio feedback, which can save the time of instructors to give more decent and instant feedback (Ice et al., 2007; Hennessy & Forrester, 2014). In other words, writing takes more than speaking. To illustrate, Lunt and Curran (2010) compared the time allocated for written versus audio feedback and concluded that same amount of information could be given 1 min of audio feedback whereas it took 6 min to write the information. In contrast with this view, Morris and Chikwa (2016) objected the time efficiency of audio feedback and pointed out the time allocated for recording, saving and uploading the audio files. However, Rotheram (2009) argued that only if instructors have digital literacy to find out convenient ways of delivering and uploading an audio file and can speak fast, giving audio feedback can be considered as saving time of them and Cavanaugh and Song (2014) further emphasized the importance of technical training of the teachers to deliver audio feedback in more time-efficient ways.

Except for its obvious advantages, audio feedback seems to have several disadvantages especially in terms of administering it (Xu, 2018). Those drawbacks of audio feedback can be listed as follows: (a) the problems emerged opening an audio feedback file due to incompatibility of operating systems (Hennessy & Forrester, 2014), (b) a lack of decent sound quality when the file size was reduced (Merry & Orsmond, 2008) (c) problems finding a quiet place to record a teacher’s voice (Hennessy & Forrester, 2014), and (d) teachers’ lack of technological literacy and their reluctance to give audio feedback because of their insufficient technological knowledge (Cavanaugh & Song, 2014; Rotheram, 2009). Taking all the disadvantages into consideration, audio feedback may seem hard to deliver and the importance of media altering the effectiveness of audio feedback should be noted (Xu, 2018). It is of utmost importance that teachers should seek for novel and innovative technological tools to deliver audio feedback (Xu, 2018).

3.4 Audio Feedback and EFL/ESL

The use of audio feedback in education dates to early 1960s (McGrew, 1969; Tanner, 1964) and its use in language teaching settings has started in the 1970s after its first emergence in general education settings (Olesova, 2011). The emergence of audio feedback in language teaching has started with the empirical study conducted by Farnsworth (1974), in which the effectiveness of giving audio feedback in an English Writing class to the students who were native speakers of English and audio

feedback was found to be an efficient mode of feedback and time-efficient. Another empirical study was conducted again with the students who were native speakers of English and resulted in native speakers of English greater self-confidence and motivation (Jelfs & Whitelock, 2000).

When it comes to the use of audio feedback in second language (L2) settings, several studies have been conducted to measure the effectiveness of delivery of audio feedback in both L2 and foreign language settings. However, it should be noted that these studies were rather narrower in scope as they only investigated the effectiveness of audio feedback in language acquisition and vocabulary learning. Garfunkel (1976) was one of the earliest scholars investigating the effects of using audio feedback in L2 classes and suggested that audio feedback was to be delivered via radio which was in direct relation with vocabulary acquisition. In another study by Wipf (1984), the delivery of audio feedback via a radio was found to be an effective mode of delivery as L2 learners were able to hear and comprehend language structures and phrases in a better way. Another study which investigated the advantages of audio feedback with non-native speakers of English to give corrective feedback to the English compositions of the students resulted in students' positive experiences and preferences with getting audio feedback due to its clear, individualised and personal nature (Farnsworth, 1974). Telephone was another medium to deliver audio feedback to L2 students and this medium was found to be quite efficient in terms of language acquisition and grammar learning (Twarog & Pereszlenyi-Pinter, 1988).

With the emergence of computer-assisted language learning (CALL) in the 1990s, the delivery media of giving audio feedback and the underlying logic behind giving audio feedback have been drastically changed although its perceived effectiveness and language learners' positive attitude remained the same. To illustrate, both ESL and EFL learners found audio feedback easy to understand and comprehensible in a comprehensive empirical study conducted by Boswood and Dwyer (1995). In the same vein, students perceived voice-recorded comments to their writing assignments as an extended listening opportunity, which increased their motivation to get more feedback (Hyland, 1990). Apart from its enhancing student motivation, many scholars concluded that audio feedback could be made use of as an extra opportunity to develop EFL learners' oral and aural skills (Boswood & Dwyer, 1995; Johanson, 1999). Boswood and Dwyer (1995) claimed that audio feedback provides EFL learners with chances of listening the audio feedback given in a self-paced and repeated manner, which gives a sense of control and agency to students in terms of listening. Likewise, giving audio feedback to EFL students' compositions was argued to be an efficient mode of feedback as it provided a wholistic approach to writing rather than marking and spotting the errors in the compositions (Johanson, 1999). Further, Johanson stated audio feedback could be time-efficient technique and could change the EFL students' perceptions about writing tasks themselves as well as EFL students tended to perceive writing assignments as pure grammatical drill rather than building up meaning. Johnson also noted that audio feedback could be benefited at all stages of writing in EFL via drafts.

Another important asset of audio feedback in EFL settings is that it can change the nature of feedback given. For instance, Hyland (1990) claimed audio feedback provided EFL learners with more opportunities to get more pastoral, humanized, detailed and informative comments of their teachers, which seemed to encourage students to reply to audio feedback and enhanced the rapport in between the students and the teacher. Similarly, audio feedback was argued to entail more wholistic and verbal changes in the content of students' work and as speaking is faster than writing, a teacher could yield more feedback during the same amount of time compared to traditional written feedback (Patrie, 1989).

With the emergence of novel digital technologies in 2000s, the delivery modes of audio feedback have also shifted to more novice and sophisticated technologies (Cavanaugh & Song, 2014) and this shift also changed the way it is perceived. In the seminal study conducted by Swan (2008), it was argued that audio feedback yielded richer feedback content which was full of adjectives and both students and teachers felt that they got and gave more feedback in audio format compared to traditional written feedback. Likewise, Merry and Orsmond (2008) reported that students found audio feedback more deep and more detailed with more specific explanations and examples provided by the teacher. Moreover, Syncox (2003) argued that students' perceptions and overall understanding of their writing assignments were enhanced.

3.5 Audio Feedback in Distance Education

Novel digital technologies have shaped and transformed education and learners' attitude towards learning and teaching as students come to a class with altering and different expectations and entail teachers to use novel methods of education. Distance education has become one of the most contemporary methods of delivering education as it enables to exploit novel technological tools with a wide spectrum of modalities of delivering feedback in a technologically enhanced manner with a capacity of fulfilling students' digital expectations (Carruthers et al., 2015). Of all media enriched feedback in distance education, audio feedback has been found to be one of the most effective modes and seems to have dominant advantages compared to other modalities of feedback (Carruthers et al. 2015; Killingback et al., 2019). Ice et al. (2007) defines audio feedback provided online as a technique where teachers can voice-record their comments on students' work and send them in online learning environments. Ice also notes the asynchronous aspect of audio feedback as its most distinguishable facet.

Numerous studies investigated the effectiveness of giving audio feedback in distance education via asynchronous learning environments and its effect on the perceptions of the students. To illustrate, Ice et al. (2007) conducted a study in which students were given audio feedback in an online graduate classis and the findings of this study yielded more student engagement, more personal rapport with the instructors, greater capability of detecting details, and greater understanding of the course

content thanks to audio feedback (Ice et al., 2007). In another study conducted in graduate level online courses in three different universities, students were found to prefer audio feedback to the written one as they thought audio feedback was more wholistic in terms of overall structure (Ice et al., 2010). Moreover, graduate and undergraduate level students preferred blended type of feedback which was in both audio and written form over the use of only audio feedback in a study by Oomen-Early et al. (2008). The researchers also noted that students in this study thought audio feedback helped them better in terms of greater comprehension of the course content and positive relationship created with the course instructor. Furthermore, Kirschner et al. (1991) conducted a study utilizing audio feedback for writing evaluation in distance education. The examination was directed at the Open University of the Netherlands for a college level course in photochemistry. Despite the fact that the scholars didn't discover any significance in differences in the measure of time spent in the arrangement of the audio feedback just as in the undergraduate students' last grades, they suggested looking at whether the expansion in studies detailed by different scholars additionally happened in a distance education setting.

Apart from its assets, audio feedback was found to enhance the communication between the students and the teacher as it improved the style and tone of instruction in distance education contexts with the help of more sophisticated technological tools (Anson, 1997). In addition, audio feedback seemed to support of the idea of social presence in virtual asynchronous learning environments and provided students with greater navigation opportunities in distance education in the qualitative study by Jelfs and Whitelock (2000). In another qualitative study (Sipple, 2007), students' attitudes towards written versus audio feedback sent via e-mail in an online writing were evaluated and again audio feedback was found to be an effective feedback method in an online environment (Sipple, 2007).

In Olesova et al.'s (2011) study, the perceptions of ESL and EFL students were compared and contrasted for their preference of written or audio feedback in an online class. Interestingly, the researchers concluded that both EFL and ESL students preferred written feedback over audio feedback regarding the spatial and visual nature of written one. However, both ESL and EFL students highlighted a greater engagement with the course was provided thanks to the audio feedback given (Olesova et al., 2011). In addition, learning styles affected the preferences of those students for the type of feedback expected as visual learners preferred written feedback over the audio one (Olesova et al., 2011). In another study which was conducted by Wood et al. (2011) in an online nursing course with 48 students, majority of the students (i.e., 70% of the students) stated that they were able to understand the audio feedback more clearly than the written ones, and 80% of them felt that audio feedback was more personal and engaging. Although much of the research focused on writing in EFL and ESL contexts and other course subjects like biochemistry or nursing in an asynchronous online learning environment, Hsu et al. (2008) found that getting audio feedback in an online classroom environment could improve EFL and ESL students' listening and speaking skills. The researchers argued that students could spot and comprehend their mistakes in their assignments better when audio feedback was provided (Hsu et al., 2008).

All in all, the plethora of research findings point out that students prefer getting audio feedback as it feels more concise, comprehensive, engaging and personal (Kirschner et al., 1991). Furthermore, the plethora of research that investigated the use of audio feedback in online courses undercover the fact that providing students with audio feedback in online discussions increased the retention of the course content and greater student satisfaction with the feedback itself (Ice et al., 2007).

4 Discussion

This review study came up with several major themes. These major themes were segregated into categories down below.

4.1 *The Practical Aspect of Audio Feedback*

Research on the use of audio feedback yielded consistent results. To illustrate, Stewart (2010) argued audio feedback was time-efficient in especially larger classes whereas Stockwell (2009) found that recording, uploading and sending process of the audio feedback took longer time than preparing the written feedback. On the other hand, Ice et al. (2007) reported audio feedback was more timesaving compared to the written one by 75%. The researchers also stated that this time saved enabled teachers to give more feedback in quantity (Ice et al., 2007). However, Dixon (2015) noted that time allocated for giving feedback was highly dependent on the length of the feedback given. Furthermore, Price et al. (2010, as cited in Dixon, 2015) stated that increase in the quantity of feedback does not entail much learning.

When it comes to the delivery way of audio feedback, some inconsistencies are observable as well (Dixon, 2015). For instance, Stockwell (2009) reported that virtual learning environments are frequently used to deliver audio feedback in mp3 files although there has been an increase in using it for homework submitted online. Merry and Orsmond (2008) identified the impracticality of audio feedback when delivered with inappropriate technological tools whereas Stewart (2010) perceived this impracticality as an advantage because it created an amateur and authentic sense. Furthermore, some of the scholars preferred to use audio feedback as the only method for giving feedback (McGarvey & Haxton, 2011) whereas most of them adopted a multiple modality and preferred to combine audio feedback with the written one (Cavanaugh & Song, 2014). Although it may make sense to use different modes feedback together, one should forget the burden that it will create on teachers' shoulders and it would way too much time-consuming obviously (Killingback et al., 2019). As the first aim of the emergence of audio feedback to save the teachers' time, then it would make no sense to spend too much time on giving feedback at all.

The last issue covered in terms of the practicality of feedback given in aural mode is that it entails a technical training for teachers to use it effectively and time-efficiently way (Cavanaugh & Song, 2014; Rotheram, 2009). For example, Merry and Orsmond (2008) witnessed technical problems while administering audio feedback in terms of too much large files sizes of audio feedback documents. Likewise, in their case study investigating the preferences of students and teachers for audio versus written feedback in an online writing class, Cavanaugh and Song (2014) found that while no students had technical problems regarding getting audio feedback, some of the teachers had hard time to record, upload or divide the audio media file. Giving audio feedback in a fully online environment makes the job more daunting for the teachers (Cavanaugh & Song, 2014). The researchers concluded that a face-to-face technological troubleshooting and training session would ease the creating process of audio feedback for the teachers. Moreover, the researchers also highlighted the importance of such a training in distance education programs as well (Cavanaugh & Song, 2014).

4.2 The Pedagogy of Audio Feedback

Much of the research conducted to explore the effects on audio feedback on the perceptions of students highlights the positive attitudes of students towards getting audio feedback and notes its triggering effect on sense of personality (Rotheram, 2009) while most of the students found the written feedback impersonal (Hepplestone et al., 2009). Hepplestone et al. (2009) also found a positive correlation between the online delivery of feedback and student engagement with that kind of feedback. Studies for the most part feature not just positive understudy points of view or even inclination (Merry & Orsmond, 2008). Exploration features how understudies find that the utilization of sound criticism can help fabricate fearlessness, and see it to be of more excellent, progressively customized and less shallow (Sipple, 2007). Reports of expanded degrees of commitment with sound input additionally feature the significance which understudies append to the procedure as an educator's very own reaction to them as people (Rowe, 2011), where understudies detailed how it appeared that the mentor had put forth more attempt (Lau, 2008), or where the educator is viewed as an educated peruser as opposed to a basic adjudicator (Sipple, 2007). Audio feedback was also found to increase the ability to comprehend with the help of intonation, stress and non-verbal cues, better feelings of course involvement and higher rates of retention especially in online courses (Ice et al., 2007; Olesova & Richardson, 2011).

4.3 *The Changing Content in Audio Feedback*

Audio feedback can alter the content of feedback delivered. To illustrate, Cavanaugh and Song (2014) found that audio feedback has nothing to do with explicit grammar correction while the written feedback is all about explicit grammar correction. What is more, although both types of feedback differ in their content and nature, students' views about them also quite dependable (Cavanaugh & Song, 2014).

The findings of the research investigating the use of audio feedback for specific skills and domains of a language (e.g., spelling, punctuation, citation, grammar) were quite mixed and altering. For instance, Sull and Cavanaugh (2011) argued that reading a sentence out loud might be more useful for a student rather than writing it after seeing it in a written feedback. Also, for lower-order writing problems, students did not prefer written commentaries over audio feedback (Sull & Cavanaugh, 2011). Interestingly, nonnative speakers of English found audio feedback effective especially in terms of micro level correction simply because audio feedback provided them with more chances of seeing their grammar and punctuation mistakes (Syncox, 2003). Finally, Ice et al. (2010) found that students preferred written feedback to micro-level areas, with only 6.7% of the students preferring exclusively audio commentary on such issues in their papers. However, they warn the other researchers in that this result might have occurred as learners might not perceive they were getting micro-level feedback in audio form when in fact they were. Students may be “less likely to recognize when such feedback is provided, especially in instances when such feedback manifests itself more subtly (as when general comments include noting that the word ‘environment’ is consistently misspelled throughout the document)” (p. 126).

4.4 *Personal Connection of Audio Feedback*

Since its first emergence, audio feedback has been long found to be more caring and personal (Olson, 1982). Not only Olson (1982), but also other scholars emphasize a better rapport between the teacher and the students thanks to the use of audio feedback (Bond, 2009; Dagen et al., 2008), and that the majority of students prefer this more individual approach (Middleton, 2011b; Rowe, 2011). Furthermore, Rowe pointed out how an increasing number of students perceive feedback as a means of satisfying a need for personal contact and emotional support (2011), and there is some evidence to show that, using audio feedback, students perceived that not only tutors care about their work (Merry & Orsmond, 2008), but also feel the instructor cares about them (Lunt Curran, 2010; Olesova & Richardson, 2011). Several studies highlighted how the meaning, care and personal connectivity that could be communicated using voice (Middleton, 2011a; Rust, 2001), including its nuances and tone (Davis & Ryder, 2012; Rockinson-Szapkiw, 2012), as something that is

difficult to achieve with other methods, human touch dimension which might be especially valuable where sensitive issues are being discussed.

5 Limitations of the Study

The most crucial limitation of this review study is that it does not address whether audio feedback has a statistically significant effect on students' achievement and performance. Also, taking the limited time for this study to be conducted into consideration, there is still left a little of research in the field of audio feedback to be covered. Finally, giving audio feedback to EFL/ESL students in distance education is still an under-researched area and only few empirical studies (e.g., Cavanaugh & Song, 2014; Ice et al., 2007) covers this topic. Most of the feedback research in EFL/ESL settings under covering the effects of audio feedback at many levels and macro and micro-level skills remain as a mystery, which could be the last limitation of this study.

6 Conclusions and Implications for Further Research

Considering the novelty of using audio feedback (Merry & Orsmond, 2008) and its potential "halo effect" (Bond, 2009; Lunt & Curran, 2010), there is widespread agreement in the literature on its potential to improve learning and teaching (Dixon, 2015). Within its scope of potential further research, the first area should be investigated is that the effect of audio feedback in students' performance. Whether it increases language learners' achievement while learning a language still remain a mystery in the field. Further research can be done to uncover its direct out indirect relationship with student performance.

Another point needed to be considered is to understand how the teachers use the audio feedback in their assessments, how they perceive it, and what benefits it brings to student learning. In addition, although the ways in which the teachers utilize the audio feedback fall into the scope of teacher assessment literacy, how teachers could improve their effectiveness in administering audio feedback has remained relatively under-explored.

Thirdly, another point of this study showed was that the need for teacher training to overcome technical hurdles in audio file creation should be considered and perhaps factored into a study. If instructors are frustrated with the process of how to make an audio file, if a microphone does not seem to work, or if a file is too large, the instructor's experience will be affected. It is possible that even if the students enjoy this method of feedback the instructor may not. As stated earlier, such training is especially important in online programs in which instructors are at a distance.

Fourth, the content of teacher comments in audio and written format represents a potentially fascinating area of study. The tendency in this study was for instructors

to make global suggestions when giving audio comments but to make more micro-level and editing suggestions and even corrections when giving written comments. It is possible that teachers tend to default toward a conversational approach in talking to the student about the paper when giving audio feedback but to lean toward a word- or sentence-level approach when giving written feedback. This dynamic may cause the types of issues that are commented on to change from one format to the other.

Finally, all of studies covering the audio feedback in EFL/ESL settings through distance education have dealt with online writing classes. Other skills of English (e.g., listening, speaking and reading) have not been investigated and even more interestingly, there is no study investigated audio feedback given to students' voice-recorded speaking assignments. Investigating the relationship between the use of audio feedback and the other skills and under-covering its potential to improve language learning at many levels carries utmost importance in language learning and teaching field.

7 How to Use Vocaroo in Educational Settings

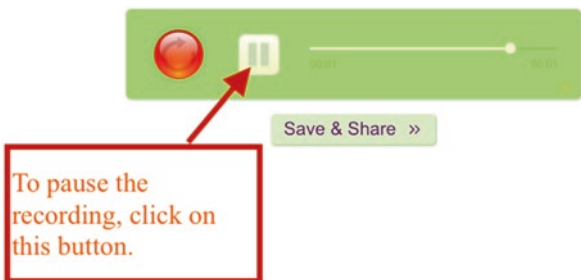
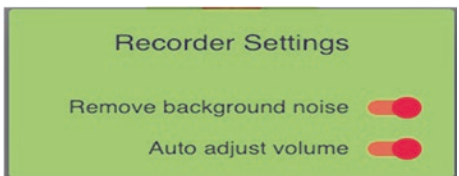
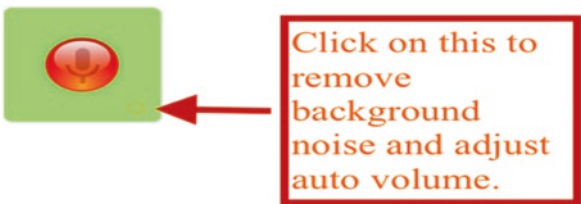
7.1 *The Features of Vocaroo*

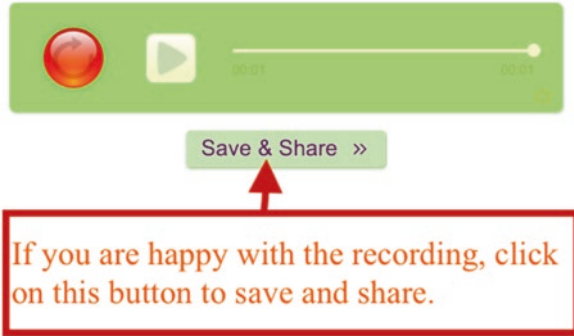
Vocaroo is a free web-based tool working in a web browser via which both teachers and learners can record and download their voice messages with their computers or mobile phones. There are numerous ways to facilitate Vocaroo in and out classroom such as giving corrective feedback, podcasting, and digital storytelling. Learners and teachers can record, send, download the audio recordings and the recordings can be turned into a QR code as well. Vocaroo can be accessed directly at <https://vocaroo.com/>, which does not require users to log into an account and which means that editing and/or revising the same audio recording is not allowed. A properly working computer or mobile phone microphone is required to use Vocaroo. The audio recordings can be downloaded and uploaded in various formats such as *mp3*, *ogg*, *flac* of which maximum size should be 50 MB. A user can share the audio recording as a link on various websites such as Facebook, Twitter, Reddit, WhatsApp Web and/or send it as an e-mail. Furthermore, it can be turned into a QR code which can be used in an online or offline document.

7.2 *Brief Tutorial*

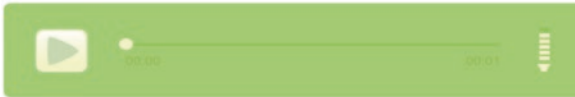
Here are some screenshots on how to record, upload and download audio messages on Vocaroo.

- Go to <https://vocaroo.com/> in your web browser.





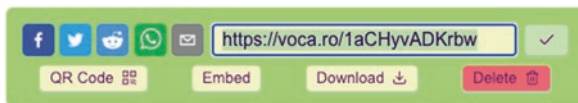
- You can turn up or down the volume of the recording like this:



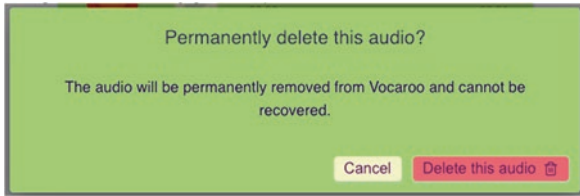
- Vocaroo provides numerous ways to share and download the audio recording.



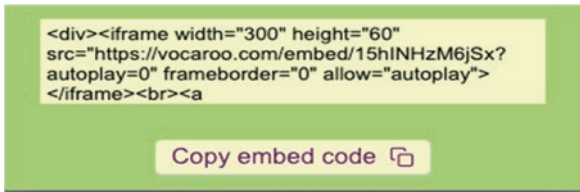
1. Copy and paste the link generated in any document. When the link is shared and clicked, the user will be referred to a webpage on which your audio message will play.



- 2. This option deletes recordings permanently.



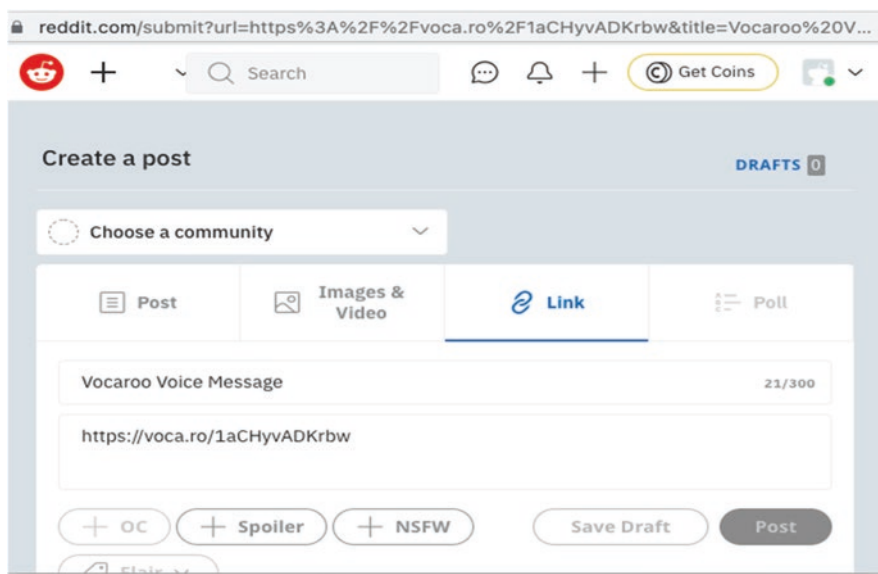
- 3. You can download the audio recording to listen to it offline. Downloading it in MP3 format is strongly recommended.
- 4. When you click the “Embed” button, a code box is going to appear.



- 5. Click on the “QR Code” button. The generated QR code can be copied, downloaded and scanned.



- The audio recording can be shared at various platforms. Here is an example of how to share the recording on Reddit.



- An audio recording can also be uploaded to Vocaroo.



7.3 Possible Advantages and Disadvantages of Vocaroo

There are numerous advantages of using Vocaroo in and out of the classroom. First, it is free and quite user-friendly. The website has a very simple design and is not confusing due to sophisticated options and sections. Given its easy-to-use nature, it can be used with unlimited number of students at various age levels ranging from young learners to adults. Secondly, as the tool isn't downloaded as an application and runs on an online browser, it can be easily accessed at any time and from any place with an Internet connection. Furthermore, both computers and mobile phones, which support HTML5, can be used to record and listen to the audio recordings if they have either plug-in or built-in microphones, which makes the tool ubiquitous and accessible compared to other audio recording tools. Lastly, the most obvious

advantage of Vocaroo is that the recordings can be shared at ease as they can be converted into links or QR codes or are easily downloadable for offline viewing.

When it comes to the disadvantages of Vocaroo, its first and foremost limitation might be that it does not appeal to the users with hearing disabilities. Also, cyber-bullying might be a serious problem as Vocaroo does not have any responsibility for the content of the audio recordings. In this regard, students might be encouraged to use the tool with an ethical code. Another disadvantage of Vocaroo might be that as it is designed for sharing audio recording files easily and does not claim further, highly private or confidential recordings are under the risk of sharing easily. Furthermore, the links that are generated uniquely for the person who will view it might be easily shared with third parties due its easily shareable nature. Bearing this in mind, information and technology specialists, teachers and school administrators might be warned about this issue while attempting to use Vocaroo for educational purposes.

7.4 Sample Activity

There are numerous ways to facilitate Vocaroo in and out of an English language class. Especially in terms of giving corrective peer feedback to tertiary-level students' writing homework, Vocaroo can be quite useful. Tertiary-level students who learn English can be assigned with several compare/contrast essays as homework. The topics of the compare/contrast essays might be as follows:

- What are the advantages and disadvantages of distance education?
- What are the advantages and disadvantages of electronic books?

All of the students might be assigned with the essays and then submit them at an online learning management system. Afterwards, an assigned peer can view, read and give 1-minute audio feedback to the other peer's essay using Vocaroo. While giving feedback, students might be given a checklist about how to evaluate the essays and after recording their audio feedback, they can easily share it with their peers. The students can be grouped in a way that everyone gets and gives audio peer feedback.

References

- Anson, C. M. (1997). In our own voices: Using recorded commentary to respond to writing. *New Directions for Teaching and Learning*, 97(69), 105–113.
- Arbaugh, J. B., & Hornik, S. (2006). Do Chickering and Gamson's seven principles also apply to online MBAs? *The Journal of Educators Online*, 3(2), 1–18.
- Azevedo, R., & Bernard, R. M. (1995). A meta-analysis of the effects of feedback in computer based instruction. *Journal of Educational Computing Research*, 13(2), 109–125.
- Bond, S. (2009). *Audio feedback*. London School of Economics.

- Boswood, T., & Dwyer, R. (1995). From marking to feedback: Audio-taped response to student writing. *TESOL Journal*, 5(2), 20–23.
- Carless, D. (2006). Differing perceptions in the feedback process. *Studies in Higher Education*, 31(2), 219–233.
- Carruthers, C., McCarron, B., Bolan, P., Devine, A., McMahon-Beattie, U., & Burns, A. (2015). “I like the sound of that” – An evaluation of providing audio feedback via the virtual learning environment for summative assessment. *Assessment & Evaluation in Higher Education*, 40, 352–370. <https://doi.org/10.1080/02602938.2014.917145>
- Cavanaugh, A. J., & Song, L. (2014). Audio feedback versus written feedback: Instructors’ and students’ perspectives. *Journal of Online Learning and Teaching*, 10(1), 122–138. Retrieved from http://jolt.merlot.org/vol10no1/cavanaugh_0314.pdf
- Chickering, A. W., & Gamson, Z. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 40(7), 3–7.
- Corbett, A. T., & Anderson, J. R. (1989). Feedback timing and student control in the LISP intelligent tutoring system. In D. Bierman, J. Brueker, & J. Sandberg (Eds.), *Proceedings of the fourth international conference on artificial intelligence and education* (pp. 64–72). IOS Press.
- Dagen, A., Mader, C., Rinehart, S., & Ice, P. (2008). Can you hear me now? Providing feedback using audio commenting technology. *College Reading Association Yearbook*, 29, 152–166.
- Davis, C., & Ryder, A. (2012). Using an old technology in a new way or using a new technology in an old way? Exploring the use of audio feedback post-teaching observation. *Middlesex Journal of Educational Technology*, 2, 30–40.
- Dixon, S. (2015). The pastoral potential of audio feedback: A review of the literature. *Pastoral Care in Education*, 33(2), 96–104. <https://doi.org/10.1080/02643944.2015.1035317>
- Dowden, T., Pittaway, S., Yost, H., & McCarthy, R. (2013). Students’ perceptions of written feedback in teacher education: Ideally feedback is a continuing two-way communication that encourages progress. *Assessment & Evaluation in Higher Education*, 38(3), 349–362. <https://doi.org/10.1080/02602938.2011.632676>
- Duncan, N. (2007). ‘Feed-forward’: Improving students’ use of tutors’ comments. *Assessment & Evaluation in Higher Education*, 32(3), 271–283. <https://doi.org/10.1080/02602930600896498>
- Epstein, M. L., Lazarus, A. D., Calvano, T. B., Matthews, K. A., Hendel, R. A., & Epstein, B. B. (2002). Immediate feedback assessment technique promotes learning and corrects inaccurate first responses. *The Psychological Record*, 52, 187–201.
- Farnsworth, M. B. (1974). The cassette tape recorder: A bonus or a bother in ESL composition correction. *TESOL Quarterly*, 8(3), 285–291.
- Garfunkel, J. (1976). *Effect of feedback for therapists and feedback-reinforcement for patients on frequency and duration of therapeutic verbalization in group therapy*. [Unpublished doctoral dissertation]. University of Wyoming.
- Garrison, R. (2000). Theoretical challenges for distance education in the 21st century: A shift from structural to transactional issues. *The International Review of Research in Open and Distance Learning*, 1(1), 1–17.
- Gibbs, G., & Simpson, C. (2005). Conditions under which assessment supports students’ learning. *Learning and Teaching in Higher Education*, 1, 3–31.
- Gould, J., & Day, P. (2013). Hearing you loud and clear: Student perspectives of audio feedback in higher education. *Assessment & Evaluation in Higher Education*, 38(5), 554–566. <https://doi.org/10.1080/02602938.2012.660131>
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77, 81–112.
- Hennessy, C., & Forrester, G. (2014). Developing a framework for effective audio feedback: A case study. *Assessment & Evaluation in Higher Education*, 39, 777–789. <https://doi.org/10.1080/02602938.2013.870530>
- Hepplestone, S., Parkin, H., Holden, G., Irwin, B., & Thorpe, L. (2009). Technology, feedback, action!: The impact of learning technology upon students’ engagement with their feedback. *JISC*. Retrieved from http://evidencenet.pbworks.com/f/TFA_Final_Report.pdf

- Hsu, H., Wang, S., & Comac, L. (2008). Using audioblogs to assist English-language learning: An investigation into student perception. *Computer Assisted Language Learning*, 21(2), 181–198.
- Hyland, K. (1990). Providing productive feedback. *ELT Journal*, 44(4), 279–285.
- Hyland, K., & Hyland, F. (2006). Feedback on second language students' writing. *Language Teaching*, 39(2), 83–101. <https://doi.org/10.1017/S0261444806003399>
- Ice, P., Curtis, R., Phillips, P., & Wells, J. (2007). Using asynchronous audio feedback to enhance teaching presence and students' sense of community. *Online Learning*, 11(2). <https://doi.org/10.24059/olj.v11i2.1724>
- Ice, P., Swan, K., Diaz, S., Kupczynski, L., & Swan Dagen, A. (2010). An analysis of students' perceptions of the value and efficacy of instructors' auditory and text-based feedback modalities across multiple conceptual levels. *Journal of Educational Computing Research*, 43(1), 113–134. <https://doi.org/10.2190/EC.43.1.g>
- Jelfs, A., & Whitelock, D. (2000). The notion of presence in virtual environments: What makes the environment—Real. *British Journal of Educational Technology*, 31(2), 145–153.
- Johanson, R. (1999). *Rethinking the red ink: Audio-feedback in the ESL writing classroom* (ERIC Document Reproductive Service No. ED 467865).
- Killingback, C., Ahmed, O., & Williams, J. (2019). 'It was all in your voice' - tertiary student perceptions of alternative feedback modes (audio, video, podcast, and screencast): A qualitative literature review. *Nurse Education Today*, 72, 32–39.
- Kirschner, P. A., van den Brink, H., & Meester, M. (1991). Audiotape feedback for essays in distance education. *Innovative Higher Education*, 15(2), 185–195.
- Kluger, A. N., & DeNisi, A. (1996). The effects of feedback interventions on performance. A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, 119, 254–284.
- Lau, L. (2008). *Use of audio feedback to foster a sense of care on learning progress in an online module*. Higher Education Academy. Retrieved from: <http://www.heacademy.ac.uk/assets/documents/subjects/engineering/use-audio-feedback-foster.pdf>
- Lunt, T., & Curran, J. (2010). 'Are you listening please?' The advantages of electronic audio feedback compared to written feedback. *Assessment & Evaluation in Higher Education*, 35(7), 759–769. <https://doi.org/10.1080/02602930902977772>
- Mccarthy, J. (2020). Student perceptions of screencast video feedback for summative assessment tasks in the creative arts. In *Technology-enhanced formative assessment practices in higher education* (Advances in higher education and professional development) (pp. 177–192). Information Science Reference. <https://doi.org/10.4018/978-1-7998-0426-0.ch009>
- McGarvey, D., & Haxton, K. (2011). Using audio for feedback on assessments: Tutor and student experiences. *New Directions*, 7, 5–9.
- McGrew, J. B. (1969). *An experiment to assess the effectiveness of the dictation machine as an aid to teachers in the evaluations and improvement of student compositions*. Report to Lincoln Public Schools (ERIC Document Reproductive Service No. ED 034776).
- Meerah, T. S. M., & Halim, L. (2011). Improve feedback on teaching and learning at the university through peer group. *Procedia-Social and Behavioral Sciences*, 18, 633–637.
- Merry, S., & Orsmond, P. (2008). *Students' attitudes to and usage of academic feedback provided via audio files*. Retrieved from <http://journals.heacademy.ac.uk/doi/pdf/10.3108/beej.11.3>
- Middleton, A. (2011a). Digital voices – Making stronger connections with the recorded voice. *Educational Developments*, 12, 6–8.
- Middleton, A. (2011b). *Media – Enhanced feedback case studies and methods: Papers produced to support the media-enhanced feedback event*.
- Moreno, R. (2004). Decreasing cognitive load for novice students: Effects of explanatory versus corrective feedback in discovery-based multimedia. *Instructional Science*, 32, 99–113.
- Morris, C., & Chikwa, G. (2016). Audio versus written feedback: Exploring learners' preference and the impact of feedback format on students' academic performance. *Active Learning in Higher Education*, 17, 125–137. <https://doi.org/10.1177/1469787416637482>

- Mory, E. H. (2004). Feedback research review. In D. Jonassen (Ed.), *Handbook of research on educational communications and technology* (pp. 745–783). Lawrence Erlbaum.
- Nakamaru, S. (2008). *A lot of talk about writing: Oral feedback on international and US-educated multilingual writers' texts*. Retrieved from ProQuest Digital Dissertations (AAT 1619188501).
- Narciss, S., & Huth, K. (2006). Fostering achievement and motivation with bug-related tutoring feedback in a computer-based training for written subtraction. *Learning and Instruction, 16*, 310–322. <https://doi.org/10.1016/j.learninstruc.2006.07.003>
- Nicol, D. J. (2006). Increasing success in first year courses: Assessment re-design, self-regulation and learning technologies. In *Proceedings of the 23rd annual Ascilite conference: Who's learning? Whose technology?* (pp. 589–598). Ascilite 2006, The University of Sydney.
- Olesova, L. (2011). *An examination of the effectiveness of embedded audio feedback for English as a foreign language students in asynchronous online discussions*. [Unpublished doctoral dissertation], Purdue University.
- Olesova, L., Richardson, J., Weasenforth, D., & Meloni, C. (2011). Using asynchronous instructional audio feedback in online environments: A mixed methods study. *MERLOT Journal of Online Learning and Teaching, 7*(1), 30–42.
- Olson, G. (1982). Beyond evaluation: The recorded response to essays. *Teaching English in the Two-Year College, 8*, 121–123.
- Oomen-Early, J., Bold, M., Wiginton, K. L., Gallien, T. L., & Anderson, N. (2008). Using asynchronous audio communication (AAC) in the online classroom: A comparative study. *Journal of Online Learning and Teaching, 4*(3), 267–276.
- Parkes, M., & Fletcher, P. (2017). A longitudinal, quantitative study of student attitudes towards audio feedback for assessment. *Assessment & Evaluation in Higher Education, 42*, 1046–1053. <https://doi.org/10.1080/02602938.2016.1224810>
- Patrie, K. (1989). The use of the tape recorder in an ESL composition programme. *TESL Canada Journal, 6*(2), 87–89.
- Poulos, A., & Mahony, M. J. (2008). Effectiveness of feedback: The students' perspective. *Assessment & Evaluation in Higher Education, 33*(2), 143–154. <https://doi.org/10.1080/02602930601127869>
- Price, M., Handley, K., Millar, J., & O'Donovan, B. (2010). Feedback: All that effort, but what is the effect? *Assessment & Evaluation in Higher Education, 35*, 277–289.
- Race, P. (2004). *Using feedback to help students to learn*. The Higher Education Academy.
- Ramaprasad, A. (1983). On the definition of feedback. *Behavioral Science, 28*(1), 4–13.
- Rockinson-Szapkiw, A. (2012). Should online doctoral instructors adopt audio feedback as an instructional strategy? Preliminary evidence elements of an effective learning experience in online education. *International Journal of Doctoral Studies, 7*, 245–258.
- Rotheram, B. (2009). Sounds good – Final report. *JISC*. Retrieved from <http://www.jisc.ac>
- Rowe, A. (2011). The personal dimension in teaching: Why students value feedback. *International Journal of Educational Management, 25*, 343–360.
- Rust, C. (2001). *Briefing on the assessment of large groups. Learning and Teaching Support Network (LTSN) generic centre assessment series*. Retrieved from: http://www.heacademy.ac.uk/assets/York/documents/resources/database/id12_Briefing_on_the_Assessment_of_Large_Groups.rtf
- Shute, V. J. (2008). Focus on formative feedback. *Review of Educational Research, 78*, 153–189. <https://doi.org/10.3102/0034654307313795>
- Supple, S. (2007). Ideas in practice: Developmental writers' attitudes toward audio and written feedback. *Journal of Developmental Education, 30*(3), 22.
- Stewart, T. (2010). *Audio feedback MECH 5500m*. Higher Education Academy. Retrieved from <http://www.heacademy.ac.uk/assets/documents/subjects/engineering/audio-feedback-mech.pdf>
- Stockwell, J. (2009). *Audio feedback for students*. Higher Education Academy. Retrieved from <http://www.heacademy.ac.uk/assets/documents/subjects/engineering/audio-feedback-students.pdf>

- Sull, E. C., & Cavanaugh, A. (2011). A miniguide to the use of audio files in the distance learning class. *Distance Learning*, 8(4), 89–93.
- Swan, K. (2008). Learning effectiveness: What the research tells us. In J. Bourne & J. C. Moore (Eds.), *Elements of quality online education: Practice and direction* (pp. 13–45). Sloan Consortium.
- Syncox, D. (2003). *The effects of audio-taped feedback on ESL graduate student writing* [Master's thesis]. Retrieved from http://digitool.library.mcgill.ca/webclient/StreamGate?folder_id=0&dvs=1398037229228~810
- Tanner, B. (1964). Teacher to disc to student. *The English Journal*, 53(5), 362–363.
- Twarog, L. I., & Pereszlenyi-Pinter, M. (1988). Telephone-assisted language study at Ohio State University: A report. *Modern Language Journal*, 426–434.
- Wipf, J. A. (1984). Strategies for teaching second language listening comprehension. *Foreign Language Annals*, 17(4), 345–348.
- Wood, K. A., Moskovitz, C., & Valiga, T. M. (2011). Audio feedback for student writing in online nursing courses: Exploring student and instructor reactions. *Journal of Nursing Education*, 50(9), 540–543.
- Xu, Y. (2018). Not just listening to the teacher's voice: A case study of a university English teacher's use of audio feedback on social media in China. *Frontiers in Education*, 3. <https://doi.org/10.3389/feduc.2018.00065>

Merve Kıymaz is currently a PhD student in the English Language Teaching Program at Middle East Technical University and works as an instructor at Düzce University School of Foreign Languages. She holds a BA in Foreign Language Education from Middle East Technical University and an MA in English Language Teaching from Bolu Abant İzzet Baysal University. She has been teaching a wide variety of English courses, including academic listening and speaking, academic reading and writing, and English for specific purposes. Her research interests are not limited to but include instructed second language acquisition, multimodal feedback, English for academic purposes, teaching speaking, teaching writing, discourse analysis, technology-enhanced second language learning, teaching, and assessment.

Multimodal Technology-Mediated Feedback in Second Language Writing Classes Through Screencasting



Merve Savaşçı and Gizem Akçor

Abstract Being one of the most potent influences on writing improvement and language learning, providing feedback is a common yet relatively complicated practice. Although it is often assumed that providing feedback presumably ends up with learners' immediate self-correction and improvement, it does not necessarily guarantee learners' understanding of feedback because even the type of feedback and the way it is conveyed could be distinctively effective. Given that lack of clarity and feedback misinterpretation are among the common problems affecting feedback processes, the advent of digital tools in the 21st century has been attempting to compensate for such problems and promote writing competencies. To this end, different feedback norms and conventions offered by technology, such as electronic feedback, have replaced traditional feedback conventions in recent years. Earlier studies have revealed that technology-enhanced (e.g., audio or video-enhanced) instructional feedback is effective, yet providing second language writing feedback in diverse, technology-mediated and multimodal ways continues to be underexplored and limited. Thus, alternative updated tools and practices to promote second language writing (SLW) competencies deserve more attention. Being one of these tools, screencast combines text-based and audio feedback through screencast software programs, allowing to capture the computer screen and annotate a written work while recording voiced comments. Screencast-mediated feedback practices might promote SLW competencies by helping teachers deliver more

M. Savaşçı (✉)
Sakarya University, Sakarya, Turkey
e-mail: msavasci@sakarya.edu.tr

G. Akçor
İzmir Bakırçay University, İzmir, Turkey
e-mail: gizem.akcor@bakircay.edu.tr

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_6

concise, in-depth, and clear feedback, which in turn might better engage and motivate students in SLW classes. Thus, this chapter offers a theoretical and practical understanding of screencasting as a novel way of providing EFL learners with multimodal technology-mediated feedback in SLW classes.

Keywords Screencast feedback · Video feedback · Technology-enhanced feedback · EFL writing

1 Introduction

Providing quality feedback in second/foreign language (L2) writing classes plays an essential role in improving students' L2 writing skills. Therefore, it is an integral part of L2 writing learning and teaching processes (Hyland & Hyland, 2006). For this reason, in their quest for effective and time-efficient feedback, L2 writing researchers and classroom practitioners have been investigating different feedback practices and their effects on improving learners' writing skills. Despite the recognized potential of feedback, earlier studies have so far documented that providing feedback is a complicated practice (Cunningham, 2019) as effective and successful feedback practices are affected and shaped by several different factors. Nevertheless, feedback processes do not seem to achieve the aim of writing tasks for either instructors or students, which is the improvement of writing (Vincelette & Bostic, 2013), due to several reasons. Among the frequently indicated reasons, while clearly salient and sensible, feedback provision is time-consuming for instructors. Also, they cannot make sure of its effectiveness, whereas students tend to complain about not receiving timely, detailed, or comprehensible feedback (Vincelette & Bostic, 2013). From another perspective, Higgins et al. (2001) indicate that emotion, identity, power, authority, subjectivity, and discourse-related issues seem to affect feedback processes. According to them, feedback is 'an essentially *problematic* form of communication involving particular social relationships' (p. 273). It must, moreover, also be noted that feedback -no matter how detailed, subjective, or timely it can be- does not necessarily guarantee students' understanding or uptake of information conveyed through instructional feedback. Lack of clarity or misinterpretation of feedback is among the common problems affecting feedback processes (Ali, 2016; Bailey, 2009; Hyland, 1998; Weaver, 2006). To deal with such problems and promote L2 writing competencies, new directions for writing instruction and practices have emerged and received a burgeoning interest as digital technologies developed in recent years.

With recent technological developments as well as the effects of sociocultural, socio constructivist, social interactionist approaches to foreign language learning and development, different digital feedback mediums such as audio, video, computer-mediated, electronic feedback have emerged in the 21st century, by replacing traditional feedback mechanisms and conventions especially in the last two decades. However, although such technology-enhanced (e.g., audio or video-enhanced) instructional feedback has been reported to be effective in most earlier

studies (e.g., Hattie & Timperley, 2007), the integration of technology in second language writing (SLW) feedback continues to be relatively underexplored and limited (Cunningham, 2019; Elola & Oskoz, 2016; Harper et al., 2018; Henderson & Phillips, 2015). Moreover, despite the advents in terms of technology-integrated or enhanced SLW, writing teachers still seem to follow SLW instruction that is already familiar to them and not exploit the affordances provided by these digital tools (Elola & Oskoz, 2016). Given these, other alternative updated tools and practices to promote SLW competencies should deserve more attention.

Screencast is one of these tools. As a digital video recording capturing both the screen of a computer and voice recording, screencast-mediated feedback practices might inherently promote SLW competencies. Accordingly, this chapter provides a theoretical and practical understanding of screencasting as an innovative means of providing second/foreign language learners with multimodal technology-mediated feedback in SLW classes. Accordingly, the chapter is basically framed around the following content: background information; definition of important concepts; innovative approaches to technology-enhanced SLW practices in the 21st century (particularly screencast-mediated feedback); the affordances and constraints regarding the use of such approaches; and potential implications.

2 Background Information with Definitions and Explanations of Concepts

Feedback, or corrective feedback or error treatment, refers to ‘the information that a teacher provides in response to a learner production’ (Tavakoli, 2012, p. 127). In the context of writing instruction, as noted earlier, previous studies have provided convincing (albeit not conclusive) evidence that L2 writing feedback helps learners improve their writing. According to Sadler (2010), feedback has two major functions: First, it is a performance statement focusing on the strengths and weaknesses of the learners’ work. Secondly, learners are provided with advice or suggestions regarding what they could have done differently to produce a better work. Nevertheless, in order for feedback to realize these functions and positively influence learner development and performance, it has also been noted that quality and quantity (Higgins et al., 2002) as well as content and tone of feedback are important (Sadler, 2010).

Editing and commenting on learners’ writing used to be generally done through written comments or face-to-face teacher-student conferences. Technology has been integrated into writing classes to teach and/or improve writing skills along with technological developments and advancements. Accordingly, several online/digital writing tools, due to their efficiency and convenience, have enabled writing instructors to teach writing and provide feedback more effectively in terms of several aspects. In recent years, therefore, feedback provision has also started to be done through audio or video feedback. As much as all forms and mediums of feedback (i.e., written, audio, or video) have their own affordances and constraints, several

studies indicated that video feedback is more positively welcomed and preferred over written or audio feedback (e.g., McCarthy, 2015).

Screencast is among those video tools. As a type of video feedback, screencast is a video-capture tool that simultaneously records real-time on-screen activities and audio recording. Several different software packages, including Bandicam, Screencast-O-matic, Jing®, are freely available and have become commonplace for instructors who would like to provide feedback with screen-capture technology. When installed on computers or laptops, these softwares enable users to designate an area on the computer screen and capture real-time on-screen activities (e.g., cursor movements, scrolling, etc.) with the narration of comments spoken into a microphone. Although screencasting has been used for different purposes such as preparing video tutorials, instructors have frequently used it in writing classes to provide feedback (Figs. 1, 2, and 3).

Fig. 1 A screencast software- Bandicam

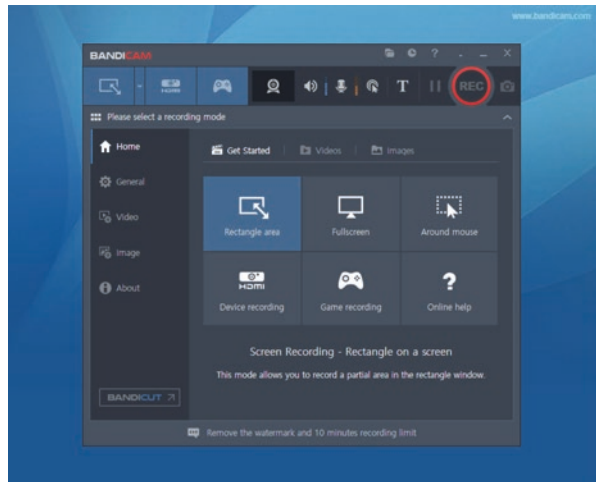


Fig. 2 Screen capture example by Bandicam





Fig. 3 Screen capture example by Screencast-O-matic

3 Review of Up-to-date Literature and Their Findings

Although video feedback practices have long been used in L2 writing instruction, multimodal technology-mediated feedback through screencasting emerged nearly a decade ago and, therefore, can be considered relatively a new mode of feedback. Still, although there is not a substantial body of research on the subject, several studies have examined the potential contribution of feedback through screencasting to the development of learners' writing (e.g., Ali, 2016; Bush, 2020; Cunningham, 2019; Ducate & Arnold, 2012; Elola & Oskoz, 2016). Earlier research has suggested that there seems to be a consensus among students that screencasting is preferred over other feedback types due to several reasons.

3.1 Affordances of Screencast

First of all, screencast feedback might help teachers provide feedback more effectively and clearly and help students benefit from teacher feedback by engaging and motivating them. As indicated by several researchers, when they receive feedback in the form of traditional written comments, learners generally cannot understand the meaning of teacher comments (Thaiss & Zawacki, 2006) or are indifferent to them as they care only about the score they receive (Higgins et al., 2001). When they

receive their assignments back, they glance at their score and throw away the assignment with the feedback on it (Gibbs & Simpson, 2005). Therefore, they do not act upon feedback and cannot make considerable or significant improvements in their writing. Or in the best-case scenario, they tend to end up dealing with lower-level comments and fixing some language-related issues such as grammatical mistakes superficially (Vincelette & Bostic, 2013). Screencasting, on the other hand, enables more in-depth and clear feedback for learners. Particularly when compared to written feedback, where the communication is asynchronous, screencast feedback is perceived as more detailed and specific.

Another important affordance relating to screencast is being able to watch the video multiple times, as many times as it is desired (e.g., Ali, 2016; Bush, 2020; Vincelette & Bostic, 2013). Ducate and Arnold (2012), for example, indicated that students found screencasting faster, clearer, and easy to replay when compared to written comments. Similarly, in Thompson and Lee's (2012) study, participants reported that they had difficulty interpreting written feedback and found screencast feedback more meaningful. Participants in Edwards et al.'s (2012) study likewise preferred screencast feedback over written feedback because the visual cues were supported with audio. They stated that the intonation of the instructor helped them better understand and interpret the critique. Besides, screencast feedback was more engaging, more detailed, to-the-point, and concise and provided a strengthened connection.

As noted earlier, however, feedback processes seem to be affected by emotion, identity, and subjectivity-related issues (Higgins et al., 2001). These issues are generally handled through arranging individual teacher-student conferences and discussing the strengths and weaknesses of learners' work in a very detailed way in a communicative, interactive, and personalized way. As Higgins et al. (2001) note, 'The student makes an emotional investment in an assignment and expects some 'return' on that investment' (p. 272). Otherwise, when teachers make comments and provide guidance for improvement on the strengths and weaknesses of learners' work, those like grammar, mechanics, and structure, for example, such feedback becomes expository and didactic in essence (Sadler, 2010). Therefore, promoting learners' interpretation and learning from feedback processes could be done through face-to-face conferences with learners individually. However, as anyone could imagine, it would not be reasonably possible to do so with the populated writing classrooms and limited time that instructors have because it is rather effort-intensive, time-consuming, and cognitively demanding. Besides, as Vincelette and Bostic (2013) put forward, face-to-face conferences might create social pressures for both instructors and teachers and a significant amount of time commitment by teachers. Citing Carabajal et al. (2003), Vincelette and Bostic (2013) posited that 'online conferences allow students to feel more comfortable because of the perceived distance' (pp. 258–259). Accordingly, screencast feedback might similarly help relieve such social pressures while giving and receiving feedback by also ensuring the 'return' of such emotional investments in the form of dialogic feedback, which can be considered another affordance. As Vincelette and Bostic (2013) note, 'Using the

available technology may help address the students' desire for spoken comments and the instructors' desire to manage time.' (p. 259).

When learners receive screencast feedback, they also tend to have a better appreciation of feedback provided by instructors as students perceive screencast feedback as 'tailor made' (Harper et al., 2012). For example, students in Harper et al.'s (2018) study found screencast feedback more personalized, easily understandable, memorable, motivating, and engaging. It also allowed students to move at their own pace. Similarly, learners in Henderson and Phillips's (2015) study thought that screencast feedback was more individualized, personal, authentic, motivating, more detailed, unambiguous, and constructive. They also reported feeling valued, supported, cared for, motivated, and emphasized that they appreciated the ability to replay the feedback video.

In Ali's (2016) study, participants stated that screencasting provided more specific, clear, detailed, constructive, personal, and easy-to-follow feedback and increased their engagement in the revision process. Similarly, Vincelette and Bostic (2013) reported that learners were more likely to incorporate teacher feedback in the revision processes. In Ali's study (2016), reduced anxiety, positive perceptions towards instructor's feedback, and strengthened rapport between teacher and students were also among the advantages of screencast feedback.

In another study conducted by Cunningham (2019), which investigated the efficacy of formative text and screencast feedback in an intermediate ESL writing course, participants preferred screencast feedback over formative text feedback because the former was easier to understand and more helpful. Students did not ask for further clarification during screencast feedback. They also found it more efficacious due to revision concurrent with listening, more personal and convenient. It took less time to revise the written work through screencast feedback compared to text feedback.

In a recent study, Bush (2020) indicated that university students who received feedback through screencasting thought that it allowed them to see their mistakes, the feedback was clear, and they had an opportunity to correct the mistakes they saw. Furthermore, some students felt it was like a face-to-face conference and cared about it.

Overall, as earlier research has suggested, screencasting offers a range of possibilities for students. It allows for more in-depth, elaborate, clear, and personalized feedback (Ali, 2016; Borup et al., 2015; Cunningham, 2019; Edwards et al., 2012; Harper et al., 2012, 2018; Marriott & Teoh, 2012; Moore & Filling, 2012; Thompson & Lee, 2012), conversational communication (Ali, 2016; Anson et al., 2016; Cunningham, 2019; Thompson & Lee, 2012), and better teacher-student connections (Ali, 2016; Anson et al., 2016; Harper et al., 2018). It also gives a sense of instructor presence as they seem to be affectively engaged more as they hear teachers' voices (Harper et al., 2012, 2018; Henderson & Phillips, 2015). Moreover, some learners think feedback received through screencasts is much more memorable (Harper et al., 2012).

3.2 *Constraints of Screencast*

The other side of the coin is that providing feedback through the medium of video might result in some problems and risks. Some learners in Ali's (2016) study, for instance, found reviewing screencast feedback more time-consuming than reviewing written feedback. Unfortunately, some technical difficulties in downloading videos due to the internet speed might arise, and poor sound quality of videos might be quite problematic for them (Ali, 2016). Video-mediated feedback might be anxiety-provoking for some as well. In Henderson and Phillips's (2015) study, for example, some learners initially perceived temporary anxiety which later gave its place to perceiving such feedback as supportive and caring. Likewise, trial versions of screencast software programs (e.g., Bandicam, Jing®) might be considered a problem due to some time constraints at the beginning. However, the relative easiness of producing screencast feedback videos might create a possible risk of overloading students with feedback. Therefore, time limitations by trial versions of screencast software programs could be taken as a silver lining for succinct feedback, as it served as an incentive for concise feedback for the tutors in Harper et al.'s (2018) study.

On the other hand, from the perspective of writing instructors, this form of feedback also has several significant affordances and constraints: Earlier research has shown that screencast feedback videos take less time to produce than traditional written feedback (Cunningham, 2019; Edwards et al., 2012; Henderson & Phillips, 2015) although teachers in some studies asserted the contrary (Ali, 2016; Harper et al., 2012, 2018; Mathieson, 2012). At this point, it is possible to refer to teachers' computer skills and technological familiarity, which could play a decisive role in the time spent during video production. In Harper et al.'s (2018) study, instructors revealed that screencasting allowed them to give more in-depth feedback, focus on more relevant points instead of each and every mistake and have more control over directing learners' attention to these points, and create a rapport with their students due to the dialogic nature of screencasting. Similarly, in Elola and Oskoz's (2016) study, the feedback of the instructors who provided screencast feedback was positively affected in terms of both quantity and quality. They indicated that instructor comments provided through screencast software and combined with written feedback via a word processing software (i.e., Microsoft Word) were longer, explicit, and more detailed. From another perspective, instructors in Henderson and Phillips's (2015) study emphasized their enthusiasm as such feedback allowed them to discuss students' arguments, elaborate on their ideas, and make more purposeful future directions. In doing so, they felt *'like a teacher rather than an editor'*, moving beyond marking text errors and citation problems. Similarly, instructors in Borup et al.'s (2015) study reported that all of them found screencast feedback provision more conversational, supportive, and understandable when compared to text feedback. One instructor said, "I could describe it better because I could just say it." (p. 178). Besides, thanks to visual and vocal cues, they thought they could provide more affective support for learners. Regarding the constraints, to begin with,

uploading screencast feedback videos on an online platform and sharing them with learners might take a lot of time, depending on the internet speed. Secondly, instructors' tone of voice might be demotivating or discouraging for some learners while getting negative comments. Another problem might be overloading learners with an excessive amount of feedback. Lastly, finding a quiet place to record screencast feedback videos might be challenging for some instructors.

4 Implications for Teaching

As also discussed above, emerging technologies have resulted in digitization, transferring all facets of education, and allowing for a myriad of new learning opportunities and instructional resources and strategies. Today one can easily come across many EdTech (i.e., educational technology) glossaries with countless buzzwords, which clearly highlight the importance of integrating technology in educational contexts. The digitization of education has opened up new forms of writing practices as well. Not only have modes of writing changed from traditional pen-and-paper writing to digital writing, but writing instruction practices have also changed. With digitization, distance education and MOOCs (Massive Open Online Courses) have become widespread, and consequently, the use of digital platforms and tools has increased. Although integrating technology in SLW has been put into practice mainly through computer-mediated writing for years, its integration has taken different forms, including screencast feedback practices.

As shown in this chapter, screencast feedback provision has both affordances and constraints, both from the perspective of learners and writing instructors. Therefore, the selection of the feedback method requires careful consideration of learner and contextual characteristics because a certain feedback method might yield advantages in some settings, whereas, in other settings, it may not. Therefore, feedback provision though screencast should similarly be carefully evaluated considering such characteristics, but even so, screencast feedback has several important implications for policymakers, practitioners, and researchers:

One implication could be for blended or flipped learning environments, where face-to-face and technology-mediated instruction are combined. Screencasting might enable SLW instructors to use face-to-face class time more effectively for writing instruction and use screencast technology to provide effective, in-depth, and personalized feedback.

Compared to traditional paper or digital text-based comments, using screencasting might also have valuable implications for learners with learning disabilities such as those with dyslexia. Such learners would definitely benefit more from hearing feedback rather than trying to ure out written comments.

For different types of learners, for example for visual learners, screencasting might also yield several benefits. Retention of information can be improved among such groups of students, and feedback provided through screencasts would be much more memorable for students.

Screencast feedback can also be combined with digital feedback. While recording the screencast video, instructors can also use Microsoft Word's 'track changes' tool with several customisable features like underlining and color-coding. They can also use the 'comment' feature and support their screencast feedback with written comments on the document. In fact, screencast feedback combined with digital text feedback is quite effective (Cunningham, 2015; Elola & Oskoz, 2016). The learners in Mathieson's (2012) study, for instance, expressed their preference for digital-text-plus-screencast feedback over digital-text-only feedback.

However, as emotions are reflected straightforwardly through visual and vocal cues, practitioners should be careful with their communication skills and behaviour while recording their screencast feedback, more specifically with how they record the audio narration in their screencasts. For example, in Rodway-Dyer et al.'s (2011) study with undergraduate students, some participants found audio feedback as a 'shock' as it was too critical and harsh and focused more on negative things rather than positive ones. Also, the instructor's tone of voice affected them, and some stated feeling bad as they listened to all those negative comments while also not being able to respond to them, which they did not enjoy much. Although such demotivation has not necessarily been reported in any earlier studies investigating screencast feedback, practitioners should consider that screencast also involves an audio component in it, which might affect students.

It must also be noted that screencasting can also be used for writing instruction apart from feedback purposes. In the form of tutorials, writing instruction videos could be created to show the details of the writing processes. Instructors might think-aloud and constitute a text by recording it through screencast and sharing it as a video tutorial to show learners the writing processes. Besides, when such videos are produced through screencast, they should remain valid for a long time as they can be reused for flipped lessons. There would also be online support for learners, particularly for those who need extra time to review topics.

In conclusion, it must be explicitly noted there is no 'one-size-fits-all' feedback type and/or medium that would benefit all EFL learners or instructor cohorts worldwide. As McCarthy (2015) suggested,

...there is no 'one size fits all' feedback model when it comes to assessment in higher education. When adopting a feedback model it is important for educators to take into consideration several factors, including the field of study; assessment type (formative or summative); assessment format (visual, aural, written); the class size; the student type (age; local or international; visual / hearing impaired); and available staff and student resources (software; hardware; internet access).

Therefore, classroom practitioners should make their feedback decisions in accordance with these factors. On the other hand, therein lies the possibility that some learners might prefer a more traditional way of receiving feedback. After all, there is also another possibility which should not be underestimated that some writing teachers might desire to continue providing traditional written feedback, too.

5 How to Use Screencasting in the Classroom

As discussed earlier in this chapter, there are various software packages available in the market, including Bandicam, Camtasia, Jing®, Movavi Screen Recorder, OBS Studio, and Screencast-O-matic just to name a few. And in this section, we would like to offer a sample tool, Bandicam, for practitioners.

5.1 A Sample Tool: Bandicam

Bandicam is an easy-to-use desktop screen recording tool and video/game recording software. It might be an excellent choice for writing instructors because its interface design is user-friendly with an uncomplicated screen (see Fig. 4), straightforward tools, and simple controls. Rather than spending time learning how to use it, one can focus on the video content more without much trouble. One can record the whole computer screen or a certain window area. For tutorials, it offers real-time tools like background overlays, highlighting, and drawing pencils. Sound and video quality can be adjusted to make it lighter as well. One can add her/his face to the video and mix the computer sound and her/his own voice. Besides, basic and advanced options and settings allow for greater user experiences. What is more, its website includes a How-To section where users can get various tutorials, advanced user tips (e.g., How to Zoom In and Out while screen recording, how to record specific sound, how to upload videos to YouTube from Bandicam, how to record computer sound and your voice at the same time, etc.) and how-tos (e.g., how to record your computer screen; how to record your gameplay on PC; how to edit a recorded

Fig. 4 A screencast software- Bandicam

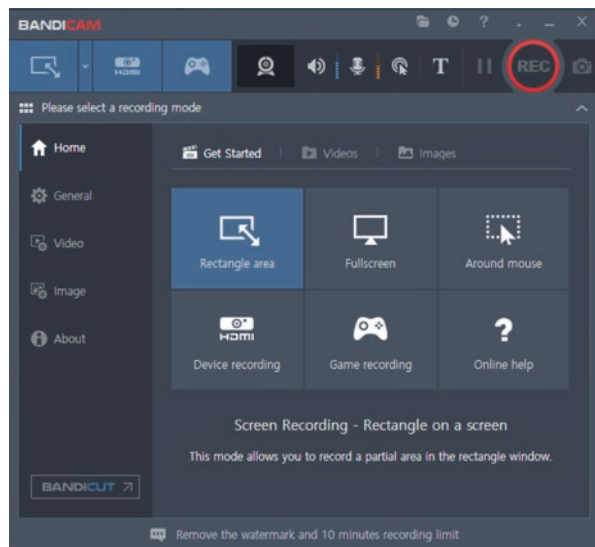
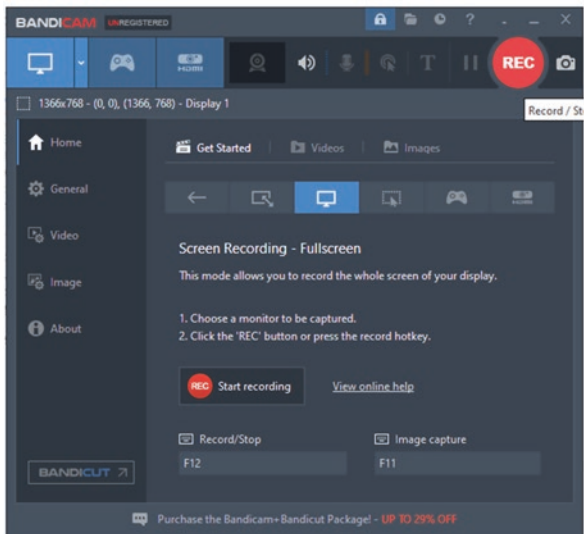


Fig. 5 A screencast software- Bandicam



video, etc.) for learning the use of Bandicam. As Bandicam is primarily built to record high-speed gaming, it gives its users an outstanding experience with advanced game recording functions.

Like many other screencasting tools, Bandicam is available with a free plan along with a subscription. The software can be upgraded to premium with one-time payment instead of a yearly subscription. The catch is that its trial version is limited to 10 min of recording time and the recorded video includes a watermark (www.BANDICAM.com). Teachers who plan on creating short videos or do not mind recording multiple 10-min feedback videos for a student's work would find it ideal.

One should use her/his web browser to go to <https://www.bandicam.com/> and click on the 'Free Download' link on the main page to download Bandicam Free. Click 'Save' in the pop-up window. When the download is complete, the screen displayed is shown in Fig. 4. Just click on 'Fullscreen' (see Fig. 4) and then 'REC' on the right top of the screen to start/ stop recording the video (see Fig. 5). When recording is stopped, one can go to the 'Videos' tab and right click on the top video and open the video folder (see Fig. 6). A sample writing feedback screen created through Bandicam is presented in Fig. 7.

5.2 Possible Screencasting Teaching Practices

In this chapter, many facets of screencasting have been discussed, and it has been indicated that screencasting might be a feasible practice for SLW feedback (Cunningham, 2019). Yet, one might wonder how exactly screencasting can be used

Fig. 6 Screen capture example by Bandicam

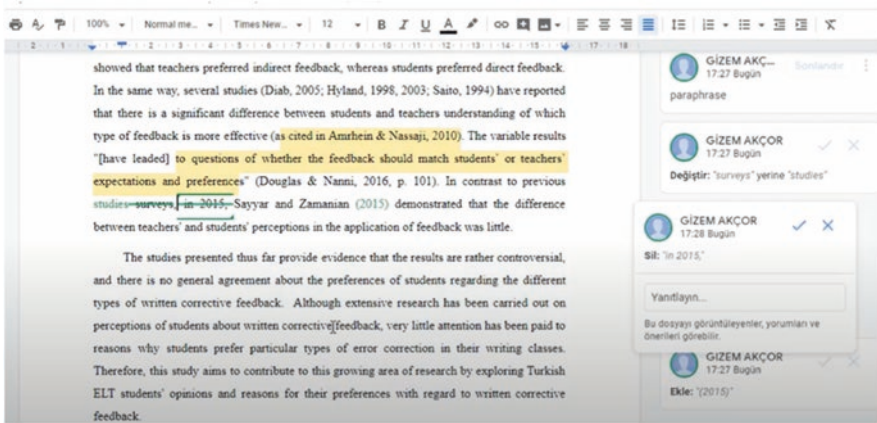
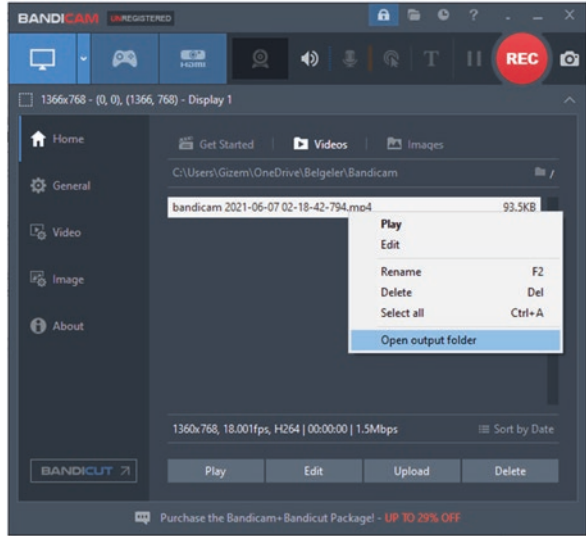


Fig. 7 Screen capture example by Bandicam

for feedback and some alternative teaching practices utilizing screencasting in SLW classes. Some teaching practices where the use of screencasting is possible are as follow:

1. **Providing feedback:** As discussed above, teachers could provide learners with screencast feedback combined with or without digital text feedback. They can save time by: (a) asking their students to submit soft copies of their written works so that teachers can make immediate changes on them; (b) taking notes of what to mention before recording videos so as not to exceed the time limit; and (c) supporting their audio feedback with written comments, color codes, and highlights to be able to address to different types of learners.

2. **Flipping classrooms:** Teachers could also flip their writing classrooms to use in-class time more efficiently. As in-class time is allocated to active learning activities in flipped classrooms, screencasts might be used to record instructional videos for out-of-class use. Sample paragraphs or essays could be analyzed and written with students in the classroom whereas students watch teacher-made screencast videos (e.g., a video explaining and exemplifying the components of a compare-contrast essay) before the class to get prepared for the content and watch them after the class to revise and get additional support.
3. **Support materials:** Teachers can create screencast videos in which they think aloud and write sample paragraphs/essays, prepare outlines, or make revisions/corrections on previously written student work to set examples of how to write better. Students can benefit from such videos as support materials when they need further help.
4. **Peer feedback:** Teachers can train their students in creating screencast feedback videos, and then students can provide their peers with screencast feedback, which could also contribute to their speaking fluency.
5. **Responses to feedback:** After students are provided with screencast feedback, teachers might ask them to respond to their feedback by producing a screencast feedback video to show any kind of revisions they have made and explain why they have made such changes and ask for further clarifications. Having an opportunity to respond to teacher feedback might help them feel valued as well.
6. **Bonus idea:** Teachers can also have their students record their own game sessions or YouTube videos, which would probably motivate and help them to use English and practice their speaking skills.

References

- Ali, A. D. (2016). Effectiveness of using screencast feedback on EFL students' writing and perception. *English Language Teaching*, 9(8), 106–121. <https://doi.org/10.5539/elt.v9n8p106>
- Anson, C. M., Dannels, D. P., Laboy, J. I., & Carneiro, L. (2016). Students' perceptions of oral screencast responses to their writing: Exploring digitally mediated identities. *Journal of Business and Technical Communication*, 30(3), 1–34. <https://doi.org/10.1177/2F1050651916636424>
- Bailey, R. (2009). Undergraduate students' perceptions of the role and utility of written assessment feedback. *Journal of Learning Development in Higher Education*, 1, 1–14. <https://doi.org/10.47408/jldhe.v0i1.29>
- Borup, J., West, R. E., & Thomas, R. (2015). The impact of text versus video communication on instructor feedback in blended courses. *Educational Technology Research and Development*, 63(2), 161–184. <https://doi.org/10.1007/s11423-015-9367-8>
- Bush, J. C. (2020). Using screencasting to give feedback for academic writing. *Innovation in Language Learning and Teaching*, 1–14. <https://doi.org/10.1080/17501229.2020.1840571>
- Carabajal, K., LaPointe, D., & Gunawardena, C. (2003). Group development in online learning communities. In M. G. Moore, & W. G. Anderson (Eds.), *Handbook of distance education* (pp. 224–238). Erlbaum.
- Cunningham, M. A. (2015). *Using audio screencast for feedback on short written essays*. Doctoral dissertation, Southern Illinois University. Retrieved from <https://opensiuc.lib.siu.edu/dissertations/1059/>

- Cunningham, K. J. (2019). Student perceptions and use of technology-mediated text and screencast feedback in ESL writing. *Computers and Composition*, 52, 222–241. <https://doi.org/10.1016/j.compcom.2019.02.003>
- Ducate, L., & Arnold, N. (2012). Computer-mediated feedback: Effectiveness and student perceptions of screencasting software versus the comment function. In G. Kessler, E. Oskoz, & I. Elola (Eds.), *Technology across writing contexts and tasks* (pp. 31–56). CALICO Publications.
- Edwards, K., Dujardin, A. F., & Williams, N. (2012). Screencast feedback for essays on a distance learning MA in professional communication. *Journal of Academic Writing*, 2(1), 95–126. <https://doi.org/10.18552/joaw.v2i1.62>
- Elola, I., & Oskoz, A. (2016). Supporting second language writing using multimodal feedback. *Foreign Language Annals*, 49(1), 58–74. <https://doi.org/10.1111/flan.12183>
- Gibbs, G., & Simpson, C. (2005). Conditions under which assessment supports learning. *Learning and Teaching in Higher Education*, 1(1), 3–31.
- Harper, F., Green, H., & Fernandez-Toro, M. (2012). Evaluating the integration of Jing screencasts in feedback on written assignments. *2012 15th International Conference on Interactive Collaborative Learning (ICL)* (pp. 1–7). <https://doi.org/10.1109/ICL.2012.6402092>
- Harper, F., Green, H., & Fernandez-Toro, M. (2018). Using screencasts in the teaching of modern languages: Investigating the use of Jing® in feedback on written assignments. *The Language Learning Journal*, 46(3), 277–292. <https://doi.org/10.1080/09571736.2015.1061586>
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81–112. <https://doi.org/10.3102/2F003465430298487>
- Henderson, M., & Phillips, M. (2015). Video-based feedback on student assessment: Scarily personal. *Australasian Journal of Educational Technology*, 31(1), 51–66. <https://doi.org/10.14742/ajet.1878>
- Higgins, R., Hartley, P., & Skelton, A. (2001). Getting the message across: The problem of communicating assessment feedback. *Teaching in Higher Education*, 6(2), 269–274. <https://doi.org/10.1080/13562510120045230>
- Higgins, R., Hartley, P., & Skelton, A. (2002). The conscientious consumer: Reconsidering the role of assessment feedback in student learning. *Studies in Higher Education*, 27(1), 53–64. <https://doi.org/10.1080/03075070120099368>
- Hyland, F. (1998). The impact of teacher written feedback on individual writers. *Journal of Second Language Writing*, 7(3), 255–286. [https://doi.org/10.1016/S1060-3743\(98\)90017-0](https://doi.org/10.1016/S1060-3743(98)90017-0)
- Hyland, K., & Hyland, F. (2006). Feedback on second language students' writing. *Language Teaching*, 39(2), 83–101. <https://doi.org/10.1017/S0261444806003399>
- Marriott, P., & Teoh, L. K. (2012). Using screencasts to enhance assessment feedback: Students' perceptions and preferences. *Accounting Education*, 21(6), 583–598. <https://doi.org/10.1080/09639284.2012.725637>
- Mathieson, K. (2012). Exploring student perceptions of audiovisual feedback via screencasting in online courses. *American Journal of Distance Education*, 26(3), 143–156. <https://doi.org/10.1080/08923647.2012.689166>
- McCarthy, J. (2015). Evaluating written, audio and video feedback in higher education summative assessment tasks. *Issues in Educational Research*, 25(2), 153–169.
- Moore, N. S., & Filling, M. L. (2012). iFeedback: Using video technology for improving student writing. *Journal of College Literacy & Learning*, 38, 3–14.
- Rodway-Dyer, S., Knight, J., & Dunne, E. (2011). A case study on audio feedback with geography undergraduates. *Journal of Geography in Higher Education*, 35(2), 217–231. <https://doi.org/10.1080/03098265.2010.524197>
- Sadler, R. D. (2010). Beyond feedback: Developing student capability in complex appraisal. *Assessment & Evaluation in Higher Education*, 35(5), 535–550. <https://doi.org/10.1080/02602930903541015>
- Tavakoli, H. (2012). *A dictionary of language acquisition: A comprehensive overview of key terms in first and second language acquisition*. Rahnama Press.

- Thaiss, C., & Zawacki, T. M. (2006). *Engaged writers, dynamic disciplines: Research on the academic writing life*. Boynton/Cook.
- Thompson, R., & Lee, M. J. (2012). Talking with students through screencasting: Experimentations with video feedback to improve student learning. *The Journal of Interactive Technology and Pedagogy*, 1(1), 1–16.
- Vincelette, E. J., & Bostic, T. (2013). Show and tell: Student and instructor perceptions of screen-cast assessment. *Assessing Writing*, 18(4), 257–277. <https://doi.org/10.1016/j.asw.2013.08.001>
- Weaver, M. R. (2006). Do students value feedback? Student perceptions of tutors' written responses. *Assessment & Evaluation in Higher Education*, 31(3), 379–394. <https://doi.org/10.1080/02602930500353061>

Merve Savaşçı works as an assistant professor in the Department of Foreign Language Education at Sakarya University and holds a Ph.D. degree in English Language Education from Yeditepe University.

Gizem Akçor is a Ph.D. candidate in English Language Teaching Program at Hacettepe University and works as an instructor in the School of Foreign Languages at İzmir Bakırçay University.

The Advantages of Using Vlogs for English Language Learners' Writing Performance



Zülal Ayar

Abstract The reputation of vlogging, or video blogging, has considerably enhanced in educational studies in the last 15 years particularly in the wake of Google's acquisition of YouTube. In fact, besides the increase in accessibility of vlogging, school-related vlogs also alleviate fatigue, help learners build self-confidence with recorded experiences, create interaction and collaboration, which will then bring about language improvements in positive classroom culture. Moving from its profits, this chapter aims at revealing recent pedagogical trends and implementations of vlogs in ESL and EFL contexts over the last decade to identify whether writing practices have been included in research and also present a systematic review. Studies indexed in Scopus or Web of Science (WoS) databases are incorporated. Finally, the review has unveiled that limited amount of research on the use of vlogs has hitherto been operated in the field of English Language Teaching (ELT), and not surprisingly, hardly any of it discusses the writing practices. The researchers seem to draw a sharp line between two productive skills in that they either adopt blogs to investigate learners' writing competency or prefer vlogs to analyse speeches of the participants. Accordingly, the study offers some suggestions for the integration of vlogs into writing skill and concludes with portraying a potential future agenda.

Keywords Vlog · Vlogging · Video blog · ELT · Technology · Writing

1 Introduction

Thanks to the major features of web 2.0 technologies, such as user-generated content, open communication providing the opportunity of freedom of expressions, sharing, and reusing information, they have become a remarkable social

Z. Ayar (✉)
İzmir Katip Çelebi University, İzmir, Türkiye
e-mail: zulalayar@ikc.edu.tr

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_7

phenomenon in this era. In a broad sense, innovative web 2.0 tools can be referred to as podcasting, social networking sites, blogs, wikis, specific web applications, social media, and so on. Though these are all of particular concern to Internet users and have gained global popularity, blogs come to the fore more particularly owing to the fact that users can take advantage of participatory practice as well as literacy practices (Godwin-Jones, 2008). In other words, blogs can be described as online journals in which bloggers can regularly update their posts, and also draw on this multimedia as a repository and e-portfolio.

Considering those benefits, blogs can be regarded as essential educational tools offering not only an engaging learning environment to students but also enhancing the practices of lucrative digital skills. A vast number of studies on blogs reveal to what extent this tool affects improving writing skill of learners in English as a Foreign Language (EFL) and English as a Second Language (ESL) classes (e.g., Akdağ & Özkan, 2017; Arslan & Şahin-Kizil, 2010; Chang et al., 2005; Cheung, 2021; Daskalogiannaki, 2012; Gray-Rosendale, 2020; Hung, 2009; Jarrah & Alzubi, 2021; Özdemir & Aydın, 2017; Sun & Chang, 2012; Taki & Fardafshari, 2012). The researchers attribute this success to bidirectional communication between students which would increase the chance of giving productive peer-to-peer feedback or prompting them to create learning communities during online interactions. Furthermore, when these text-based blogs have been equipped with other sensory inputs, they will be far more effective. Hence, after interweaving images, audios, movies or clips, the blogging platforms will not be simply written entries, but they will turn out to be video blog (henceforth, 'vlog' or 'vlogging') or photo-blogs taking digital archives of distinct documents in.

Similar to blogs, vlogs are virtual platforms providing visual and aural stimuli to learners in order to expose them to different accents, slangs or dialects. Vlogs primarily allow learners to polish communicative skills, strengthen their command of the English language, and explore their unique learning styles without devoting blocks of time to the task. Vlogging also establishes an environment based on feedback and reflections of experience among group members through presentations and observations as well as instigating them to build and develop a virtual community of practice (Cayari, 2019; Kaçar, 2020; Ong et al., 2020). In terms of pedagogical considerations, vlogs heavily rely on Vygotsky's (1978) social constructivism and Zone of Proximal Development (ZPD), and Siemens' connectivism theory (2004) for instructional environments in the digital age. This would then pave the way for social interaction on learning, internalizing and facilitating knowledge uptake. To illustrate, Noviya and Aisyah (2017) inspected the promising efficiency of vlogs in helping learners to be better communicators via storytelling, which eventually disclosed that vlogs mediated learners to advance their communicative autonomy as in the study of Pazilah and Hashim (2018). Wulandari (2019) examined whether vlogs can contribute to EFL learners' speaking development by conducting a 3-month-long experiment on 28 participants. He concluded with the success of vlogs in providing learners with the opportunity of transmitting the messages rapidly and catalysing mutual understanding.

Furthermore, Kaçar (2020) unearthed that vlogs increased the motivation and self-confidence of the learners. Likewise, Snelson (2013) expressed the motivating side of vlogs and their impact on enhancing speaking skill and vocabulary learning. Hung (2011) assessed vlogs concentrating on their affective aspects and investigated students' perceptions and attitudes towards adopting them in second language learning. She explored that learners regarded vlogs as a mediator to organize language learning, review learning products and store knowledge as well as the learning practices. In the same vein, Combe and Codreanu (2016) discussed the use of vlogs in informal settings to reveal the potential improvement of speaking ability and intercultural exchanges of an American, French language learner via his YouTube experiences. They pointed out that vlogs were not only beneficial for speaking, but promoting digital literacy skills, intercultural communication, and multilingual peer learning. Finally, Aldukhayel (2019) searched for the perceptions of teachers and learners towards utilizing vlogs as a tool for listening practice in formal and informal contexts. The findings displayed that learners and teachers easily embraced vlogs in the lessons for the improvement of listening and expanding their vocabulary pool since they found vlogs motivating sources enriching the learning processes.

To put it briefly, it has been affirmed that vlog should be integrated into language classes taking account of its basis on socio-constructivist learning theory, mobile-friendliness, up to date standard, and presenting colloquial English besides activating learner engagement. Moreover, the research findings have echoed that vlogs facilitate scaffolding, intercultural awareness, co-construction of knowledge, reflective and autonomous learning. However, almost all studies have operationalized vlogs in the domains of teaching speaking (Frobenius, 2011; Hung & Huang, 2015; Lestari, 2019; Snelson, 2013; Wesch, 2009), and vocabulary (Eisenlauer, 2020; Gustafsson, 2016; Sahayu, 2019; Saiful, 2019; Taqwa & Sandi, 2019). On the other hand, there do not seem to be many investigations infusing vlogs into other skills (e.g., Aldukhayel, 2019; Kaufmann & Frisby, 2013). Considering that, the researcher has planned to pinpoint all related research on vlogs in language teaching over the last decade, and unveil whether writing was treated on an equal footing with the other skills. It would also demonstrate whether scholars have appealed to the recent techniques and harmonized all skills while working on vlogs. Furthermore, it would help us understand whether integrating vlogs into language classes would display their feasibility for advancing specific language skills. To that end, two research questions have been determined to analyse the academic studies on vlogs systematically:

1. What are the overarching objectives of research on vlogs in EFL and ESL contexts from 2010 until 2021?
2. Are school-related vlogs incorporated into the writing practices over the last 10 years? If not, how can vlogs be involved in the contents of writing lessons?

2 Methodology

2.1 Inclusion and Exclusion Criteria

First of all, some inclusion criteria were embodied to identify the studies for this review. For instance, they must be (1) in the English language, (2) indexed in Scopus or WoS database, (3) specified in language teaching rather than all of the subjects in education, (4) administered between the years 2010 and 2020, (5) experimental research. Initially, 46 studies appeared on WoS after typing ‘vlog’, ‘vlogging’, ‘video blogging’, and ‘video blog’ respectively. The first study was completed in 2002, and one of them was operated on in 2009, hence they were automatically eliminated, which makes 44 articles in total. Afterwards, the reviews, book chapters, post scriptum, books, proceedings, responses to the editors, letters, projects, and thesis were excluded from the search list. Though some empirical studies on vlog subsist in language teaching, a great amount of research ($N = 40$) was performed in media and technology, transactions on multimedia, text and talk (communication), psychology, social networking, image and video processing, and logistics. Hence, full-text versions of only four articles were decided to be analysed exhaustively.

As for Scopus, although 83 studies were firstly detected without any exclusions, eight of them were directly out of the scope of this design due to their publication dates. Additionally, some research ($N = 11$) from other disciplines was not involved in the analysis, such as the ones in linguistics investigating the use of adjectives in bilingual blogs and vlogs, code-copying, audience design in monologues, sequencing of conversations in computer-mediated communication and vlogs, and merely comparing blogs and vlogs. Furthermore, some of the articles in language studies ($N = 23$) covered quite general and technical issues beyond any reference to language learning or teaching. In the end, the researcher marked only five papers straightforwardly addressing vlogs in the ELT context.

Out of nine studies received from the two databases, the researcher identified only six articles to be thoroughly checked. Nonetheless, another study was incorporated after skimming the abstracts of the articles, as well. Though ‘vlog’ was written neither in the title of the paper nor within the long-tail keywords, the study was related to its implementation. As a result, seven studies published in flagship journals were selected to scrutinize.

Table 1 indicates that all of the articles covered in this analysis were published in different journals. The first, third and fourth journals in the list were both in Scopus and Social Sciences Citation Index (SSCI), whereas the other four were only indexed in Scopus. The number of experiments on school-related vlogging also seems to increase in 2019 and 2020. Still, no relevant research from the years of 2010, 2012, 2013, 2014, 2015, and 2017 could meet the criteria to be included in the review.

Table 1 The studies in the review

The number of the study	Title	Year of publication	Journal
1	Pedagogical applications of Vlogs: An investigation into ESP learners' perceptions	2011	British Journal of Educational Technology
2	Blending a class video blog to optimize student learning outcomes in higher education	2016	The Internet and Higher Education
3	Attitudes and behaviors related to individual and classroom practices: An empirical study of external and internal factors of ICT use	2018	LIBRI (De Gruyter)
4	Vlogs in L2 listening: EFL learners' and teachers' perceptions	2019	Computer Assisted Language Learning
5	"VLOG": An innovation in collaborative ESL learning	2019	International Journal of Innovation, Creativity and Change
6	Engaging in reflective practice via vlogs: Experience of Malaysian ESL pre-service teachers	2020	Indonesian Journal of Applied Linguistics
7	Scaffolding speaking tasks using videoblog portfolio in an ESL classroom	2020	Universal Journal of Educational Research

2.2 Data Collection and Analysis

Several forms developed for former systematic reviews were initially assessed in the preparation phase. Then, a review form was designed to analyse the identified studies for scrutiny. That form paved the way for describing the basic information about the characteristics of the research and helped to outline the specific details. Considering the reliability of this form, two experts in the field checked and evaluated it, which enabled the researcher to shape its final version covering some information about the publications, such as research justification, the gap in the literature, general objectives, research questions, research designs, major findings, the theoretical contributions, suggestions and pedagogical implications.

However, after the review, it was discovered that the researcher cannot examine the studies in line with descriptive content analysis and the statistical meta-analysis as previously thought due to the limited number of research ($N = 7$). Then, it would not be reasonable to start the process of generating codes and themes. Instead, the researcher initially analysed each study in light of the research questions. Finally, she appealed to peer debriefing to hold impartial views about the articles as is suggested by Lincoln and Guba (1985). The peers examined the identified studies using the review form. As a result, they detected both overemphasized and underemphasized points individually, then they arranged virtual meetings three times throughout the analysis. This helped me to mitigate the biases towards the investigation in

turn. Moreover, their support provided to ensure validity and reliability of the study due to a high inter-rater agreement of .88 among raters.

3 Findings and Discussion

The seven selected studies (see Table 1) were meticulously vetted according to their overarching objectives of using vlogs in EFL and ESL contexts and to reveal whether school-related vlogs were incorporated into the writing practices. The first study set out to unveil university students' perceptions towards the use of vlog in an elective course, Business Oral Communication. It aimed at portraying the pros and cons of vlogs from a holistic perspective to boost educational attainments and inspire learning in EFL classes. Besides, it was to improve the rhetoric while learners were handling effective communication, delivering a speech or giving presentations, and to keep negotiating in distinct situations. To put it differently, speaking skill was primarily stressed and associated with vlogs for foreign language attributions. In the end, the researcher explored that the learners favoured employing vlogs in English language lessons as functional learning tools in that they facilitated the learning process, reflected both verbal and non-verbal cues in their communication unlike in conventional foreign language classes. Furthermore, the learners expressed that vlogs were visual representations and served as mediators for being competent in technical skills, prevailing time constraints, reaching a wider audience, achieving self-assessment and being autonomous with peer bonding. Yet, the challenges overshadowing the strengths of vlogs comprised unrealistic and inauthentic dialogues, technical problems, and perceptual intrusions.

Another investigation attempted to uncover whether vlogs can be combined with person-to-person communication to support undergraduate learners' language knowledge and affective domains simultaneously in the oral training course. It would also explore the perceptions of learners towards vlogging experience besides the advancement of their speech delivery and willingness to communicate (WTC). It results in the great success of learners supported with vlogs rather than the control group who were deprived of these digital videos in the language learning procedure. The other remarkable point was the achievements of learners using vlogs with WTC outside the classroom context dissimilar to the disadvantaged group who were only influenced by in-class willingness. Finally, vlogs were detected to inspire positive feelings among learners to partake in the platform and obtain their language learning aims. Hence, similar to the first paper, this would also draw attention to promoting oral proficiency in the target language.

The third research intended to deeply probe into the attitudes of university students towards the Information and Communication Technology (ICT) use in a broad context without restricting the scope of the study by selecting learners solely from the language departments. In the end, all participants declared the motivating effect of ICT tools in terms of engaging learners, and providing efficacy. However, learners who major in a language revealed that they notably used vlogs, blogs, and social

media as e-resources to maintain personal educational studies, whereas learners from non-language majors largely embodied task-based tools, such as simulations. As to the frequency of ICT usage, the most common appliances in the wide context were unsurprisingly editing tools, search engines, and language tools. On the contrary, social media, translation, lexicons and dictionaries and video activities were highly favoured in the language learning context. Overall, the findings highlight that vlogs were greatly appreciated in the language learning process.

The following research in Table 1 pointed whether vlogs were regarded as aural input enhancement for listening exercises through the lens of both teachers and learners inside and outside of EFL classes. Hence, their perceptions towards the effectiveness and suitability of vlogs as a source of language teaching and integration into L2 listening lessons were also aimed to reveal to upgrade language lessons and steer the future implementations. The results show that both learners and teachers had positive manners to manipulate vlogs as L2 materials in that they would further the passion of learning, supply edutainment by releasing the latest information besides promoting vocabulary, listening, other language-related skills and raising awareness of communicative competence. Results obtained from the data sources also displayed that vlogs can be coordinated with bottom-up and top-down listening activities as well as listening comprehension checks. Furthermore, pre-learning activities of vlogs must be considered as well to set the ground for post-viewing activities. All in all, the researcher informed us about the use of vlogs and reported that they offer several excellent pedagogical opportunities for the improvement of fluency and listening comprehension to get the gist of the text in place of focusing on forms and accuracy. Otherwise, L2 learners might get lost in multifaceted and complex language features (e.g., idiomatic phrases, colloquial expressions) due to the limited exposure they have hitherto gained from the authentic English speaking environment.

The fifth research in the list attempted to discover whether vlogs can be exploited as learning tools in listening, speaking, grammar and reading skills, respectively. To this end, the researchers adapted the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model to create three vlogs for language lessons. However, they only adjusted the first three principles now that this was just a preliminary study. After exploring learners' exam anxiety and low proficiency levels, they constructed vlogs as collaborative learning materials based on real-life events. Finally, researchers documented the first story-telling vlog with sentence patterns designed for listening and speaking skills. They also reported the advancement of pronunciation as well as the correct intonation in a speech preceding the role-play exercises presented according to the theme-based model. The grammar was introduced via another vlog adopting a task-based instruction to encourage learners to talk about the given topic. Then, teachers referred to vlogs with subtitles to expand learners' reading skill and enabled them to recall words, use higher-order thinking skills and also provided reciprocal peer coaching. In conclusion, they reflected the importance of incorporating vlogs in the ESL context regarding their positive impact on the overall learning experiences.

As for the following study, it differs from the other six in terms of scrutinizing vlogs for teachers' professional development in the role of reflective practices. The research was carried out with the critical reflections of teacher candidates during their practicum. On the one hand, some of those pre-service teachers unveiled their pleasure of having this experience and being engaged in post-lesson reflections. On the other hand, some were uncomfortable with videotaping themselves and sharing this with others in addition to feeling anxious about being criticized or evaluated according to their performance in recordings. Notwithstanding, vlogs were found as a great opportunity for all participants considering posted comments to the peers in affirmative and encouraging nature, deeper reflections, and the exchange of knowledge and experience. Another noteworthy point was the caveats of the researchers. They can be referred to as the manners of the peers during the reflections in that they need to be non-judgemental, decent and reassuring instead of striking an overarching attitude. Finally, the implications for practices were related to in-class issues. For instance, additional coaching was detected to be one of the immediate needs of teacher candidates to learn more about reflections besides dealing with technical difficulties encountered in adopting vlogs.

The last research, a case study, was planned to discuss the fluency development of learners in ESL speaking lessons through vlogs as a means of technological media. A vlog project was managed by enabling learners to provide mutual feedback in order to reinforce learning via task-based and blended learning. The findings indicate that learners actively utilized reflections, scaffolding, accomplished peer to peer interaction while they were creating vlog portfolios and practising English. As one of the self-directed learning and sensory scaffolding techniques, vlogs offered them the chance of using English in non-contact class time, fostering their autonomy, pragmatic competence and learner accountability. In short, we can say that this study was also based on speaking and listening as two essential communicative language skills to improve ESL learning.

Having completed describing each study in-depth, the purposes of vlog-based research can be tabulated to expose the most common one out of all (Table 2).

Table 2 The objectives of the studies

The number of the study	The language skill(s)	Other objectives
1	Speaking skill	Perceptions of learners, advantages and disadvantages of vlogs
2	Listening and speaking skills	Perceptions of learners, WTC
3	Not specified (general)	Attitudes of learners, ICT
4	Listening skill and vocabulary	Perceptions of teachers and learners
5	Listening, speaking reading skills and grammar	–
6	Professional development skills (career-oriented)	–
7	Listening and speaking skills	Scaffolding techniques

The table demonstrates that mainly listening and speaking skills were addressed in the research. Taking into account the essence of vlogging, cultivating learners' speaking and listening abilities were quite plausible. By the same token, as the distribution of ideas on the internet is trendy, related studies were planned to boost oral fluency, pronunciation, and effective speech. Correspondingly, they turned out to be the salient determinants of vlog analyses because of being easily correlated with current trends, such as autonomy, motivated individuals in digitally-supported settings, distance education, synchronous and asynchronous learning. However, none of them directly referred to writing skill; the apparent truth seems that 'blogs are mostly matched with writing exercises'. The underlying reason behind the exclusion of writing in the research must derive from its onerous nature. To put it more explicitly, writing necessitates knowledge of both functional linguistic domains and strategic management for maintaining content integrity throughout the text (Aydın & Yıldız, 2014). That is, micro and micro-skills of writing must be well-counted before the experimentation. Therefore, the research designs must have multi-variables taking into account the cognitive demands, complex tasks, and affective domains. As a result, thanks to these intricate steps behind the scene of the writing practices, there is a paucity of research in the literature optimizing vlogs to teach or learn writing much better as was already underscored by Aldukhayel (2019) and Zhang et al. (2020).

3.1 How to Integrate Vlogs in Classes to Improve Writing Skill

A brief guide as to how to incorporate vlogs in EFL or ESL classes to enhance writing skill must be addressed herein to answer the second research question considering the directions within the selected studies. Firstly, as Özdemir and Açık (2019) reported, despite being labelled as netizens or digitally literate due to social media, and using technological equipment at every step of their lives, some learners had difficulty in using computer application software programs and the digital classroom systems. Besides, they had trouble with creating self-made videos, and content for the text as well as developing the language and style. In this respect, Public Broadcasting Service (PBS) Idea Channel or VlogBrothers on YouTube can be initially introduced to learners in order to emphasize how lively dialogues they can engage in, and extend the conversation as John and Hank Green brothers do. Thereafter, they can design their first flipgrid vlogs on any topic following the given prompts (see Sample activity 1). Accordingly, the vlog-enriched class would raise learners' awareness of the text, style, social contexts and the language itself. In this way, they will also comprehend how to make the critical analysis of a text they are designing to write. Moreover, regarding the findings of Hashim et al. (2019), Shin and Cimasko (2008) and Shuib et al. (2020), some writing activities relevant to task-based learning can be combined with vlogs (see Sample activity 2). In the meantime, a program can be embedded in the website to record learners' entrances and

exits. In doing so, learners will be stimulated to follow the vlogs more systematically and attentively.

Creating vlogs in which learners are starring themselves or starting class-based discussions will lead them to discover new ways of understanding expressions. Therefore, some audio-visual materials (e.g., animations, screenshots with audios) built with Camtasia studio program or accompanied by scripted videos must be posted on Instagram, Google Drive or YouTube since they are all amazing, entertaining and prominent vlog platforms. This will increase digital citizenship, promote flipping the class content by making learners develop vlogs beforehand and be prepared for classroom activities. In the end, they will be able to transfer what they have acquired into their future learning, which would fairly demonstrate that they are on a steep learning curve. Last of all, their sharing in these digital venues will not just reach out to their school community, vlogs will also provide learners with the chance of interacting with other students from different parts of the world.

In the great scheme of things, the common sense dating from the 1970s' methods of 'teaching one skill at a time' must still subsist in some language classes and impede handling integrated skills. This is because a vast range of studies (e.g., Ekmekçi, 2017; Engin, 2014; Güvenç, 2018; Hansen, 2015; Özdemir & Açıık, 2019; Özkurkudis & Bümen, 2019; Raedts et al., 2017; Sun, 2010; Vurdien, 2011; Zhang, 2009) aiming at boosting writing performance through mobile learning tools and social networking sites expressly concentrate on just 'blogs'. However, writing skill must be inserted in lesson plans through vlogs abiding by the integrated skills approach in Communicative Language Teaching (see Sample activity 3). As a matter of fact, writing and speaking activities can be organized by videos and vlogs via online video-sharing platforms (see Sample activity 4). In addition, conversation analysis, movie trailers, movie scene re-enactments can be harmonized with vlogs rather than labelling them only as potential practices for listening, reading and speaking skills (Watkins & Wilkins, 2011).

Likewise, process-oriented writing must be respected to raise learners' consciousness of the quality of the regularisation process. At this point, receiving and providing feedback through peer bonding as well as collaborative practices would sound superior to traditional teacher feedback in negotiating the meaning. Furthermore, this would pave the way for establishing learning communities or much preferably academic writing clubs by which learners would pair up with one another according to their immediate needs to remediate their weaknesses together with the support of teachers in necessary cases. As to the advantage of applying a process-oriented approach for vlogs, it would make learners spare enough time to compose their manuscripts with pre-writing, re-writing studies and self-evaluations in addition to allowing the interaction between peers and teachers. Afterwards, the learners will be instigated to create their original vlogs or video projects (see Sample activity 5) and hence expected to be self-regulated in second/foreign language learning thanks to their positive perceptions and attitudes towards writing skill (Lam, 2015).

Vlogs also serve as multimodal digital forms in telling digital stories on the websites, such as Storybird, Animoto, Zooburst (see Sample activity 6). As is

well-known, multimodality in writing depends on creative designs and inter-semiotic complementarity (Yeh et al., 2020). Creativity doubtlessly requires the critical analysis of identified and applied modes from many aspects. Those implementations would enable individualized instructions, informed learning, active learning and higher-order reasoning ability of learners while arranging, composing and writing their ideas in a systematic order. Moreover, their awareness of alternative communicative e-resources will increase through numerous modalities and co-constructed, cooperative activities (Kirchoff & Cook, 2016). Additionally, the involvement of multimodal affordances and using images to express themselves vividly would help to alleviate their concerns and build a positive mind-set (Ciekanski & Chanier, 2008).

Overall, it is of prime importance to signify that the improvement in writing performance cannot be confined to the progress in making notes or basic writing competence. The cardinal linguistic features of the texts (i.e. content and organization, use of L2, readability, mechanics, coherency and cohesion, syntactic, semantic and lexical functions, to name but a few) must be expanded in quality. Quintessentially, vlogs will mobilize learners to polish their writings without narrowing the learning environment to brick and mortar locations by making them feel at ease and reducing their anxiety about writing. In short, vlogs as a learning-focused practice must be tackled in language teaching in order to develop writing skill regarding their foregoing benefits in ESL/EFL classes.

4 Suggestions

Vlogs offer abundant culturally-bound concepts as well as linguistic and paralinguistic features in contextualized language by exposing learners to real-world English. Socio-constructivist instructional perspectives, ZPD (Vygotsky, 1978), and connectivism (Siemens, 2004) as the theoretical underpinnings of vlog also underline its superiority in terms of providing social networking, scaffolding, and recognition of interconnections in distinct areas of knowledge to stimulate language learning. Hence, unlike conventional language teaching techniques, vlogs can easily make up for the failures of the EFL/ESL learning experience by enabling flexible learning conditions to decrease foreign language anxiety. Besides, vlogs foster teaching and learning by referring to some creative ways to introduce the topic, develop critical thinking, assess learners' prior knowledge, and engage them through different instructional approaches. Finally, as vlogs gauge the language development besides measuring the learning outcomes, they can be regarded as critical attributes of a balanced assessment system.

Despite all of those advantages of vlogs in the language learning arena, this analysis unveiled that the selected studies mainly focused only on speaking and listening skills by depriving learners of the interplay of vlogs with writing to improve their written expressions. Accordingly, some practical implementations of vlogs with writing enriched courses have been proposed for teachers and learners to adopt.

Another striking fact discovered at the end of the review has been the sharp line between blogs and vlogs in that research on the blog was mostly related to writing, whereas vlogs were directly associated with speaking skill. As a result, studies discussing the fusion of writing practices with communication skills will be highly appreciated in the field.

Moreover, though studies on vlogs have just started to burgeon in the language teaching and learning domain, few research designs have been carried out at the tertiary level. Further orientations thus need to address this lacuna in the literature and develop new empirical designs to combine integrated skills with vlogs in the higher education context. In the same vein, considering the fact that some learners experience technical problems, future studies need to take screen reading, and digital literacy into their scope in addition to the new designs of vlogs to increase autonomous learning. In this regard, the other challenges or difficulties learners encountered in this process need to be analysed, such as the problems in vlog-making as a collaborative learning activity, which will then contribute to a profound understanding of ways to help learners improve language skills.

The study suggests that apart from YouTube, other different videostreaming websites (e.g. Vimeo, and Metacafe) can be exploited as remarkable resources to develop English language learners' writing performance via lively vlogs. Likewise, scholars are advised to research the effectiveness of various video media (e.g. DVD, VLS, VHS, VCR, and YouTube) in writing classes to reveal learners' and teachers' preferences, as well as comparing them in terms of content and storage capacity.

The research further emphasizes that as vlogs take the burden of instilling the knowledge from the teachers to some extent, teachers are expected to provide a language-rich environment to learners automatically, and they will have more time to develop versatility to manage optimal learning conditions. As the key to utilizing vlogs largely lies in the competency of teachers in adjusting learners to live within the scenarios, they should meticulously select vlogs according to the learners' needs, interests, proficiency levels besides the characteristics of vlogs, such as inspirational or self-improvement focused.

Last but certainly not least, as is also affirmed by Yeh et al. (2020), the other suggestion for using vlogs in English writing classes will be related to the development of curriculum which will include multimodal means of expression leading learners to become independent language users. Besides, it would help them associate the modalities with the writing practices and generate opinions, and inspiration. As such, discovering the efficacy of distinct modes on teaching and learning can stipulate language teachers to adopt multimodality in order to enhance students' writing competency. To conclude, the study can also hearten language teachers to embody the use of video-making, and vlog to improve learners' writing skill.

How to Use Vlogs in Writing Classes

Below are some activities to guide students create vlogs and sample activities to integrate Vlogs in writing tasks. A complete lesson plan to use Vlogs in a writing lesson is also presented:

Sample Activity 1: Flipgrid Vlog *This B1 level follow-up activity is for learners aged 17–24 years.*

Objective: Create a video on flipgrid.com explaining what makes generation Z distinct from the others.

You must include:

- How active do you use social media?
- Are you a ‘digital pioneer’ in real terms? If so, how?
- In what ways do you feel different from your parents?
- What influences your decision making in general?
- What is your advice for the peers from generation Z?

Other Requirements:

- It must be between 3–5 min long.
- Your speech must be intelligible and embellished with details.
- We need to see your face clearly on the screen.
- You can use supplementary materials, such as illustrations, animated images, computer codes and so on.

Sample Activity 2: Travelling by Plane Vlog *This A2/B1 level activity is for learners aged 15–20 years. It can be conducted at the elicitation, presentation and practice stages of the lesson.*

Task: Create a vlog that includes information about the processes that a passenger goes through at the airport, and then write a paragraph about how to check-in at the airport sharing the exciting moments before boarding.

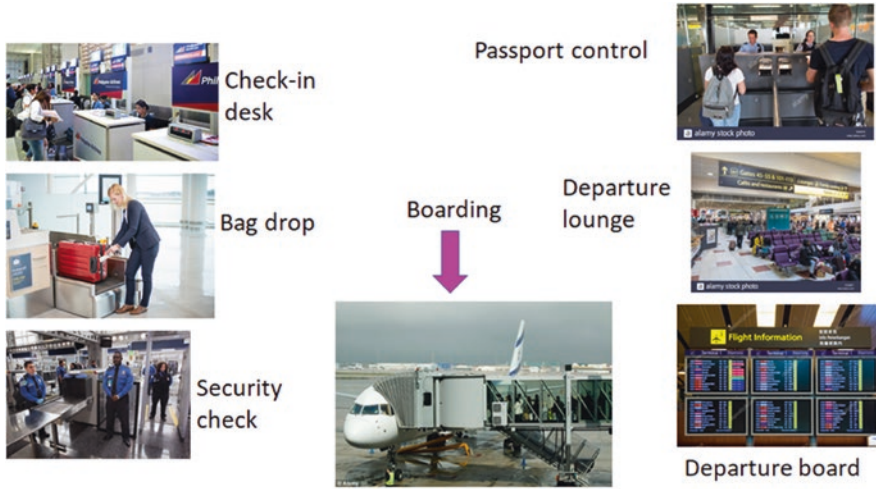
Watch this video on YouTube on a complete guide to departures from the airport (Sydney Airport, 2021, March 29. Sydney airport departures. Retrieved from <http://www.youtube.com/watch?v=zBkJvFu1V8s>

Topics that must be included:

- Thoughts/Feelings about travelling by plane
- The steps to follow before the departure
- Information about one of the passengers’ experiences
- Interesting facts about the airport departure lounges
- The most thought-provoking part of the travel

What must be included:

- Introduction to the video
- Merging photos with audios to summarize information about the travel
- Using the vocabulary and telling the process that a passenger goes through until s/he boards the plane



- Watching the video on YouTube
- Allowing learners to create their vlogs
- Guiding them to write a paragraph about how to check-in at the airport sharing the exciting moments before boarding.

Sample Activity 3: Lesson Plan-Summer Schools

This B1 level activity is for learners aged 17 and above.

1. Warm-up:

Discuss the following questions.

- How do you spend your summer holiday?
- Would you like to attend a summer course or a summer camp? Why?/Why not?

2. Vocabulary preview:

Read the words in the chart below. Which words do you know? Put a check (✓) next to them. Then match them with their definitions. (1–10).

CONFIDENTLY	ARRANGE	EXPERT	IMPROVE	PREPARE
TUITION	ATTENDANCE	CRITICAL SKILL	FLUENT	FORCE

1. to push someone to do something _____
2. a person having lots of skill or knowledge _____
3. teaching _____
4. the manner which shows you are certain about something _____
5. thinking carefully and deeply _____
6. to become better _____
7. someone who can speak a language fast and well: _____

8. make plans or organize something _____
9. participating in an activity _____
10. to make something ready for the future _____

3. Listening and Speaking:

- A. Watch the vlog on YouTube about an English language summer school, and talk about the questions below in pairs. (Oxford Summer English, 2021, March 30).

<https://www.youtube.com/watch?v=O-FUHBasfP4>

1. What information did you receive from this video?
2. What do the learners tell us about the running courses?
3. How do they learn the language in the classroom?
4. What are the differences between the education system therein and in our schools?
5. Would you like to attend this summer course? Why or why not?

- B. You will hear a radio interview with the manager of a summer activity course. Listen and choose the correct option. You will hear the recording twice (Exam English Resources (n.d.). Retrieved from: https://www.examenglish.com/PET/pet_listening_part2.htm)

1. This year, the course will run for _____.
 - (a) eight weeks
 - (b) six weeks
 - (c) seven weeks
2. The problem last year was that _____.
 - (a) few people wanted to attend the course
 - (b) they couldn't look after the children
 - (c) there were too few workers
3. This year, for the first time, children will _____.
 - (a) do creative activities
 - (b) organise events
 - (c) do new outdoor sports
4. Molly doesn't think children will come for 6 weeks because _____.
 - (a) it's too expensive for families
 - (b) they will do the same activities again and again
 - (c) their parents will want to spend time with them

5. The course isn't open to teenagers because _____.
- (a) Molly thinks they're only interested in activities that are related to computer
 - (b) Molly's staff think that teenagers are difficult to please
 - (c) Molly thinks they should spend time with people of a similar age
6. It is important that parents of children who are going to attend the course _____.
- (a) inform Molly about any food the child cannot eat
 - (b) choose the activities the child wants to do when they apply
 - (c) pay the full amount of the course immediately

4. Vocabulary check

Retell the story by filling in the blanks with the correct words from the box.

EXPERTS	HOLDING	FORCE	GO AWAY WITH APPLICATION FORM
OPERATED	ATTENDANCE	WHOLE	ARRANGING

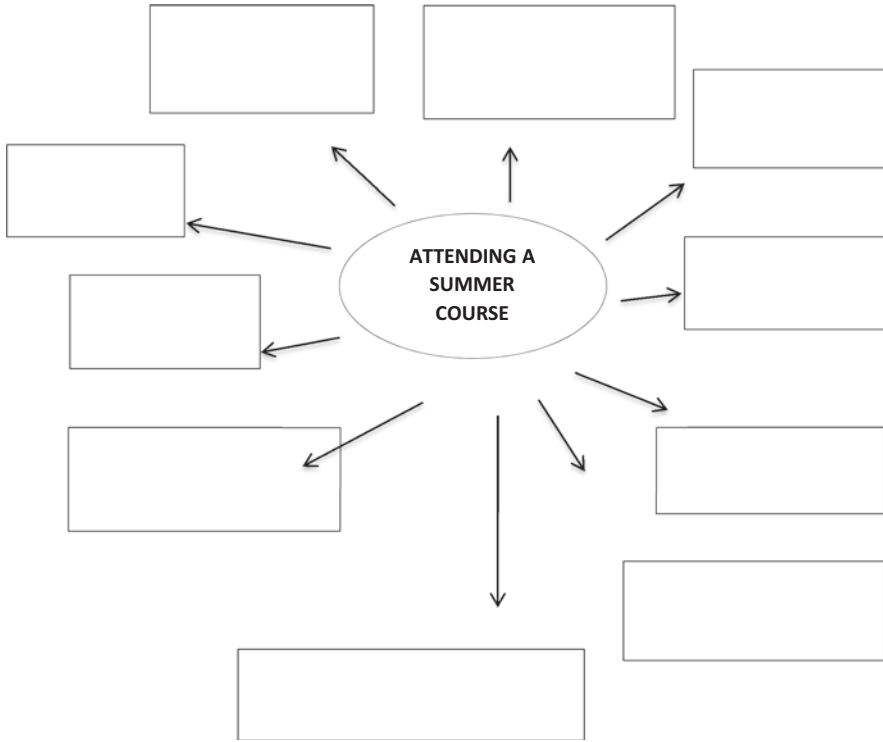
1. Molly is an activity course for the summer holidays.
2. The summer course for the first time last year for 6 weeks from the middle of July until the end of August, the length of the summer holidays.
3. This year we'll be the course again. We did think about making the course longer this year and have a 7-week course.
4. There will be art and music coming in who will lead creative classes.
5. They can come for the length of the course if they like.
6. I'm sure they will all their parents for a week or two.
7. It makes it easier for us to keep records.
8. I don't think it's fair to teenagers to spend their summer holidays with eight-year-olds.
9. They should go to my website, www.summeractivities.co.uk and print out an

5. Writing

A. Brainstorming

Read the following topic and brainstorm about it.

Topic: "Should students spend their summer holiday in a course?" What is your opinion? Use specific reasons/arguments and examples to support your opinion.



B. Preparing an outline

Decide which ideas you will use in your paragraph by crossing out the irrelevant ones. Organise these ideas using the chart below. Write your ideas in phrases.

Topic sentence	- _____ _____
Major & minor supporting ideas (1):	* _____ _____
Major & minor supporting ideas (2):	* _____ _____
Major & minor supporting ideas (3):	* _____ _____
Concluding sentence	- _____ _____

C. Writing your paragraph

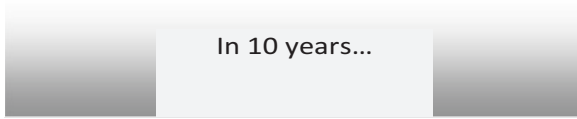
Now review your outline above and write your paragraph. After you write your paragraph, exchange it firstly with your partner, then submit it to the instructor to get feedback.

Sample Activity 4: Blog and Vlog *This B2 level activity is for learners aged 17 and above. It can be conducted at controlled, and free practice stages in the lesson.*

You are expected to write a blog post and create a vlog by associating the topic with your experiences and points of view on online English lessons for university students.

1. Initially, determine your stance
 - Why is this issue noteworthy to you?
 - What is your attitude towards this issue?
2. Estimate what features influence your notion
 - What external factors affect your opinion?
 - To what extent do you fall under the influence of your inner voice?
3. Write the blog post as in opinion paragraph format to share your views with the audience
 - Exchange your writings with peers to provide feedback to each other before the final editing of the instructor
4. Design the vlog expressing your ideas within 5 min long speech
 - Decide the type of platform you will use (e.g., Vimeo, YouTube etc.)
 - Set the scene and use additional materials
5. In the end, ask yourself the following questions for self-assessment and self-reflection:
 - What do I know already?
 - What did I learn?
 - What should I do to facilitate my understanding?
 - How can I improve my self-awareness for further studies?

Sample Activity 5: *This B1/B2 level follow-up activity is for learners aged 15–25 years.*



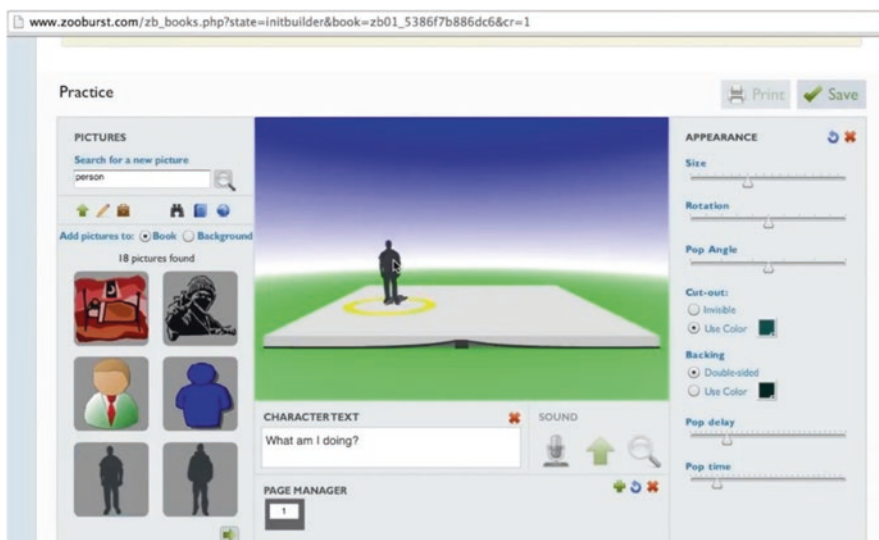
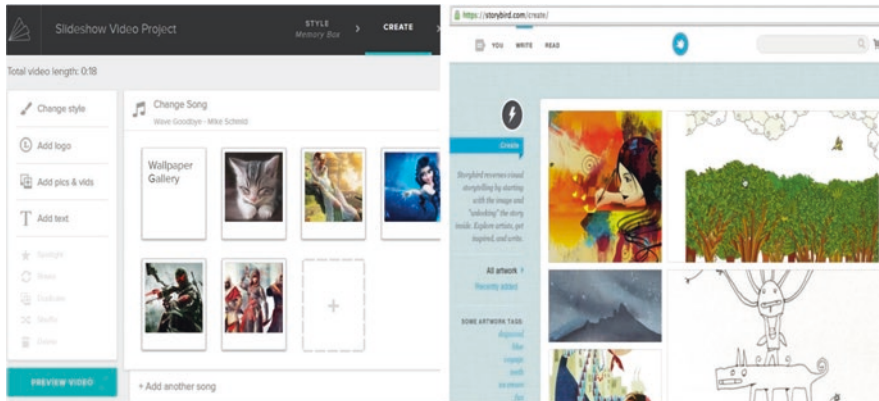
A short project that asks learners to think creatively about their future learning. They need to...



For This Writing Project, You Can Use the Following Prompts

- Prompt 1. What will be the future of learning like?
- Prompt 2. What are your expectations for the future of learning?
- Prompt 3. Do you think that the whole education system will change soon?
- Prompt 4. Is face-to-face learning dying a death?
- Prompt 5. What do you think about the benefits of hybrid learning?
- Prompt 6. How do you think the Covid-19 pandemic will have an impact on the future of learning?
- Prompt 7. What level of education will the future of learning mostly affect (kindergarten, elementary education, secondary education, high school or tertiary level)?
- Prompt 8. What do you think about the examinations in the new system?
- Prompt 9. Will the teaching and learning be more motivating?
- Prompt 10. How can a better learning climate be created?

Below is sample activity 6 including some online platforms you can use (i.e. Storybird, Animoto, and Zooburst).



References

- Akdağ, E., & Özkan, Y. (2017). Enhancing writing skills of EFL learners through blogging. *The Reading Matrix: An International Online Journal*, 17(2), 79–95.
- Aldukhayel, D. (2019). Vlogs in L2 listening: EFL learners' and teachers' perceptions. *Computer Assisted Language Learning*, 1–20. <https://doi.org/10.1080/09588221.2019.1658608>
- Arslan, R., & Şahin-Kizil, A. (2010). How can the use of blog software facilitate the writing process of English language learners? *Computer Assisted Language Learning*, 23(3), 183–197. <https://doi.org/10.1080/09588221.2010.486575>
- Aydın, Z., & Yıldız, S. (2014). Using wikis to promote collaborative EFL writing. *Language Learning & Technology*, 18(1), 160–180. <http://lt.msu.edu/issues/february2014/aydinyildiz.pdf>

- Cayari, C. (2019). Collaborative video logs: Virtual communities of practice and aliveness in the music classroom. *AoIR Selected Papers of Internet Research*. <https://doi.org/10.5210/spir.v2019i0.10932>
- Chang, Y. J., Wu, C. T., & Ku, H. Y. (2005). The introduction of electronic portfolios to teach and assessment English as a foreign language in Taiwan. *TechTrends: Linking Research & Practice to Improve Learning*, 49(1), 30–35.
- Cheung, A. (2021). Integrating e-learning into process writing: The case of a primary school in Hong Kong. In B. Reynolds & M. Teng (Eds.), *Innovative approaches in teaching English writing to Chinese speakers* (pp. 19–42). De Gruyter Mouton. <https://doi.org/10.1515/9781501512643-002>
- Ciekanski, M., & Chanier, T. (2008). Developing online multimodal verbal communication to enhance the writing process in an audio-graphic conferencing environment. *ReCALL*, 20(2), 162–182. <https://doi.org/10.1017/S0958344008000426>
- Combe, C., & Codreanu, T. (2016). Vlogging: A new channel for language learning and intercultural exchanges. In S. Papadima-Sophocleous, L. Bradley, & S. Thouëсны (Eds.), *CALL communities and culture – Short papers from EUROCALL 2016* (pp. 119–124). <https://doi.org/10.14705/rpnet.2016.eurocall2016.548>
- Daskalogiannaki, E. (2012). Developing & assessing EFL students' writing skills via a class blog. *Research Papers in Language Teaching & Learning*, 3(1), 269–292.
- Eisenlauer, V. (2020). The EFL-YouTube remix: Empowering multimodal and computational literacies for EFL purposes. *Journal of Visual Literacy*, 1–18. <https://doi.org/10.1080/1051144X.2020.1826220>
- Ekmekçi, E. (2017). The flipped writing classroom in Turkish EFL context: A comparative study on a new model. *Turkish Online Journal of Distance Education*, 18(2), 151–167.
- Engin, M. (2014). Extending the flipped classroom model: Developing second language writing skills through student-created digital videos. *Journal of the Scholarship of Teaching and Learning*, 14(5), 12–26. <https://doi.org/10.14434/josotlv14i5.12829>
- Exam English Resources. (n.d.). Retrieved from https://www.examenglish.com/PET/pet_listening_part2.htm
- Frobenius, M. (2011). Beginning a monologue: The opening sequence of video blogs. *Journal of Pragmatics*, 43(3), 814–827. <https://doi.org/10.1016/j.pragma.2010.09.018>
- Godwin-Jones, R. (2008). Emerging technologies-web-writing 2.0: Enabling, documenting, and assessing writing online. *Language Learning & Technology*, 12(2), 7–13.
- Gray-Rosendale, L. A. (2020). Creative approaches to teaching life writing online: The value of discussions, creative blog posts, final projects, and real-time video interaction. In A. W. Thornburg, D. F. Abernathy, & R. J. Ceglie (Eds.), *Handbook of research on developing engaging online courses* (pp. 116–133). <https://doi.org/10.4018/978-1-7998-2132-8>
- Gustafsson, J. (2016). *Vocabulary learning a vlogging: An exploratory study of vocabulary learning in the form of a vlogging exercise with the use of mobile learning, compared to orthodox written exercises*. [Master's thesis, Linnaeus University]. Digitala Vetenskapliga Arkivet. <http://www.diva-portal.org/smash/record.jsf?pid=diva2%3A941641&dsid=718>
- Güvenç, G. (2018). The flipped classroom approach in teaching writing: An action research. *International Journal of Social Sciences and Education Research*, 4(3), 421–432.
- Hansen, H. E. (2015). The impact of blog-style writing on student learning outcomes: A pilot study. *Journal of Political Science Education*, 12(1), 85–101. <https://doi.org/10.1080/15512169.2015.1060887>
- Hashim, H. U., Rusli, R., Yunus, M., Hashim, H., Norman, H., & Singh, C. K. S. (2019). “VLOG”: An innovation in collaborative ESL learning. *International Journal of Innovation, Creativity and Change*, 7(10), 261–276.
- Hung, S. T. A. (2009). Promoting self-assessment strategies: An electronic portfolio approach. *Asian EFL Journal*, 11(2), 129–146.
- Hung, A. S. (2011). Pedagogical applications of Vlogs: An investigation into ESP learners' perceptions. *British Journal of Educational Technology*, 42(5), 736–746. <https://doi.org/10.1111/j.1467-8535.2010.01086.x>

- Hung, S. T. A., & Huang, H. T. D. (2015). Video blogging and English presentation performance: A pilot study. *Psychological Reports, 117*(2), 614–630. <https://doi.org/10.2466/11.PR0.117c20z6>
- Jarrah, M. A., & Alzubi, A. A. F. (2021). Arab postgraduates' readiness towards and effectiveness of utilizing Web 2.0 in language learning. *International Journal of Instruction, 14*(1), 673–690. <https://doi.org/10.29333/iji.2021.14141a>
- Kaçar, I. G. (2020). Blogging in an autonomous, constructivist and blended learning environment: A case study of Turkish EFL pre-service teachers. In H. Reinders (Ed.), *New language learning and teaching environments* (pp. 145–174). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-34212-8_6
- Kaufmann, R., & Frisby, B. N. (2013). Let's connect: Using Adobe Connect to foster group collaboration in the online classroom. *Communication Teacher, 27*(4), 230–234. <https://doi.org/10.1080/17404622.2013.798014>
- Kirchoff, J. S. J., & Cook, M. P. (2016). The impact of multimodal composition on first year students' writing. *Journal of College Literacy and Learning, 42*, 20–39.
- Lam, R. (2015). Understanding EFL students' development of self-regulated learning in a process-oriented writing course. *TESOL Journal, 6*(3), 527–553. <https://doi.org/10.1002/tesj.179>
- Lestari, N. (2019). Improving the speaking skill by vlog (video blog) as learning media: The EFL students perspective. *International Journal of Academic Research in Business and Social Sciences, 9*(1), 915–925. <https://doi.org/10.6007/IJARBS/V9-I1/5490>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.
- Liu, M. (2016). Blending a class video blog to optimize student learning outcomes in higher education. *The Internet and Higher Education, 30*, 44–53. <https://doi.org/10.1016/j.iheduc.2016.03.001>
- Nagy, J., & Habók, A. (2018). Attitudes and behaviors related to individual and classroom practices: An empirical study of external and internal factors of ICT use. *The International Journal of Libraries and Information Studies (LIBRI), 68*(2), 113–123. <https://doi.org/10.1515/libri-2017-0099>
- Noviya, H., & Aisyah, N. A. (2017). *Video blog (vlog) in social media to promote learners' autonomy*. Paper presented at the 9th National English Language Teachers and Lecturers (Nelta) Conference, Malang Indonesia. Retrieved from <https://core.ac.uk/download/pdf/127684762.pdf>
- Ong, W. A., Swanto, S., & Alsaqqaf, A. (2020). Engaging in reflective practice via vlogs: Experience of Malaysian ESL pre-service teachers. *Indonesian Journal of Applied Linguistics, 9*, 716–724. <https://doi.org/10.17509/ijal.v9i3.23222>
- Oxford Summer English. (2021, March 30). *An EFL course from Oxford Royale Academy*. Retrieved from <https://www.youtube.com/watch?v=O-FUHBasfP4>
- Özdemir, O., & Açıık, F. (2019). Development of written expression skills with flipped learning instruction: An embedded mixed method study. *Hacettepe University Journal of Education, 1*–17. <https://doi.org/10.16986/HUJE.2019048710>
- Özdemir, E., & Aydın, S. (2017). Blogging effect on English as a foreign language writing motivation: Blogging and writing motivation. *International Journal of Computer-Assisted Language Learning and Teaching, 7*, 40–57.
- Özkurkudis, M., & Bümen, N. (2019). Flipping the writing classroom: Using grammar videos to enhance writing. *Journal of Education and Future, 15*, 1–16. <https://doi.org/10.30786/jef.425632>
- Pazilah, F. N., & Hashim, H. (2018). Using infographics as a technology-based tool to develop 21st century skills in an ESL context. *Journal of Educational and Learning Studies, 1*(1), 35–38. <https://doi.org/10.32698/0242>
- Raedts, M., Steendam, E., Grez, L. D., Hendrickx, J., & Masui, C. (2017). The effects of different types of video modelling on undergraduate students' motivation and learning in an academic writing course. *The Journal of Writing Research, 8*, 399–435. <https://doi.org/10.17239/jowr-2017.08.03.01>
- Sahayu, W. (2019). The effect of YouTube on high school students' second language acquisition. *International Journal of Linguistics, Literature and Translation, 2*(6), 38–44. <https://doi.org/10.32996/ijllt.2019.2.6.5>

- Saiful, J. A. (2019). EFL teachers' cognition in the use of YouTube vlog in English language teaching. *Journal of Foreign Language Education and Technology*, 4(1), 72–91.
- Shin, D. S., & Cimasko, T. (2008). Multimodal composition in a college ESL class: New tools, traditional norms. *Computers and Composition*, 25(4), 376–395. <https://doi.org/10.1016/j.compcom.2008.07.001>
- Shuib, A., Ismail, L., & Manaf, U. M. A. (2020). Scaffolding speaking tasks using video blog portfolio in an ESL classroom. *Universal Journal of Educational Research*, 8(1A), 44–52. <https://doi.org/10.13189/ujer.2020.081307>
- Siemens, G. (2004). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 1–9.
- Snelson, C. (2013). Vlogging about school on YouTube: An exploratory study. *New Media & Society*, 17(3), 321–339. <https://doi.org/10.1177/1461444813504271>
- Sun, Y. (2010). Extensive writing in foreign-language classrooms: A blogging approach. *Innovations in Education and Teaching International*, 47(3), 327–339. <https://doi.org/10.1080/14703297.2010.498184>
- Sun, Y., & Chang, Y. (2012). Blogging to learn: Becoming EFL academic writers through collaborative dialogues. *Language Learning & Technology*, 16(1), 43–61. <http://lt.msu.edu/issues/february2012/sunchang.pdf>
- Sydney Airport. (2021, March 29). *Sydney airport departures*. Retrieved from <http://www.youtube.com/watch?v=zBkJvFu1V8s>
- Taki, S., & Fardafshari, E. (2012). Weblog-based collaborative learning: Iranian EFL learners' writing skill & motivation. *International Journal of Linguistics*, 4(2), 412–429. <https://doi.org/10.5296/ijl.v4i2.1663>
- Taqwa, A., & Sandi, V. N. (2019). Students' experiences of using vlog to learn English. *Journal of Foreign Language Teaching and Learning*, 4(1), 1–13. <https://doi.org/10.18196/ftl.4134>
- Vurdien, R. (2011). Enhancing writing skills through blogging in an advanced English as a foreign language class in Spain. *Computer Assisted Language Learning*, 26(2), 126–143. <https://doi.org/10.1080/09588221.2011.639784>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Watkins, J., & Wilkins, M. (2011). Using YouTube in the EFL classroom. *Language Education in Asia*, 2(11), 113–119.
- Wesch, M. (2009). YouTube and you: Experiences of self-awareness in the context collapse of the recording webcam. *Explorations in Media Ecology*, 8(2), 19–34.
- Wulandari, M. (2019). Improving EFL learners speaking proficiency through Instagram vlog. *LLT Journal: A Journal on Language and Language Teaching*, 22(1), 111–125. <https://doi.org/10.24071/lt.2019.220111>
- Yeh, H., Heng, L., & Tseng, H. (2020). Exploring the impact of video making on students' writing skills. *Journal of Research on Technology in Education*, 1–11. <https://doi.org/10.1080/15391523.2020.1795955>
- Zhang, D. (2009). The application of blog in English writing. *Journal of Cambridge Studies*, 4(1), 64–72. <https://doi.org/10.17863/CAM.1578>
- Zhang, N., Zhang, Q., Liu, X., & Jiang, X. (2020). *Improving college students' English writing performance via vlog*. Paper presented at 2020 International Symposium on Educational Technology (ISET), Bangkok, Thailand. Retrieved from <https://ieeexplore.ieee.org/document/9215484>

Zülal Ayar is currently an assistant professor at Izmir Katip Çelebi University, Turkey. Dr. Ayar received her B.A., M.A., and Ph.D. in English Language Teaching (ELT). Some of her professional interests include EFL, continuing professional development, curriculum design, using literature in ELT, and language teacher education.

Utilizing Mobile Technology to Improve Writing Skill



Deren Başak Akman Yeşilel

Abstract Technology has improved rapidly, and new communication technologies emerge every day. Those technologies can be used in the educational field, including language education. Throughout history, language teaching has been assisted with various technological tools such as tape recorders, overhead projectors, DVD players, computers, smartboards, etc. If appropriately used, technology is a great help to develop language skills. The use of technology in language education can bring authenticity and fun to the classroom and can have a better impact on the learning/teaching process, especially when we think of Gen Z. This generation is known to be digital natives and uses any technological tools efficiently and effectively. They prefer to communicate by sending emails or using social media rather than face-to-face interaction. Therefore, it seems to be a need for language teachers to adopt a new perspective in language teaching. This chapter sheds light on the effectiveness of mobile-assisted language learning (MALL) in improving language learners' writing skills. MALL provides invaluable sources to practice writing in and outside the classroom. After reviewing some studies investigating the impact of mobile technologies on language learning, randomly selected writing applications are introduced, and a sample activity for classroom practice is suggested.

Keywords Mobile-assisted language learning (MALL) · Web 2.0 tools · Writing · Writing apps

1 Introduction

Technological developments have affected every aspect of our daily life, from health to communication. We can observe both the advantages and disadvantages of these developments in the educational field as well. Language education is no exception,

D. B. A. Yeşilel (✉)
Ondokuz Mayıs University, Samsun, Türkiye

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_8

too. Throughout history, language teaching has been assisted with various technological tools, such as tape recorders, overhead projectors, DVD players, computers, smartboards, and etc. If appropriately used, technology is a great help to develop language skills. Especially, in recent years, through the use of the Internet, live exchanges between the speakers of English have been promoted. There emerged a variety of tools that support the language teaching/learning process. Those tools are often used to provide collaboration among language learners and help them to become autonomous learners. Furthermore, they can also be used to develop intercultural communicative competence.

The 21st century is the age of information and communication. Among the 21st century skills, digital literacy had gained importance. Thus, technology has become one of the essential components of teacher education programs all over the world (Estarki & Bazyar, 2016). Technological tools become inseparable components of our daily lives, and they create many opportunities in the educational field. Dissemination of information is accelerated due to these technological developments, and educational programs are redesigned to train learners equipped with the necessary 21st century skills (Büyükbaykal, 2015).

Educational systems keep looking for alternative ways and methods to improve their performances through technology. Yet, it should be kept in mind that technology alone does not improve education. As Estarki and Bazyar (2016) claim, “technology alone cannot improve the delivery of knowledge then; a new computer cannot make a teacher better. Nor can it provide a magic formula to improve learning” (p. 407). Nevertheless, integrating technology into language classrooms can have a better impact on the learning/teaching process, especially when we think of Gen Z. Language teachers face a new generation who prefers to communicate by sending emails or using any kind of social media rather than face-to-face interaction. They are born into digital technology and, most of the time, are better than their teachers in using these technological tools. Therefore, teachers need to adapt themselves and adopt a new perspective to keep the balance. Ekşi and Yılmaz Yakışık (2015) state that teachers of this digital age must have multimodal literacy knowledge and skills. “The teachers should be able to comprehend and interpret multimodal texts, and effectively design and communicate meaning through such texts and finally need to transfer this knowledge and skills to their students” (p. 464). There are many other studies conducted on the benefits of using technological tools to improve language skills.

Genç İltar (2015, p. 311) lists a number of advantages of integrating technology in young learners’ classrooms as follows:

- Technology can bring a real and enjoyable atmosphere into young learners’ classroom when used effectively and correctly.
- It helps learners to gain language skills outside the classroom and provides them real communicative settings.
- Technology also helps young learners develop their intercultural competence with unlimited resources.

At the end of her study, teacher candidates stated their positive attitudes towards using technological tools and technology-based activities to develop their students' language and cultural awareness. Moreover, the young learners themselves expressed how an English lesson can be fun with technology.

Larsen-Freeman and Anderson (2011) think that technology provides teaching resources and enhances learning experiences. They state that it allows learners to explore the language used in the process and work on authentic language. Through technology, learners become more autonomous, actively involved in using the language, and take risks with the language by connecting with others. Blogs, digital portfolios, electronic chatting, e-pen pals, cell phone-based applications, podcasts, social networking, and wikis are among the techniques they offer to be used in language classrooms. Pourhosein Gilakjani and Sabouri (2014) also assert that technology allows learners to become autonomous and access unlimited information.

Eaton (2010) claims that in the near future, it is possible to see that textbooks are replaced by some mobile applications. She further states that learners of the century tend to express themselves and demonstrate what they know using technology. "The challenge for the twenty-first century teacher will be to find ways to allow them to do that. In today's world, students are the creators, not simply consumers, of technology and technology-produced art and projects" (p. 14).

Parvin and Salam (2015) conducted a study and figured out that when the language content is presented with the help of technology, the students become very attentive, excited, and curious. They get more chances to speak and practice English in the classroom. Teachers who participated in their project reported that using technology in language classes is highly beneficial as it contributed learners' general language abilities and equipped them with the communication skills necessary for their academic and personal life.

Zhao (2013) reviewed the literature on the use of technology in language classrooms and figured out that technology-supported language learning can be as effective as teacher-delivered instruction. Communication technologies such as the Internet have been used to bring authenticity into the classroom, and if used appropriately, they have a positive effect on language learning. Al-Mahrooqi and Naquvi (2014) conducted a study to see the impact of student-created digital videos on their language development and found that students viewed this experience positively and they made gains in vocabulary, reading, oral and written communication. This activity also enhanced their thinking skills and autonomous learning.

In a nutshell, technology helps learners to develop thinking skills and become autonomous. It provides comprehensible input for the learners and increases their motivation to learn a language. It brings authentic materials and activities into the classroom and creates a purpose for real communication. While making the teaching/learning process more student-centered, it provides interaction between teachers and learners (Ahmadi, 2018).

2 Writing as Product vs. Writing as Process

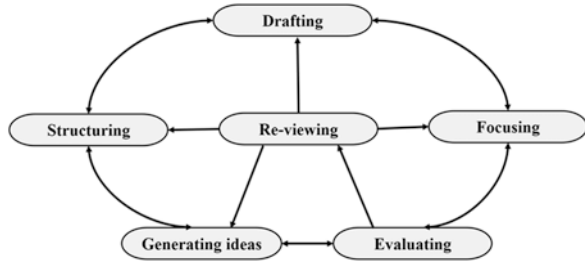
Writing, a tool for communicating with others, is a way of expressing thoughts, ideas in written form. It is one of the language skills that needs to be handled in language classrooms, although it is often neglected. It is often considered to be the least useful of the four language skills. Therefore, teachers tend to spend more time on the other three skills in the classroom. Chastain (1988) stated that this should not be the actual case. The teachers should be responsible for appropriate planning about the role of writing, considering the needs, ages, and interests of the learners. Hancock and McDonald (2012, pp. 1–2) explain some of the advantages of writing in foreign language classrooms as follows:

- Students get a chance to express themselves and their ideas through writing.
- Since learners get time to think, writing provides learners opportunities to try out the language and allows them to practice learned structures and words in context.
- It brings variation into the classroom activities.
- Writing does not only help learners but also teachers to figure out the problems that learners encounter in terms of structure and vocabulary usage and follow their progress.

Traditionally, language teachers are concerned with final written products such as essays, stories, letters, etc. Learners are given a topic or a model composition and asked to write their own, and their final products are assessed considering several criteria such as content, correct word choice and structure use, punctuation, spelling, and so forth. Hancock and McDonald (2012) list a number of criteria under two categories: accuracy and content. Language teacher pays attention to grammar, vocabulary, punctuation, spelling, capitalization, legibility, and appropriate text conventions in terms of accuracy. When content is taken into account, they focus on whether the text is communicatively effective, sufficiently detailed, logically organized, stylistically appropriate and original/interesting. The more the text meets these criteria, the higher the score learners get. A coherent and error-free final product is expected at the end (Brown, 2001; Nunan, 1999). However, in the last few decades, the focus shifted towards the process of writing. Those who favor this approach to writing focus on the process that a piece of writing goes through. “By spending time with learners on pre-writing phases, editing, redrafting, and finally ‘publishing’ their work, a process approach aims to get to the hearth of the various skills that should be employed when writing” (Harmer, 2001, p. 257). Harmer (2001) states that process writing consists of various stages like brainstorming, planning, drafting, and reviewing, between which learners move backward and forward. Nunan (1999) asserts that learners complete six recursive stages according to White & Arndt’s process writing model: drafting, structuring, reviewing, focusing, generating ideas, and evaluation (Fig. 1).

There are some critics against process writing highlighted in the literature as well. Brown (2001) states that the major aim of the language teachers is to get a final product at the end of the writing process one way or the other. Therefore, learners

Fig. 1 White and Arndt's process model writing. (In Nunan, 1999, p. 274)



go through all those stages, and the role of the product should not be underestimated. “Without that final product firmly in view, we could quite simply drown ourselves in a sea of revisions. Process is not an end; it is the means to the end” (p. 337). Harmer (2001) highlights one of the disadvantages as students’ concentration on the process writing. All those stages that a learner follows cannot simply be completed in 15 min, and this can be a problem because of the limited classroom time. As a teacher, you can also ask your learners to write something on the spot, for example, while playing a game. Hence, this approach may not be appropriate to use all the time.

Especially that concentration problem can be a big burden on the shoulders of language teachers as they are the teachers of Gen Z learners recently. Those learners were born after 1995, and known as the digital natives since they were born into the world of technological improvements. They use all the technological devices effectively and are deeply involved in social media. They all get their mobile phones or tablet at very young ages. Actually, smartphones are the ways of communicating with the rest of the world for most of them (<https://www.kasasa.com/articles/generations/gen-x-gen-y-gen-z>). They prefer technology-enhanced learning opportunities. They are less focused and prefer to receive information using digital media, like Snapchat, images, or YouTube videos (<https://www.caylor-solutions.com/5-major-characteristics-generation-z-education-marketers/>). As this is the case, it is inescapable to redesign the language teaching methods and classroom activities for language teachers. Due to these facts, a new term, mobile-assisted language learning (MALL), took its place in the literature.

3 Mobile-Assisted Language Learning (MALL)

Mobile-assisted language learning (MALL) is learning a language through mobile technologies and devices such as smartphones, personal digital assistants (PDA), MP3/4 players, tablets, and laptops. Students have the opportunities to reach language learning materials anytime and anywhere. Learning becomes spontaneous, ubiquitous, informal, and personalized through mobile devices (Miangah & Nezarat, 2012). Learners themselves control the learning process at their own pace. They list

the properties of mobile devices as portability, social interactivity, context sensitivity, connectivity, and individuality. Together with their advantages, they explained some of the disadvantages as well. Many of these devices are not produced for educational purposes, and since they are handheld devices, their screen is quite small, making reading difficult. Moreover, storing the data can be a limitation too. The cost of Internet access can also be a problem.

Hashim et al. (2017) state that technology offers unlimited access to resources and tools that enable language learning. They add that MALL has an essential role in supporting language learning, especially in motivating the learners, as mobile devices are quite popular among them. These devices offer various features, such as recording audio, taking pictures, taking notes, or even writing something down and publishing it. They believe that such features allow learners to learn English more meaningfully and provide an authentic environment to integrate all four language skills. This eventually results in increasing learners' language proficiency.

Using mobile applications has become one of the trendy topics in language learning recently. The number of studies conducted has been increasing day by day. One of these studies is done by Okumuş Dağdeler et al. (2020) on vocabulary development. Their study aimed to figure out the effectiveness of *CollocatApp* in learning collocations. The results showed a significant difference between the experimental and control groups in terms of receptive vocabulary knowledge. However, this effect was not observed in the retention test.

Smartphones are a part of our learners' daily lives and offer many opportunities to develop language skills. Yaman et al. (2015) found out that prospective English language teachers actively use their smartphones, especially for vocabulary development. Smartphones are not only used to develop vocabulary knowledge. There are also some studies examining the effects of smartphones on grammatical accuracy (Baleghizadeh & Oladrostam, 2010; Ghorbani & Ebadi, 2020). According to the results obtained, it was reported that getting feedback through mobile tools influenced learners' grammatical accuracy significantly and they performed better on multiple-choice grammar tests.

Similarly, Kassaie et al. (2021) emphasize that the young generation spends most of their time on their phone to surf the Internet and social media, check their email messages, have access to unlimited information, shop online, listen to music, and play games. Therefore, they believe that it is essential to take advantage of this case in the educational setting. They further state that many software and mobile applications are available to use inside and outside the classroom, but what is important here is to integrate MALL effectively and purposefully into language teaching programs. They believed that one of the best ways to develop language skills in FFL (French as a foreign language) is to provide them with authentic materials. In their study, they preferred to use podcast applications to enhance Iranian FFL learners' listening and speaking skills. They used authentic podcasts because they provide rich content, are accessible, and bring variety into the classroom. The results revealed a significant change in learners' listening and speaking skills.

In recent years, mobile applications are often used to supplement ELT course-books. In his master thesis, Korkmaz (2010) investigated the effectiveness of SMS

and MMS messages as supplementary tools to regular in-class learning in an experimental study. The results revealed that MALL supplementation had positive effects on learners' achievement scores, especially if the students read the messages regularly. The learners also had a positive attitude towards the application as supplementary material for ELT coursebooks.

Mobile applications are especially favored in developing speaking and listening skills (Alzatma, 2020; Shi et al., 2017; Tonekaboni, 2019; Xu, 2020). A variety of applications, such as *WeChat*, *SayHi Translate*, *IELTS Speaking*, *Memrise*, *Talk English Standard*, *Voscreen*, *English Daily* and *Keke* were used in some studies. Xu (2020) points out that in EFL contexts, the language learning resources and tasks are generally decontextualized. Learners do not have much opportunity to be exposed to authentic English for listening and speaking. This may result in some kind of boredom in language classrooms after a while. Therefore, using MALL has been regarded as a solution to overcome such drawbacks. The very final result of his action research showed that students made a significant progress in English listening but not in speaking. Tonekaboni (2019), on the other hand, found out that the learners who used the *English Daily* mobile app had a significantly better performance on speaking test. Similarly, Alzatma (2020) recommended that mobile apps should be integrated into curricula, and some training should be provided for the teachers.

Hazaea and Alzubi (2016) believed that mobile technologies could improve reading skills as they provide opportunities to practice reading independently and get feedback. Students get a chance to be exposed to authentic texts, practice reading extensively, study web-based reading activities and develop vocabulary knowledge through electronic dictionaries. Naderi and Akremi (2018) investigated the effect of instruction through *Telegram* groups on the learners' reading comprehension. A number of pre-, while- and post- reading activities were assigned to the learners and the findings showed that *Telegram* groups significantly affected the intermediate students' reading comprehension ability.

4 Developing Writing Skill via MALL

Like other language skills, MALL can be incorporated into writing as it provides many opportunities to develop writing skills. Gharenblagh and Nasri (2020) state that *Wikis*, *Google Docs*, and *the writing Portal* are among the most widespread online technologies used in studies conducted on MALL and writing skill relationships. They assert that writing skill has a collaborative nature and mobile devices offer practical implication opportunities to facilitate this process. In their experimental study, they investigated the effect of MALL on the writing skills of elementary learners. For that purpose, learners in the experimental group were given mobile-based instructions, whereas the control group was given paper-based instruction. The results revealed that both groups improved their writings, yet the

experimental group's performance was significantly better. Those learners also favored using mobile technologies in writing classes.

Razak et al. (2013) claimed that traditional language classrooms do not support collaboration and interaction in writing classes. However, "... today, the majority of EFL learners are accessing Social Networking Sites (SNSs) as online communities of practice (CoPs) for adopting informal collaborative learning as a way of practicing English beyond the classroom" (p. 187). In the same vein, Akhilar et al. (2017) stated that social networking sites support authentic language use and meaningful interaction outside the classroom environment. When the literature is reviewed, it is seen that there are many studies focusing on the opportunities and challenges social networking sites would offer to develop writing in English. One of the most highlighted advantages of these sites is that they enhance collaborative learning. Among these sites, *Facebook* is the most popular one (Alotumi, 2015; Bani-Hani et al., 2014; Habibi, 2015; Yunus & Salehi, 2012). The studies investigated the effectiveness of *Facebook* groups on teaching and improving writing skill and the results revealed a positive effect on developing learners' writing skill, especially for brainstorming. The learners also reported that they also developed their vocabulary knowledge and corrected their spelling mistakes in these groups. Razak et al. (2013) stated that the learners were motivated to generate ideas, write their paragraphs and scaffold each other in paragraph writing in their *Facebook* group. On the other hand, they faced some challenges, especially technical ones, such as the frequent electricity cut-off and disconnection of the Internet or slow networking access. Many other social networking sites were used to provide opportunities to collaborate while writing, such as *Instagram* (Akhilar et al., 2017), *Telegram* (Ahmadpour & Yousefi, 2016), *WhatsApp Messenger* (Fattah, 2015), wiki technologies (Li et al., 2010; Lin & Yang, 2011), *Nearpod* & *Line* (Krisbiantoro & Pujiani, 2021), etc. The results revealed that students enjoyed this activity and developed a positive attitude toward collaborative writing activity. It was found that these tools increased students' motivation to write and heightened group interactions.

The Ministry of Education in Malaysia decided to make some changes in the curriculum, including Information and Communications Technologies (ICT), to improve the quality of the learning process and equip learners with 21st century skills. It is believed that if meaningful technology was integrated into the teaching materials, it would help learners gain 21st century skills. Therefore, different technological tools and applications have become a part of language classrooms to improve language skills, including writing. "The assimilation of online tool into teaching and learning of writing skills is stimulating to elevate students' writing competency and motivations along the process" (Zakaria et al., 2016, p. 2107). In their study, Zakaria et al. introduced a digital storytelling tool called *Storybird* in writing a narrative text. This tool allows learners to collaborate and share their talent with others in a virtual environment. The participants reported both the advantages and challenges they faced. One of the frequently stated challenge was that they did not find time for proofreading because of the time constraint. They also said that they sometimes had problems in generating ideas. On the other hand, most

participants mentioned their positive opinions on using *Storybird* in writing an English narrative text. They pointed out that *Storybird* captured their interest in writing thanks to artistic graphic images, colorful templates, and inspiring designs it offered. It was also motivating and helped some students to overcome the writing stress. They also felt a sense of authority while using this tool as it allowed them to think that their voice is heard. They also enjoyed working collaboratively as they were highly engaged in discussion, especially during the pre-writing stage.

Karim et al. (2017) claim that writing is the most challenging one of all language skills, especially for the ones writing in an academic context as they do not know how to generate ideas for writing. Learners often have problems in expressing their ideas, feelings and persuading others. Therefore, they suggested that mind-mapping would be one of the techniques to be integrated into mobile learning to improve writing skills. Similarly, while examining the role mobile-assisted task-based language learning plays in improving students' writing ability and their motivation to write, Dewi et al. (2020) asked the participants to use the *MindMeister* to create their mind maps in the pre-task phase. They wrote their drafts in *Microsoft Word* on their mobile phones and then shared them in the online group and received feedback from their peers. Later, they rewrote their text and then checked the spelling, sentence structure using the *Grammarly* application. Finally, they sent their products to their teachers via email and published them on their own *Instagram* so that others would read their writing. This study showed that using mobile devices and applications motivated students to write and significantly contributed to their writing competency. Applications like *Grammarly* and *White Smoke* allow learners to self-edit their written texts and produce a more accurate outcome at the end. Learners have a chance to check their grammar, spelling, punctuation, and even style. Thus, they become more aware of their mistakes and avoid repeating them (Al-Washy & Mahdi, 2016).

There are different mobile applications available for different age groups. A language teacher can benefit from these tools considering their learners age and proficiency levels. Chen et al. (2017) focused on mobile-assisted narrative writing practice for young learners in their study. They used the iPad and a mobile application, *Penultimate*, to develop those learners' narrative writing skills. It was stated that young learners were accustomed to having technology in their daily lives; therefore, they were willing to integrate mobile technology to improve their writing skills and overcome their deficiencies. Their essays were evaluated using a rubric with six levels of a continuum including language production, focus, support/elaboration, organization, and mechanics. The mobile technology used enhanced the quality of their narrative writing abilities and increased their motivation to write.

As is seen in all these studies, using mobile technologies creates a positive environment for improving students' writing ability, especially when the needs and interests of the digital natives are taken into account. Yet, Estarki and Bazayar (2016) remind us that the effect of technology depends on various factors, such as access to technology, administrative mandates, teachers' and learners' goals and it is important to integrate technology cautiously and train both teachers and learners.

Therefore, as language teachers, it is necessary to consider the situation we are in carefully, and choose the appropriate mobile tools and applications to be used accordingly. In the following part of this chapter, you can find some writing applications that can be used with different age groups.

5 A Glance at the Writing Apps

Although it is often neglected, writing is an essential skill that needs to be developed since it is one of the primary sources of communication. As in the saying ‘words fly away, but writings remain’. Being good at writing can be an advantage for the students’ future. However, there are many students who do not like to write even hate it. Therefore, it is essential to find alternative fun ways to develop writing skills in this technology age to make writing attractive to your student. In this part, some mobile applications for writing are introduced.

Hemingway

It is an app downloadable to your desktop and also provides an online version. It is available at <https://hemingwayapp.com/>. You can check how readable your text is after you copy and paste it. It is especially beneficial if you want to simplify your text. It allows you to replace complex words with simpler versions and warns you if you overuse passive voice (Fig. 2).

Writing Challenge

It is available at <https://www.writingchallengeapp.com/> for different platforms, and you can use it on IOS, Android, Kindle, and Mac. It is a game-based app and provides creative prompts to practice free writing. This app is not free, and you are

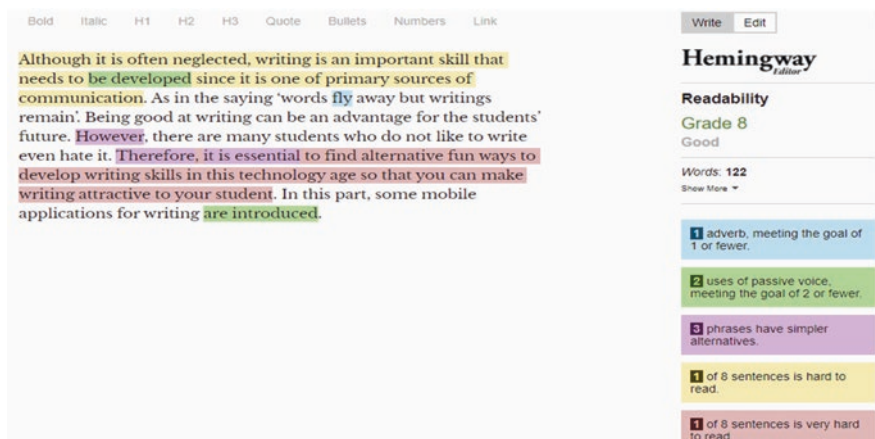


Fig. 2 Hemmingway App

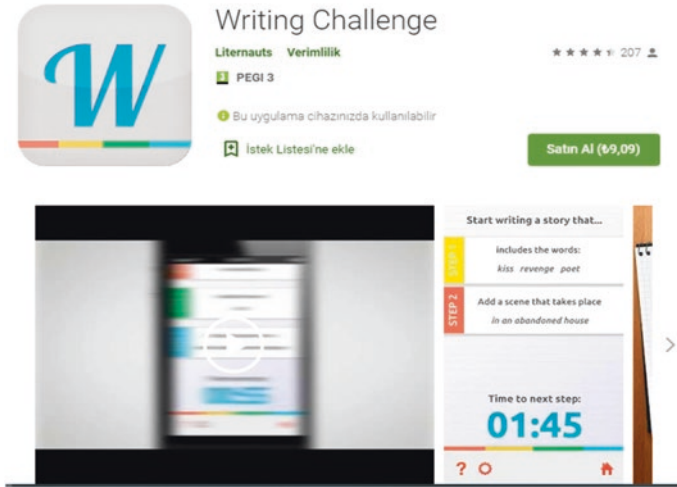


Fig. 3 Writing challenge



Fig. 4 Toontastic

supposed to pay \$1.49–\$3.99 to download it. Once you download, click on the start button, and the app gives you the first prompt to write your story. You can choose the time in the app settings, and in line with this time, it will provide new prompts to add new ideas, sentences, create new settings, add new characters or actions to the plot. Writing is like a game; you get fun and motivated to write further (Fig. 3).

Toontastic

This app is available on Google Play Store and Apple App Store. It is 100% free. Students can practice their storytelling skills and work on their writing skills with this app. It enables students to draw, animate and share their stories. It offers a fun a way to practice writing, especially with young learners (<https://toontastic.with-google.com>) (Fig. 4).

Storybird

This app is also available on Google Play Store and Apple App Store. You can try a free trial for 7 days before you purchase it. It gives opportunities to write picture books, longform stories, comics, flash fiction, and even poetry. Students can choose from existing illustrations designed by professional artists and add their own text to create their own stories or read the ones created by other writers. *Storybird* writing curriculum offers 300+ lessons, quizzes, and writing prompts created by experienced educators and expert authors (<https://storybird.com>) (Fig. 5).

The Brainstormer

The Brainstormer is a story/idea generator. It provides online writing tools to help you think in new ways and generate ideas. It costs \$0.99 for each feature. There is a flash-based *Brainstormer* Wheel, and you can choose different wheel modes like *Word Builder* or *Character Builder* to create scenes and players for your writing.

When you spin the Brainstormer, you'll be presented with three terms or phrases. The inner wheel gives you the conflict. The middle wheel gives you the style or setting. The outer wheel gives you the subject. Combined, they are the building blocks for a hit film, epic novel, or mind-blowing comic. Not every combination will give you that spark. But every word in every wheel has been selected with care and purpose to maximize creative thinking (<https://play.google.com/store/apps/details?id=com.exciteengineering.brainstormer&hl=tr&gl=US>) (Fig. 6).

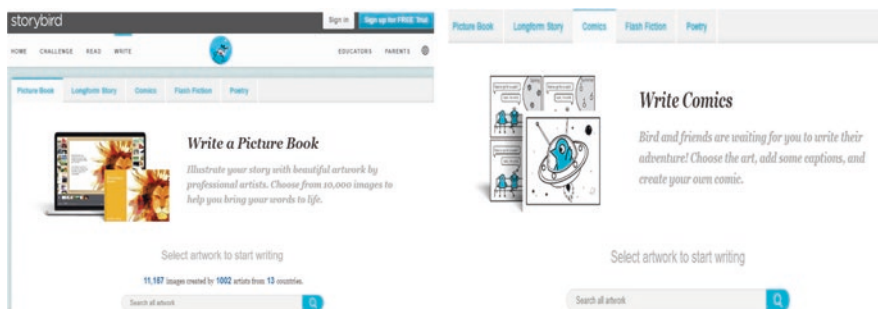


Fig. 5 Storybird



Fig. 6 The Brainstormer

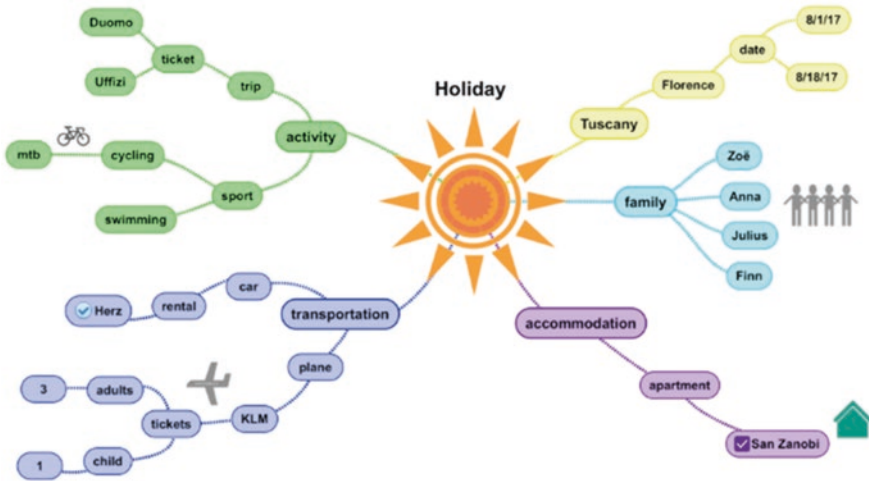


Fig. 7 SimpleMind

SimpleMind

It is a mind mapping tool to help you organize your ideas while brainstorming before you start writing. Organizing ideas is quite essential in writing to make the final product look better. Thus, your writing would be clear. It is available on Apple App Store and Google Play Store. It offers different editions. *SimpleMind Lite* is free of charge and does not require any account information. *SimpleMind Pro* offers expanded features for \$7.99. It supports a free-form layout and six auto-layout schemes. In the free-form layout, you can organize your ideas in any way you like manually. The auto-layout, on the other hand, does this automatically. That’s to say, it places and arranges the topics for you. For further information, you can click on <https://simplemind.eu/> (Fig. 7).

Grammarly- Grammar Keyboard

Grammarly is one of the most popular applications serving as a proofreader and allowing to write error-free texts. Once you get an account, you can upload whatever you wrote to edit and correct your grammar, spelling, and punctuation mistakes. Since it provides short and clear explanations for your errors, it helps you to avoid making the same errors in the future. You can also enable *Grammarly* in your keyboard settings to utilize the same features in different apps, including social media and messaging. It is available on Apple App Store and Google Play Store. Basic grammar and spelling checks are free, but premium features start at \$29 per month. Premium features include analysis of tone and word choice, formality level, clarity improvements, vocabulary enhancement, and fluency. It also provides plagiarism check by comparing your text to the hundreds of already existing texts (Fig. 8).

The basics
Mispellings and grammatical errors can effect your credibility. The same goes for misused commas, and other types of punctuation. Not only will Grammarly underline these issues in red, it will also showed you how to correctly write the sentence.

Underlines that are blue indicate that Grammarly has spotted a sentence that is unnecessarily wordy. You'll find suggestions that can possibly help you revise a wordy sentence in an effortless manner.

But wait...there's more?

Grammarly Premium can give you very helpful feedback on your writing. Passive voice can be fixed by Grammarly, and it can handle

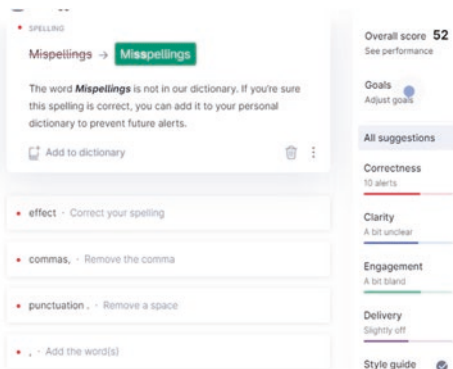


Fig. 8 Grammarly

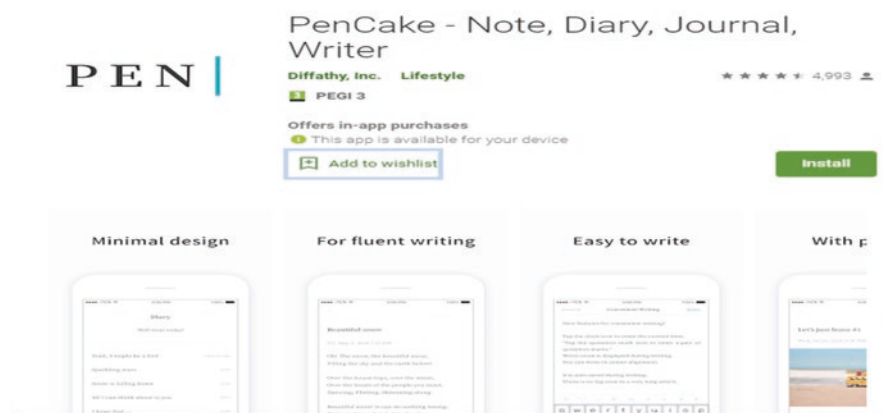


Fig. 9 PenCake

PenCake- Note, Diary, Journal, Writer

It is available on both Androids and iOS devices. There is a free version, but you can upgrade to Premium for \$5.99. You can ask your students to keep a diary or a journal. They can also jot their notes down on their mobile devices. The app is directly synced with Google Drive, so if you have a google account, there is no chance of missing any data since your progress will be stored in Google Drive. Due to its minimal user interface, it offers high readability and helps you sort your notes. It also allows you to add photos and videos to different folders. It has some basic typing features like bold, italic, and hyperlinks, and it allows you to align the written content left and center. If you are a premium user, you can have more features such as security by Face ID or Touch ID (Fig. 9).

Google Docs

It is free writing software for collaborative writing. If you do have a google account, you can use *Google Docs* anywhere anytime to write, edit and archive your work. Your work can be made available offline with the *chrome* extension. It works as a word processor, and you can check grammar, spelling, and punctuation. It also offers different options to format your text and counts the words you wrote. Moreover, your document is saved automatically to *Google Drive* after almost every word you write. The software allows you to collaborate with anyone you wish, to share your document and enables them to view, edit, and comment on your document. They can do this together at the same time without intervening others' changes. It also has a suggestion mode that recommends some changes, and if you accept those changes, the system automatically makes the changes. *Google Docs* keeps the records of every document you create; thus, it allows you to reach earlier versions of the same document if you wish. *Grammarly* is also available on *Google Docs*, so you can make use of every facility it offers and edit your document accordingly (Fig. 10).

As is seen, there are many applications and software available for different platforms, suitable for different age and interest groups from young learners to adults or students to writers. Just a few randomly selected of them are mentioned here. Some of them are totally free, while others have free basic versions but offer premium versions for some amount of money. There are tools for brainstorming and mind mapping, for writing, or even for editing. You can choose the ones appropriate for your purposes and use them in your language classes to bring variety.

6 Suggested Activity

<i>Age:</i>	Young learners (11–12)
<i>Topic:</i>	Summer holiday
<i>Applications to use:</i>	<i>SimpleMind Lite</i> , <i>Google Docs</i> , and <i>Grammarly</i> .
<i>Procedure:</i>	The teacher asks students to write about their summer holiday plans. First of all, they brainstorm and organize their ideas using <i>SimpleMind Lite</i> . They write their paragraph on <i>Google Docs</i> and share it with their peers for some suggestions. Finally, before submitting the final version, they use <i>Grammarly</i> to check their spelling and grammar. The final products can be shared on <i>Padlet</i> . Some samples for the major steps of the procedure are given below.

Step 1: The teacher asks students to download *SimpleMind* application to their mobile tool if they do not already have and then make a brief introduction to how to use it underlining the possible features they may use. Students can make use of icons or different layouts, etc.

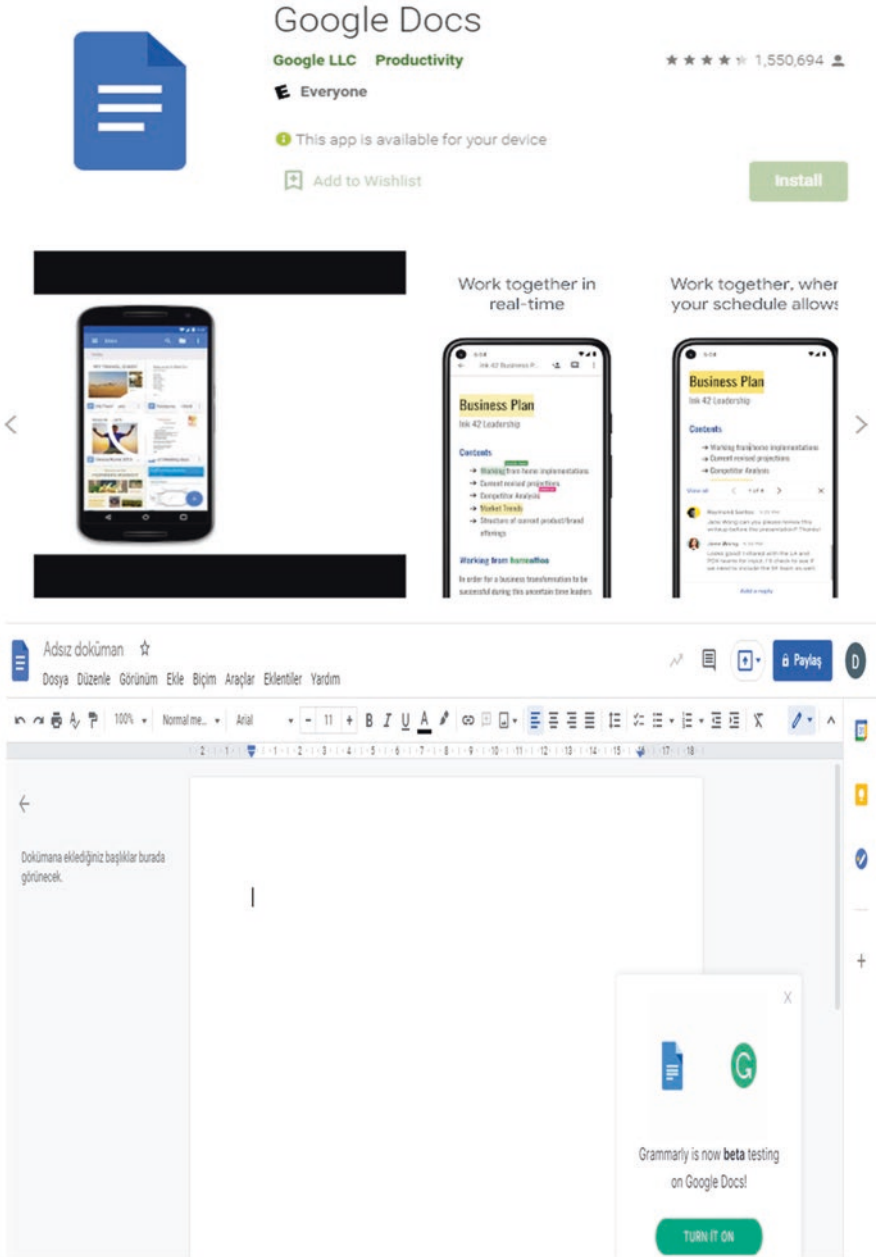
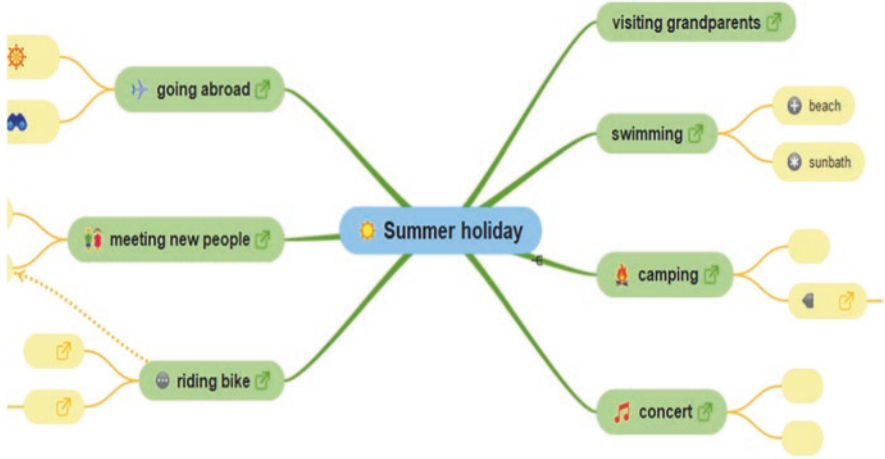
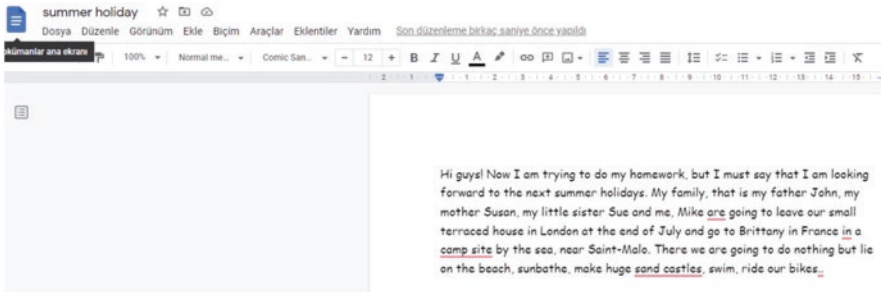


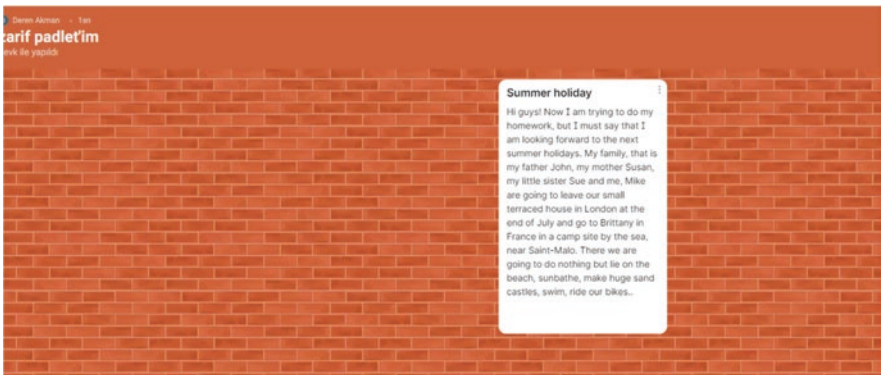
Fig. 10 Google Docs



Step 2: Making use of the *Google Docs*, they write their paragraphs down using different options available, and check grammar, punctuation or spelling using *Grammarly* at the same time. *Grammarly* underlines the parts misspelled or grammatically incorrect and provide alternatives so they students see the correct form



Step 3: Students share their paragraphs on *Padlet*. They can comment on each other's work, upload pictures or videos



7 Conclusion

Writing is an essential skill that students should develop by practicing both inside and outside of the classroom. However, it is sometimes quite difficult for students to get into writing spirit; some might even hate righting. It requires you to spend some energy and effort, and motivating students to write can be problematic. Therefore, teachers need to find alternative ways to attract students' attention to writing tasks. Traditional paper and pen type writing may not be that effective when you think of the digital natives who spend their time on computers, laptops, tablets, or mobile phones. Technology offers unlimited access to resources and tools that enable language learning. MALL plays a significant role in supporting language learning, especially in motivating learners, as mobile devices are quite popular among them. These devices offer a variety of different features such as recording audio, taking pictures, taking some notes, or even writing something down and publishing it. Mobile devices provide an authentic environment to integrate language skills. This eventually results in increasing learners' language proficiency.

There are many mobile technologies available for developing students' language skills, including writing. Many studies are conducted to observe the efficacy of these technologies, and the results indicate that utilizing mobile technologies has a positive impact on improving students' writing abilities in terms of mechanics, word choice, content, and so on. Students develop a positive attitude and benefit from the collaborative nature of these tools. Through mobile technologies, students would enjoy the writing process, innovatively develop their skills and become autonomous learners. They can choose among the applications and software fitting into their needs, such as story writing, editing, brainstorming, or note-taking. Furthermore, they can make use of social network tools to develop their language skills. All in all, mobile technologies are recommended to language teachers to teach and practice writing skill for all ages as an alternative method.

References

- Ahmadi, M. R. (2018). The use of technology in English language learning: A literature review. *International Journal of Research in English Education*, 3(2), 115–125.
- Ahmadpour, L., & Yousefi, M. H. (2016). The role of mobile-assisted language learning on EFL learners' development of writing accuracy, fluency and complexity. *English Language Teaching*, 3(4), 105–118.
- Akhlar, A., Mydin, A., & Kasuma, S. A. A. (2017). Students' perceptions and attitudes towards the use of Instagram in English language writing. *Malaysian Journal of Learning and Instruction (MJLI), Special issue on Graduate Students Research on Education*, 47–72.
- Al-Mahrooqi, R., & Naquvi, S. (2014). Fostering EFL students' language development via student-created digital videos. In R. Al-Mahrooqi & S. Troudi (Eds.), *Using technology in foreign language teaching* (pp. 215–234). Cambridge Scholars Publishing.

- Alotumi, M. (2015). *Facebook interaction (FBI) and essay writing pre-task: Yemeni EFL students' perceptions, attitudes and challenges*. Innovation in English Language Teacher Education Conference Paper, British Council (pp. 125–133). Retrieved from https://www.academia.edu/11270519/Facebook_Interaction_FBI_and_Essay_Writing_Pre_task_Yemeni_EFL_Students_Perceptions_Attitudes_and_Challenges
- Al-Washy, B. Q., & Mahdi, H. S. (2016). The effect of mobile phone applications on improving EFL learners' self-editing. *Journal of Education and Human Development*, 5(3), 149–157.
- Alzatma, A. A. (2020). *Using mobile apps to improve English speaking skills of EFL students at the Islamic University of Gaza* [Unpublished MA thesis]. The Islamic University of Gaza, Research and Postgraduate Affairs.
- Baleghizadeh, S., & Oladrostam, E. (2010). The effect of mobile assisted language learning (MALL) on grammatical accuracy of EFL students. *MEXTESOL Journal*, 34(2), 77–86.
- Bani-Hani, N. A., Al-Sobh, M. A., & Abu-Melhim, A. H. (2014). Utilizing Facebook groups in teaching writing: Jordanian EFL students' perceptions and attitudes. *International Journal of English Linguistics*, 4(5), 27–34.
- Brown, H. D. (2001). *Teaching writing*. Longman.
- Büyükbaykal, C. I. (2015). Communication technologies and education in the information age. *Procedia – Social and Behavioral Sciences*, 174, 636–640. <https://doi.org/10.1016/j.sbspro.2015.01.594>
- Chastain, K. (1988). *Developing second language skills: Theory and practice*. Harcourt Brace Jovanovich.
- Chen, Y., Carger, C. L., & Smith, T. J. (2017). Mobile-assisted narrative writing practice for young English language learners from a funds knowledge approach. *Language Learning and Technology*, 21(1), 28–41.
- Dewi, P. A. K., Ratminingsih, N. M., & Santosa, M. H. (2020). Mobile-assisted task-based language learning, writing competency, and motivation. *JPI (Jurnal Pendidikan Indonesia)*, 9(1), 119–130.
- Eaton, S. E. (2010). *Global trends in language learning in the twenty-first century*. Onate Press. <https://files.eric.ed.gov/fulltext/ED510276.pdf>
- Ekşi, G., & Yılmaz Yakışık, B. (2015). An investigation of prospective English language teachers' multimodal literacy. *Procedia – Social and Behavioral Sciences*, 199, 464–471.
- Estarki, N. K., & Bazyar, M. (2016). The effect of MALL on pre-intermediate EFL learners' writing performance. *European Online Journal of Natural and Social Sciences*, 5(2), 406–420.
- Fattah, S. F. (2015). The effectiveness of using Whatsapp messenger as one of mobile learning techniques to develop students' writing skill. *Journal of Education and Practice*, 6(32), 115–127.
- Genç İter, B. (2015). How does technology affect language learning process at an early age? *Procedia – Social and Behavioral Sciences*, 199, 311–316.
- Gharenblagh, N. M., & Nasri, N. (2020). Developing EFL elementary learners' writing skills through mobile-assisted language learning (MALL). *TEWT Journal*, 20(1), 104–121.
- Ghorbani, N., & Ebadi, S. (2020). Exploring learners' grammatical development in mobile assisted language learning. *Cogent Education*, 7(1), 1–14. <https://doi.org/10.1080/2331186X.2019.1704599>
- Habibi, A. (2015). Utilizing a Facebook group in teaching writing in higher intermediate classes. *LIA Research Journal*, 8(1), 204–211.
- Hancock, M., & McDonald, A. (2012). *Teaching writing to school children*. Retrieved from: <http://hancockmcdonald.com/ideas/teaching-writing-school-children>
- Harmer, J. (2001). *The practice of English language teaching*. Longman.
- Hashim, H., Yunus, M., Embib, M. A., & Ozira, N. A. M. (2017). Mobile-assisted language learning (MALL) for ESL learners: A review of affordances and constraints. *Sains Humanika*, 9(1–5), 45–50. <https://doi.org/10.11113/sh.v9n1-5.1175>
- Hazaeta, A., & Alzubi, A. (2016). The effectiveness of using mobile on EFL learners' reading practices in Najran University. *English Language Teaching*, 9(5), 8–21.

- Karim, R. A., Abu, A. G., & Khaja, F. N. M. (2017). Theoretical perspectives and practices of mobile-assisted language learning and mind mapping in the teaching of in ESL classrooms. *Journal of English Language Teaching Abu Buana*, 2(1), 1–12.
- Kassaia, L., Shairi, H. R., & Gashmardi, M. R. (2021). Integrating MALL into the classroom: The cultural and pedagogical impact of authentic podcasts on EFL learners' listening and speaking skills. *International Journal of Society, Culture & Language (IJSCL)*, 9(1), 69–85.
- Korkmaz, H. (2010). *The effectiveness of mobile assisted language learning as a supplementary material for English language teaching coursebooks* [Unpublished MA thesis]. Bilkent University, The Graduate School of Education.
- Krisbiantoro, B., & Pujiani, T. (2021). The effectiveness of MALL and flipped classroom in teaching writing to the eleventh graders of SMA in Banyumas. *Journal of English Education, Literature and Culture*, 6(1), 86–104.
- Larsen-Freeman, D., & Anderson, M. (2011). *Techniques and principles in language teaching*. OUP.
- Li, X., Chu, S. K. W., Ki, W. W., & Woo, M. (2010). *Students and teacher's attitudes and perceptions toward collaborative writing with Wiki in a primary four Chinese classroom*. Paper presented at the 3rd international conference "ICT for Language Learning".
- Lin, W., & Yang, S. C. (2011). Exploring students' perceptions of integrating Wiki technology and peer feedback into English writing courses. *English Teaching: Practice and Critique*, 10(2), 88–103.
- Miangah, T. M., & Nezarat, A. (2012). Mobile-assisted language learning. *International Journal of Distributed and Parallel Systems (IJDPS)*, 3(1), 309–319.
- Naderi, S., & Akrami, A. (2018). EFL learners' reading comprehension development through MALL: Telegram groups in focus. *International Journal of Instruction*, 11(2), 339–350. <https://doi.org/10.12973/iji.2018.11223a>
- Nunan, D. (1999). *Second language teaching and learning*. Heinle & Heinle.
- Okumuş Dağdeler, K., Konca, M. Y., & Demiröz, H. (2020). The effect of mobile-assisted language learning (MALL) on EFL learners' collocation learning. *Journal of Language and Linguistic Studies*, 16(1), 489–509.
- Parvin, R. H., & Salam, S. F. (2015). The effectiveness of using technology in English language classrooms in government primary schools in Bangladesh. *FIRE: Forum for International Research in Education*, 2(1), 47–59. Retrieved from: <http://preserve.lehigh.edu/fire/vol2/iss1/5>
- Pourhosein Gilakjani, A., & Sabouri, N. B. (2014). Role of Iranian EFL teachers about using *pronunciation power* software in the instruction of English pronunciation. *English Language Teaching*, 7(1), 139–148. <https://doi.org/10.5539/elt.v7n1p139>
- Razak, N. A., Saeed, M., & Ahmad, Z. (2013). Adopting social networking sites (SNSs) as interactive communities among English foreign language (EFL) learners in writing: Opportunities and challenges. *English Language Teaching*, 6(11), 187–198.
- Shi, Z., Luo, G., & He, L. (2017). Mobile-assisted language learning using WeChat instant messaging. *iJET*, 12(2), 16–26. <https://doi.org/10.3991/ijet.v12i02.6681>
- Tonekaboni, A. M. (2019). Effects of mobile assisted language learning (MALL) on speaking proficiency (A case of Learn English Daily Mobile App). In *2nd international conference on advanced research in humanities and art*, (pp. 1–13). Retrieved from: https://www.researchgate.net/publication/338955542_Effects_of_Mobile_Assisted_Language_Learning_MALL_on_Speaking_Proficiency_A_case_of_Learn_English_Daily_Mobile_App
- Xu, Q. (2020). Applying MALL to an EFL listening and speaking course: An action research approach. *Turkish Online Journal of Educational Technology- TOJET*, 19(4), 24–34.
- Yaman, I., Şenel, M., & Akman Yeşilel, D. B. (2015). Exploring the extent to which ELT students utilize smartphones for language learning purposes. *South African Journal of Education*, 35(4), 1–9. <https://doi.org/10.15700/saje.v35n4a1198>.

- Yunus, M. M., & Salehi, H. (2012). The effectiveness of Facebook groups on teaching and improving writing: Students' perceptions. *International Journal of Education and Information Technologies*, 6(1), 87–96.
- Zakaria, S., Yunus, M., Nazri, N., & Shah, P. (2016). Students' experience of using Storybird in writing ESL narrative text. *Creative Education*, 7, 2107–2120. <https://doi.org/10.4236/ce.2016.715210>
- Zhao, Y. (2013). Recent developments in technology and language learning: A literature review and meta-analysis. *The CALICO Journal*, 21, 7–27.

Online Sources

<https://app.grammarly.com/>
<https://hemingwayapp.com/>
https://play.google.com/store/apps/details?id=com.diffathy.bbapp&hl=en_US&gl=US
<https://play.google.com/store/apps/details?id=com.exciteengineering.brainstormer&hl=tr&gl=US>
https://play.google.com/store/apps/details?id=com.google.android.apps.docs.editors.docs&hl=en_US&gl=US
<https://simplemind.eu/>
<https://storybird.com>
<https://toontastic.withgoogle.com>
<https://www.caylor-solutions.com/5-major-characteristics-generation-z-education-marketers/>
<https://www.kasasa.com/articles/generations/gen-x-gen-y-gen-z>
<https://www.writingchallengeapp.com/>

Deren Başak Akman Yeşilel is working as an assistant professors at the Department of Foreign Language Education, Ondokuz Mayıs University in Turkey. She received her PhD from Gazi University ELT Department. Her research interests mainly consist of teacher education, teaching language skills, technology in EFL teaching. She has published a number of articles and presented at international conferences.

Part II
Using Technology for Academic Writing

Using Corpus Tools for Academic Writing in EFL Settings: A Data-Driven Learning Approach



Hakan Cangır

Abstract Previous research studies indicate that developing writing skills is a challenging process particularly for EFL learners. Academic writing puts an additional burden on the learners' shoulders as it requires some further advanced skills, such as genre awareness, lexical flexibility, and complex syntactic knowledge, to name but a few. *Corpus Linguistic Approaches* to language analysis (i.e., *Data-Driven Learning*) has the potential to guide L2 writers in their attempt to follow the academic genre and learn the required writing skills inductively. Corpora can be exploited in three stages: observation of concordance evidence, classification of salient features and generalization of rules. Learners as the discoverers of language in this approach can benefit from the versatile features of corpora and learn from the patterns they observe through the concordance lines. In the light of the given approach and its potential to create more autonomous EFL learners, this chapter attempts to (a) explain what data-driven learning is and how it may shape the learning experience in an EFL context, (b) elaborate on how corpora can guide EFL learners in academic writing and (c) provide some hands-on uses of corpora in teaching/learning (academic) writing.

Keywords Academic writing · Data-driven learning · Corpus linguistics

1 Introduction

In today's educational context, there is an emphasis on the growing need for online education and the current trends pave the way for flipped learning environments. The traditional ways of learning or teaching fail to meet the requirements of modern time and the educational institutions feel obliged to transform their means of instruction and tend to facilitate learning with the help of online tools. While some

H. Cangır (✉)
Ankara University, Ankara, Türkiye

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_9

institutions prefer to go fully online, some others attempt to combine the traditional methods with the online tools and platforms, which is regarded as flipped-classroom approach or hybrid systems (Hamdan et al., 2013).

Following the same trend in education sector in general, language schools exploit the online tools and platforms (i.e., learning management systems) and arrange their teaching style accordingly. As a result, second/foreign language learners, who are more inclined to be spoon-fed by their instructors, have to adapt their learning preferences and learn how to study more autonomously using various multipurpose tools, software and online platforms.

A *corpus [pl., corpora]* (i.e., a large body of machine-readable and electronically-tagged texts) is one of those educational tools which help teachers of language design materials using authentic samples and patterns of language. Corpora also guide learners by providing real life contexts through which grammar rules can be deduced and common uses of language can be observed. Learners' direct interaction with language corpora to explore the language, discover the common patterns and make generalization is often referred to as data-driven learning (DDL). According to Johns (1991), DDL takes place when linguistic data fulfil the language learners' needs. Römer (2011) states DDL occurs when there is a direct interaction between learners and corpora. Teachers exploiting corpora to design language learning materials also seem to embrace the DDL approach. The basic idea behind DDL has its roots in statistical learning and the approach builds on similar theoretical grounds with usage-based theories of language (Tomasello, 2003), idiom principle (Sinclair, 1991), and lexical priming (Hoey, 2005). Another theory of language, pattern grammar (Hunston & Francis, 2000) also emerged from corpus linguistic approaches to language.

According to Luo and Zhou (2017), the DDL approach has certain advantages. Firstly, authentic instances of language in a corpus help learners increase their language awareness regarding recurrent patterns in a language. In addition, the approach fosters learner autonomy as language learners can discover the language on their own through concordance lines (i.e., a list of language samples) and salient linguistic patterns. Finally, current corpus software has certain functions which provide learners with frequent collocations, chunks of language, and fixed grammatical constructions, which could help them sound more natural in their writing. The suggestions by corpora will also indirectly facilitate the learning of those chunks through first-hand experience.

Corpus Linguistics has long been seen as a ground-breaking approach to language research, but its applications in the language learning environments is rather new. It has been emphasized by the followers of the DDL that language learners should be researchers of language, autonomously benefitting from the linguistic data and acquiring the language through implicit input rather than an explicit instruction by a teacher. As Boulton (2009) states, in the DDL method, language learners actively examine the naturally occurring language through corpora and discover the linguistic patterns and structural consistencies by themselves. According

to Nolen (2017), DDL does not seem to be a pedagogically convenient approach at first sight particularly to those students and teachers who are used to traditional ways of instruction. Tribble (2015) also suggests that DDL is more suitable for proficient language learners. However, there are also other researchers (e.g., Mueller & Jacobsen, 2016) stating that learners at lower levels can also benefit from the corpus-informed approach by correcting their errors in their writing.

One of the most common corpus-assisted language learning materials is for grammar instruction. It has been claimed that learning grammar through DDL is more challenging for lower-level students and it is likely that they resist the idea due to their previous learning experiences. However, Yanto and Indra Nugraha (2017) claim that language learners find the corpus experience entertaining and rewarding as they favour the idea of acquiring the language through non-artificial material and discovering the grammar patterns on their own in the long run. It is also a common belief that corpora help learners go beyond what the dictionaries provide to them at the lexical level. Unlike traditional dictionaries, learners can learn about a word's surrounding context (collocations, constructions etc.), its morphological features, register, and connotations through a corpus search. Learners have the opportunity to go beyond the word level and inspect genre-structuring features, moves and patterns of textualization. Nolen (2017) underlines the importance of collocations in language learning and states that corpora can extend students' lexical analysis and help them grasp a deeper understanding of linguistic chunks, and thus their awareness about the functions and pragmatic information about words and phrases is raised. By doing this, learners can internalize grammatical correctness and acceptability of a specific construction or a particular linguistic choice.

Despite some of the disagreements and the lack of extensive research in the field, we can tentatively claim that DDL has the potential to be a constructive approach in the language classroom in expert hands and with the right guidance. There is no doubt that it promotes learner autonomy (Charles, 2014; Mueller & Jacobsen, 2016) and provides the learners with various authentic input through which they can explore the language comprehensively by themselves (Aston, 2015; Römer, 2011). Learners take the role of a language researcher, and they learn how to survive the language learning process on their own or with little guidance.

Inspired by the corpus-driven approaches to language teaching, Lexical Approach (Lewis, 1993) emphasizes the importance of vocabulary learning and proposes a lexical oriented teaching methodology. This approach is regarded as one of the DDL methods as vocabulary learning and corpus analysis complement one another. Nation (2001) and Schmitt (2010) hold that corpus linguistics has revolutionized the way vocabulary is taught and lies at the heart of lexical approach. All the tools presented in this chapter are useful means to teach vocabulary (and grammar) and ultimately improve EFL (academic) writing skills. Taken together, it stands to reason that these tools are inevitable parts of a lexical or a phraseological approach to teaching English as a foreign language and enhancing writing skills in particular.

2 Research in DDL

Research in DDL has shown that corpus-assisted language learning can be an effective method in second/foreign language teaching environments. However, there are also some other studies indicating the opposite and emphasizing the learners' resistance to autonomous learning approaches and their lack of interest in self-discovery.

Boulton and Cobb (2017) state in their meta-analysis that DDL has the potential to provide learners with important learning gains and seems to be more effective and rational than traditional teaching methods. In another meta-analysis, Lee et al. (2019) conclude that the DDL approach is considerably more efficient than non-DDL approaches to second language learning. Both studies show that DDL is effective not only in more practical activities but also in less hands-on activities while teaching vocabulary, grammar and raising awareness about discourse. The benefit prevails for different proficiency levels and in various teaching contexts. Pérez-Paredes (2019) also suggests that DDL appears to create a very learner-centred experience, foster learner autonomy and thus is considered to be a very effective approach to learning by most learners. Corpora can also help language instructors who are non-native speakers of the target language and thus lack native language intuition. These instructors can consult corpora while designing materials and during teaching to find authentic examples from real life instead of the artificial (or semi-authentic) content of the course books (Römer, 2011).

On the other hand, there are also some studies in the literature underlining the limits of DDL. For instance, Yoon and Hirvela (2004) state that the majority of the participants in their study think using a corpus to improve their writing is challenging and impractical as they find interpreting the corpus output difficult. In an intervention study, Yoon (2008) concludes that students' writing performance has not changed although they use corpora. The time-consuming nature of DDL particularly for writing instruction is emphasized by Chang (2014). He also claims that there may be a relationship between the use of corpora and the amount of plagiarism, as learners tend to copy texts from authentic materials provided by corpora. Boulton (2010a) focuses on the perceived impractical uses of DDL particularly for lower-level language learners. He further discusses the problems faced by the teachers and learners in DDL environments. He suggests that some fears stand to reason since there are limited data showing the clear benefits of the DDL approach, students' performances using the DDL method vary, and learners are not inclined to learn a language inductively due to cultural backgrounds. In addition, textbooks tend to lack DDL materials and language teachers are not fully aware of the ways to exploit the DDL approach and thus feel reluctant to adopt it. There are also concerns about technical and linguistic knowledge, which are required for DDL (Flowerdew, 2010). Therefore, Luo and Liao (2015) emphasize that we need to invest in the training of teachers for DDL and Boulton (2010b) contends that more empirical evidence is needed to have a comprehensive understanding of the limits of DDL and take actions accordingly.

3 Direct and Indirect Applications of DDL

DDL has both direct and indirect applications. Language instructors and learners can exploit corpora directly. For instance, corpora can be used to study the use of specific words and expressions. Learners can make sense of the observed patterns by investigating the concordance lines (see Fig. 2 for an illustration). For example, by exploring its co-occurrences, learners can deduce that the word *significant* is more commonly used in academic contexts and that some of its collocates are *advantage*, *amount*, *number*, *statistical* etc. Furthermore, when studying a grammar structure (e.g., quantifiers: *some* and *any*), students can discover the fact that *some* is used in positive statements, whereas *any* is used in negative and questions just by looking at the salient patterns in the concordance lines and generalizing. They can also deduce by looking at the authentic examples that *some* can exceptionally be used in the question form with a specific function (i.e., polite requests). BNC (British National Corpus) (2007) could be an effective tool to teach grammar structures and their language functions through naturally occurring spoken data. On the other hand, in its indirect applications, corpora can be utilized by researchers and more importantly by material writers to design syllabi and teaching materials. The most important contribution of corpora so far can be considered the frequency profiles of the potential target lexical items. The basic idea behind the approach is that the more frequent a word is, the more important it is to learn. Coxhead's (2000) Academic Word List is one of the first examples of this type of contribution to language instruction. Another indirect application could be regarded as the findings of linguistic research studies, which in exchange contribute to pedagogical applications. For instance, researchers using corpus tools to investigate bilingual or multilingual mental lexicon claim that words are inclined to occur in combinations or clusters; an idea which feeds into new language acquisition theories. These theories, such as usage-based linguistics and construction grammar (Ellis, 2017), which benefit from corpus-informed and corpus-driven data, have their reflections in language teaching practices. This interrelation indicates the indirect effect of corpora on language teaching and thus contributes to DDL from various angles.

4 Using Corpora in Teaching Writing

Writing in a foreign and second language is a challenging task and mastering this skill is a difficult process, which can and should be guided by experienced instructors and facilitated by cutting-edge tools, such as corpora. One of the main problems in EFL learners' writings is the fact they do not sound native-like mainly because they lack lexical sophistication and include mis-collocations (or lack naturally recurring items) in their writing. By using some of the basic and advanced features of freely available corpora, these problems can be solved permanently.

DDL is regarded as an efficient approach when teaching second language writing classes in particular since corpora have the potential to improve students' writing performance in their second language through their unique features. This part of the chapter mainly deals with how DDL approach is integrated into actual writing classrooms. More specifically, it will scrutinize what approaches are adopted and what tools are utilized in DDL environments, particularly for writing instruction.

Simply speaking, with the help of representative corpora (e.g., British Academic Written English Corpus;¹ Nesi et al., 2008), learners can compare their own writing with writings by native speakers of English. By comparison, they can probe the correct uses of certain expressions, be more aware of the academic genre and eventually improve their writing skills. During the writing process, L2 writers can use a corpus (e.g., British National Corpus, 2007) to explore the surrounding context of a specific lexical item to learn more about its common collocates, explore its synonyms, and see if their word choices are appropriate for the genre. On the other hand, corpora can also be used before writing in order to brainstorm ideas by searching the topic-related lexical items and expressions. These features are beyond the capabilities of dictionaries, which lack enough information to fully understand the use and the functions of a word or an expression.

Furthermore, corpus-assisted language analysis can also help learners spot and correct their mistakes in writing. By consulting a learner corpus (e.g., Cambridge Learner Corpus²), where learner errors are annotated, students can grasp the commonly made mistakes (e.g., misuse, overuse etc.) by L2 learners (with a specific L1 background) and have the opportunity to avoid those mistakes and ultimately improve their writing performance. Nesselhauf (2004) states that observing errors through a learner corpus is particularly effective for those issues, which are covered in the classroom, but still produced erroneously by the students. In other words, this approach gives students the chance to become fully aware of the so-called fossilized errors by mirroring the most common infelicities of expression in L2 writing.

On the whole, modern corpus tools provide learners with (a) concordance lines to help them explore patterns in language, (b) lexical frequency profiles to give an idea about how commonly a word is used in natural language by native speakers, (c) collocation information to give learners an idea about the surrounding context of a word, (d) clusters of words which can be used in language production to sound more natural and to be more fluent in a foreign language, (e) details about different registers to raise genre awareness, and (f) common errors made by L2 users. The following section attempts to illustrate some of these features by giving examples.

¹ See the website <https://www.coventry.ac.uk/research/research-directories/current-projects/2015/british-academic-written-english-corpus-bawe/> for more details.

² See the website <https://www.sketchengine.eu/cambridge-learner-corpus/> for more details.

4.1 Some Useful Corpus Tools to Teach Writing

All the corpus programs and websites explained here can be used either directly or indirectly in the language classroom. Either the students themselves can exploit them to explore the language or the teachers can utilize them to design DDL materials to help students discover the language. All the websites and tools are specifically selected to highlight their versatility in writing instruction and developing writing skills both implicitly and explicitly.

4.1.1 COCA (Corpus of Contemporary American English)³

One of the most common corpora used particularly for language teaching is COCA (Davies, 2008). The corpus contains over 1 billion words (between the years 1990 and 2019) from various genres, such as spoken, fiction, newspapers, academic texts etc. It has many basic and advanced features. Learners can study the frequency profile of a word, compare the frequency information in different genres (e.g., academic vs. spoken) and look into concordance lines to explore the use in context more comprehensively. In addition, the web interface also provides the users with an overview feature. The “Word” feature presents the collocates of a target item, its clusters, related words (synonyms), frequency difference between the genres, and the websites using the target word the most as an overview on the same page. Figure 1 illustrates part of the overview screen.

This multi-purpose tool can easily be used by non-native writers to check their lexical choices and enhance the quality of their academic texts. To illustrate, if an L2 writer cannot decide in what contexts to use the word *significant* and if it is synonymous with the word *important*, this brief information on COCA can guide the writer and clearly indicate that *significant* is preferred in academic contexts rather

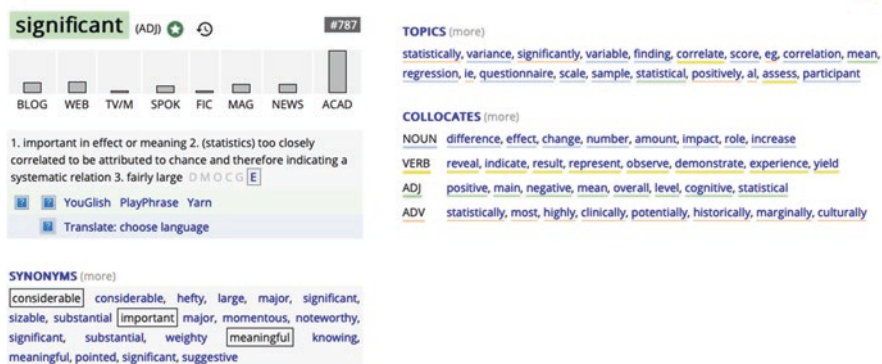


Fig. 1 ‘Word’ feature of COCA (for an overall look)

³ See the website <https://www.english-corpora.org/coca/> to reach the interface.

than in spoken language. Moreover, the collocates of the item suggest that the node *significant* seems to be in near vicinity with statistical information (e.g., *significant difference, indicate a statistical change, statistically significant, etc.*) (Fig. 2).

If a user wants to further analyse the contexts, the concordance lines can be scrutinized to grasp more firmly how the word and its collocates are used in a sentence. One can also examine the resource and visit the core source to read the context in more details. To give another example, non-native writers who are non-expert users of academic language can utilize the tool to decide what conjunctions to use in academic writing and learn the correct punctuations in a certain context. To avoid repetition and to sound more academic, non-native writers may need some alternatives for the frequent conjunctions *but* and *so*. To achieve that, users can initially use the thesaurus feature of the tool (with the notation ‘=but’, ‘=so’) and come up with the alternative conjunctions. For the first conjunction, some alternatives like *however, yet, nevertheless* can be observed. When the concordance lines are analysed, it could be detected that one use of *however* is preceded by a full stop followed by a comma combining contrasting statements. As for the synonym of the second conjunction, some alternatives like *therefore, thus, consequently* are revealed in the corpus research. Once the writer analyses further and investigates the salient patterns using the concordance lines, the punctuation rules are easily visible. The users can go beyond the word level and can search for phrases and strings (e.g., *tion, dis*able, got VERB-ed, BUY * ADJ NOUN, “splendid” NOUN etc.)

This tool can be used by the teachers while designing an academic writing class or can directly be used by the students during the classes or while writing their papers. The features discussed here need to be explicitly presented to the students and some practice could be necessary before students can autonomously use it while writing. Tools like COCA has functions beyond a simple dictionary and its advanced features can facilitate the writing process in L2 and help non-native teachers who lack native speaker intuitions design their classes more effectively. Some users may find COCA and its output a bit complicated and need a more user-friendly interface, which makes use of corpus data indirectly. With the aim of providing the versatile features of corpora to novice users with a simple look, the Collocaid project aims to help writers produce texts that are more sophisticated.

CONCORDANCE LINES (more)	
1 BLOG: 2012: uwdawgpound.com	roster), but there 's nothing there to indicate a significant advantage | # Normally in these predictions I can imagine a
2 MAG: 2017: Ars Technica	friction was generated . But all of the conditions produced a significant amount of power , anywhere from 10 to 30 Gigawatts . Water
3 BLOG: 2012: gtrendsunleashed.com	the emissions caused by transportation fuel account for a significant amount of the carbon dioxide in the atmosphere . Reducing the
4 MAG: 1990: Forbes	the island of Nantucket , " Blitzen 's history adds a significant amount to its value . " Yet her recent purchase price was
5 MAG: 1999: MensHealth	while taking your temperature can throw off the reading by a significant amount | has with a fever # " There are two ways
6 WEB: 2012: topics.nytimes.com	Iran 's repeated boasts , it is still having trouble deploying significant amounts of next-generation equipment to make fuel . The United
7 ACAD: 2011: TeachLibrar	the recipient of the 2011 Margaret A. Edwards Award honoring his significant and lasting contribution to writing for teens . Pratchett , who
8 ACAD: 2007: MechanicalEng	Texas . # Alejandro R. Diaz Alejandro R. Diaz has made significant and lasting contributions to the theory and practice of
9 FIC: 1998: KenyonRev	I ca n't figure out whether these shows of his are significant and leading somewhat or not . Is it meaningful to have a
10 NEWS: 1990: CSMonitor	# " Praise House " asks important questions and provides some significant and poetic responses - not just about a singular artist like
11 NEWS: 2011: WashPost	and lover of painter Max Ernst and later emerged as a significant artist in works that fused surrealism with the occult and

Fig. 2 Sample concordance lines from COCA

4.1.2 Collocaid⁴

Collocaid (Frankenberg-Garcia et al., 2019) is not a representative corpus, but it is designed more like a writing aid supported by corpus data. The developers state that the tool builds on noun, verb and adjective lemmas, which appear in well-acknowledged academic vocabulary lists (e.g., Durrant, 2016; Paquot, 2010). The database was enriched with the help of authentic collocations. It consists of 551 core academic lemmas, 9257 (+22,206) core collocations, and 27,771 authentic examples of use. The approach of the platform is considered data-driven in that the collocational uses are given to the users as suggestions and are not explained. Its menu is interactive since a lexical suggestion leads to other possible collocations and clusters with their authentic examples. Figure 3 illustrates a sample screen from the website in which some collocation alternatives for the word *significant* are provided for the writers.

In the figure, we see a simple Word processor screen in which a user can paste a text or write using the tool itself to analyze certain chunks and get some suggestions. As the user writes, the tool underlines some words or chunks to give some suggestions about the naturally co-occurring word combinations and clusters. The user can either choose the provided suggestions or adapt it to his/her own style. The combinations and chunks suggested by the interface could both help students produce writings that are more effective and provide a learning opportunity in the long run as the suggestions raise awareness about naturally cooccurring word combinations and salient grammatical constructions. This awareness has the potential to help build connections between the associated lexical items in the non-native speakers' mental lexicon, which could turn into more strongly entrenched networks. This tool can be much more effective when used in combination with COCA. Non-native

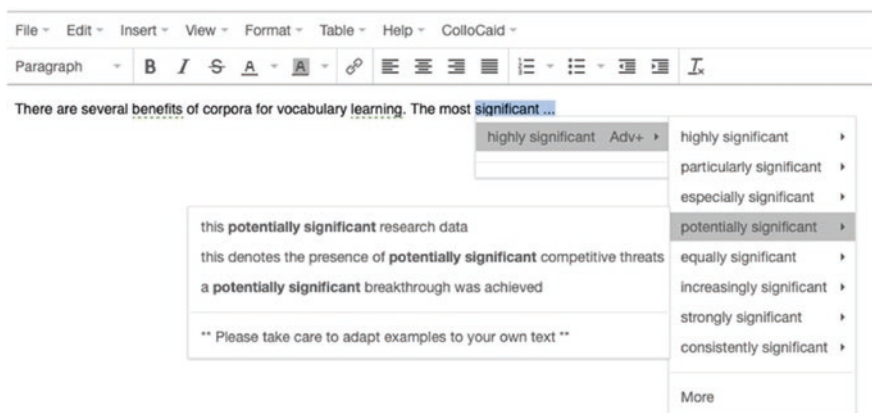


Fig. 3 Collocaid sample screen

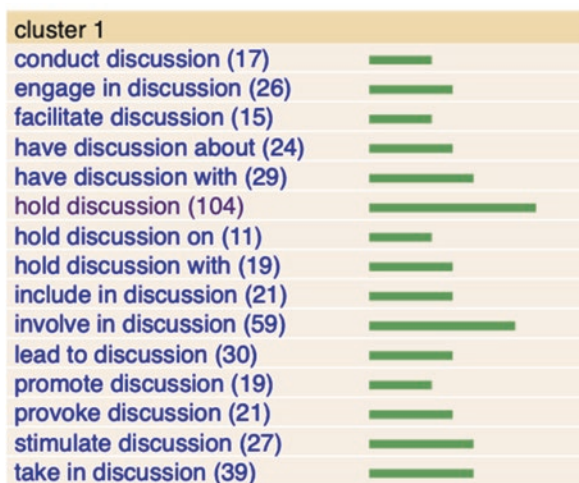
⁴Go to the website <http://www.collocaid.uk> to reach the interface.

writers can get an initial idea about a lexical item by using the ‘overview’ feature of COCA and then exploit the Collocaid interface to enrich the surrounding context of that lexical item with its frequently used collocates and clusters. This tool can both be used by students while writing academic papers to enhance their performance and by instructors while teaching a specific aspect of a lexical item, word combination or a cluster. The suggested word combinations are likely to guide non-native users of English in their language learning experience. This feature is believed to give the users the message that academic language is mainly composed of chunks and formulaic expressions (Schmitt, 2010) and this may encourage them to adapt their learning preferences, which will improve their productive skills in the end.

If users are looking for an even simpler interface (similar to a dictionary or a thesaurus), through which they can investigate frequent word combinations and clusters, Just-the-Word⁵ could be good alternative to help them discover different types of collocational patterns. Figure 4 is an illustration of a sample output.

Just-The-Word uses a subset of 80 million words of the British National Corpus (2007), which includes published written language and transcribed spoken language data. The interface is similar to a dictionary on which a user types the word of interest and then click on combinations to see the patterns of different structures (e.g., ADJECTIVE+NOUN, ADVERB+VERB etc.). As is seen in the figure, the cluster window gives some collocational patterns with their frequency information. The numerical values indicate the number of instances in the corpus and the green line shows the strength of association (i.e., t-score), which makes it easier to spot the most and least frequent collocations. If users click on a collocation, they can also see the combination in context and see for themselves if it meets their expectations while writing. Through those details, they can also decide what prepositions they use after the collocation by investigating the concordance lines and generalizing.

Fig. 4 Just-the-Word sample cluster screen



⁵ See the website <http://www.just-the-word.com> for more information.

For instance, if the user is looking for the VERB, which precedes *discussion*, the output will reveal that the most frequent collocates are *involve* and *hold*. The concordance lines clearly show that the frequent combination for the former word is ‘involve IN a discussion’ and ‘hold a discussion ON smt.’ or ‘hold a discussion WITH somebody’ for the latter. In short, users can have an insight into the frequent collocations, its colligations, and their surrounding context by observing the patterns in the concordance lines.

4.1.3 SkELL⁶

SkELL (Sketch Engine for Language Learning; Baisa & Suchomel, 2014) is one of the simplest corpus tools, which helps L2 English users and EFL teachers. Users can easily observe the collocational patterns (see Fig. 5) employed by native speakers of English. They can also see a word cloud with synonymous words to help them visualize the related senses of a target word. All the sample sentences, collocations and synonyms are extracted automatically by a cutting-edge software. It simply is a

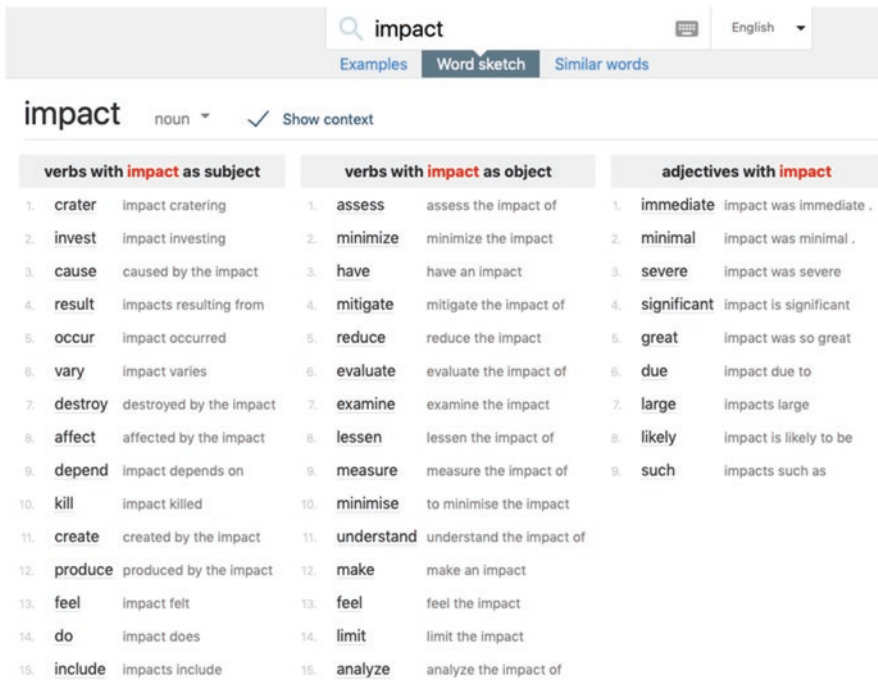


Fig. 5 SkELL ‘Word sketch’ sample output

⁶ See the website <https://skell.sketchengine.co.uk/run.cgi/skell> for more information.

corpus query and management system particularly designed for language learning and teaching purposes.

As is seen in the sample screen, the output shows certain combinations including the word *impact*, such as ‘caused by the impact’, ‘minimize the impact’, ‘significant impact’ and ‘severe impact’. When users hover the cursor on the target combinations, a new window containing some authentic sentences and synonyms appears. Therefore, it is possible to extend the analysis by taking into account the surrounding context of a word combination or cluster. To see all the examples at one go, users can use the “Examples” tab and observe the concordance lines. Unlike COCA, the “Similar Words” feature on SkELL provides the users with a word cloud in which big fonts refer to closer synonym and smaller fonts refers to a slightly distinct meaning. It should also be noted that the output for synonyms requires further analysis particularly in academic writing as words may mean different things in different contexts and writers need to make sure if the synonymous word is used in formal or informal situations. To achieve that, COCA’s genre comparison feature can be utilized as a complementary step to decide on the chosen item’s register (i.e., academic or non-academic).

4.1.4 Hask Collocation Database⁷

Another collocation database which can be used in teaching academic writing is Hask (Pęzik, 2014). The interface, which reveals corpus-derived recurrent word combinations, gives a detailed numerical output (e.g., t-score, mutual information, chi-square etc.) for researchers but also strong visuals for language instructors and students. It is possible to download the output in excel format if one wants to use the combinations and instances in a writing material. The English version of the HASK dictionary currently contains over 150,000 entries with a total of 2.8 million recurrent word combinations (Fig. 6).

Another powerful feature of the tool is its collocational graphs. The bar graphs help visualize the frequency of the detected word combinations and guide the writers in their lexical choices. An innovative feature of this tool is “Colosaurus”. Knowing the synonyms of words is a great opportunity for L2 writers, but many words, which are thought to be synonymous, are indeed employed in different textual patterns. Colosaurus enables the users to compare the textual company lexical items keep. With the aid of graph-based visuals, the tool helps users explore the (shared) frequent collocates of a number of target words (rather than a single word as in the tools mentioned in the earlier sections). In addition, users have the opportunity to download the visuals and adapt the graph based on their needs.

To give an example, when a learner uses COCA or SkELL to find synonyms for *important*, two of the synonyms will be *significant* and *vital*. To investigate the interconnections between these words and observe their common collocations, the

⁷ See the website http://pelcra.pl/hask_en/ for more information.

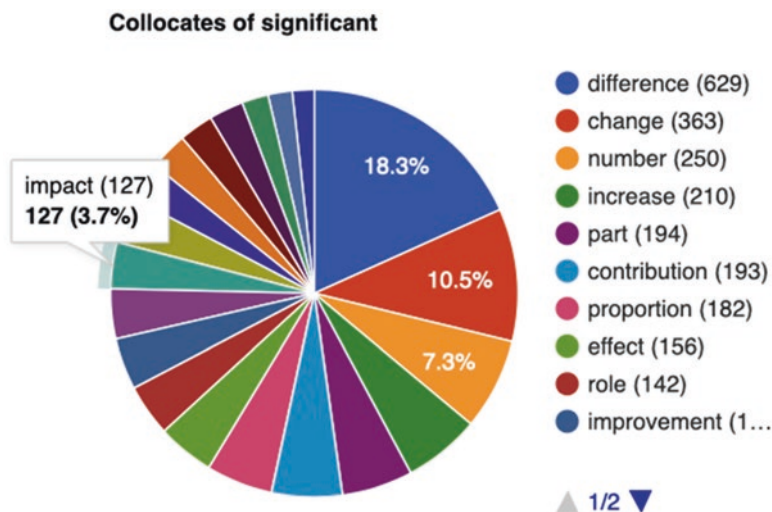


Fig. 6 Hask collocation database sample output

learner can use the graph (Fig. 7) generated by the Colosaurus tab and decide whether these words with similar senses can be used in place of one another and if each of these words can be used in an academic context.

The figure indicates how the target words are related at the collocational level and what the association is between them. This visual (titled e-charts) is one of the many options (matrix, dracula, and gephi) which are available through the interface with their downloadable versions. Different colors show different search words and the size of the dots signify the frequency strength. For instance, it is possible to see here the intersections of *important* and *significant* (e.g., important/significant contribution, difference, and change) and that *important* is a more frequent word than *significant* and *vital*. This can be a great tool to visualize the collocational networks for language learners and particularly for those trying to sound more academic and natural in their writings.

4.1.5 Vocab Profiler⁸

Vocab Profiler (Heatley et al., 2002) is a feature of Complete Lex Tutor (a free data-driven language learning program on the web) designed by Tom Cobb. The website has various features and vocab profiler is one of those features which can help L2 writers aiming to discover the (academic) language by analyzing their own texts or texts written by expert writers and generalizing. Figure 8 displays the vocab profiler output and summarizes the lexical features of the text under investigation.

⁸ See the website <https://www.lex tutor.ca/vp/eng/> for more information.

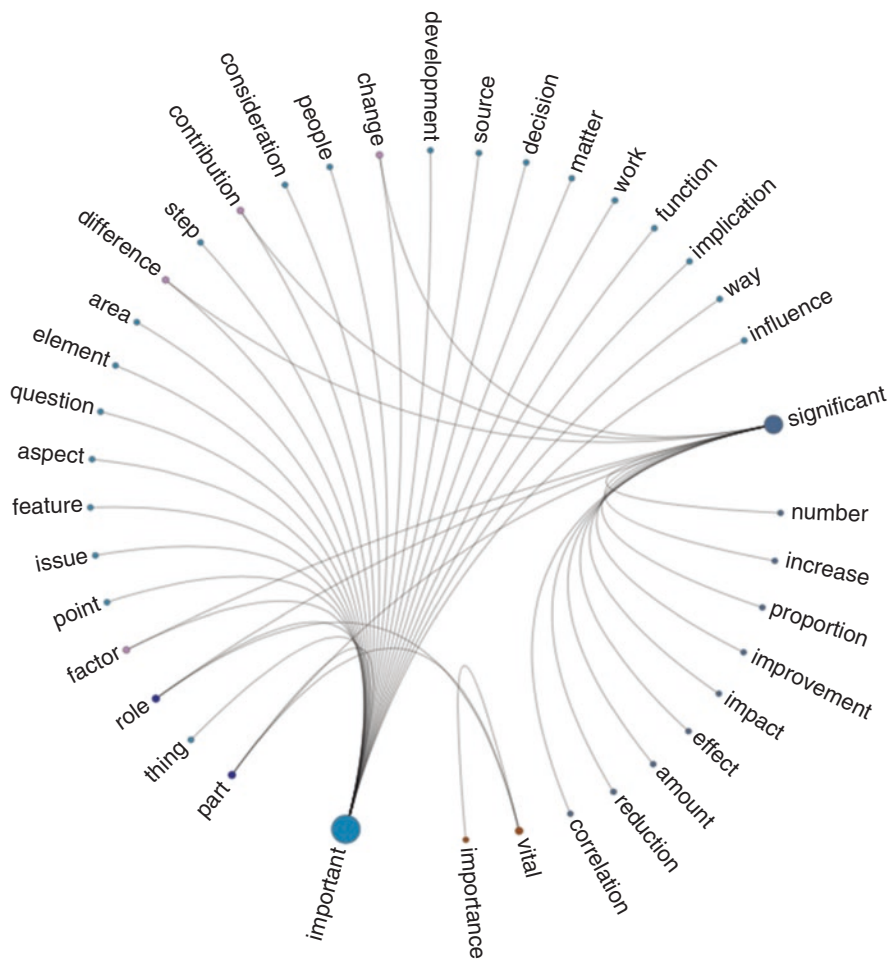


Fig. 7 Sample Colosaurus graph output

	Families	Types	Tokens	Percent	Current profile	
K1 Words (1-1000):	58	69	134	68.02%	68.02	68.02
Function:	...	...	(77)	(39.09%)		
Content:	...	...	(57)	(28.93%)	3.05	71.07
> Anglo-Sax	...	...	(35)	(17.77%)		
K2 Words (1001-2000):	3	3	6	3.05%	14.72	85.79
> Anglo-Sax	...	...	(3)	(1.52%)		
1k+2k			...	(71.07%)	14.21	100.00
AWL Words:	20	22	29	14.72%		
> Anglo-Sax	...	...	(3)	(1.52%)		
Off-List Words:	?	20	28	14.21%		
	81+?	114	197	100%		

Fig. 8 Sample overview screen from Vocab Profiler

As is seen in the figure, users are provided with an overview screen to see the dispersion of the words used in the text. The program also highlights the words in the text for you to analyze them in more details. Using this tool, one can have a general understanding about how formal or academic a text is. One can also tentatively guess the level of the text as the website enables to integrate a CEFR level detector. This tool can be utilized by the instructors to design integrated materials for writing. For instance, to introduce academic words in writing, the teacher can exploit some formal essays written by advanced L2 users or native speakers, ask the students to guess the formal words and expressions in the text and then get them to compare their guesses with the highlight words provided by the program. By doing this, they can encourage students to learn the academic counterparts of informal words, raise awareness about their importance in academic writing and teach them to explore texts on their own. In other words, with the help of the teacher as a facilitator, students can learn to survive by themselves when writing academic texts by analyzing texts as language researchers using various corpus methods.

In addition to the practical tools and databases presented so far, L2 writers or instructors teaching academic writing can also exploit some websites which include hands-on practice materials for writing instruction. CROW⁹ (Corpus & Repository of Writing) is one of those websites, which is a web-based archive for rhetoric and composition (Staples & Dilger, 2018). The corpus consists of 10,000 texts by undergraduate students in first year writing. The participants represented in the corpus are from over 50 different countries and from 100 different majors. The teachers can use the pedagogical materials available on the site to practice transition words, exemplification strategies and near synonyms.

4.1.6 Building Your Own Corpus

A more advanced way of using corpora while teaching writing could be building your own corpus using texts written by advanced L2 learners or native speakers. Through this method, teachers may have the opportunity to build a more controlled corpus which meets the needs of their students and use the corpus to design materials or do some hands-on practice during writing instruction. Lancsbox¹⁰ (Brezina et al., 2020) is one of those new-generation software packages for the analysis of language data developed at Lancaster University. The software works with your own data or existing corpora (e.g., Lancaster Learner Corpus, which includes university student essays), visualizes language data, automatically annotates data for part of speech, and analyzes patterns of linguistic data in any language. The software is suitable for language researchers as well as language teachers. It can be exploited during the classes to analyze the language or before the lessons to design

⁹ See the website <https://writecrow.org/> for more information.

¹⁰ See the website <http://corpora.lancs.ac.uk/lancsbox/> for more information.

5 Extension: Sample Lesson Plan with DDL

This sample educational scenario is designed to help foreign language educators prepare materials using the DDL method and have a more practical understanding of the use of corpora for teaching writing in particular. The intended level is intermediate. Tentative objective is to familiarize students with the DDL method and help them survive on their own (through discovery method) while using transition words in their writing.

Students at Intermediate level tend to know the overall meaning of certain transition words, but they may have difficulty using them in the correct place in a sentence, overuse the items or can make mistakes in terms of the academic register.

This lesson particularly concentrates on the correct use of *therefore* and *so*. After the instructor presents the corpus output and encourages the students to comprehend the different uses of the conjunctions *therefore* and *so* with the help of concept checking questions, s/he asks the students to explore *because*, *because of*, *but*, *however*, *although*, and *despite* following the same approach and discover the different uses on their own.

Tool: Corpus of Contemporary American English (COCA) (Fig. 10)

Steps:

1. Register as a new user (as easy as opening a social media account),
2. Go to the front page and choose the 'Word' feature,
3. Type the word you are investigating.

You will focus on the sections below (Fig. 11):

Instructions

Students check the use of *therefore* through sample concordance lines (Sect. 3) to comprehend the required sentence structures and punctuation. The 'clusters' feature on COCA can also be used to explore the patterns and punctuation. Then students focus on Sect. 1 to help decide if it is appropriate to use *therefore* in academic

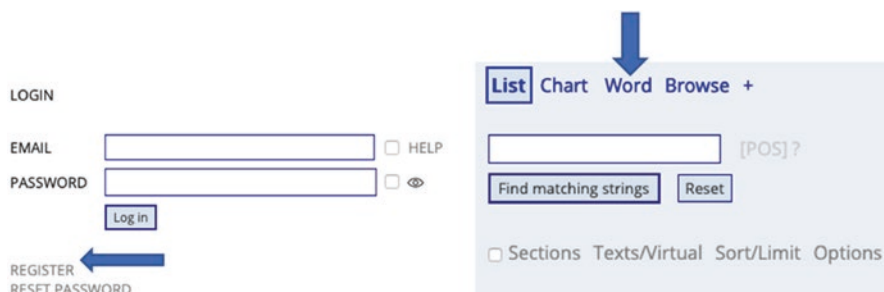


Fig. 10 Login screen and search box

therefore (ADV) #1085

BLOG WEB TV/M SPOK FIC MAG NEWS ACAD

1. (used to introduce a logical conclusion) from that fact or reason or as a result 2. as a consequence
D M O C G E

YouGlish PlayPhrase Yarn
Translate: choose language

SYNONYMS (more)
so hence, so, then, therefore, thus

Section 1

Section 2

COLLOCATES (more)

NOUN god, us, christ, hypothesis, jesus, israel, obama, america
VERB must, conclude, hypothesize, infer, repent, sin, rejoice, unsurprising
ADJ surprising, essential, unlikely, imperative, eligible, logical, worthy, desirable
ADV inherently, morally, logically, incorrectly, implicitly, objectively, biologically, intrinsically

Section 3

racist . the position that 's it 's all fact ,	therefore	a disgrace ,	etc. , the electoral map in
in original sin there was the root of all evil .	therefore	all holiness may be opposed , and all sin practised ; so	
habit of grace there is the root of all grace .	therefore	all sin will be loathed , and every part of holiness will	
and the unconventional way she had gained the throne -- and	therefore	appears to have done what canny leaders have often done in times	
that economics is not a science and monetary economies	therefore	can not be " mathematically perfected. " # Until you can	
reasons have intermarried with bid-Christian families .	Therefore	conversos should be dealt with as individuals , and not as a	
Muslim . Here , practice is secondary to belief and is	therefore	dispensable | The Islamic practices that do prevail in the	
I 'm sorry , but this irks me . " We	therefore	do nt have the luxury of spending \$40 an hour on a	
him ; his servant will be his judge ; he will	therefore	endeavour to overthrow him . Go to God , therefore , for	
the heart of stone would have done his work effectually :	therefore	for the service of the former , and that constantly , for	
country . Large-scale immigration to the United States	therefore	has enormous implications for world-wide CO2 emissions . #	
, has established itself as a protector of laicism , and	therefore	has the right to limit these practices in the public sphere .	

Fig. 11 Sample screen from COCA

writing. Finally, they analyse its synonyms (Sect. 1) to enrich their writing production. They make sure in which register the synonyms are more commonly used and get an insight into their syntactic features by investigating the surrounding context through collocations or clusters (Sect. 2). If students click on the words in Sect. 2, it will take them to the sentence in which the linking word is used. Students do the same analysis with the conjunction *so* and the instructor elicits the main differences (punctuation, register and frequency) between *therefore* and *so*. The instructor can use the concept checking questions (CCQs) below to make sure students have an overall understanding.

CCQs:

1. Do the sentences following *therefore* and *so* give a result or a reason?
2. What punctuations do we use before and after *therefore*?
3. What punctuations do we use before and after *so*?
4. Which conjunction is preferred more in academic contexts?
5. Which conjunction is more frequently used in spoken English?
6. What are the synonyms of *therefore*?

- (a) Which of those synonyms can we use in academic contexts?
- (b) What punctuations do we use before and after these conjunctions?

Once the instructor helps students answer these questions, students can be asked to form their own sentences by getting help from the concordance lines. Students

discuss their sentences with their partners. Finally, the instructor sets an assignment and asks students to do the same analysis for some other conjunctions; *because, because of, but, however, although, and despite*.

6 Comparison of the Tools

As is discussed in the earlier sections of this chapter, these corpus tools can be used either directly or indirectly. They can be exploited in a classroom environment by teachers to teach vocabulary or grammar deductively or inductively. On the other hand, students can also be trained to use these tools by themselves to discover the patterns in language and improve their language skills on their own. The tools presented so far can contribute to various possible educational scenarios from different angles. For instance, websites and tools, such as COCA and Lancsbox are more suitable for in-class use as the interfaces require some more advanced computing skills. Teachers can utilize their sophisticated features to illustrate the correct uses of certain lexical items and their surrounding context while teaching (academic) writing. These cutting-edge technologies can also be used by teacher researchers to investigate learner language and create pedagogically more convenient language teaching materials. On the other hand, tools like Collocaid, Just-the-Word, and SkELL can more readily be exploited by the learners when studying on their own thanks to their more user-friendly interfaces and practical features. These less sophisticated tools have the potential to help students write better (i.e., error free and complying with the register requirements) and more natural sounding texts (i.e., with more appropriate co-occurring word combinations and expressions). Students are also likely to learn from these naturally co-occurring chunks and enjoy a permanent positive effect on their writing skills.

7 Conclusion

Taken together, data-driven learning opens a new window to learners through which they can systematically explore the natural language on their own. Being exposed to this approach, they can broaden their horizons regarding the formulaic nature of academic writing in particular, write more advanced and error-free texts and eventually express themselves more effectively using the correct words, collocations and clusters accurately. The lexical networks and patterns observed through corpora have the potential to shape the mental lexicon structuring of the language learners and have a lasting impact on their language performance in the long run. The tools presented so far (though by no means exhaustive) are great facilitators of language learning and can be exploited either deductively or inductively depending on the students' needs and the objectives of a class. Course book designers assert that the new generation materials are (learner) corpus-informed and thus build on

data-driven learning practices. Therefore, the in-class applications of DDL are likely to comply with the rationale behind the modern course book designs and point language learners in the best direction possible.

References

- Aston, G. (2015). Learning phraseology from speech corpora. In A. Lenko-Szymanska & A. Boulton (Eds.), *Multiple affordances of language corpora for data-driven learning* (pp. 65–84). John Benjamins.
- Baisa, V., & Suchomel, V. (2014). SkELL – Web interface for English language learning. In *Eighth workshop on recent advances in Slavonic natural language processing* (pp. 63–70). Tribun EU.
- Boulton, A. (2009). Testing the limits of data-driven learning: Language proficiency and training. *ReCALL*, 21(1), 37–54.
- Boulton, A. (2010a). Data-driven learning: Taking the computer out of the equation. *Language Learning*, 60/3, 534–572.
- Boulton, A. (2010b). Language awareness and medium-term benefits of corpus consultation. In A. Gimeno Sanz (Ed.), *New trends in computer-assisted language learning: Working together* (pp. 39–46). Macmillan ELT.
- Boulton, A., & Cobb, T. (2017). Corpus use in language learning: A meta-analysis. *Language Learning*, 67(2), 348–393.
- Brezina, V., Weill-Tessier, P., & McEnery, A. (2020). #LancsBox v. 5.x. [software]. Available at: <http://corpora.lancs.ac.uk/lancsbox>
- Chang, J. Y. (2014). The use of general and specialized corpora as reference sources for academic English writing: A case study. *ReCALL*, 26(2), 243–259.
- Charles, M. (2014). Getting the corpus habit: EAP learners' long-term use of personal corpora. *English for Specific Purposes*, 35, 30–40.
- Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34, 213–238.
- Davies, M. (2008). *The Corpus of Contemporary American English (COCA)*. Available online at <https://www.english-corpora.org/coca/>
- Durrant, P. (2016). To what extent is the Academic Vocabulary List relevant to university student writing? *English for Specific Purposes*, 43, 49–61.
- Ellis, N. C. (2017). Cognition, corpora, and computing: Triangulating research in usage-based language learning. *Language Learning*, 67(S1), 40–65.
- Flowerdew, L. (2010). *Using corpora for writing instruction*. In A. O'Keeffe & M. McCarthy (Eds.), (pp. 444–457).
- Frankenberg-Garcia, A., Rees, G., Lew, R., Roberts, J., Sharma, N., & Butcher, P. (2019). *ColloCaid: A tool to help academic English writers find the words they need*. In F. Meunier, J. Van de Vyver, L. Bradley, & S. Thoušny (Eds.).
- Friginal, E. (2018). *Corpus linguistics for English teachers: New tools, online resources, and classroom activities*. Routledge.
- Hamdan, N., McKnight, P., McKnight, K., & Arfstrom, K. M. (2013). *A review of flipped learning*. Retrieved from <http://www.flippedlearning.org/review>
- Heatley, A., Nation, I. S. P., & Coxhead, A. (2002). *RANGE and FREQUENCY programs*. Available at <http://www.victoria.ac.nz/lals/staff/paul-nation.aspx>
- Hoey, M. (2005). *Lexical priming. A new theory of words and language*. Routledge.
- Hunston, S., & Francis, G. (2000). *Pattern Grammar: A corpus-driven approach to the lexical grammar of English*. John Benjamins.
- Johns, T. (1991). From printout to handout: Grammar and vocabulary teaching in the context of data-driven learning. In T. Johns & P. King (Eds.), *Classroom concordancing. English Language Research Journal*, 4, 27–45.

- Lee, H., Warschauer, M., & Lee, J. H. (2019). The effects of corpus use on second language vocabulary learning: A multilevel meta-analysis. *Applied Linguistics*, 40(5), 721–753.
- Lewis, M. (1993). *The lexical approach. The state of ELT and a way forward*. Language Teaching Publications.
- Luo, Q., & Liao, Y. (2015). Using corpora for error correction in EFL learners' writing. *Journal of Language Teaching and Research*, 6(6), 1333–1342.
- Luo, Q., & Zhou, J. (2017). Data-driven learning in second language writing class: A survey of empirical studies. *International Journal of Emerging Technologies in Learning*, 12(3), 182–196.
- Mueller, C., & Jacobsen, N. (2016). A comparison of the effectiveness of EFL students' use of dictionaries and an online corpus for the enhancement of revision skills. *ReCALL*, 28(1), 3–21.
- Nation, P. (2001). *Learning vocabulary in another language*. Cambridge University Press.
- Nesi, H., Gardner, S., Thompson, P., et al. (2008). *British academic written English corpus*. Oxford Text Archive. <http://hdl.handle.net/20.500.12024/2539>
- Nesselhauf, N. (2004). Learner corpora and their potential for language teaching. In J. Sinclair (Ed.), *How to use corpora in language teaching* (pp. 125–152). Benjamins.
- Nolen, M. (2017). *Exploring corpora: Developing exploratory habits with data-driven learning in a study abroad setting* [Unpublished Master's paper]. Department of Applied Linguistics and ESL, Georgia State University.
- Paquot, M. (2010). *Academic vocabulary in learner writing: From extraction to analysis*. Continuum.
- Pérez-Paredes, P. (2019). A systematic review of the uses and spread of corpora and data-driven learning in CALL research during 2011–2015. *Computer Assisted Language Learning*, 35(1–2), 36–61.
- Pežik, P. (2014). Graph-based analysis of collocational profiles. In V. Jesenšek & P. Grzybek (Eds.), *Phraseologie Im Wörterbuch Und Korpus (Phraseology in Dictionaries and Corpora)* (pp. 227–243. ZORA 97). Filozofska fakulteta.
- Römer, U. (2011). Corpus research applications in second language teaching. *Annual Review of Applied Linguistics*, 31, 205–225.
- Schmitt, N. (2010). *Researching vocabulary: A vocabulary research manual*. Palgrave Macmillan.
- Sinclair, J. M. (1991). *Corpus concordance collocation*. Oxford University Press.
- Staples, S., & Dilger, B. (2018). *Corpus and repository of writing [Learner corpus articulated with repository]*. Available at <https://crow.corporaproject.org>
- The British National Corpus*, version 3 (BNC XML Edition). (2007). Distributed by Bodleian Libraries, University of Oxford, on behalf of the BNC Consortium. <http://www.natcorp.ox.ac.uk/>
- Tomasello, M. (2003). *Constructing a language: A usage-based theory of language acquisition*. Harvard University Press.
- Tribble, C. (2015). Teaching and language corpora: Perspectives from a personal journey. In A. Leńko-Szymańska & A. Boulton (Eds.), *Multiple affordances of language corpora for data-driven learning* (pp. 15–36). John Benjamins.
- Yanto, E. S., & Indra Nugraha, S. (2017). The implementation of corpus-aided discovery learning in English grammar pedagogy. *Journal of ELT Research*, 2, 66–83.
- Yoon, H. (2008). More than a linguistic reference: The influence of corpus technology on L2 academic writing. *Language, Learning and Technology*, 12(2), 31–48.
- Yoon, H., & Hirvela, A. (2004). ESL student attitudes toward corpus use in L2 writing. *Journal of Second Language Writing*, 13, 257–283.

Hakan Cangır, PhD is a lecturer at Ankara University, School of Foreign Languages in Turkey and is currently working as a Visiting Lecturer at Erfurt University, Language Centre in Germany. He does research at the intersection of Corpus Linguistics and Psycholinguistics.

The Use of Automated Writing Evaluation Tools to Foster ESL Writing Instruction



Ceylan Yangın Ersanlı and Deren Başak Akman Yeşilel

Abstract Together with the rapid developments in the area of technology, there appears an increase in the incorporation of technological tools to EFL and ESL classrooms. To this end, Automated Writing Evaluation (AWE) tools have emerged and begun to be used to foster target language writing skills of students. AWE tools are computer software programs specifically designed to evaluate the written compositions of students. First, they were developed to assist teachers in grading student papers; however, later their capacity was enlarged to involve feedback features. These tools are proved to be very effective especially in a number of aspects. Students can receive immediate feedback for their writings. Their errors and mistakes are labelled and the system gives feedback accordingly. This will contribute to learner autonomy. Students can make self-evaluations at the moment they write their essays, or when they complete their essays via the feedback they receive from the AWE tools. Another equally significant contribution of the AWE tools to our profession is that they help to reduce the heavy burden on the shoulders of English language teachers in writing classes. Considering the crowded classrooms, it is generally nearly impossible for teachers to provide detailed corrective feedback to the written compositions of each student. Therefore, most of the teachers focus on the mechanics of the target language in the compositions of students ignoring the other equally significant properties of written language such as content and organization. The AWE tools assist teachers on these repetitive surface-level errors and thus, provides them the necessary time to focus on content and organization. Finally, the related research suggests us that the use of AWE tools positively contributes to the students' motivation levels in the second language (L2) writing classes.

Keywords Automated Writing Evaluation (AWE) · Feedback · Writing · Self-editing

C. Y. Ersanlı (✉) · D. B. A. Yeşilel
Ondokuz Mayıs University, Samsun, Turkiye

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_10

1 Introduction

Writing in L2 has always been a significant part of language classrooms. Today, especially with the technological advances in the world and with the wide spread of the Internet, people have more opportunities to communicate in the written form across languages. As a result, it has gained more importance than ever. However, for most students writing in L2 is seen as challenging. There are a number of reasons for it; mechanics of the written texts, accuracy and appropriacy related issues and the lack of metalanguage in written communication are just some of the reasons. It is inevitable that the written essays of the students are full of deviant utterances and inappropriate uses. Therefore, in a ‘process approach’ to L2 writing they need to receive feedback.

Feedback plays a very crucial role in L2 writing development. With increased writing practice they will have a chance to develop awareness about the mechanics of L2 writing. Yet, practice alone would not be enough to improve the quality of their written texts unless they are given appropriate feedback. According to Leacock (2004) writing is a language ability that can be best improved by frequent writing and appropriate and immediate feedback (cited in Parra & Calero, 2019). The feedback should not only reveal accuracy problems but also can be used as a means of improvement. However, as stated earlier, instructors often find it hard to give a holistic feedback for the problematic areas of the students’ written texts because of their enormous workload. In response to the need to decrease their workload a growing number of instructors have begun to use AWE tools (Link, 2015; Grimes & Warschauer, 2010; Warschauer & Grimes, 2008). By this way, they have the opportunity to move beyond surface level errors to more meaning-focused ones and by reducing the risk of human error they can spend more time in evaluating the true communicative value of the written texts.

With the rapid developments in the field of computer technology, second language instruction and assessment have undergone scrutiny and there have appeared new trends and applications. Computer software programs are just some of them. They are used to provide summative feedback on the students’ written texts. They give scores in high-stakes contexts and for instructional applications to support writing improvement (Burstein et al., 2016). This means that the feedback promotes L2 writing achievement and thus has some meaningful consequences to the student.

Automated Writing Evaluation (AWE) tools exist since the 1960s. Over the years, they have undergone exploration and become more functional. However, their effects in the development and evaluation of the L2 writing skills of students is still a controversial issue. Some scholars criticize AWE tools on the grounds that they reduce the role of human factor in the development of L2 writing skills. They also claim that AWE tools are most effective in detecting the surface level linguistic errors while failing to identify deeper level, global errors (McGee, 2006). In these respects, the scholars criticize too much reliance on those computer-generated tools to evaluate students’ written performances. It is believed that feedback dependent on just computer capabilities may cause to escape the real communicative nature of the written texts.

However, a closer look at the writing evaluation practices clearly highlights the growing use of AWE tools. Most scholars argue on behalf of those tools and suggest that instructors may use them especially, to correct errors stemming from mechanics of written language. They agree on their time-saving advantages (Bailey & Lee, 2020; Bai & Hu, 2017). There are many research studies revealing that AWE tools help instructors keep their work load at a reasonable level which permits them to focus on deeper level corrections in the written texts of the students (Parra & Calero, 2019).

Wang et al. (2012) listed the three main advantages of computer-generated feedback that AWE tools provide. According to them, AWE tools promote students' motivation in L2 writing, their self-efficacy beliefs, and give students immediate feedback and thus, enable them to have more opportunities in the target language learning process. Another advantage of the AWE tools is their effect on the increase in the reliability of the scoring when compared to human scoring (Tang & Rich, 2017). Research reveals that the evaluation of students' writing performances via AWE tools increase the consistency and objectivity of the scoring and thus, contributes to an overall improvement in the accuracy of the written products (Wang et al., 2012).

AWE tools are used not only by the instructors but also students may get benefit from them in recognizing the errors in their own writings and overcome the problems. In this respect it can be said that AWE tools support self-regulated learning and learner autonomy. These two terms are closely intertwined. Self-regulated learning is used to describe a process of taking control of and evaluating one's own learning. It emphasizes autonomy. The term learner autonomy, coined first by Henri Holec, can be defined as the ability to take charge of one's learning. Autonomous students do not need the guidance of the teachers all the time, they can go on learning and improve their L2 skills outside the classroom without the actual presence of the teachers. Parallel to these, AWE tools allow students to develop their L2 writing skills at their own pace as they provide instant feedback to their written products.

2 L2 Learning Theories and AWE Tools

The use of AWE tools has been supported by the two main leading learning theories; cognitive, and sociocultural theories.

2.1 Cognitive Theories and AWE Tools

Krashen's *Comprehensible Input Hypothesis* (Krashen, 1985) suggests that learners comprehend input which is slightly above their current level of competence. In line with this, "AWE feedback provide insight into the learner's next stage of language

acquisition because the revisions address what the students composed on their own” (Bailey & Lee, 2020, p. 5).

McLaughlin et al. (1983) *Information Processing Theory* is a cognitive one and investigates human learning and performance. It suggests that there are two types of knowledge in the cognitive processing; explicit and implicit. Students need to attend to explicit knowledge in a conscious way whereas implicit knowledge do not require conscious attention, since it is used in an automatic way. In second language acquisition the path from explicit to implicit knowledge is associated by rule learning and practice. It is believed that with enough practice explicit knowledge turns into implicit knowledge and thus become automatized.

In a similar vein, *the Skill Acquisition Theory* suggested by DeKeyser suggests that implicit knowledge arises out of explicit knowledge, when the latter is proceduralized through practice it leads to automatization (Taie, 2014). It draws on Anderson’s *Adaptive Control of Thought Model* which suggests a similar distinction between declarative/procedural knowledge. According to Anderson’s Model learning starts from ‘declarative’ and moves to ‘associative’ stage with enough practice and ends with the ‘autonomous’ stage (Taie, 2014).

The main premise of these cognitive theories (*Information Processing Theory, Skill Acquisition Theory and Adaptive Control of Thought Model*) of second language acquisition is that they adopt an *interface position* arguing that explicit knowledge becomes implicit if learners have the opportunity for plentiful practice. AWE tools provide instant immediate feedback to the students’ written products and thus enable them to think about what and how they have written. Through repeated practice and instant computer-generated feedback they may internalize what they have learnt and may have the chance to convert the explicit knowledge to implicit knowledge. In this respect, students’ written products are the indicators of their already existing knowledge and the feedback that they receive from AWE tools will serve as the new knowledge.

Another cognitive theory which AWE tools have their roots in is Schmidt’s (1990) *Noticing Hypothesis*. This theory has a very basic argument. Schmidt argues that without noticing nothing can be learned. It serves as a starting point in the learning process. When students notice something in their L2 performances that is different from what they expect or fill a gap in their competence, they learn. The instant feedback that the students receive via AWE tools facilitates noticing, which in turn promotes development of L2 writing skills of the students.

2.2 Sociocultural Theories and AWE Tools

Scaffolding is a term used in the sociocultural theory (Margolis, 2020). It refers to the assistance that students receive to perform better in a required task. To this end, the immediate feedback received from AWE tools helps students develop higher levels of L2 writing skills and allow them to do more on their own.

Swain (1985) first proposed her *Output Hypothesis* as a complement to Krashen's *Comprehensible Input Hypothesis*. Thus, her early works were highly effected by cognitive theory. However, her recent studies are more motivated by sociocultural theory. She highlights the importance of learners' output in the learning process. Output refers to the corpus of utterances that the learners produce orally or in writing. It is inevitable that learner output is full of errors. Traditionally, the role of output is to evaluate where the learners are in the learning process. However, by drawing attention on its 'noticing', and 'hypothesis testing' and 'metalinguistic' functions, Swain argues that output also promotes learning. AWE tools are especially very effective in providing students immediate feedback and thus, helping them critically analyze their own outputs to see what they need to develop more. They also help them test their own hypotheses out and develop an awareness about what works and what does not work.

3 Previous Research on AWE

When the literature is examined, it is seen that especially in the last decade, the number of the studies conducted on the effectiveness of the AWE tools dramatically increased (Chen & Cheng, 2008; Cotos, 2011, 2012; Erdal-Bulut, 2019; Grimes & Warschauer, 2010; Hockly, 2019; Link, 2015; Parra & Calero, 2019; Wang, 2013; Warschauer & Grimes, 2008; Weigle, 2013). Although different AWE tools are used in these studies, most of them highlight the positive effects on improving learners' L2 writing. Besides, these tools lower the burden on the shoulders of the teachers. Yet, they are not magic bullet and should be supported by teacher and peer feedback.

As aforementioned, writing in L2 is generally thought to be a challenging task. Therefore, it is the most neglected skill in L2 classrooms. Teachers avoid giving writing tasks as it requires immediate and comprehensive feedback. In a similar vein, students generally find writing in L2 difficult and time consuming. However, when used carefully AWE tools may help students revise their drafts, receive immediate feedback and increase the chance to practice writing. The findings reveal that students make fewer mistakes after using these tools as they allow students to edit and check spelling and grammar autonomously (Chen & Cheng, 2008; Grimes & Warschauer, 2010; Parra & Calero, 2019). Moreover, Erdal-Bulut (2019) claim that using AWE tools have a positive influence on students' success, increase their intrinsic motivation, and self-efficacy.

Warschauer and Grimes (2008) conducted a case study to figure out how AWE is used in classrooms and how this usage varies by school and social context. They used interviews, surveys and classroom observations to gather the data. Their sample consisted of a middle school (Grades 6–8), two junior high schools (Grades 7–8) and a high school (Grades 9–12). Two schools used *Criterion* while the other two used *MYAccess!*. The sample population differed in academic achievement, socio-economic status, ethnic background and access to computers. The results indicated that all of the interviewed teachers and administrators expressed positive attitudes

towards the tools and met on a common ground about students' increased motivation to write. Teachers asserted that they would recommend the tools to other teachers and added that these tools engaged students autonomous creative writing activity. The researchers stated that although *MY Access!* was favored by teachers, it is not used frequently since teachers felt responsible for covering the curriculum to prepare students for state exam. Compared to *MY Access!*, *Criterion* used more often because the teacher who used this tool was really in favor of it and was using the tool often.

On the other hand, it should be noted that these tools are still developing. For example, in her PhD dissertation, Link (2015) criticized already existing tools for not grounding on any language development view and developed a new tool named as *CAFFite* (*Complexity, Accuracy, Fluency, and Functionality Writing Tool*). Her tool is based on Complexity Theory and Systemic Functional Linguistics and uses complexity, accuracy, fluency, and functionality measures. In a similar vein, Wang (2015) stated that although students favored instant scoring speed, the error analysis of usage, and the feedback for organization and development, most students were not satisfied with the scoring rubric and scoring summary, the style error analysis and the 'Plan' tool of the program. What's more, Matsumura et al. (2020) examined the teachers' views on AWE tools and stated that while designing such tools, teachers' viewpoints should be taken into consideration. They further claimed that teachers do not want such systems to replace them or take their whole responsibility to give feedback to students' work but be just a help for the sake of developing their writing skills.

4 AWE Tools

Due to technological and scientific developments in all over the world, the number of people learning English for different purposes such as academic purpose (EAP) increases day by day. This resulted in the increasing importance of developing writing skills in language teaching programs although it was neglected often for many years (Astrid et al., 2019; Chastain, 1988; Harmer, 2006; Hedge, 2000; Nunan, 1989; Yılmaz & Erkol, 2015). It is because writing puts a heavy burden on the shoulders of teachers, they tend to avoid giving writing tasks. Moreover, teachers often regret not having enough time to evaluate students' works quickly in detail. AWE tools have opened a new door to reduce this load. Due to this fact, attention on these tools has increased over the past decade (Chen & Cheng, 2008; Cotos, 2011; Hockly, 2019; Wang, 2013, 2015; Warschauer & Grimes, 2008; Warschauer & Ware, 2006; Yang, 2004).

Development of automated writing evaluation tools dates back to 1960s. AWE tools are used both for high-stake exams, such as TOEFL and for lower-stake writing instruction and consist of a scoring engine and a feedback engine based on artificial intelligence, natural language processing (NLP) or latent semantic

analysis. Link (2015, p. 22) overviews four major developers of computerized writing assessment as follows:

AES engine	AWE tool	Scoring models	Feedback categories	Developers
Project Essay Grade (PEG)	Folio (Measurement Inc., 2012)	Statistical: trins and proxes	Organization, support, sentence structure, word choice, mechanics	Page (1966)
Intelligent Essay Assessor (IEA)	WriteToLearn (Pearson Knowledge Technologies, 1999)	Latent semantic analysis	Organization, ideas, conventions, sentence fluency, word choice, voice	Landauer et al. (1997)
e-rater	Criterion (ETS, 2001)	NLP: 12 writing features	Organizational segments, grammar, usage, mechanics, style, vocabulary, content	ETS (Burstein et al., 1998)
Intellimetric	MY Access! (Vantage Learning, 2007)	NLP: 500 writing features	Content, word variety, grammar, text complexity, sentence variety	Elliot (2003)

Ellis Page, a former high school English teacher, and his colleagues are considered to be father of automated scoring systems for their *Project Essay Grade* (PEG). Grimes and Warschauer (2010) stated that Ellis and his colleagues used “multiple regression to associate surface text features in a target essay to those in a corpus of essays on the same topic that has been scored by English teachers” (p. 6). The scoring method is statistical and is based on the number of words, average sentence length, grammar, punctuation, word choice, and so on. Almost two decades after PEG, with the emergence of microcomputers in 1980s, a new tool, *Writer’s Workbench*, was introduced by MacDonald et al. (Warschauer & Ware, 2006). The systems following PEG used natural language processing (NLP) together with statistical techniques to evaluate writing tasks based on grammar, complexity of sentence formation, mechanics, style, content, topic and so on.

Many years later, in 1997, Knowledge Analysis Technologies released *The Intelligent Essay Assessor* (IEA) which was derived from a semantic text-analysis approach called Latent Semantic Analysis. As the name suggests, here meaning in written texts was more important than surface features such as grammar, punctuation or spelling. That’s to say, semantic meaning of a piece of writing is compared to a broader corpus of textual information. “Using such analysis, IAE trains the computer on an informational database of textbook materials, sample essays, or other sources rich in semantic variation surrounding a particular essay” (Warschauer & Ware, 2006, p. 5). This study took the attention of Pearson Knowledge Technologies and new AWE tools such as *WriteToLearn* (<https://www.pearsonassessments.com/professional-assessments/products/programs/write-to-learn.html>) and *Holt Online Essay Scoring* (<https://my.hrw.com/support/hos/index.html>) emerged (Link, 2015; Warschauer & Ware, 2006). *WriteToLearn* is not free and offered in three languages: English, Spanish and Chinese. It has a database

comprising more than 300 reading passages in science, history, language arts, social studies and fiction serving students at grade 4–12. You need to purchase *Holt Online Essay Scoring* according to your grade level as well.

Among other commercially available and widely used products are *MY Access!* (www.myaccess.com/myaccess/do/log) and *Criterion* (<https://criterion.ets.org/criterion>). *Criterion* was developed by Educational Testing Services (ETS) and used e-rater software engine. Its evaluation mechanism is based on NLP. Grimes and Warschauer (2010) stated that *Criterion* provides scores, feedback and comments on four analytic categories: grammar, usage, mechanics and style and one higher level category: organization and development. Cotos (2012) pointed out that through the programs interface, teachers can give feedback to their students. “This helps them to focus not only on automatically detectable errors, but also on other, more subtle, aspects of writing identified by the teacher” (p. 82). The program also allows students to see their overall performance summary including a holistic score, the number of errors and links to detailed feedback on each error category.

MY Access! is another web-based tool developed by Vantage Learning. It uses an artificial intelligence scoring engine called *Intellimetric*. It evaluates students writing and provides revision activities. It also works as an editor, highlights errors and gives suggestions for editing, spelling, grammar and word choice. Moreover, it provides checklist to writers, self-assessment rubrics, word banks to pick suitable vocabulary items, graphical prewriting tools to organize and formulate ideas. It also allows teachers to choose among 700 prompts, including narrative, persuasive, informative, literary and expository essay topics (Cotos, 2012; Grimes & Warschauer, 2010; Link, 2015). Warschauer & Ware (2006, p. 4) have stated that *MY Access!* provides “a holistic score on a 1–6 or 1–4 scale, as well as individual scores on the same scale for focus and meaning, organization, content and development, language use and style, and mechanics and convention. ... Generic feedback is then provided based on grade level, genre and score...”.

There are some other AWE tools available online some of which are free of charge and provide feedback especially in terms of mechanics of writing, such as spelling and grammar mistakes, word choice, plagiarism check, and so on. Among these programs are *Grammarly*, *Ginger Software*, *PaperRater*, *Grammarly*, *PEG Writing Scholar*, *Virtual Writing Tutor*, *White Smoke*, *After the Deadline*, and many others.

5 A Sample AWE Tool: Grammarly- What Does It Offer to Us?

Grammarly is one of the online writing evaluation tools that allow you to scan the text you upload in terms of grammar, spelling, clarity, word choice and plagiarism (www.grammarly.com). You can click on the link and create an account (Fig. 1). Once you create your account, you need to set goals in line with your needs and then upload your text (Figs. 2 and 3).


www.grammarly.com ▾ Bu sayfanın çevirisini yap

Grammarly: Free Online Writing Assistant

Grammarly scans your text for common grammatical mistakes (like misused commas) and complex ones (like misplaced modifiers). Write with confidence, even ...

<h4>Grammar Check</h4> <p>Grammarly is more than a grammar check, more than a ...</p>	<h4>About</h4> <p>Grammarly is on a mission to improve lives by improving ...</p>
<h4>Plagiarism Checker</h4> <p>Using someone else's text without attribution is plagiarism ...</p>	<h4>The Grammarly Keyboard</h4> <p>Take your mobile writing to the next level with the Grammarly ...</p>
<h4>Grammarly Premium</h4> <p>Make the best impression with writing that speaks for itself ...</p> <p>grammarly.com alanından daha fazla sonuç »</p>	<h4>Grammarly@EDU | Trusted by ...</h4> <p>Grammarly works one-on-one with a student to develop essential ...</p>

Fig. 1 Grammarly website



Set goals

Get tailored writing suggestions based on your goals and audience.

Audience General **Knowledgeable** Expert

Knowledgeable (default): Requires focus to read and understand.

Formality Informal **Neutral** Formal

Neutral (default): Restricts slang but allows standard casual expressions.

Domain Academic Business **General** Email Casual Creative

General (default): Applies most rules and conventions with medium strictness.

Tone 😐 Neutral ❤️ Confident 😄 Joyful 🙌 Optimistic

Show Set Goals when I start a new document [Reset to defaults](#) [Done](#)

Fig. 2 Setting goals

Fig. 3 Uploading the text

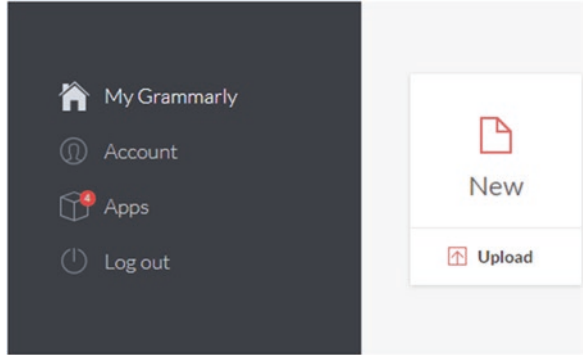
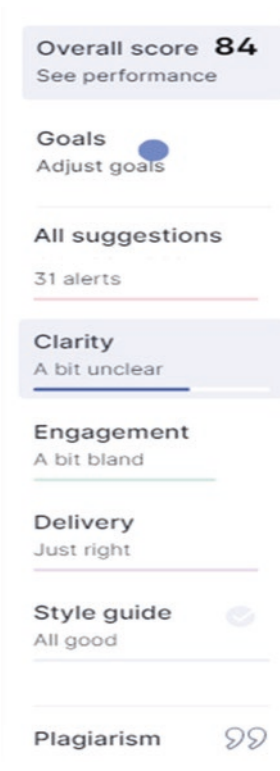


Fig. 4 Overall evaluation result



After you upload your text, you can see the overall evaluation result and suggestions to develop your text (Fig. 4). The system evaluates the text in terms of correctness, clarity, appropriate wording, style and the rate of similarity with the other texts.

The text is evaluated in terms of accuracy and correctness. The parts which are not accurate are highlighted and suggestions are provided (Fig. 5).

It also offers necessary changes for accurate punctuation (Figs. 6) and 7.

Hymes (1972) defined the concept of communicative competence as familiarity with grammar and the ability to use language properly in different situations. In this regard, the emergence of Intercultural Communicative Competence (ICC) is to improve students' cultural awareness and to prepare students for culturally appropriate communication with people from other cultures. Knowing the similarities, differences, and features between cultures, learners can foster a positive attitude towards cultural diversities, leading to tolerance and respect for other cultures. This kind of attitude promotes more effective intercultural communication. (According to Padilla and Casali (2017) use of the word

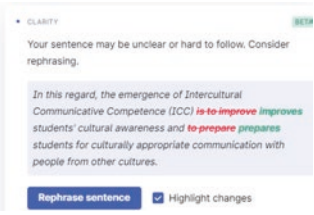


Fig. 5 Accuracy

In learning and teaching English as a Foreign Language, one of the aims is to develop intercultural competence therefore, culture must play a key role. Since coursebooks include cultural aspects, particular attention should be paid to the cultural content of course

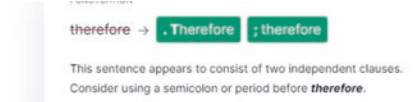


Fig. 6 Punctuation

particular attention should be paid to the cultural content of course books. In this respect, it is highly important to integrate cultural elements into language education for intercultural understanding. The current study aims to explore EFL students' attitudes towards culture and its integration into course books. Data are collected from 64 participants through a questionnaire consisting of three parts. A



Fig. 7 Wording

The system also offers some suggestions for sharpening your text in terms of word choice. If the word is overused throughout the text, it provides some synonyms to improve the text (Fig. 8).

While using Grammarly, you can get an idea to what extent your text is similar to the other texts. You can see the percentage (13% in this sample) and the texts that match to your own text.

6 Advantages of AWE Tools

One of the mostly highlighted advantage of AWE tools is that they are a time saver. Since AWE tools give automated feedback to students' writing, they are a weight off teachers' shoulders. As Grimes & Warschauer (2010, p. 4) claim, AWE software "has been promoted as a way to remove the bottleneck, primarily because students receive scores and formative feedback very quickly". Since it is a quick way of providing feedback, teachers would assign different writing tasks to their students which in turn might help them practice often and develop their writing skills. That is, AWE offers more chance to practice writing. AWE also allows students to get feedback quickly. Thus, they can revise what they have written easily since it is still

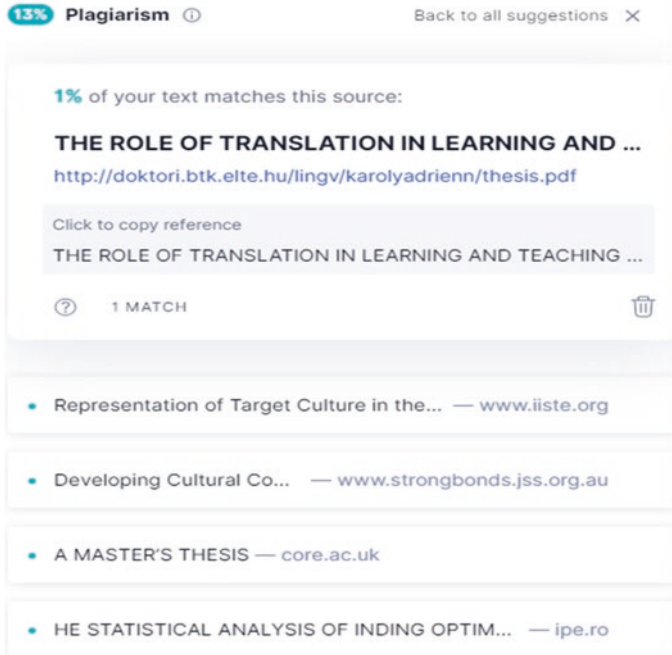


Fig. 8 Plagiarism

fresh in their mind (Cotos, 2012; Matsumura et al., 2020) which may increase student motivation to write.

Immediate feedback feature of AWE can make learning more efficient and interesting. Moreover, it is stated that AWE tools provide beneficial advice on organization and give objective feedback regarding the revision (Wang, 2013). AWE tools are equipped with word processing feature and this feature eases editing and revising, especially in terms of grammar and spelling, which in turn motivates students to write more often. Grimes and Warschauer's study (2010), for example, emphasizes that when AWE tools *MY Access!* and *Criterion* were used in writing classes, U.S. high school students were highly motivated. Cotos (2012) also affirmed that AWE tools guide student revision, motivate them and foster learner autonomy.

Wang (2015) also asserts that AWE tools are equipped with electronic portfolios and the Internet. While the e-portfolios show students' writing improvement in time on the one hand, they save storage space on the other. As part of 'process writing', through these portfolios, students can revise their drafts as much as they need. This allows the individualization of the process. Thus, they can observe their own progress, take necessary steps and be responsible for their own work. Moreover, through the Internet, students can search for the information for brainstorming, use electronic dictionaries for word search or exchange their works with their peers through online platforms. All these help students improve their L2 writing.

Cotos (2012) claimed that AWE tools support process-writing approach. Students have a chance to revise and edit their drafts many times through suggestions and explanations before they submit the final product. Thus, teachers would observe the improvement and value the process as well.

7 Disadvantages of AWE Tools

Cost of AWE tools is another issue under debate. Since some of the programs are free of charge, they are found to be effective in terms of cost (Cotos, 2011) while some others such as, *Criterion* and *MY Access!*, are costly. Therefore, before purchasing such tools, it is necessary to evaluate whether they worth buying by the institutes (Wang, 2013). If both teachers and students do not have necessary technological skills or training on using these tools, they may not be that much beneficial. Technical problems those are likely to occur are among the disadvantages listed in the literature (Wang, 2015).

Autonomous use of AWE with limited human assistance may cause frustration to students which may result in limitation of their learning writing (Chen & Cheng, 2008). Cheng (2006) stated that *MY Access!* did not provide specific feedback on the content and rhetorical aspects of students' writing; therefore, they were not satisfied with the grading function of *MY Access!*. Wang (2015) expressed that there were similar studies referring to the inefficiency of feedbacks given by such AWE tools.

Critics further indicated that computers were not able to understand meaning of the written texts in the same way humans did. It was stated that AWE tools were not adequate when human interaction was considered. Additionally, those tools eliminated human factor and decreased the role of the teacher in developing writing skill (Cotos, 2012; Warschauer & Ware, 2006). Critics also questioned the validity of AWE tools as the tool might score the writing tasks higher than the human raters. For example, Wang (2013) mentioned a study which claims that the machine did not grade the broad and open writing tasks as reliably as human raters. Similarly, LinHuang's study (2010) indicated that human raters identified errors in essays better than *MY Access!* does. In their study, Chen et al. (2009) found that most of the feedback provided by *MY Access!* were false alarms whereas grammar feedback messages by *Criterion* were 70% accurate. Considering this fact, they concluded that both *MY Access!* and *Criterion* need further improvement in terms of their feedback mechanisms.

Another negative view about the tools is that they support essays written to specific prompts. If teachers want students to write essays on different topics other than those supplied by the tool or if they ask them to write in different writing styles, such as brochures, they would not use the tools (Warschauer & Grimes, 2008).

Opposing camps also claimed that students may adjust their writing tasks either consciously or unconsciously to meet assessment criteria of the tools. What is worse

is that teachers may support such adjustments to raise test scores and this is likely to impair students' practice (Cotos, 2012).

Taking the related literature into account, Link (2015, p. 17) listed a number of criticisms against AWE tools as follows: violets the social nature of writing; are not humanistic; lack transparency in how the scores are produced; are easy to fool; provide vague and formulaic holistic feedback; favor lengthiness; overemphasize the need for transition; largely ignore coherence and content and discourage unconventional ways of writing.

8 Conclusion

Crystal (2003) states that because of the widespread use of English, it has become the language of intercultural communication among the representatives of diverse cultural backgrounds. To this end, not only spoken language but also written language in L2 has gained importance. Combination of technological development with the emphasis on written communication has increased the use of AWE tools in education over the past years. Some commercial products as well as some free tools are served for the sake of developing and evaluating written works. Many advantages and disadvantages of using these tools have been listed and discussed in the related literature. It is a clear fact that AWE tools are not silver bullets. Just like any educational technology they have good and bad sides, yet, still, it is undeniable that they remove or at least lessen the burden on the shoulders of teachers. Some studies emphasize that these tools devalue the role of teacher in developing writing skills, and claim that they cannot evaluate the writing tasks as the way the human raters do. On the other hand, some other studies indicate that since these tools provide immediate feedback especially in terms of mechanics of writing, they allow teachers to focus on the other deeper aspects such as content and appropriateness. Thus, they decrease the teachers' workloads especially in overcrowded classrooms. The more the number of the students in the classrooms, the more difficult for a teacher to give a holistic feedback sooner.

Another criticism mentioned in the literature is that these tools come with some ready-made prompts. Offering 400–700 prompts, there is always the risk of becoming useless if teachers choose different topics or writing styles such as brochures rather than essays. However, the opposing ideas claim that if the prompts are chosen from a variety of different study fields such as history, science, social studies, students will have a chance to develop their L2 writing skills in different content areas.

The arguments in favor of AWE tools suggest that they have a motivating effect on the students L2 writing achievements. Students do not need to wait for their teachers' feedback as the tool provides them instant feedback and thus, allow them to work on their drafts at their own pace as much as possible, which will contribute to their autonomy.

The discussions on AWE tools indicate that they are most effective in scoring and providing feedback on the mechanics of writing. Therefore, it is necessary to keep

a balance between AWE and human scoring. Writing is not just comprised of surface level mechanical aspects but it also requires a deeper understanding and encoding of the intended message of the written text. Therefore, teachers' involvement into the evaluation process is essential.

All in all, it should be noted that technology keeps improving, so does AWE tools. It is the teachers' responsibility to compensate the limitations of the softwares' feedback. Therefore, their insights about the effectiveness of those tools are valuable and need to be taken into consideration in the process of the improvement of these tools.

References

- Astrid, A., Marzulina, L., Erlina, D., Harto, K., Habibi, A., & Mukminin, A. (2019). Teaching writing to EFL student teachers: Teachers' intervention and no teachers' intervention through peer feedback writing techniques. *Universal Journal of Educational Research*, 7(9), 1901–1908. <https://doi.org/10.13189/ujer.2019.070908>
- Bai, L., & Hu, G. (2017). In the face of fallible AWE feedback: How do students respond? *Educational Psychology*, 37(1), 67–81.
- Bailey, D., & Lee, A. R. (2020). An exploratory study of Grammarly in the language learning context: An analysis of test-based, textbook-based and Facebook corpora. *TESOL International Journal*, 15(2), 4–27.
- Burstein, J., Elliot, N., & Molloy, H. (2016). Informing automated writing evaluation using the lens of genre: Two studies. *CALICO Journal* (online), 33(1), 117–141.
- Chastain, K. (1988). *Developing second language skills: Theory and practice* (3rd ed.). Harcourt Brace Jovanovich.
- Chen, C. F., & Cheng, W. Y. (2008). Beyond the design of automated writing evaluation: Pedagogical practices and perceived learning effectiveness in EFL writing classes. *Language Learning and Technology*, 12(2), 94–112.
- Chen, H. J., Chiu, T. L., & Liao, P. (2009). Analyzing the grammar feedback of two automated writing evaluation systems: My access and criterion. *English Teaching and Learning*, 33(2), 1–43.
- Cheng, W. Y. (2006). *The use of web-based writing program in college English writing classes in Taiwan- a case study of MY Access* [Unpublished master's thesis]. National Kaohsiung First University of Science and Technology.
- Cotos, E. (2011). Potential of automated writing evaluation feedback. *CALICO Journal*, 28(2), 420–459.
- Cotos, E. (2012). Towards effective integration and positive impact of automated writing evaluation in L2 writing. In G. Kessler, A. Oskoz, & I. Elola (Eds.), *Technology across writing contexts and tasks* (pp. 81–112). CALICO, Texas State University.
- Crystal, D. (2003). *English as a global language* (2nd ed.). Cambridge University Press.
- Erdal-Bulut, S. (2019). *The effects of automated writing evaluation on EFL students' writing achievement and motivation towards writing* [Unpublished MA thesis]. Istanbul University Cerrahpaşa the Institute of Graduate Studies.
- Grimes, D., & Warschauer, M. (2010). Utility in a fallible tool: A multi-site case study of automated writing evaluation. *The Journal of Technology, Learning and Assessment*, 8(6), 1–44.
- Harmer, J. (2006). *How to teach English* (15th ed.). Longman.
- Hedge, T. (2000). *Teaching and learning in the language classroom*. Oxford University Press.
- Hockly, N. (2019). Automated writing evaluation. *ELT Journal*, 73(1), 82–88. <https://doi.org/10.1093/elt/ccy044>
- <https://criterion.ets.org/criterion/>

- <https://grammar.org/>
<https://my.hrw.com/support/hos/index.html>
<https://virtualwritingtutor.com/>
<https://www.afterthedeadline.com/>
<https://www.gingersoftware.com/>
<https://www.grammarly.com/>
<https://www.measurementinc.com/news/peg-writing-scholar>
<https://www.myaccess.com/myaccess/do/log>
<https://www.paperrater.com/>
<https://www.pearsonassessments.com/professional-assessments/products/programs/write-to-learn.html>
<https://www.whitesmoke.com/>
- Krashen, S. (1985). *The input hypothesis*. Longman.
- LinHuang, S. H. (2010). *The exploitation of e-writing in an EFL classroom: Potential and challenges* [Unpublished master's thesis]. I-Shou University.
- Link, S. M. (2015). *Development and validation of an automated essay scoring engine to assess students' development across program levels* [Unpublished PhD dissertation]. Iowa State University.
- Margolis, A. A. (2020). Zone of proximal development, scaffolding and teaching practice. *Cultural-Historical Psychology*, 16(3), 15–26.
- Matsumura, L. C., Wang, E. L., Correnti, R., & Litman, D. (2020). *What do teachers want to see in automated writing evaluation systems?* <https://www.rand.org/blog/2020/07/what-do-teachers-want-to-see-in-automated-writing-evaluation.html>
- McGee, T. (2006). Taking a spin on the intelligent essay assessor. In P. F. Ericsson & R. H. Haswell (Eds.), *Machine scoring of student essays* (pp. 79–92). Utah State University Press.
- McLaughlin, B., Rossman, T., & McLeod, B. (1983). Second language learning: An information-processing perspective. *Language Learning*, 33(2), 135–158.
- Nunan, D. (1989). *Designing tasks for the communicative classroom*. Cambridge University Press.
- Parra, G. L., & Calero, S. X. (2019). Automated writing evaluation tools in the improvement of the writing skill. *International Journal of Instruction*, 12(2), 209–226. <https://doi.org/10.29333/iji.2019.12214a>
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129–158.
- Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235–253). Newbury House Publishers.
- Taie, M. (2014). Skill acquisition theory and its important concepts in SLA. *Theory and Practice in Language Studies*, 4(9), 1971–1976.
- Tang, J., & Rich, C. S. (2017). Automated writing evaluation in an EFL setting: Lessons from China. *JALT CALL Journal*, 13(2), 117–146.
- Wang, P. (2015). Effects of an automated writing evaluation program: Student experiences and perceptions. *Electronic Journal of Language Teaching*, 12(1), 79–100.
- Wang, P. (2013). Can automated writing evaluation programs help students improve their English writing? *International Journal of Applied Linguistics & English Literature*, 2(1), 6–12.
- Wang, Y., Shang, H., & Briody, P. (2012). Exploring the impact of using automated writing evaluation in English as a foreign language university students' writing. *Computer Assisted Language Learning*, 26(3), 234–257.
- Warschauer, M., & Grimes, D. (2008). Automated writing assessment in the classroom. *Pedagogies: An International Journal*, 3, 22–36.
- Warschauer, M., & Ware, P. (2006). Automated writing evaluation: Defining the classroom research agenda. *Language Teaching Research*, 10(2), 1–24.

- Weigle, S. C. (2013). English as a second language writing and automated essay evaluation. In M. D. Shermis & J. Burstein (Eds.), *Handbook of automated essay evaluation current applications and new directions* (pp. 36–54). Routledge, Routledge Handbooks Online.
- Yang, N. D. (2004). Using MyAccess in EFL writing. In *The proceedings of 2004 international conference and workshop on TEFL & applied linguistics* (pp. 550–564). Ming Chuan University.
- Yılmaz, C., & Erkol, K. (2015). Using word processor as a tool to enhance the teaching of writing in a Turkish EFL context: An action research. *Journal of Theory and Practice in Education*, 11(1), 346–358. ISSN: 1304-9496.

Ceylan Yangın Eranlı is working as an associate professor at the Department of Foreign Language Education, Ondokuz Mayıs University in Turkey. She received her MA from the Department of English Language Teaching, Ondokuz Mayıs University and PhD degree from the Department of English Language Teaching, Gazi University, Turkey. Her research interests include CLIL, materials development, young learners of English, teacher training, TPACK, technology and language teaching.

Deren Başak Akman Yeşilel is working as an assistant professors at the Department of Foreign Language Education, Ondokuz Mayıs University in Turkey. She received her PhD from Gazi University ELT Department. Her research interests mainly consist of teacher education, teaching language skills, technology in EFL teaching. She has published a number of articles and presented at international conferences.

Digital Writing Practices in the Information Age: Possibilities and Implications for English Language Teachers and Learners



Ömer Özer and Ceyhun Yükselir

Abstract The purpose of this chapter is to review a selection of recent studies of writing practices and research in order to synthesise and discuss the growing importance of technology orientation and digital literacy in English language learning and teaching. For this purpose, adopting a top-down framework, the chapter touches upon the issues of learning management systems (LMSs), personal learning environments (PLEs) and learning on language learning and teaching with examples of *Symaloo*, writing correction, similarity and word-formation tools and feedback in digital classrooms. Finally, the chapter also provides an insight into and some examples of the current implementations in writing practices in online learning during the COVID-19 pandemic. In this chapter, we explore current practices and research in the field of English language teaching and seek to shed light on this issue by overviewing the writing practices and online digital writing tools applied on a global scale in order to enhance interaction. More specifically, this chapter covers LMSs and PLEs, digital writing tools, content similarity detection tools, and student/teacher interaction and feedback in virtual classrooms with a special emphasis on learner autonomy. The results of this study have some far-reaching implications for language teachers, learners, language planners and curriculum developers.

Keywords Artificial intelligence writing assistants · Digital writing tools · English language teaching · Learning management system (LMS) · Personal learning environment (PLE)

Ö. Özer (✉)

Department of Translation and Interpreting, Adana Alparslan Türkeş Science and Technology University, Adana, Turkey

e-mail: oozer@atu.edu.tr

C. Yükselir

Department of English Language and Literature, Osmaniye Korkut Ata University, Osmaniye, Turkey

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_11

211

1 Introduction

In this chapter, we present a series of good writing practices in Turkey and elsewhere and we believe that the evidence of successfully integrated technologies might contribute to foreign-language writing instruction and offer direct insights into how writing can be taught more effectively. Before moving any further, let us be clear about what we mean by integrating technologies. Bill Gates (n.d.) once said: “Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is most important”. As known, English language teachers have a responsibility to address each of the four basic language skills, but writing, which has been considered a very difficult skill in learning a foreign language, tends to be somewhat neglected or challenged in EFL classrooms. However, writing in English epitomises the complex process of language learning and leaves a lasting record of students’ own language ability. Their improvement over time as well as their mistakes in spelling, grammar and word choice are immediately evident in their writing. For English language learners, learning how to write is an engaging process and new ideas and research are shaping our understanding of how to teach writing more effectively. Therefore, this chapter covers LMSs and PLEs, digital writing tools, content similarity detection tools, AI-powered writing assistants, and student/teacher interaction and feedback in virtual classrooms with a special emphasis on learner autonomy.

1.1 Learning Management Systems: Definition, Usage and Integration into English Language Teaching and Learning

In today’s online learning environment, LMSs, often used synonymously with Content Management Systems (CMSs) and Virtual Learning Environments (VLEs), have become one of the hot-topics in academic circles and have become especially significant during the COVID-19 pandemic. In this part, our main focus is on examining LMSs with an emphasis on English language teaching and learning. In this regard, LMS is first presented with various definitions and then the integration of LMS into language teaching is dealt with for specific studies.

In its simplest definition, LMS is a web-based software application which serves to customise, manage, track and report educational courses in an interactive learning environment (Ifenthaler, 2012). Dudeney and Hockly (2007) stated that LMS combines various Web 2.0 tools into a single platform and learners can access courses, assignments and activities. In course management, Adams (2010) stated that the primary use of LMSs is to provide “support to span multiple class sessions across an entire course with common goals, adding tools for evaluation, feedback and discussion” (p. 254.) Basal (2015a) stated that with the help of LMS, teachers send out videos, activities and assignments as well as contacting and checking students’ grades. In another study, Basal (2015b) stated that pre-service EFL teachers

had positive perceptions of the use of LMS as a part of face-to-face classes. From another perspective, Warschauer and Meskill (2000) pointed out that “the key to successful use of technology in language teaching lies not in hardware or software but in ‘humanware’, our human capacity as teachers to plan, design and implement effective educational activity” (p. 316).

Indubitably, LMSs have many strengths, from cost-effective content delivery to the easy tracking of student development. Although there is a multitude of LMSs emerging every year, we shall discuss some common LMSs used by language learners. All the systems included here can be used to promote the development of writing skills. There are dozens of free apps such as Canvas, Edmodo (Altunkaya & Ayranci, 2020), Google Classroom, Moodle and Sakai (Aldiab et al., 2019; Edutechnica, 2020) and commercial systems such as Blackboard (Aldiab et al., 2019; Washington, 2019; Docebo, n.d.; Schoology, n.d.) (Fig. 1).

Writing is a difficult skill to learn and requires thorough practice on the part of students. Furthermore, writing teachers spend a large amount of time giving feedback on each student paper. Given that LMSs provide a simple way for learners to access and use the learning materials through the internet, it is worth looking at studies which have explored the impact of LMSs on the feedback process and on the development of writing skills (Lafren & Smith, 2017). Even though a wide range of previous studies have explored the use of LMSs to facilitate learning, little research has examined their effects on English language learning with regard to writing skill. In one such study, Fageeh and Mekheimer (2013) investigated the pedagogical effects of the Blackboard LMS in teaching academic writing. A total of 46 EFL students’ development in writing skill and their attitudes towards online writing activities on the LMS platform were measured through written assignments, reflections and afterthoughts. The use of the system’s asynchronous discussion forum provided students with an abundance of opportunities to develop their writing skill. In addition, the longer the time students spend on the LMS, the more positive attitudes they will take towards the use of online communication activities to develop their academic literacy and academic writing.

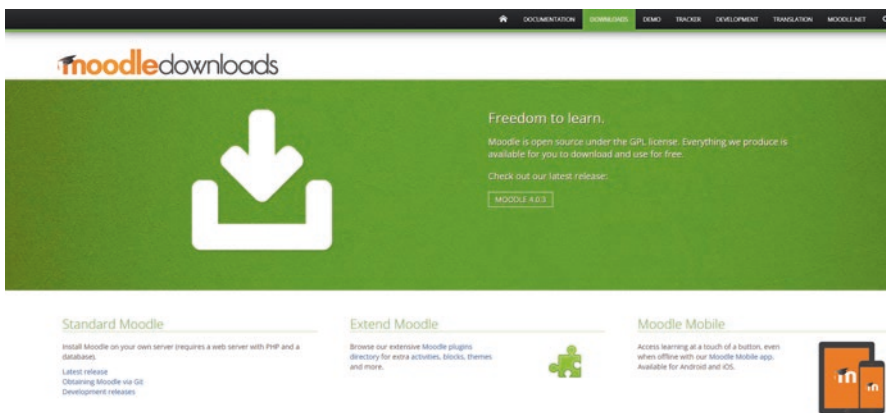


Fig. 1 Available Moodle apps to download. (Retrieved from <https://download.moodle.org/>)

The narrow spectrum of literature dealing with how to respond to student writing in LMSs makes this field wide open to future researchers to be observed in English language classrooms. In addition to the results discussed, we shall mention two studies from the US, one from the Philippines and one from Turkey. Laflen and Smith (2017) studied how students interacted in the Sakai LMS to access teacher feedback on their writing. To this end, they used the data of 334 students from sixteen different courses at a private college and sought answers to the question of whether the rate at which students open the attached files with feedback differ if they can view their scores without actually opening the file of feedback. The findings suggested that most students seemed to give more importance to their grades than to the teacher feedback. When grades could be viewed independent of teacher feedback, participants in the study were less likely to navigate through the LMS to access the feedback. In another study conducted in the US, Laflen (2019) examined the relationship between the timing of feedback and students' interest in it and another central point in the study was the question of whether students' behaviour as they viewed the feedback on the LMS was related to what period of the writing process the feedback covered. The findings suggested that the timing of the teacher feedback had a significant effect on students' behaviour as they accessed the feedback: the earlier into the writing process feedback was provided, the more likely students were to transfer the feedback into their writing. Topacio (2018), a researcher in the Philippines, employed a quasi-experimental design and investigated the use of an LMS in teaching writing to English language learners. Based on the students' average scores on previous English courses they had taken, they were divided into control and experimental groups. The experimental group were taught ten online-based lessons through an LMS which included functions such as discussion forums, announcements, video presentation, digital learning materials, slideshows and quizzes. The control group students were taught in a face-to-face classroom. The analysis of the pre- and post-test results of the groups showed no significant difference in their skill of building contents in favour of the students learning through an LMS. In the Turkish context, Altas and Mede (2021) investigated the impact of a flipped writing course delivered through video lectures with the use of an LMS on pre-service English teachers' writing achievement. Fifty-five students were recruited from an advanced writing course at a foundation university and were separated into control and experimental groups. For a full academic term, they engaged in higher level discussions, wrote structured essays and received feedback from the teacher and their peers. Students used the LMS actively since the video lessons, texts, announcements and supplementary materials were shared on that platform on a regular basis. The results of the study led to the assertion that students in the flipped classroom supported by the use of an LMS had significantly higher writing scores. However, the learners are not liable to use LMSs after their graduation which can be seen as a limitation of these platforms. Here, PLEs appear and become conducive to assisting learners to improve their language proficiency skills specifically writing (as key concept in this book chapter) and continue the writing activities in their own pace they started before.

1.2 *Basic Components of Personal Learning Environments (PLEs)*

With rapid technological developments and the massive use of technology both in formal and informal settings since the 1980s, there have been enormous changes in social and educational circles which constitute a significant part of digital life. Based on these changes and the opportunities which the internet provides, such as weblogs, blogs, wikis, social networks, bookmarks and tagging through the development of web-based technologies ranging from Web 1.0 to Web 4.0, not only the teaching and learning styles but also the roles of teachers and learners have altered in line with the process of adaptation to e-learning tools. Also, the information technologies have brought the concept of PLEs to the fore and have transformed the traditional classrooms into virtual class atmospheres to some extent. It is also noteworthy to state that people in the 21st century are ready to use information and communication technologies and are qualified for the internet facilities and they can also take an active role and regulate their own learning processes throughout their lives (Buchem et al., 2011), making them become autonomous learners at the end. On this issue, Lankshear and Knobel (2007) suggested that young learners have different thinking styles in regard to grasping virtual space rather than a conventionalist view which is characterised by collaboration, production and participation.

In particular, with the outbreak of the COVID-19 pandemic across the world, the concepts of LMS, also known as CMS and VLE, have been investigated by many scholars on the grounds that their function is to manage and direct online learning (Mott & Wiley, 2009). As mentioned earlier, learners do not have any opportunity to use and benefit from LMSs and VLEs after their graduation from their universities; in other words, LMS provides a closed platform or environment for both learners and institutions and this approach can therefore be regarded as teacher-based or technology-based rather than learner-based (Guth, 2009). This can be seen as a limitation for the learners to pursue their education without limit and follow life-long learning beyond their academic career. From this perspective, Van Harmelen (2006) claimed that PLEs can be considered as an experience for achieving personal life-long learning goals (García-Peñalvo & Conde, 2015) and thus creating a personal e-learning platform and knowledge by using various Web 2.0 tools rather than a single source. Chatti et al. (2010) stated that the concept of PLE is triggered by the principles of constructivism and connectivism by putting the emphasis on 'self-organised, informal, lifelong learning and network learning' (p. 79). In PLEs, learners can have the opportunity to access the content and manage their own learning in addition to forming and sharing the content on their own (McLoughlin & Lee, 2010). Thus, as learners form, organise and share the content on their own, it is more meaningful to them. Writing, like any other language skill, is no different and as personal learning experiences occur in PLEs, then they matter more to students.

Before explaining the role and function of PLEs in online learning based on foreign-language teaching and learning, it will be helpful to set out the definitions and conceptual framework on which it is based. However, a PLE is a relatively new

concept and there is almost no consensus over the definitions and usages of it. Taking the previous studies of PLEs into account, one of the pioneering figures of PLEs, Attwell (2007), stated that with the help of PLE platforms, learners can make individual preferences about the use of technology in line with their particular needs and choices. In a later study, Attwell (2010) commented that:

PLEs are made-up of a collection of loosely coupled tools, including Web 2.0 technologies, used for working, learning, reflection and collaboration with others. PLEs can be seen as the spaces in which people interact and communicate and whose ultimate result is learning and the development of collective know-how. A PLE can use social software for informal learning which is learner driven, problem-based and motivated by interest – not as a process triggered by a single learning provider, but as a continuing activity.

Downes (2005) described a PLE as an environment in which interrelated applications are put together in contrast to a single unit. Similarly, Wilson et al. (2007) stated that PLE functions at a personal level and coordinates information closely related to users rather than at an operational level, as in the case of VLE. McLoughlin and Lee (2010) described PLE as a platform on which formal and informal learning are integrated using social media and fostering self-regulated learning (Dabbagh & Kitsantas, 2012) in higher education. Türker and Zingel (2008) stated that PLEs can become effective tools for promoting cognitive processes as well as learners' informal learning. Last but not least, Laakkonen and Taalas (2015) considered PLEs as supporting and promoting the norms and features of digital literacy and 21st century skills.

1.3 PLEs in Language Learning and Teaching: An Example of Symbaloo

In the language-teaching context, Panagiotidis (2012) stated that personalised and adaptable learning environments could increase the possibility of reaching multiple contexts, materials and informal communication, creating a holistic style for learners' needs and thus enabling them to acquire a language at the end. This customised approach to language learning can easily be used to support the development of students' writing skills as it is extended out of the classroom. PLEs can also be used effectively to allow student writers to engage in self-directed learning. Xu et al. (2020) stated that PLE is a pedagogical approach which can be adapted well to the field of English for Specific Purposes as it is learning-centred. It is well-known that PLE is a flexible and individual social software in which contents can be created, shared and re-assembled with various configurations (Milligan et al., 2006) and provides student engagement and interaction (Oliver, 2001). In relation to this, Anderson (2005) referred to the educational social software tools focusing on individual control as “networked tools that support and encourage individuals to learn together while retaining individual control over their time, space, presence, activity, identity and relationship” (p. 4). All in all, therefore, PLEs can be regarded as a

Fig. 2 Common tools for creating a PLE (Reinders, 2014, p. 15)



discourse of learners' informal learning processes through Web 2.0 tools or e-learning platforms in collaboration with peers and instructors using multiple sources and systems (Martindale & Dowdy, 2010). Reinders (2014) suggested that PLEs can be a good way and a solution to bring common tools and resources together and enhance the language-learning process in and out of the classroom (see Fig. 2). Cinganotto and Cuccurullo (2016) pointed out that using PLEs in language-learning environments can pave the way for meeting the learners' needs and fostering interaction and communication in both formal and informal settings. Similarly, Warschauer (1996b) commented that communicative skills can be acquired through electronic discussions in formal language settings.

As stated above, of the basic tenets of PLEs, learners' authority and taking a managerial role in forming and shaping the content during the learning process are most likely to apply to the features of autonomous learning, which is also focused on learners taking responsibility for their own learning (Holec, 1981). From this perspective, computer technology and e-learning enable learners to make use of various tools outside the classroom and foster their language acquisition and self-learning (Godwin-Jones, 2011) so that they can use the technology and carry out PLEs under their own control.

It is a fact that technology is increasing and gaining popularity steadily, and the new concepts and applications regarding online learning are becoming obvious and available for language acquisition. It nevertheless has to be said that there have been a limited number of studies conducted in the Turkish context about PLEs compared with LMSs and VLEs (Göksel & Mutlu, 2021). In language learning, Pegrum (2009) pointed out that learners can form a community of practice by applying the features of PLE in their language learning process. When encouraged actively by

teachers, students are more likely to develop a consciousness of their language needs including writing skill. With awareness of their needs and based on their own interests, students can support development of their writing skill by making use of PLEs (Harwood, 2014). Laakkonen (2011) suggested that these environments have important roles in bringing structured and unstructured language-learning platforms together, following and encouraging the learning process in online courses. Warschauer and Healey (1998) pointed out in their overview study of computers and language that online writing opens the door for learners to practise and then improve their writing and suggested that second-language teachers also have to equip their learners with effective online writing skills.

In order to support learning and continue professional development, there have been numerous digital tools available on the internet. Some examples of these tools are as follows: academic search (Google Books, Google Scholar), citing documents (Mendeley, EndNote), keeping notes (Google Keep, Evernote), storification (StoryJumper, Story Bird), forming documents (Blendspace, Padlet), interaction, brainstorming and cooperation (AnswerGarden, Tricider, Vocaroo) creating and making videos (EdPuzzle, Flipgrid, Powtoon, Vlogger), sharing and organising the content and videos (Google Docs, YouTube, YouTube Edu) and social media (Facebook, LinkedIn, Twitter). There is no doubt that there are many more websites and digital tools which can be used across the world, but it is important to point out that it can be difficult at times to access and manage all the useful websites. At that point, PLEs emerge to help learners to figure out how to access all the personalised tools easily and arrange and share on their own digital tools, which promotes a learner-centred approach to making learners autonomous. These applications can be defined as starting pages to have all the necessary tools on one website and to update them constantly. Among the PLEs, *Symbaloo*, *Netvibes* and *start.me* are the most popular ones used by many learners, teachers and educators. In this book chapter, the examples used in *Symbaloo* will be shared and dealt with in view of the language teaching and learning which they enable. In these PLEs, there are webmixes, widgets and tiles which are also called shortcuts to websites, and they provide learners with access to websites easily, collect reference lists, customise them personally and finally create a single learning space. Figure 3 shows a picture of a *Symbaloo* homepage.

Examining the previous studies about PLEs in language teaching, Anderson and Dron (2010) stated that the studies had generally been based on connectivism and that issue should be handled pedagogically and institutionally. Guth (2009) stated that PLEs help learners to develop personal blogs, podcasts and videos and create a unique digital environment in the process of autonomous learning. Harwood (2014) studied the use of *Symbaloo* to support undergraduate and postgraduate learners of English for Academic Purposes and concluded that the online learning environment is beneficial for learners to improve their language-learning proficiency and enables students to go beyond the curriculum and become more autonomous. In online learning, Warschauer (1996a) suggested that computer-mediated platforms help learners to share knowledge and information, endorsing collaborative writing as

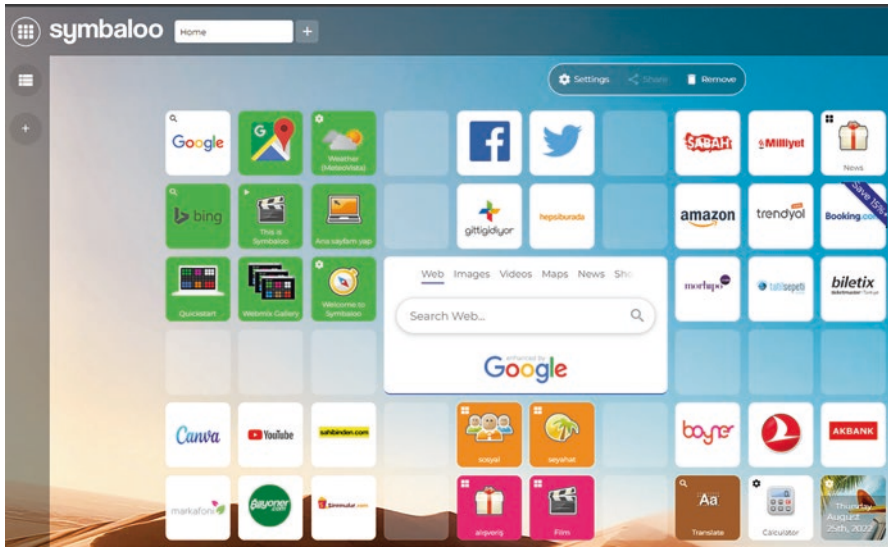


Fig. 3 Symbaloo homepage sample. (Retrieved from <https://www.symbaloo.com/home/mix/13eOhKV7Yf>)

well as building up digital audio and videos. Marín et al. (2012) studied *Symbaloo* as a PLE organiser in higher education and found that it is a practical tool for fostering and constructing PLE and that most of the student participants benefited from this tool for academic purposes. In order to promote and support learning by using *Symbaloo*, Harwood (2011) suggested that social media tools should be integrated into the curriculum and that teachers should be supported by sufficient training in how to use PLEs and facilitate learning and address the webmix content to raise awareness among the class. With that being said, in a writing class where most students are self-aware of their language needs, teachers should encourage self-study habits amongst their students. As PLEs encourage independent learning beyond the classroom, students can improve their writing skills successfully (Reinders, 2014).

As in the case of other technologies, PLEs also have some limitations and weaknesses. First, it should be noted that these personal platforms are generally offered to users freely with their basic features, but that if the users try to obtain a pro version, they need to pay. This shows that PLEs are not guaranteed to last forever, so the learners should be ready to change and adapt themselves to novel applications. Second, there are issues which need to be considered in using PLEs, such as advertisements and cyber bullying (Alazab, 2020). The former are mostly visible on the screen so that most PLE communities can cover the costs of providing the service, and the latter creates an open environment for the insecurity stemming from incorrect usages. Third, it can sometimes be difficult for learners to collaborate with their peers through webmixes using PLEs.

1.4 Digital Writing Tools for Personal and Classroom Use

Expectations from a language teacher who tries to help learners to develop their autonomy are usually high and the tasks which the teacher has to do so are physically and mentally demanding. The typical workload and work routine of a language teacher increased and became more complicated after classes were moved online during the coronavirus pandemic. There is no denying that teaching during the pandemic has become more difficult and that teachers' work and personal life have been deeply affected while they are coping with the inevitable challenges in the midst of the pandemic. However, online is not only the mode of delivery but online learning has also been very different and difficult on the part of students (MacIntyre et al., 2020). Developing learner autonomy, monitoring learners' engagement and progress, providing indirect corrective feedback (Pham & Iwashita, 2018), students' digital literacy and classroom interaction between teacher and students as well as between students themselves have all grown in importance in a virtual language classroom. Particularly in the last two decades, advances in technology have profoundly reconstructed how language learners interact with their peers and with their teacher, receive feedback and learn to write (Oh, 2020). This redesign has brought about both challenges and opportunities. An example of the opportunities can be found in the study of Luef et al. (2020) who found that some smartphone apps had a significant impact on informal foreign-language learning. Teachers are therefore expected to engage students in formal and informal education. For example, collaborative writing in knowledge-building forums was demonstrated to be effective in increasing students' proficiency in English as students engage in idea-centred discussions, state their opinions, share information and experiences, and develop knowledge with their peers (Manegre & Gutiérrez-Colón, 2020). When it comes to computer-mediated language learning, collaborative writing and developing learner autonomy are issues which teachers should really focus on because by doing so, students will become decision-making learners who can set their own goals and pursue them. Kessler and Bikowski (2010) reported on the 16-week language learning experiences of 40 pre-service EFL teachers in which they engaged in a long-term wiki-based collaborative activity. Over the course of an academic term, students added new information, deleted information, elaborated on information, synthesised information and added web links to collaboratively construct a wiki. The findings showed that students benefit from opportunities to practise autonomy in collaborative writing activities and their interaction and language use also reportedly benefit from a flexible learning environment.

Many English language learners use various supplementary resources such as spell checkers, digital writing assistants and search engines as they learn and before they submit their writings (Barrot, 2020). Language teachers should therefore take the use of these tools into consideration when they assess students' writing. Oh (2020) found that students who used writing resources in English significantly outperformed those who did not. Writing teachers cannot deny this evidence. Acquiring writing skills is fairly demanding both in classroom learning and distance learning since the orthographic features of the Turkish language are different from those of

English. Thus, this book chapter also considers some classroom practices based on research and teachers' experiences over the course of the pandemic.

There is a long list of resources which students can use to improve their writing skills. One of them is corpus-based web tools which enable language learners to find authentic sentences and collocations for a specific target word. These tools process the word's collocates and other words in its surrounding material. They can be used not only by language learners but also by terminologists, lexicographers, translators and teachers. Even though it is necessary to have a paid subscription to be able to use most well-known tools available on the web, they offer free trials and even open versions of the engines but with limited corpora.

At this point, it should be noted that artificial intelligence (AI) powered writing assistants can also help students to write correct English and even help them to improve their writing skills (Barrot, 2020). There has been a growing number of applications on the market and most of them offer a free plan. For example, 'Grammarly', 'SentenceCheckup' and 'Slick Write' among others can be used for free up to a specific number of times a month without any registration. Many writing assistant tools are compatible with all types of popular operating systems and allow students to perform their writing using web browsers such as Chrome, Edge, Safari and Firefox provided that they download the browser extension (Fig. 4).

A growing number of studies have examined the effect of automated written corrective feedback (AWCF) in teaching writing and computer-mediated feedback with the increasing advance of instructional and educational technologies (Barrot, 2020; Hyland & Hyland, 2019; Koltovskaia, 2020; O'Neill & Russell, 2019). A case study, which was conducted at a US university, explored ESL undergraduate students' engagement with AWCF provided by a digital writing assistance tool. Two undergraduate students enrolled in the International Freshman Second Language Writing course took part in the study. The assignments were to write an annotated bibliography, a research proposal and a research proposal presentation. The students utilised a free version of the *Grammarly* tool when revising a final draft of each assignment. At the end of the study, both participants made moderate changes to their drafts by eliminating the errors detected by the writing assistance tool (Koltovskaia, 2020). At

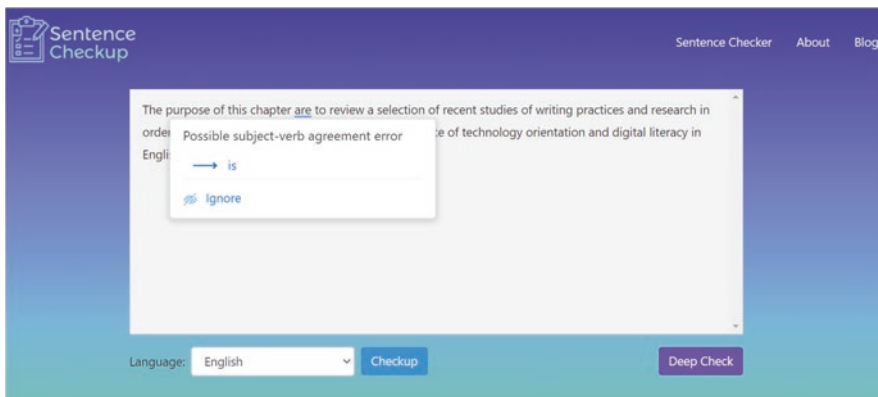


Fig. 4 SentenceCheckup. (Retrieved from <https://sentencecheckup.com/>)

this point, it is important to note the close relationship between indirect corrective feedback, students' growth in linguistic proficiency and the frequency of autonomous learning behaviours. Implementing indirect corrective feedback has a positive impact on developing writing skill and learner autonomy (Pham & Iwashita, 2018). In another study, the researchers investigated 96 university students' perceptions of an AI-powered writing assistant (paid version) when used in conjunction with advice from an academic learning advisor. The study took place at an Australian university and data were collected over one academic term by adopting a mixed-methods sequential explanatory design. The results showed that students receiving feedback from the AI-powered writing assistant responded more positively to the majority of the survey items and were significantly more satisfied with the feedback which they received compared with the students in the control group. Despite little empirical evidence to date supporting the use of AI-powered writing assistants and grammar checkers, it is recommended that these tools be utilised for classroom and distance learning on condition that their use is accompanied by the teacher (O'Neill & Russell, 2019). One of AWCF tools above is explained here in further detail with respect to its pros and cons as well as limitations.

Basic Features of *Grammarly* and a Brief Tutorial

Grammarly is a commercial AWCF tool that provides immediate and specific feedback and opening new insights into L2 classrooms (Ranalli, 2018). The software basically functions as a writing assistant and helps learners detect spelling, punctuation, and other common error in digital documents. How *Grammarly* works is quite simple and easily accessible via www.grammarly.com. To start using this interactive tool, learners can either paste or upload a text and the text is given an overall score based on the number of issues the software detects (O'Neill & Russell, 2019). The issues are grouped under two main categories; correctness and clarity. The number of issues within either group is counted and shown. Users see spelling, grammar and punctuation errors under the correctness category whereas clarity helps users make their text precise and easy to read (Fig. 5).

Pros and Cons

The free version of *Grammarly* provides learners with instant indirect and direct feedback on spelling and grammar in addition to conventions (spacing, capitalisation). Subsequent to uploading the paper, the tool shows the indirect feedback with errors underlined as red on the left-hand side of the screen and direct feedback on the right-side indicating error types and possible error correction. Based on the suggestions made by *Grammarly*, language learners can understand which writing skills they need the most immediate help and this is particularly conducive to independent learning considering teachers generally have little time to offer individual help to students (Fig. 6).

Besides correctness, this software can help learners with word choice and phrasing by pointing at unclear sentences and redundant phrases. It is not uncommon to see learners in elementary writing classes who use the same word repeatedly or use a large number of filler words, but writing is most effective when it is concise (Fig. 7).

In the extant literature, several scholars (Dikli & Bleyle, 2014; Zhang, 2017) point out the benefits of using AWC tools to improve writing quality such as *Grammarly*. However, there are lack of studies investigating student engagement using this tool. Koltovskaia (2020) examined student

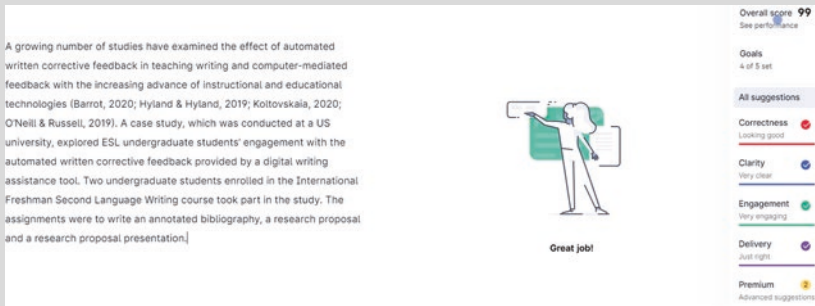


Fig. 5 Sample text and issues found. (Retrieved from <https://www.grammarly.com>)

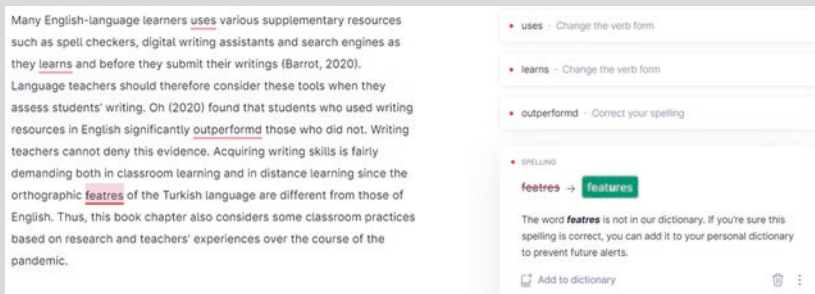


Fig. 6 Correctness. (Retrieved from <http://www.grammarly.com>)

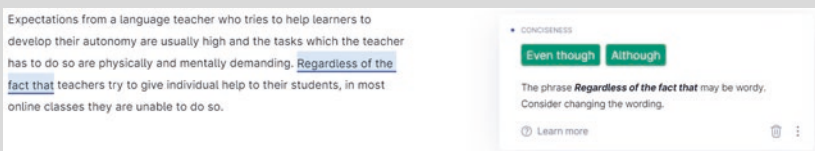


Fig. 7 Clarity (Retrieved from <https://www.grammarly.com>)

(continued)

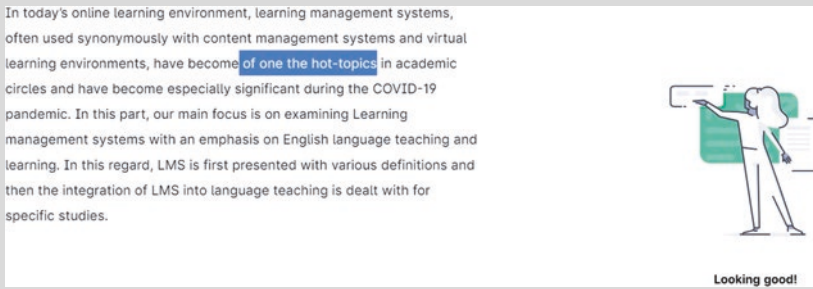


Fig. 8 Problems in detecting errors (Retrieved from <https://www.grammarly.com>)

engagement with AWCF and stated that due to linguistic competence, students with low level proficiency do not benefit from *Grammarly* in a proper way. Thus, this can be seen as a limitation to use *Grammarly*. Besides, finding certain errors in sentence structures is a little problematic in *Grammarly*. The tool does not determine the basic errors in using the syntax formation. In order to utilize this tool effectively, proper guidance and training are recommended for the learners to become effectively engaged especially when revising the final manuscript. The free version of *Grammarly* offer suggestions over 150 types of grammar and spelling errors, while *Grammarly Premium* plan covers correction for over 400 types of grammatical issues (Zhang et al., 2020) (Fig. 8).

Sample Activity (Students with the Least Number of Errors)

Becoming a better writer takes practice. To this end, writing teachers can use this tool in their writing classroom to help their students improve writing skills and reach higher academic writing quality. Considering AWCF tools are more useful in groups of students with at least intermediate level of English proficiency, the sample activity presented in this chapter is targeted at upper-intermediate level group university students at preparatory year foreign language programmes. Given that more and more courses are moving online nowadays, this is an online academic writing class where students are writing on computers and tablets.

How it works

- The teacher splits the classroom into pairs, so each student is paired with another student.
- Students write a specific type of paragraph/essay within a time period decided by the teacher. The teacher warns them and tell them, “unlike some other activities in their class, grammatical correctness (accuracy) is of the utmost important this time.”

(continued)

- When time is up, each student submits their paragraph/essay to his/her pair, so he/she reads the other student's paragraph/essay to spot grammatical errors. When he/she is unable to find any more errors, each student copies and pastes (or uploads) the text into *Grammarly Free*. The pairs discuss the issues they found and the tool detected with their partners, and they reflect on their mistakes.
- The free version does not flag all the grammatical issues, and there will probably be issues that are missed, so students can ask their questions to their peers and to their teacher for clarification, which fosters autonomy.

After that, students correct all the mistakes and submit the final version of their papers to the teacher and he/she reads the papers based on pre-determined criteria and gives students immediate evaluative feedback as well as corrective feedback.

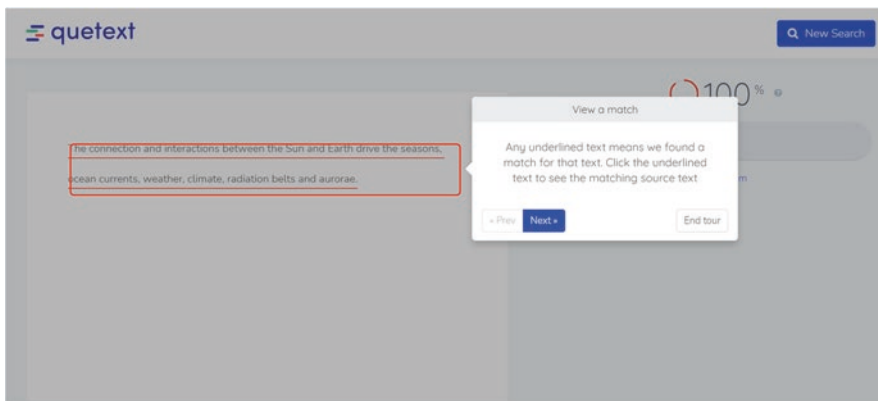


Fig. 9 Quetext (Retrieved from <https://www.quetext.com/>)

There are various digital tools which teachers can use in the writing classroom. As EFL teachers, every week we read and grade a pile of papers from our students and this is a really demanding task for writing teachers. The internet and computers facilitate learning and acquiring information, so students can complete their assignments expeditiously. Unfortunately, teachers do encounter students who commit internet plagiarism (Santosa et al., 2019), but teachers also have a broad range of digital tools to help them to spot plagiarism. Plagiarism detection tools or content similarity detection tools are widely used by both teachers and students. The main function of this anti-plagiarism software is to identify unoriginal passages in an electronically submitted document by checking against a wide selection of online resources, books and scholarly articles (Fig. 9).

Results	Query	Domains (original links)
319 results	magnetic field at the edge of the shock wave and subsequently accelerated by the motion	man.com sciencedaily.com nsw.sioea.edu greatlesledger.com scitechdaily.com shvs.org xpress.co.uk naldentk.com theinnovativelife technobreaker.com
Unique	Then the reflected electrons spiral along interstellar magnetic field lines, gaining speed as the	-

Fig. 10 Plagiarisma result (Retrieved from <http://plagiarisma.net/>)

Fortunately, there are dozens of widely available content similarity detection tools and most of them, such as *Quetext*, *Copyscape* and *Plagiarism Checker X*, offer a free plan whereas *Plagiarisma*, *Duplichecker* and *Smallseotools* are completely free. There are also paid-for plagiarism detection tools such as *Turnitin*, *iThenticate* and *Scribbr* on the market (Grammarly, n.d.-a, b; Scribbr, n.d.; Turnitin, n.d.) (Fig. 10).

Content similarity detection tools all serve to prevent plagiarism, so a teacher can utilise these tools to scrutinise papers at a faster rate. However, preventing plagiarism is a responsibility of the school or institution as well as the course teacher. Preventing and detecting plagiarism is all about academic integrity. Academic integrity refers to acknowledging the ideas of others by providing credit to them when you use them as part of your argument (Beasley, 2016; Frost & Hamlin, 2015). Razi (2015) recommended that schools should develop an institutional policy to prevent plagiarism because it requires more than simply the cooperation of teachers. Various studies have explored language teachers' and EFL students' perceptions and practices regarding content similarity detection tools. Nova and Utami (2018) investigated Indonesian EFL students' experiences and perceptions of *Turnitin* in academic writing classes at a university. To the students' surprise, only a few participants managed to get low similarity scores, so they were largely unsatisfied with the similarity results. However, the use of a plagiarism checker also led some students to develop awareness of the importance of originality in academic writing. Some students reported that they had become progressively more careful to produce original content. Liu and Wu (2020) investigated 141 Chinese undergraduate EFL learners' perceptions of plagiarism and their practice of citing sources properly in their academic writing papers by means of plagiarism checking software. The findings showed that the students substantially avoided plagiarism by summarising, paraphrasing and using direct quotes. The study also delved into the reasons for plagiarism in a class of academic writing. The top reasons given by the students were being too lazy to search for information, gaining some benefits, lacking creative ideas and not knowing the rules for how to cite properly. In the Turkish context, few studies have looked into similarity detection practices in writing classes, one of which was an action study by Köse and Arikan (2011), who explored the perceptions of 40 undergraduate students at an English-medium instruction university in Turkey on academic integrity and evaluated the effectiveness of *Turnitin* software in detecting and helping students to lower the level of similarity to an acceptable level by giving them a similarity report on their submissions. Surprisingly, it was found that more than a quarter of

the students did not consider plagiarism to be an important academic offence. Nearly half of the students had peers who deliberately committed plagiarism at the university. This act reportedly took place in the form of an exchange of essays between students enrolled in different academic writing classes. *Turnitin*, by and large, was effective in promoting students' understanding of the moral code in an academic setting and in making them revise their work and thereby reducing the level of plagiarism.

2 Conclusion

The teaching and learning about writing practices presented in this chapter has described some technologies used by language teachers to assist them in developing students' writing skills. Our focus in this chapter was therefore to exemplify writing teachers' suddenly imposed divergence from the traditional teaching setting to a virtual classroom setting due to the COVID-19 pandemic and based on the findings reported in the recent literature, we have suggested some practices which could lead to a feedback-rich learning environment. Even though the contexts discussed in this chapter differ in many respects, all of them have one thing in common: they provide evidence of good practices inside and outside the classroom which foster learner autonomy.

Both language teachers and students have taken on some tough challenges during the ongoing pandemic and there have been fundamental changes in the teaching and learning processes. Surprisingly, the pandemic has also enabled us to envisage some new possibilities for English language learners and teachers. With so many assignments delivered online, a growing number of writing teachers have started to use similarity detection tools as well as automated scoring systems for different essay types. In a parallel way, the use of LMSs and PLEs for providing feedback and taking responsibility for the learning process has also gained prominence because nowadays more flexibility is needed for student learning to happen. Fortunately, LMSs incorporate a variety of digital tools and functions for the teaching and learning processes and offer flexibility both inside and outside the classroom and, although there is a clear limitation for the learners especially after graduation, these systems can be used in traditional face-to-face, blended and flipped classrooms. It is worth mentioning a common issue at this point which is the possible under-utilisation of these technologies for teaching and learning (Washington, 2019). As teachers, we should keep in mind that LMSs are not only administrative tools, but they can be used to enable students to study material at their own pace and by interacting with their peers when the learning environment is appropriately prepared for them. It is important to note that as writing teachers, we should always remember that technology is neither helpful nor harmful by its nature because it is just a tool to be used to promote the language-learning process.

Another conclusion drawn from the reviewed studies is the need for classrooms where students take on more responsibilities for their own learning. When the

learning environment is appropriately designed and more flexibility is given to students, they are more likely to show a higher level of involvement in autonomous language learning. To foster learner autonomy in writing classes, teachers should remember that for most student writers, indirect corrective feedback is effective and provides an ideal opportunity for learners to solve problems and make learning decisions.

3 Implications

Despite the differing contexts illustrated in this chapter, the issues which teachers and learners experience and the reported benefits of technology-mediated learning seem very much alike. This study has a number of practical implications for guiding writing instruction for EFL teachers and learners. Based on the findings of the studies reviewed in this chapter, it can be synthesised that in classes with few autonomous and self-directed learners it will be more difficult for students to utilise the digital writing tools effectively. If language teachers are to use LMSs, PLEs or other digital tools, specifically writing tools in teaching, they should also remember that providing non-evaluative and timely feedback on students' drafts plays a crucial role. That is, technology can help to facilitate student learning, but it is the teacher who designs the course and inspires and engages students. As discussed earlier in this chapter, there has been little research in Turkey with regard to new practices in teaching writing and furthermore most of these studies have been exploratory in design. It can also be suggested that students taking writing classes be made aware of the recommended practices concerning academic integrity. Despite the limited number of studies investigating academic integrity across various foreign-language-learning settings around the world, studies are even fewer in the Turkish context. This gap in the literature requires more research to be carried out in writing classes in Turkey and elsewhere. The evidence presented in this study indicates a need for more rigorously designed confirmatory and longitudinal studies. Finally, since technology-enhanced teaching and learning is being given attention in EFL contexts, it can be suggested that researchers and educators revise both graduate and postgraduate syllabuses and integrate courses fostering digital literacy and benefiting from technology to make pre-service EFL teachers more ready for the inevitable changes and ultimately more aware of learner autonomy.

References

- Adams, C. (2010). Learning management systems as sites of surveillance, control, and corporatization: A review of the critical literature. In D. Gibson & B. Dodge (Eds.), *Proceedings of SITE 2010-society for information technology & teacher education international conference* (pp. 252–257). Association for the Advancement of Computing in Education (AACE). <https://www.learntechlib.org/primary/p/33345/>

- Alazab, M. (2020). Automated malware detection in mobile app stores based on robust feature generation. *Electronics*, 9(3), 1–20. <https://doi.org/10.3390/electronics9030435>
- Aldiab, A., Chowdhury, H., Kootsookos, A., Alam, F., & Allhibi, H. (2019). Utilization of learning management systems (LMSs) in higher education system: A case review for Saudi Arabia. *Energy Procedia*, 160, 731–737. <https://doi.org/10.1016/j.egypro.2019.02.186>
- Altas, E. A., & Mede, E. (2021). The impact of flipped classroom approach on the writing achievement and self-regulated learning of pre-service English teachers. *Turkish Online Journal of Distance Education*, 22(1), 66–88. <https://doi.org/10.17718/tojde.849885>
- Altunkaya, H., & Ayranci, B. (2020). The use of Edmodo in academic writing education. *Journal of Language and Linguistic Studies*, 16(1), 89–103. <https://doi.org/10.17263/jlls.712659>
- Anderson, T. (2005). Distance learning – Social software’s killer ap? In *Proceedings of the Open & Distance Learning Association (ODLAA) of Australia*. ODLAA. https://auspace.athabasca.ca/bitstream/handle/2149/2328/distance_learning.pdf?sequence=1&isAllowed=y
- Anderson, T., & Dron, J. (2010). Three generations of distance education pedagogy. *The International Review of Research in Open and Distributed Learning*, 12(3), 80–97.
- Attwell, G. (2007). Personal learning environments-the future of eLearning. *eLearning Papers*, 2(1), 1–8.
- Attwell, G. (2010). *Personal learning environments and Vygotsky*. <https://www.pontydysgu.org/2010/04/personal-learning-environments-and-vygotsky>
- Barrot, J. S. (2020). Integrating technology into ESL/EFL writing through Grammarly. *RELC Journal*. <https://doi.org/10.1177/0033688220966632>
- Basal, A. (2015a). The implementation of a flipped classroom in foreign language teaching. *Turkish Online Journal of Distance Education*, 16(4), 28–37.
- Basal, A. (2015b). Perceptions of pre-service English teachers towards the integration of an LMS into English language teacher education. *Journal of Technology and Teacher Education*, 23(4), 485–507.
- Beasley, E. M. (2016). Comparing the demographics of students reported for academic dishonesty to those of the overall student population. *Ethics & Behavior*, 26(1), 45–62. <https://doi.org/10.1080/10508422.2014.978977>
- Buchem, I., Attwell, G., & Torres, R. (2011). Understanding personal learning environments: Literature review and synthesis through the activity theory lens. In *The PLE conference 2011*. Southampton.
- Chatti, M. A., Jarke, M., & Specht, M. (2010). The 3P learning model. *Journal of Educational Technology & Society*, 13(4), 74–85. <https://www.jstor.org/stable/pdf/jeductechsoci.13.4.74.pdf>
- Cinganotto, L., & Cuccurullo, D. (2016). PLE & PLN for language learning and teaching: A case study. *International Journal for 21st Century Education*, 3(2), 35–48. <https://doi.org/10.21071/ij21ce.v3i2.5853>
- Dabbagh, N., & Kitsantas, A. (2012). Personal learning environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. *Internet and Higher Education*, 15(1), 3–8. <https://doi.org/10.1016/j.iheduc.2011.06.002>
- Dikli, S., & Bleyle, S. (2014). Automated essay scoring feedback for second language writers: How does it compare to instructor feedback? *Assessing Writing*, 22, 1–17. <https://doi.org/10.1016/j.asw.2014.03.006>
- Docebo. (n.d.). *Pricing*. <https://www.docebo.com/pricing/>
- Downes, S. (2005). E-learning 2.0. *eLearn Magazine*, 10. <https://dl.acm.org/doi/fullHtml/10.1145/1104966.1104968>
- Dudeney, G., & Hockly, N. (2007). *How to teach English with technology*. Pearson Education Limited.
- Edutechnica. (2020). *8th annual LMS data update*. <https://edutechnica.com/tag/lms/>
- Fageeh, A., & Mekheimer, M. A. A. (2013). Effects of blackboard on EFL academic writing and attitudes. *The JALT CALL Journal*, 9(2), 169–196.
- Frost, J., & Hamlin, A. (2015). A comparison of international student attitudes concerning academic dishonesty. *International Journal Business Review*, 14(2), 153–165.

- García-Peñalvo, F. J., & Conde, M. Á. (2015). The impact of a mobile personal learning environment in different educational contexts. *Universal Access in the Information Society*, 14(3), 375–387. <https://doi.org/10.1007/s10209-014-0366-z>
- Gates, B. (n.d.). *EdTech: Using technology in education*. <https://resourced.prometheanworld.com/using-edtech-technology-education/>
- Godwin-Jones, R. (2011). Emerging technologies autonomous language learning. *Language Learning & Technology*, 15(3), 4–11. https://scholarspace.manoa.hawaii.edu/bitstream/10125/44255/15_03_emerging.pdf
- Göksel, N., & Mutlu, M. E. (2021). İngilizce öğrenmede kişisel öğrenme ortamlarının kullanımı: Anadolu Üniversitesi Açıköğretim Fakültesi örneği [Use of personal learning environments in English learning: An example of Anadolu University Open Education Faculty]. *Anadolu Journal of Educational Sciences International*, 11(1), 88–115. <https://doi.org/10.18039/ajesi.739788>
- Grammarly. (n.d.-a). *Introducing the grammarly editor*. <https://support.grammarly.com/>
- Grammarly. (n.d.-b). *Plans*. <https://www.grammarly.com/plans>
- Guth, S. (2009). Personal learning environments for language learning. In M. Thomas (Ed.), *Handbook of research on Web 2.0 and second language learning* (pp. 451–471). IGI Global. <https://doi.org/10.4018/978-1-60566-190-2.ch024>
- Harwood, C. (2011). Using personal learning environments (PLEs) to encourage peer learning and learner autonomy. *Technology in Pedagogy*, 6(1), 1–6.
- Harwood, C. (2014). Personal learning environments: Using SymbalooEDU in learning English for academic purposes. *ESP Today*, 2(2), 199–215.
- Holec, H. (1981). *Autonomy and foreign language learning*. Pergamon Press.
- Hyland, K., & Hyland, F. (Eds.). (2019). *Feedback in second language writing: Contexts and issues*. Cambridge University Press.
- Ifenthaler, D. (2012). Learning management system. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning*. Springer. https://doi.org/10.1007/978-1-4419-1428-6_187
- Kessler, G., & Bikowski, D. (2010). Developing collaborative autonomous learning abilities in computer mediated language learning: Attention to meaning among students in wiki space. *Computer Assisted Language Learning*, 23(1), 41–58. <https://doi.org/10.1080/09588220903467335>
- Koltovskaia, S. (2020). Student engagement with automated written corrective feedback (AWCF) provided by Grammarly: A multiple case study. *Assessing Writing*, 44, 1–12. <https://doi.org/10.1016/j.asw.2020.100450>
- Köse, Ö., & Arikan, A. (2011). Reducing plagiarism by using online software: An experimental study. *Contemporary Online Language Education Journal*, 1, 122–129.
- Laakkonen, I. (2011). Personal learning environments in higher education language courses: An informal and learner-centred approach. In S. Thouëсны & L. Bradley (Eds.), *Second language teaching and learning with technology: Views of emergent researchers* (pp. 9–28). Research-publishing.net. <https://doi.org/10.14705/rpnet.2011.000004>
- Laakkonen, I., & Taalas, P. (2015). Towards new cultures of learning: Personal learning environments as a developmental perspective for improving higher education language courses. *Language Learning in Higher Education*, 5(1), 223–241. <https://doi.org/10.1515/cercles-2015-0011>
- Laffen, A. (2019). What LMS site statistics tell us about timing instructor feedback on student writing. *Journal of Response to Writing*, 5(2), 46–71.
- Laffen, A., & Smith, M. (2017). Responding to student writing online: Tracking student interactions with instructor feedback in a learning management system. *Assessing Writing*, 31, 39–52. <https://doi.org/10.1016/j.asw.2016.07.003>
- Lankshear, C., & Knobel, M. (2007). Sampling “the new” in new literacies. In M. Knobel & C. Lankshear (Eds.), *A new literacies sampler* (pp. 1–24). Peter Lang.
- Liu, M., & Wu, Y. (2020). Chinese undergraduate EFL learners’ perceptions of plagiarism and use of citations in course papers. *Cogent Education*, 7(1). <https://doi.org/10.1080/2331186X.2020.1855769>

- Luef, E. M., Ghebru, B., & Ilon, L. (2020). Apps for language learning: Their use across different languages in a Korean context. *Interactive Learning Environments*, 28(8), 1036–1047. <https://doi.org/10.1080/10494820.2018.1558255>
- MacIntyre, P. D., Gregersen, T., & Mercer, S. (2020). Language teachers' coping strategies during the Covid-19 conversion to online teaching: Correlations with stress, wellbeing and negative emotions. *System*, 94, 1–13. <https://doi.org/10.1016/j.system.2020.102352>
- Manegre, M., & Gutiérrez-Colón, M. (2020). Foreign language learning through collaborative writing in knowledge building forums. *Interactive Learning Environment*. <https://doi.org/10.1080/10494820.2020.1836499>
- Marín, V., Salinas, J., & de Benito, B. (2012, July). *Using SymbalooEDU as a PLE organizer in higher education*. The PLE Conference 2012, Aveiro, Portugal. <http://revistas.ua.pt/index.php/ple/article/view/1427>
- Martindale, T., & Dowdy, M. (2010). Personal learning environments. In G. Veletsianos (Ed.), *Emerging technologies in distance education* (pp. 177–193). Athabasca University Press.
- McLoughlin, C., & Lee, M. J. W. (2010). Personalised and self-regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software. *Australasian Journal of Educational Technology*, 26(1), 28–43. <https://doi.org/10.14742/ajet.1100>
- Milligan, C. D., Beauvoir, P., Johnson, M. W., Sharples, P., Wilson, S., & Liber, O. (2006). Developing a reference model to describe the personal learning environment. In W. Nejdil & K. Tochtermann (Eds.), *Innovative approaches for learning and knowledge sharing – First European conference on technology enhanced learning* (pp. 506–511). Springer. https://doi.org/10.1007/11876663_44
- Mott, J., & Wiley, D. (2009). Open for learning: The CMS and the open learning network. *In Education*, 15(2). <http://ourspace.uregina.ca/handle/10294/2954>
- Nova, M., & Utami, W. H. (2018). EFL students' perception of Turnitin for detecting plagiarism on academic writing. *International Journal of Education*, 10(2), 141–148.
- O'Neill, R., & Russell, A. M. T. (2019). Stop! Grammar time: University students' perceptions of the automated feedback program Grammarly. *Australasian Journal of Educational Technology*, 35(1), 42–56. <https://doi.org/10.14742/ajet.3795>
- Oh, S. (2020). Second language learners' use of writing resources in writing assessment. *Language Assessment Quarterly*, 17(1), 60–84. <https://doi.org/10.1080/15434303.2019.1674854>
- Oliver, K. (2001). Recommendations for student tools in online course management systems. *Journal of Computing in Higher Education*, 13(1), 47–70. <https://doi.org/10.1007/BF02940944>
- Panagiotidis, P. (2012). Personal learning environments for language learning. *Social Technologies*, 2(2), 420–440. <https://www3.mruni.eu/ojs/social-technologies/article/view/207/198>
- Pegrum, M. (2009). Communicative networking and linguistic mashups on web 2.0. In M. Thomas (Ed.), *Handbook of research on Web 2.0 and second language learning* (pp. 20–41). Information Science Reference. <https://doi.org/10.4018/978-1-60566-190-2.ch002>
- Pham, N. L., & Iwashita, N. (2018). Using corrective feedback on writing to enhance Vietnamese learners' autonomy. In A. Burns & J. Siegel (Eds.), *International perspectives on teaching the four skills in ELT* (pp. 205–218). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-63444-9_15
- Ranalli, J. (2018). Automated written corrective feedback: How well can students make use of it? *Computer Assisted Language Learning*, 31(7), 653–674. <https://doi.org/10.1080/09588221.2018.1428994>
- Razi, S. (2015). Development of a rubric to assess academic writing incorporating plagiarism detectors. *SAGE Open*, 5(2), 1–13. <https://doi.org/10.1177/2158244015590162>
- Reinders, H. (2014). Personal learning environments for supporting out-of-class language learning. *English Teaching Forum*, 52(4), 14–19. <http://unitec.researchbank.ac.nz/handle/10652/2964>
- Santosa, M. H., Paramartha, A. A. G. Y., & Absari, R. M. (2019). Indonesian English university students' perceptions on plagiarism in the online world era. *Journal of ELT Research*, 4(2), 100–114. https://doi.org/10.22236/JER_Vol4Issue2pp100-114
- Schoolology. (n.d.). *Request a demo*. <https://www.schoolology.com/request-a-demo>

- Scribbr. (n.d.). *Prices*. <https://www.scribbr.co.uk/plagiarism-checker/>
- Topacio, K. N. M. (2018). Exploring the use of online educational platform in teaching writing among ESL students. *Journal of Language and Linguistic Studies*, 14(21), 86–101.
- Türker, M. A., & Zingel, S. (2008). Formative interfaces for scaffolding self-regulated learning in PLEs. *Elearning Papers*, 14(9), 1–15. https://www.researchgate.net/profile/Mustafa_ali_Turker/publication/28264184_Formative_Interfaces_for_Scaffolding_Self-Regulated_Learning_in_PLEs/links/555c4a7608ae6aea08173737.pdf
- Turnitin. (n.d.). *Get started with Turnitin*. <https://www.turnitin.com/contact#tab-2>
- Van Harmelen, M. (2006, July). Personal learning environments. In *Sixth IEEE International Conference on Advanced Learning Technologies (ICALT'06)*. IEEE. https://www.researchgate.net/profile/Oleg_Liber/publication/220095391_Personal_Learning_Environments/links/0deec518100ccb69d8000000/Personal-Learning-Environments.pdf
- Warschauer, M. (1996a). Computer assisted language learning: An introduction. In S. Fotos (Ed.), *Multimedia language teaching* (pp. 3–20). Logos International. <http://www.ict4lt.org/en/warschauer.htm>
- Warschauer, M. (1996b). Comparing face-to-face and electronic communication in the second language classroom. *CALICO Journal*, 13(2), 7–26.
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31(2), 57–71.
- Warschauer, M., & Meskill, C. (2000). Technology and second language learning. In J. Rosenthal (Ed.), *Handbook of undergraduate second language education* (pp. 303–318). Lawrence Erlbaum.
- Washington, G. Y. (2019). The learning management system matters in face-to-face higher education courses. *Journal of Educational Technology Systems*, 48(2), 255.275. <https://doi.org/10.1177/0047239519874037>
- Wilson, S., Liber, O., Johnson, M., Beauvoir, P., Sharples, P., & Milligan, C. (2007). Personal learning environments: Challenging the dominant design of educational systems. *Journal of E-learning and Knowledge Society*, 3(2), 27–38. <https://www.learntechlib.org/p/43419/>
- Xu, X., Zhu, X., & Chan, F. M. (2020). System design of Pintrich's SRL in a supervised-PLE platform: A pilot test in higher education. *Interactive Learning Environments*, 1–18. <https://doi.org/10.1080/10494820.2020.1802296>
- Zhang, Z. (2017). Student engagement with computer-generated feedback: A case study. *ELT Journal*, 71(3), 317–328. <https://doi.org/10.1093/elt/ccw089>
- Zhang, J., Zorluel Ozer, H., & Bayazeed, R. (2020). Grammarly vs. face-to-face tutoring at the writing center: ESL student writers' perceptions. *Praxis: A Writing Center Journal*, 17(2), 33–47.

Ömer Özer is an associate professor in the Faculty of Humanities and Social Sciences at Adana Alparslan Türkeş Science and Technology University, Turkey. He has published extensively in the areas of multilingual policies in higher education, mobile-assisted language learning and autonomous language learning.

Ceyhan Yükselir is an associate professor of English language teaching at the department of English language and literature, Osmaniye Korkut Ata University, Turkey. His research interests include teacher education, reflective teaching, learner autonomy, technology integration in EFL classes and applied linguistics with ELT focus.

Academic Writing Instruction Beyond the Classroom Walls: New Possibilities and Implications for English Language Teachers and Learners



İlknur Yüksel, Banu Çiçek Başaran Uysal, Emine Eren Gezen,
and Ümit Özkanal

Abstract Owing to ever-changing technological advances, the landscape of language education has been reformed significantly. The aim of the chapter is to provide theoretical and practical guidance for teachers and candidate teachers about how to integrate technology to academic writing instruction during online courses. In this chapter, a new generation of digital approaches to academic writing instruction would be discussed reviewing the related literature and then the instructional offers would be presented with available effective digital writing tools and task samples. The content of the chapter includes three subsections: (1), the theoretical discussion on academic writing and technology integration referring to digital writing and multimodal practices, (2), the practical implementations of the tools and tasks within the framework of Critical Reading and Writing course, and (3) evaluation and discussion on future research and practices. Available innovative online tools would be exemplified referring to the stages and processes of writing lesson; for example, *Lucidspark* for brainstorming, *Padlet*, *Cube Creator*, *Zoho Writer* for collaborative interactive writing and *Adobe Spark*, *Pixton* for adding visuals. Furthermore, implemented task samples using these tools and additional ideas for classroom practices are presented within the scope of the chapter.

Keywords Multimodal writing · Academic English · Online instruction · Technology integration · Web 2.0 tools

İ. Yüksel (✉) · B. Ç. Başaran Uysal · E. Eren Gezen · Ü. Özkanal
Eskişehir Osmangazi University, Eskişehir, Türkiye

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_12

1 Introduction

Online communication and technology-integrated education have gradually become more pervasive and common to keep up with the expectations of the 21st century. Such technology-based instructions have begun to replace the traditional instructional methods. Therefore, new technologies and digital instruments that foster a wide range of genres, educational settings and approaches started to appear. Writing has always been a critical and crucial skill in this technology-based era. The influence of the technology in our daily lives is inarguable; that's why it must be at the core of the writing education, as well. Using technology helps students to develop their writing skills, discuss their products with others and start self-revisions. In academic writing courses, various online discourses can be adopted from the pre-writing stages till the final feedback and evaluation session of the teacher, and lastly sharing the learners' products with others. However, it is obvious that technology cannot replace the need for an effective writing instruction as well as detailed and organized feedback (Topacio, 2018). Therefore, the digital writing applications are always supposed to align with the pedagogical aims. Teachers can widen their perspectives by exploring the digital applications or tools for their writing courses and see new ways of integrating and using them in their writing classrooms. One such approach to practice and improve writing skills is multimodal writing which incorporates several different elements (audio-visual, linguistic, spatial) to convey the meaning. Owing to the multilayered and dynamic nature of online environments, multimodal writing can efficiently be practiced through digital tools. In line with the suggestions of previous literature (Lim & Polio, 2020), this chapter focuses on investigating the use of multimodal writing in an online EAP course by presenting in-class tasks for improving digital literacy skills.

2 New Age; New Needs, New Approach to Writing Skill

The 21st century induces new life conditions and new needs with the rise of digital technology. Laptops and smartphones have become integral part of our daily lives, and thus the new learners are the internet generation who spend much time on social media and communicate with texts/voice messages, media, videos, and pictures. Such radical changes yield revolutionary innovations in education; fast-paced information exchange, full-access to learning resources, and many sharing platforms restructure the dynamics of teaching and learning. Course offerings, teachers' competences, tasks, materials are reconsidered and expanded according to the learners' changing needs in this new digital ecosystem.

The most salient changes could be observed in writing instruction for language learners. Rather than paper-pen-based, staged writing instruction, more open-minded approach to blending technology and focusing on digital language learners has been adapted nowadays (Elola & Oskoz, 2017). Multimodal compositions are

included in writing instructions by means of embedding linguistic and non-linguistic (visual, auditory, spatial, etc.) modes through digital tools. It should be clarified that multimodal writing does not mean to use technology to color writing with some visuals, audial or linguistic elements randomly, but to enable learners to express opinions in a more coherent and creative way. In this mode, the elements used in the manuscript are purposefully arranged to convey and aid the meaning of writing. In addition to audio-visual elements, multimodal texts can have hyperlinks, different fonts, and motion (Cope & Kalantzis, 2009; Lim & Polio, 2020). Through creating this type of texts, the learners can engage in dynamic, elaborate, and multifaceted writing for diverse audiences, and for various purposes. Jewitt (2009) suggested that employing multimodal writing helps learners to analyze and synthesize different types of texts and adapt the way they write for improved expression. Besides, collaboration and teamwork are promoted through this mode of writing practices.

First and foremost, the multimodal possibilities must be planned carefully by considering the contextual factors. There is a huge treasure trove of instruments to be used as modalities including posters, web pages, brochures, infographics; therefore, detailed information about their uses and potentials should be provided to the writers. More profoundly, the instructors should get together with the learners to collaborate on the composition development process. Mutual support is vital to improve teamwork and increase trust. Through collaboration, components such as the word choice, genre, descriptions, readers, setting, and tone may be specified. Also, coherence and cohesion are emphasized. At its core, there is a well-established interaction to encourage the learner and enable reflection. It enables writers to see their weak and strong points during the writing process. Reflection sessions can be conducted with the participation of learners and the instructor. With the help of this self-examination procedure, working and lacking points can be seen during the development of multimodal writing tasks. Thus, an overall evaluation is made, and the necessary steps are taken for further improvement.

To practice online multimodal writing effectively, the learners need to be knowledgeable about the topic at hand, possess critical literacy skills for determining the best way to communicate the message, employ technological competence to utilize the available tools innovatively, and exploit digital literacy skills to understand and use technology for creative writing. Similar to the traditional writing processes, multimodal writing requires determining the purpose, audience, and the genre (Mills, 2010).

Since multimodal learning is interactive, collaborative, creative and motivating (Arslan, 2020; Edwards-Groves, 2011; Fernandez-Pacheco, 2018; Gordani & Khajavi, 2019; Hampel & Stickler, 2012; Leander & Boldt, 2013; Leon et al., 2011; Wu et al., 2018) it is currently practiced in many different contexts for language education. Additionally, the use of this writing mode enhances language development of learners (Dzekoe, 2017; Kim & Belcher, 2020; Vandommele et al., 2017). Through online tools, the learners can practice and improve their writing and digital literacy skills which incorporates critical reading and writing with technological competencies. Considering the potential advantages of employing online multimodal writing, it is important to underline the significance of integrating technology

in teacher education since it motivates and guides future teachers to utilize such tools in their own lessons (Egbert & Borysenko, 2018; Janssen et al., 2019). In addition, Yi and Choi (2015) argued that for teachers to effectively practice multimodal education, they should have first-hand experience during pre-service education and/or in-service training.

With the changes in writing instruction and the effects of technology on education, the definition of literacy has also been updated. As stated in Elola and Oskoz (2017), unlike the traditional definition of literacy, which describes it as mastering “monomodal” and “static” reading and writing skills, the current approaches to literacy centralize around “multimodal” and “dynamic” digital skills that promote collaboration and social interaction between the authors and the audience (p. 53). Thinking about this new definition, it can be seen that it is linked with another type of literacy, the digital literacy. It is characterized as the set of skills that combine technology, social practice, and critical thinking (Elola & Oskoz, 2017). In other words, for digital literacy, the learners need to employ technological competence, communicative competence, analytical thinking, and creativity which are considered among 21st century skills (Trilling & Fadel, 2012). The research underlines the importance of utilizing multimodal texts for improving digital literacy (Elola & Oskoz, 2017; Thorne & Reinhardt, 2008).

3 Writing with Its Complex Structure

Writing is a crucial component of student success in language education. It can also play an entrance ticket for getting employed or promoted in the work life, and there is a tendency for indicating that requirement for qualified writing at work will enhance in the upcoming years (Noermanzah et al., 2018; Karto et al., 2019). Nevertheless, it is seen as a problematic skill to acquire by L2 speakers because it requires an effective and complete writing education (Langan, 2013; Casanave, 2017). In writing, students need to have the appropriate topic, organization, content, format and mechanics such as structure, grammar and punctuation to give the meaning by means of writing at the same time (Lee & Lee, 2013). Hence, the complicated nature of writing requires imagination, concentration, confidence and affirmation from the teachers and peers (Connelly, 2013).

4 Online Writing

Education can be conducted everywhere; thus, language learning goes beyond the limits of the classroom walls (Yunus & Salehi, 2012), and writing, as one of the most important components, flourishes in many areas in today’s social life. Therefore, online writing is an integral part of online language learning. The web in the 21st century has seemingly changed with the rapid improvements of the social

web-sites as it was used to promote learning, and had an impact on instructional and learning methods, enabling critical thinking, creativity and collaboration (Noermanzah & Friantary, 2019). So far, various terms have been used to refer to social networking tools that support learning, such as the learning administration frameworks (LMSs), web 2.0 innovations, virtual learning environment (VLE) or course administration frameworks (CMS), collaborative learning, and mixed learning classroom (Conradie et al., 2014; Ekmekci, 2016; Qizi, 2020). In general, the common social component of computer programs is that it is a tool that promotes social interaction, collaboration, data collection, data exchange or mass communication (Klobas & Beesley, 2006; Woods & Thoeny, 2011), since collaborative learning requires exchange of shared knowledge and social interaction (Li, 2014). Specifically, those tools give people online virtual settings facilitating communication, collaboration and exchange of ideas and thoughts (McCarthy, 2010); in addition to editing writing, commenting on posts, editing or developing an understanding of certain ideas (Moonen, 2015; Yücel & Usluel, 2016).

Particularly, the methods of traditional language learning and teaching are influenced by several developments that have incorporated technology into education as new instructional methods. In the process of writing within the traditional curriculum, the dominant role is laid more on the teachers rather than the learners, as the students write on a specific topic by receiving instruction from their teacher, and then the teacher reads through their writing and lastly provides feedback to their products. Therefore, they receive only teacher feedback in this process (Yang et al., 2005). Yet, the technology-mediated writing classroom gives students the opportunity to collaborate and communicate with both their peers and their teachers. With the developments in technology, teachers and students are able to carry the collaborative writing activities to a broader extension by using the combination of the digital-based and online activities. It assists the L2 learners to finish the writing assignments and achieve the collaboration and communication goals simultaneously (Said & Lee, 2014). Therefore, it is easy to integrate an online community into the classroom so one can use the online platform for educational purposes with fun and meaningful learning environments in EFL classrooms. For example, the digital and social media platforms such as Facebook, Instagram, Twitter, Google Docs and Padlet (Suwantarathip & Wichadee, 2014, Moonen, 2015) can be used in writing classrooms. These applications are categorized under the umbrella term Web 2.0 tools or web-based learning tools (Buckingham & Willett, 2013; Said & Lee, 2014) and they should be utilized for their advantages in teaching such as increasing student motivation, engagement and learning outcomes (Dyer et al., 2015). All in all, the goal of web-based advancements is to provide a feasible learning environment for students through collaborative learning which increases their academic performance in time (Su & Cheng, 2015). By applying the Web 2.0 improvements to teaching, education has become more intelligent, learning-based and student-centered. In this way, the student's dependence on teachers is thoroughly reduced (Alkhatiba et al., 2018). Furthermore, online writing courses can help teachers and students communicate outside the school and assist them build a warm learning community through technology (Marleni, 2020). However, this

might not be preferred by some of the students who like face-to-face communication which can only happen inside the classroom walls (Marleni, 2020). Still, according to Marleni (2020), the use of these tools can be beneficial for introverted learners, because thanks to the virtual environment the technology provides them, they get encouraged to interact with their peers and their teacher within the social and professional frames. Hence, this demonstrates the true meaning of education.

Numerous studies have shown that innovation in digital learning tools has a positive impact on learning of second or foreign language when implemented and coordinated appropriately in pedagogical contexts (Al-Wasy, 2020; Dantas & Lima, 2020; Dyer, et al. 2015; Marleni, 2020; Solomon & Schrum, 2007; Tanrikulu, 2020; Williams & Beam, 2019a, b; Yaccob & Yunus, 2019 among others). The evidence in the literature has clearly displayed that when compared to traditionally created hand-written texts, technology mediated environments enable students to write longer texts (Marleni, 2020). Also, the learners have the chance to review often what they have written (Novelti et al., 2019; Kristiawan, 2014). Therefore, their writing quality increases (Zawilinski, 2012). Hence, some novice teachers of foreign language who like to form an appealing learning atmosphere prefer to use the social media websites (Kristiawan et al., 2016). They seek to find efficient methods encouraging students to learn how to write and improve their writing skills rapidly (Ibrahim, 2013).

5 Digital Tools in Collaborative Academic Writing Instruction

Technology has opened new windows to access and share information, write and collaborate with others (Pennington, 2013a, b). Digital tools which include specific software tools, resources and platforms have been updated day by day and they are widely used to apply innovative approaches and meet the emerging needs of digital learners. Digital tools can help writers in all stages of the writing processes as the learners can brainstorm, research, take notes, outline or map, draft, cite, rewrite and revise, add graphic elements, edit, share with colleagues/peers and finally submit their manuscripts.

The concept of collaborative learning focuses on Vygotsky's (1978) Socio-Cultural approach, which believes that learning occurs as a result of a social interaction and reciprocal knowledge building (Alkhatiba et al., 2018). Collaborative writing is the collective understanding of the writers on the ownership of their product (Storch, 2021a, b). As Storch (2021a, b) suggested, collaborative writing tasks are assigned "to encourage learners to language", namely, having discussions about the language with their classmates and these interactions lead language learning (p. 29).

In collaborative online writing, a couple of people work together actively by using some technological tools (Suwantarathip & Wichadee, 2014; Alzain, 2019).

Through this digital communication environment, students are provided with the opportunities to work together and contact with their instructors or other parties. As mentioned above, technology has a fundamental role in teaching, and it provides teachers and students with meaningful learning practices (Eady & Lockyer, 2013). Considering today's generation of learners are digital natives (Creighton, 2018), they have greater motivation to learn utilizing technology as a tool.

A great deal of research has been done on the positive effects of the online collaborative writing with a variety of tools. Ene and Upton (2018) investigated teacher electronic feedback (TEF) in L2 writing by researching whether TEF is effective in face-to-face and online L2 writing classrooms. In these lessons, TEF was delivered via Word comments which was the asynchronous type and so the students could track changes in digital drafts, in addition, it was offered via synchronous text chats between the learners and the instructor. The findings revealed that TEF is efficient, and synchronous TEF significantly strengthens asynchronous TEF. Another study, (Li et al., 2011) explored elementary students' and teacher's opinions on computer-assisted collaborative writing and discovered that students' perceptions of writing enhanced as a result of online collaborative writing activities.

Along the same lines, Seyyedrezaie et al. (2016) studied students' experiences of working with Google Docs. The results displayed that the students had a positive attitude towards the role of Google Docs because of its contribution to their writing. Similarly, Zhou et al. (2012) state that the participatory collaboration process among undergraduate students has been changed radically with web-based technology. In their study, participants said that thanks to Google Docs, they were able to communicate more easily and effectively. Moreover, Liu and Lan (2016) reviewed the student's views on Google Docs. The results of the study displayed that the peers working together had more positive attitudes compared to the individual students in terms of learning experiences and motivation for the access to the knowledge. In addition, students found collaborative writing useful since it extended the audience for their writing and developed collaborative interaction.

Kennedy and Miceli (2013) also revealed that students had the feeling of being a part of a community as they work together by using the tools of the technology offered. Lin (2014) investigated the perspectives of students and instructors on writing collaboratively using wikis. The findings exhibited that the students' perceptions toward writing displayed an improvement after they participated in the collaborative activities, and also it showed that the students had positive opinions about the use of tools in the online environment. Furthermore, Suwantarathip & Wichadee (2014) discovered that writing via Google Docs improved the students' collaborative writing skills and increased their confidence in sharing their ideas with other people. Additionally, the students in Kessler et al. (2012)'s study accepted that there was a crucial role of each member in their collaborative writing. In the same vein, Aljafen (2018) investigated the students' opinions about collaborative writing, and the results displayed that there were positive attitudes towards collaboration in writing with regard to their writing process, being easy to use and applicability.

However, there are some studies conducted on collaborative online writing showing that not all the learners displayed fully positive attitudes towards the use

of the digital tools in writing instruction. They appear to reflect students' lack of confidence while or after working with these tools in the digital environment or they had findings involving significant and insignificant results in different angles. For instance, Zhu (2012) compared students' participation in the online discussion in their countries and found out that cultural differences had a direct impact on students' opinions about the virtual, electronic environment. In addition, Li and Kim (2016) investigated the active interaction in ESL collaborative writing activities. They found that two groups of students working on the same activity on the same wiki site surprisingly developed different forms of collaboration and they also had change across two activities in each group. Moreover, Topacio, (2018) examined whether using online learning platforms such as a Learning Management Software in online L2 writing instruction is effective or not. She found that the online tutorial group has not developed in building content skills. Online instruction was found to be helpful in terms of getting the sources and conveying the thoughts and be beneficial for reducing time and getting rid of the fear of direct feedback. Nonetheless, with regard to instructions and counseling, the learners still had a tendency to choose face-to-face classroom mode. It also exhibited that the absence of autonomous learning habits could be an obstruction to online education.

Cho (2017a, b) studied synchronous collaborative online writing with voluntary students outside the school context. The results exhibited that the main factors intervening on the quality of collaboration are the ways of communication, presentation of the tasks, matching/mismatching roles between the self-perceived and other-perceived roles of the participants and the sense of the peer feedback. The author offers some pedagogical insights for the teachers who want to use collaborative online writing assignments. First, she suggested that students might understand the collaborative tasks and their roles differently in the writing process. Second, the means of communication should be chosen carefully depending on the purpose of the assignment and the language proficiency of the students. Third, when informing students about the group works, teachers should set up or give instructions on how to interact with the peers because the design of the group interaction affects the collaboration quality of participants' collaboration. Lastly, teacher feedback about language uses of the group can be used.

6 How to Implement Digital Tools in Academic Writing Instruction: Sample Tasks

To catch up with the innovative digital technologies in writing and apply new multimodal composing techniques, new tasks should be designed and utilized. In that way, students and teachers can enlarge their visions and demonstrate their creativity and performances. With this understanding, the implementations of certain digital tools and designed tasks at critical reading and writing course (CRW) offered at ELT department for sophomores will be presented in this part of the chapter.

Table 1 Summary of the tools employed for improving learners' writing skills

Aim	Online tools
Brainstorming	Lucidspark https://lucidspark.com/
Multimodal composing: Planning	Cube Creator https://www.readwritethink.org/classroom-resources/student-interactives/cube-creator
Multimodal composing: Visualization	Adobe Spark https://www.adobe.com/products/spark.html Pixton https://pixton.com
Collaborative writing	Padlet https://padlet.com/ Zoho Writer https://www.zoho.com/writer/

Although the use of digital tools at K12 level has been shared and researched recently, there is a paucity in higher education level. Besides, as mentioned so far, the use of digital tools and varying tasks should be exemplified especially at teacher education so that students who will be the future language teachers can develop their own repertoire of tasks and learn how to use these tools in their own classrooms. Therefore, CRW course is selected as the case context. The course aimed to improve the learners' critical reading and writing skills at the university level, which are vital for fulfilling the academic tasks required to graduate from the undergraduate program. The participants of the course were training to become English language teachers which meant that the CRW skills were also needed for their future professional lives. The course in question was offered through online platform due to the outbreak of Covid-19, all the lesson materials, live classes were provided through *Canvas* as the official LMS of the university. The purpose of the course was to design cooperative and critical tasks using digital tools. The list of online tools utilized within the scope of the study and the related aims can be seen in Table 1.

7 Sample Tasks

7.1 *Brainstorming and Practicing*

Brainstorming is an important phase of the writing process, through an effective brainstorming, learners can activate their background knowledge and they can organize their ideas about the writing prompt. In traditional classroom, teachers apply brainstorming tasks as discussion activities with notes on the boards, however, with digital age and within the context of online education, teachers should find a way to employ brainstorming tasks by involving students. In that point, digital tools that provide access to all course members and enable synchronous producing are

practical and effective for writing lessons. One of the collaborative brainstorming tools used in the sample case was *Lucidspark*. It is a virtual whiteboard that enables users to share their ideas synchronously. With different templates, users can brainstorm their ideas on diagrams, maps, charts, and tables. To use this tool, one needs to register to the site by providing an e-mail address. There are several options for registration (free, individual, team, enterprise) and the paid versions offer different features, if needed. One of the advantages of the tools is that the teachers can use it for their classes to create and discover collaboratively and synchronously.

In the case of argumentative essay writing, this tool can be used to discuss about the pros & cons, argument vs counterargument. In the sample study, the students were asked to discuss the pros and cons of euthanasia as illustrated in Fig. 1. In that way, students could decide on their stances about the topic and get different perspectives. During the online brainstorming, the instructor asked about their rationales and provide more examples. The instructor could follow which student shared what idea so that participation in the lesson could be monitored easily. After brainstorming, the instructor asked them to note down the ideas that they found useful for their essays.

Lucidspark can be used not only for throwing the ideas but also for practicing and organizing the arguments. Again, in the same argumentative essay context, the students were asked to write their arguments and then their refutations to the given arguments. To enhance collaboration, the students were divided into two groups as argument and counter argument, each member of the groups should find an argument on the given topic and refute it. Thanks to synchronous share, the instructor had chance to give feedback to the students' writings and students could discuss their answers. Figure 2 shows an example of online collaborative argument writing through *Lucidspark*.

In this study, *Lucidspark* was employed for teaching and practicing argumentative essays; however, it can also be used for different aims. The teachers and the learners could use pictures to make things more interesting during a brainstorming

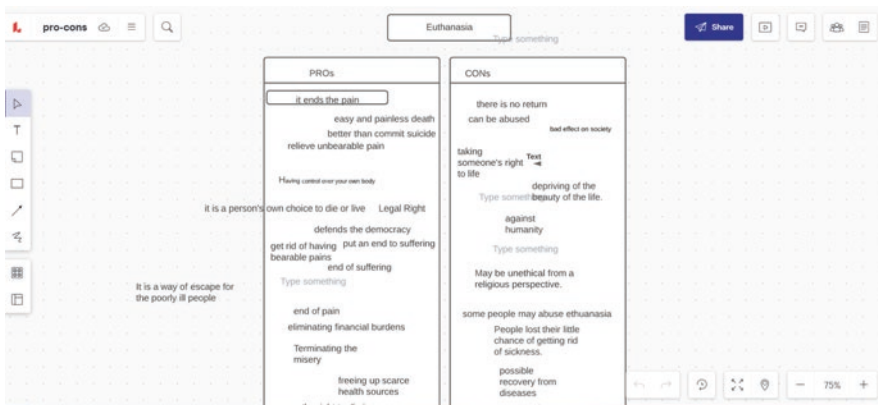


Fig. 1 Screenshot of the Lucidspark activity (brainstorming)

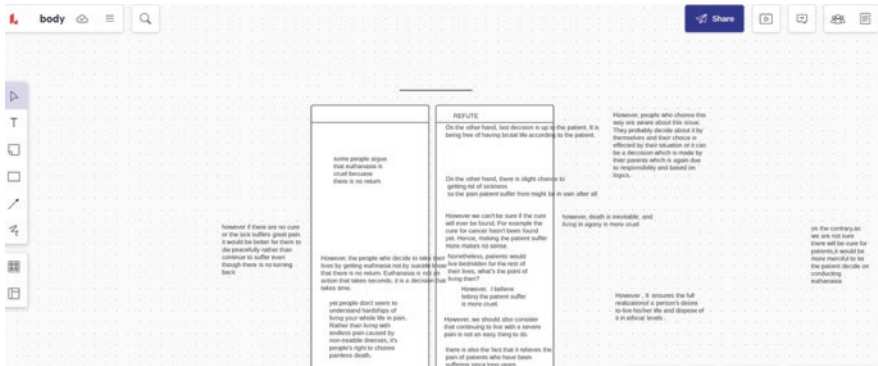


Fig. 2 Screenshot of the Lucidspark activity (organizing)

Tool	Tasks
<p>Lucidspark</p> <p>https://lucidspark.com/</p>	<p>The students are given a topic and they are asked to note down any ideas (i.e. phrases, words) related to topic.</p> <p>The same brainstorming can be applied with the pictures; the teacher can give a picture and ask students to brainstorm about anything related with the picture or the students could paste any visuals related with the topic. The instructor could ask students to explain or write about the pictures they choose for the brainstorming.</p> <p>The students are divided into two groups and they could write either the pros or cons according to the topic and then the instructor would change the roles and ask them to add more to the brainstormed ideas.</p> <p>The teacher provides different pictures/visuals and asks students to write a paragraph narrating a story. The students will study in group 4 and each group will write their parts but follow others to have a coherence in the story. At the end of the task, there will be a story written by the students using the pictures.</p>

Fig. 3 Sample tasks for Lucidspark

activity. Figure 3 shows a list of example tasks that can be carried out with Lucidsparks.

7.2 Multimodal Composing: Planning, Visualization

To teach students to plan their writing is the essential stage of writing lesson. *Cube Creator* is a digital tool that can help students to outline their writing. Rather than asking students just to write, students should plan what to write, set the scene, characters and climax in the story or writing. The tool offers outlines for different genres

(bio, mystery, story, and create-your-own) and it is free to use without a registration requirement. Based on the selected genre, the tool asks several questions for writers to answer. Their answers then are used to create a cube which the learners can follow to construct their scripts. The tool’s create-your-own cube feature allows teachers to adapt the tool for teaching and practicing different genres.

In the sample case, students were asked to write a mystery story. Rather than restricting them with the plot and characters, students were free to design their own mystery story but firstly they need to create their own outline through *Cube Creator*. Using their mystery cubes, they were ready to write their own stories; while at the same time, they shared their own cubes, and their peers created the story according to the cube and they compared the different versions (Fig. 4).

Cube creator tool can also be used to teach the basics of different genres in writing classes. The teacher can ask learners to view an example text and then answer the questions on the cube to infer the outline of the story. Figure 5 presents a list of tasks that can be conducted with this tool.

For writing, creativity is essential. When the students can create their own products and express the ideas from their own point of view, they benefit from the tasks most effectively. During online courses, to make students engaged in the lesson and pursue their cooperation with their friend, *Adobe Spark* is an effective digital tool that embraces visualization and writing. This tool requires users to register to the

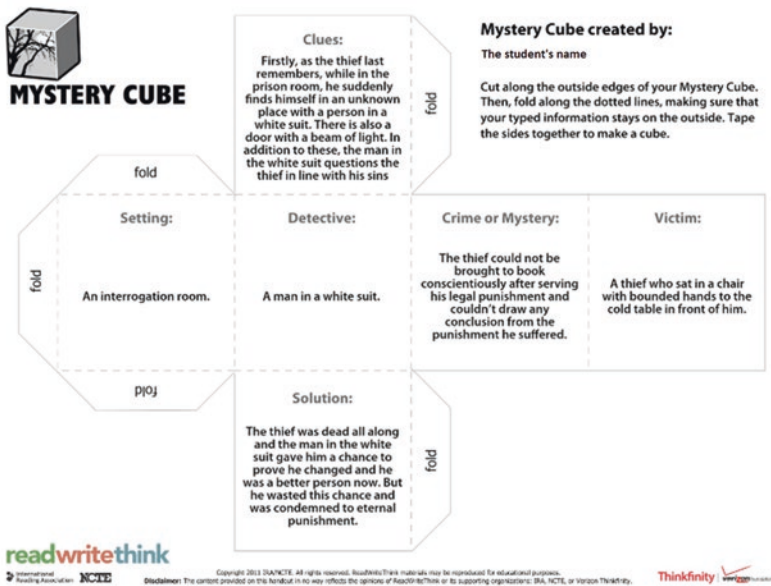


Fig. 4 Cube Creator; screenshot of mystery cube task

Tool	Tasks
<p>Cube creator</p> <p>https://www.readwritethink.org/classroom-resources/student-interactives/cube-creator</p>	<p>The students are given an example text to analyze. After the analysis, the learners answer the questions on the cube to deduce the outline of the story.</p> <p>The learners are divided into 7 groups: 6 groups are given the clues to complete the cube (the cube has 6 sides and hence 1 side for each group). The remaining group tries to collect all the answers and match them with the correct questions (correct side of the cube) to reach the outline of the story.</p> <p>The teacher can use this tool to teach a writing genre. S/he can complete a genre-based writing task by utilizing this tool. As a collaborative activity, the teacher and the learners can complete the outline of a genre to infer the characteristics and the language structure.</p> <p>The teacher deletes the titles of the stories and then the learners are assigned several stories to choose from. Once the students decide on which text to work with, they are asked to examine the outlines on the cube and then decide which genre their story belongs to.</p>

Fig. 5 Sample tasks for Cube creator

site by selecting a membership type (starter-free, individual, and team). The tool is compatible with mobile devices and enables social media integration. One of the benefits of the tool is that it offers several different templates for the users to get started.

In the sample case, students were asked to read the short story ‘*Lottery*’ by Shirley Jackson and get the main idea and express it in their own words. To scaffold their creativity and cooperation, they were asked to design a poster or video about the main idea of the story in groups of three. Each group examined other groups’ products and voted for the best one. Figure 6 displays an example from the students’ videos.

Besides finding the main idea in the text, the learners can also create posters or videos to summarize the assigned manuscript, to criticize an idea from the text, or narrate the story through audio-visuals. A list of example tasks to be carried out with Adobe Spark can be seen in Fig. 7.

In addition to the previous one, another tool that improves students’ writing through visualization is *Pixton*. This tool is for comic designs and story creation. Students could participate to writing activities in which students could set the scenes and create the characters and prepare speech balloons. To use this tool, one needs to create an account (student, educator, parent, and business). Once the account has been created, the users can browse and employ different features (avatar making,

Fig. 6 Adobe Spark, screenshot of main idea visualization



class photos, comic builder, and content library). The teachers can create an online class on Pixton and then invite the students to join. The teacher can track the learner progress over this tool and grade the students' works.

In the sample case, the students were asked to design a scene from the short story 'Lottery' and write the most important conversation that characterizes the story. Through this task, students could visualize the scenes and characters, and they elicited the climax of the story (Fig. 8).

Pixton can also be used to create graphic novels, comic strips, and storyboards. The tool can be used with almost all age groups since it offers a wide variety of graphics and characters. Figure 9 presents a list of example tasks that can be integrated with Pixton.

7.3 Collaborative Writing

Being popular online collaborative writing tools, Google Docs and Wikis are used at many pedagogical practices all over the world. Google Docs and Wiki have come to the forefront thanks to their practical uses and access to different users with varying purposes. The studies and practices are mentioned in the literature review. This study aims to introduce and exemplify the alternative online collaborative writing tools that teachers and learners can use in teaching and learning processes.

Tool	Tasks
<p>Adobe Spark</p> <p>https://www.adobe.com/products/spark.html</p>	<p>The students are given a manuscript to read and identify one of the main ideas. After that, they are asked to design a poster or create a short clip to criticize the idea from the text. Once all the students are finished, the teacher asks them to post their products on the class social media account for interactivity.</p> <p>The teacher divides the class into groups of four. Afterwards, each group is assigned a different story to summarize. The groups utilize the tool for creating a short clip or a poster to present their summaries. Once all the groups are finished, they view each other's products and take notes. The teacher asks the learners questions related with each story and scores the correct answers. The group with the highest score wins the game.</p> <p>The tool can be used as an information gap activity. In groups, the students can view each other's posters or videos to make inferences about the assigned text. Afterwards they try to re-write stories based on their peers' visual products.</p> <p>The teacher creates a poster or a video to convey a main idea to the learners. After they discuss the main idea as a whole class, the students are asked to write a story/essay centered around this idea. After all the students are done, they read each other's writings and then choose the best one.</p>

Fig. 7 Sample tasks for Adobe Spark



Fig. 8 Pixton, screenshot of comic design for the story "Lottery"

Tool	Tasks
<p>Pixton</p> <p>https://pixton.com</p>	<p>The learners are given a story to read and they are asked to identify the main events and the main characters. Then the learners prepare a summary of the story by addressing the key points via Pixton. After all the learners are done, the teacher asks them to choose two/three of their peers' visual summaries and then give feedback to them.</p> <p>The teacher divides the class into groups of 3 or 4. The groups are asked to choose a well-known story to tell through Pixton. The teacher can ask them to draw a story from a hat/bag to make sure each group gets a different story. The learners are to keep the names of the story to themselves while preparing their storyboards. Once they all finish, each group tries to guess their peers' stories by viewing the storyboards.</p> <p>The teacher selects a current/popular topic to be used in the classroom. After brainstorming and exploring the issue, the students are invited to do a mini-research on the topic to create a comic strip using the tool in groups of three. After all the groups complete their comics, they share it with their classmates to further explore and understand the assigned topic.</p> <p>The teacher uses the tool to highlight the main points of a story as a graphic novel. The teacher then jumbles the order of the scenes and asks the learners to find the correct order of events chronologically.</p>

Fig. 9 Sample tasks for Pixton

Padlet is one of the alternative tool that is becoming popular in digitalized language learning. It is a virtual wall on which students and teachers can brainstorm and share ideas through text, video, documents, or images. To employ this tool, users need to create an account for free. The tool offers several different features (Fig. 10) for users' benefit (wall, canvas, shelf, stream, grid, timeline, and map). Each offers different type of layout and organization. The teachers can use different layouts for different tasks or topics. The tool allows teachers to download all the works of the students which is a useful aspect.

In this study, the sophomore students were asked to write their paragraphs on Padlet. After the instruction on argumentative essays, the instructor employed a process writing task for this genre. An example of a shared wall on which students posted their introduction and body paragraphs of an argumentative essay on euthanasia can be seen in Fig. 11. They also commented on each other's paragraphs and received feedback from the instructor which they could access on the comments section.

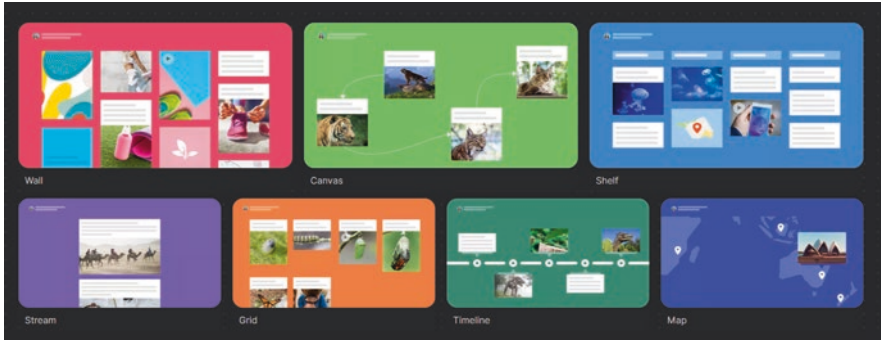


Fig. 10 Screenshot of Padlet's features

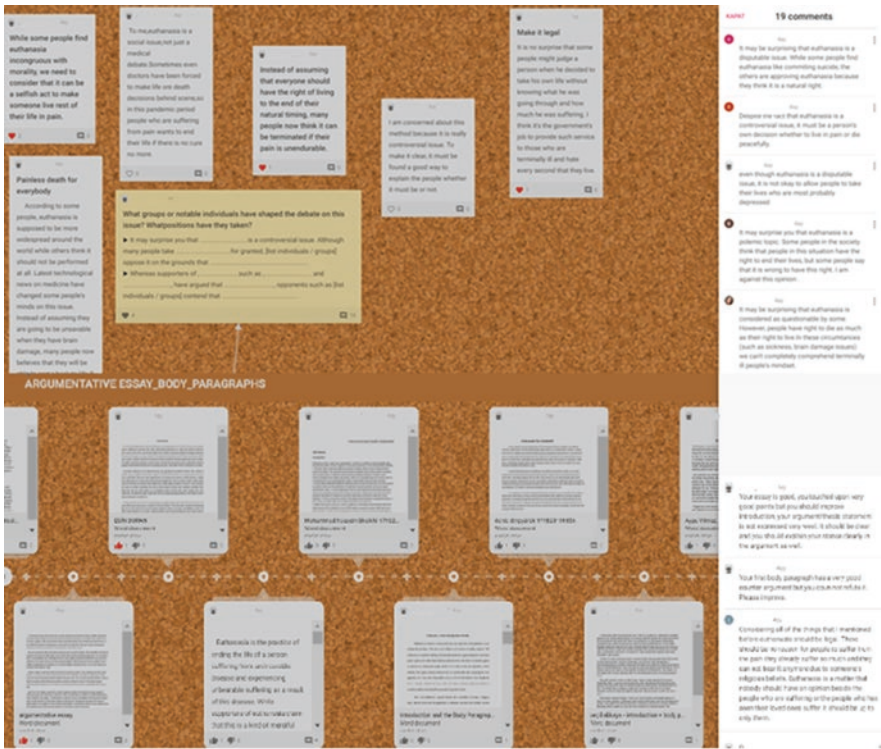


Fig. 11 Padlet, shared wall on essay writing

In addition, the tool can be used as a collaborative writing tool. The learners can be grouped to work on a text together since the tool allows synchronous participation. Padlet can also be utilized to improve the inference skills of the learners and encourage creative writing. A list of example tasks that can be done via Padlet can be seen in Fig. 12.

For teamwork, *Zoho Writer* is another digital platform. The students can create their own teams and work on the same product. The teacher can cooperate, give feedback, and track the changes according to the feedback. To use this tool, one need to create a free account. The tool has the features of a word processor and allows users to invite others to work on the same document at the same time or asynchronously. The tool is beneficial for collaborative and interactive writing. Another advantage the tool offers is the embedded language check. The tool allows users to check the spelling, grammar and quality of their writing.

Tool	Tasks
Padlet https://padlet.com/	The teacher divides the learners into groups of four for an online crime-solving activity on Padlet. Each group receives a different part/clue related with a text in mystery genre. The learners come together on Padlet to share and collect the clues, and to solve the mystery. The first group to solve, summarize and post the story on Padlet wins the game.
	<p>The teacher groups the class into 5 and then gives class a jumbled reading text. The learners are asked to work together to solve the chronological order of the events. By employing the timeline feature, the learners order the main events in the story.</p> <p>The teacher distributes several countries and a list of questions to the learners and asks them to do a guided mini-research project, individually. Once they gather information on the assigned countries, they go to Padlet and use map layout to identify and give information about the country. Once they finish, they comment on each other's work and state where they want to visit in the future.</p> <p>The teacher gives the first half of a novel/story to the learners and asks them to identify the main characters in the book. S/he then uses Padlet's canvas feature and invites students to visualize the relationship between the characters and their main qualities. Once they establish the relationships between the characters, the learners are asked to make predictions about the rest of the text and write them on Padlet.</p>

Fig. 12 Sample tasks for Padlet

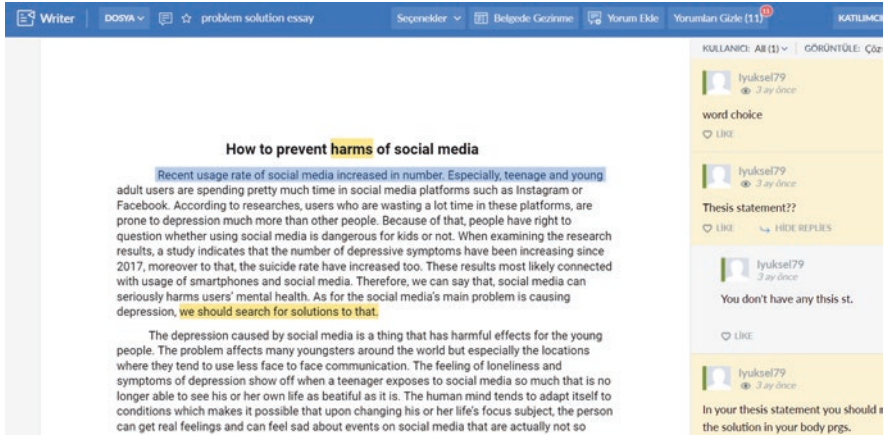


Fig. 13 Zoho Writer, group essay writing

In the sample case, the class was divided into groups of 4 to write a problem-solution essay on the negative effects of social media. The group members studied on the same page at the same time and the instructor gave feedback. The students could negotiate on the feedback with the teacher and other students on the chat box. Figure 13 presents an example screenshot from the writing activity.

The tool can also be used for self and peer feedback practices. By employing Zoho Writer, the teacher can keep track of the feedback provided and the changes made. Additionally, the tool can be utilized for product and process writing practices. Furthermore, the learners can come together to work on their outlines for the writing task, receive feedback before starting the writing process. Figure 14 illustrates a set of tasks that can be completed with this tool.

8 Conclusion

With the rapid technological developments, the nature of education has been reshaped tremendously: Education is everywhere; not bound within the school walls. Considering EAL, technology is an effective global tool that can open new windows to the teachers and students to learn and use the target language. Particularly, writing instruction has taken on new significance along with the digital tool integration. Nowadays, students face new demands of digital cultures in addition to the primarily print text-based world. Digital environments redefine the writing processes, even the basics of writing, due to an interwoven combination of traditional and digital approaches such as hyperlinks to digital sources, infusions of multimedia texts and interactive platforms. Seeing all, teachers should have technology competences to utilize the rich repertoire of tools for effective writing

Tool	Tasks
Zoho Writer https://www.zoho.com/writer/	The learners are divided into three groups and then given an example essay for analysis. They are invited to work on the text on Zoho Writer simultaneously. Each group needs to work on a specific aspect related with the text: underline the important arguments, point out the language structures, and making comments on the genre. They are then invited to study their peers' comments and work to explore the genre specific features and make inferences.
	The learners are divided into groups of four. Each group receives one controversial issue to write a persuasive essay on Zoho Writer. Once all the groups finish writing, they visit and read other groups' works and give feedback to them. The learners are also encouraged to make critical observations and write comments about the essays.
	The teacher provides learners with a recent local news and asks them to conduct an online research to uncover the full the story. The learners are required to create a news report by using Zoho Writer and the finished product needs to have multimodal elements. Afterwards, the teacher checks their reports and provides feedback.
	The teacher provides students with an erroneous writing text and asks them to work on the text online to correct and give feedback to the writer. The teacher can keep track of the comments and feedback of the learners and help them identify the errors in the text and make inferences about correct language use.

Fig. 14 Sample tasks for Zoho Writer

instruction and critical digital literacy to decode the multi-layered online texts and produce pieces for multimodal environments.

In this chapter, the use of digital tools to improve academic writing skills are discussed and supported with some examples employed in the online class of critical reading and writing course. The theories underlying writing approaches and how these approaches are evolved with digital tools are presented in this chapter. The sample cases are illustrated to give an idea about how the digital tools can be used to engage the students on online platforms, and how their creativity, artistic and writing potentials can be unleashed. The aforementioned tasks can be employed for undergraduate teacher education purposes as well as in-service teacher training. Considering the benefits of utilizing such tools for professional development, the chapter offers some implications for several educational settings.

The literature indicates that using online multimodal writing tasks can prove to be useful for teacher education (Egbert & Borysenko, 2018; Janssen et al., 2019; Yi & Choi, 2015). Experiencing such tools during professional development activities and/or teacher education procedures helps and encourages teachers to make use of these tools in their own classrooms. Hence, the suggested tasks can be included as part of teacher professional development. Considering the setting of the present study, it can also be said that exposing the pre-service teachers to these online tools and multimodal writing as part of their education would yield fruitful results for their future professional lives as language teachers. Additionally, using online tools for improving the writing skills has been supported by the recent literature (Al-Wasy, 2020; Dantas & Lima, 2020; Marleni, 2020; Tanrikulu, 2020; Williams & Beam, 2019a, b; Yaccob & Yunus, 2019). For this reason, the suggested tasks and the Web 2.0 tools can be included in language classes to support the target language development of the learners. These tools can provide the teachers and the learners with different feedback opportunities (Ene & Upton, 2018), collaborative writing (Pennington, 2013a, b), and interaction (Marleni, 2020).

References

- Aljafen, B. S. (2018). *Traditional vs. Wiki: Saudi students' performance in and perceptions of collaborative writing in a wiki* (Unpublished doctoral dissertation). University of Tennessee.
- Alkhataba, E. H. A., Abdul-Hamid, S., & Ibrahim, B. (2018). Technology-supported online writing: An overview of six major web 2.0 tools for collaborative-online writing. *Arab World English Journal (AWEJ)*, 9, 433–446.
- Al-Wasy, B. Q. (2020). The effectiveness of integrating technology in EFL/ESL writing: A meta-analysis. *Interactive Technology and Smart Education*, 17(4), 435–454.
- Alzain, H. (2019). The role of social networks in supporting collaborative e-learning based on connectivism theory among students of PNU. *Turkish Online Journal of Distance Education (TOJDE)*, 20(2), 46–63.
- Arslan, S. (2020). Multimodal writing to promote global competence for EFL learners. *Sakarya University Journal of Education*, 10(3), 589–608. <https://doi.org/10.19126/suje.777878>
- Buckingham, D., & Willett, R. (Eds.). (2013). *Digital generations: Children, young people and the new media*. Routledge.
- Casanave, C. P. (2017). *Controversies in second language writing dilemmas and decisions in research and instruction*. University of Michigan Press.
- Cho, H. (2017a). Synchronous web-based collaborative writing: Factors mediating interaction among second-language writers. *Journal of Second Language Writing*, 36, 37–51.
- Cho, H. (2017b). Synchronous web-based collaborative writing: Factors mediating interaction among second-language writers. *Journal of Second Language Writing*, 36, 37–51.
- Connelly, M. (2013). *The Sundance writer: A rhetoric, reader and research guide*. Wadsworth.
- Conradie, P., Moller, M., & Faleni, T. (2014). *The effect of learning management systems' media richness on 21st-century student's satisfaction: A higher education perspective*. 13th European Conference on e-Learning – ECEL 2014.
- Cope, B., & Kalantzis, M. (2009). A grammar of multimodality. *The International Journal of Learning*, 16(2), 361–423.

- Dantas, S. G. M., & de Carvalho Lima, S. (2020). Online collaborative writing in English at the federal institute of Rio Grande Do Norte: Some quantitative data on student participation in integrated secondary education. *Revista Leia Escola*, 20(2), 27–42.
- Dyer, T., Larson, E., Steele, J., & Holbeck, R. (2015). Integrating technology into the online classroom through collaboration to increase student motivation. *Journal of Instructional Research*, 4, 126–133.
- Dzekoe, R. (2017). Computer-based multimodal composing activities, self-revision, and L2 acquisition through writing. *Language Learning & Technology*, 21(2), 73–95. Retrieved from <http://llt.msu.edu/issues/june2017/dzekoe.pdf>
- Eady, M. J., & Lockyer, L. (2013). Tools for learning: Technology and teaching strategies. In *Learning to teach in the primary school*. Queensland University of Technology. Retrieved from: <https://ro.uow.edu.au/asdpapers/403/>
- Edwards-Groves, C. J. (2011). The multimodal writing process: Changing practices in contemporary classrooms. *Language and Education*, 25(1), 49–64. <https://doi.org/10.1080/09500782.2010.523468>
- Egbert, J., & Borysenko, N. (2018). Teacher preparation for using technology. *The TESOL Encyclopedia of English Language Teaching*, 1–7. <https://doi.org/10.1002/9781118784235.eelt0432>
- Ekmekçi, E. (2016). Integrating Edmodo into foreign language classes as an assessment tool. *Participatory Educational Research (PER)*, 1(1), 1–11.
- Elola, I., & Oskoz, A. (2017). Writing with 21st century social tools in the L2 classroom: New literacies, genres, and writing practices. *Journal of Second Language Writing*, 36, 52–60. <https://doi.org/10.1016/j.jslw.2017.04.002>
- Ene, E., & Upton, T. A. (2018). Synchronous and asynchronous teacher electronic feedback and learner uptake in ESL composition. *Journal of Second Language Writing*, 41, 1–13.
- Fernandez-Pacheco, N. N. (2018). The impact of multimodal ensembles on audio-visual comprehension: Implementing vodcasts in EFL contexts. *Multimodal Communication*, 7(2). Retrieved from <https://www.degruyter.com/view/journals/mc/7/2/article-20180002.xml>
- Gordani, Y., & Khajavi, Y. (2019). The impacts of multi-modal powerpoint presentation on the EFL students' content knowledge attainment and retention over time. *Education and Information Technologies*, 25, 403–417.
- Creighton, T. B. (2018). Digital natives, digital immigrants, digital learners: An international empirical integrative review of the literature. *ICPEL Education Leadership Review*, 19(1), 132–140.
- Hampel, R., & Stickler, U. (2012). The use of videoconferencing to support multimodal interaction in an online language classroom. *ReCALL*, 24(2), 116–137.
- Ibrahim, M. G. (2013). *The effect of using facebook on improving students' writing skills in English* (Unpublished M.A. thesis). Al-Najah National University.
- Janssen, N., Knoef, M., & Lazonder, A. W. (2019). Technological and pedagogical support for pre-service teachers' lesson planning. *Technology, Pedagogy and Education*, 28(1), 115–128. <https://doi.org/10.1080/1475939X.2019.1569554>
- Jewitt, C. (Ed.). (2009). *The Routledge handbook of multimodal analysis*. Routledge.
- Karto, Suhartono, Susetyo, Noermanzah, & Maisarah, I. (2019). The differences ability in writing descriptive texts by using chain writing and conventional methods. *International Journal of Scientific and Technology Research*, 8(10), 2714–2719.
- Kennedy, C., & Miceli, T. (2013). In piazza online: Exploring the use of wikis with beginner foreign language learners. *Computer Assisted Language Learning*, 26(5), 389–411.
- Kessler, G., Bikowski, D., & Boggs, J. (2012). Collaborative writing among second language learners in academic web-based projects. *Language Learning & Technology*, 16(1), 91–109.
- Kim, Y., & Belcher, D. (2020). Multimodal composing and traditional essays: Linguistic performance and learner perceptions. *RELC Journal*, 51(1), 86–100. <https://doi.org/10.1177/0033688220906943>

- Klobas, J., & Beesley, A. (2006). *Wikis: Tools for information work and collaboration*. Chandos Publishing.
- Kristiawan, M. (2014). A model for upgrading teachers' competence on operating computer as assistant of instruction. *Global Journal of Human-Social Science Research*, 14(5), 42–55.
- Kristiawan, M., Parlian, R. B., & Johari, I. (2016). The effect of time token technique towards students' speaking skill at science class of senior high school 1 Pariaman. *Al-Ta lim Journal*, 23(1), 22–28.
- Langan, J. (2013). *College writing skills with readings*. Tata McGraw-Hill Education.
- Leander, K., & Boldt, G. (2013). Rereading “a pedagogy of multiliteracies”: Bodies, texts, and emergence. *Journal of Literacy Research*, 45(1), 22–46.
- Lee, S., & Lee, C. H. (2013). A case study on the effects of an L2 writing instructional model for blended learning in higher education. *TOJET: The Turkish Online Journal of Educational Technology*, 12(4), 1–10.
- Leon, D. L. G., Leon, J. E. G., & Rozo, Y. H. (2011). Students' beliefs: Multimodal texts as pedagogical tools in foreign language teaching. *Revista Papeles*, 3(5), 21–35.
- Li, J. (2014). Zoho cloud computing technology-based educational technology training, examination and certification of study on the design of the integration platform. *BioTechnology: An Indian Journal*, 10(9), 4272–4277.
- Li, M., & Kim, D. (2016). One wiki, two groups: Dynamic interactions across ESL collaborative writing tasks. *Journal of Second Language Writing*, 31, 25–42.
- Li, X., Chu, S. K., Ki, W. K., & Woo, M. (2011). *Students and teacher's attitudes and perceptions toward a Wiki-based collaborative process writing pedagogy in a primary five Chinese classroom*. In CITE research symposium, CITERS 2011. The University of HongKong.
- Lim, J., & Polio, C. (2020). Multimodal assignments in higher education: Implications for multimodal writing tasks for L2 writers. *Journal of Second Language Writing*, 47, 1–8. <https://doi.org/10.1016/j.jslw.2020.100713>
- Lin, H. (2014). Establishing an empirical link between computer-mediated communication and SLA: A meta-analysis. *Language Learning & Technology*, 18(3), 120–147. <https://dx.doi.org/10125/44387>
- Liu, S. H. J., & Lan, Y. J. (2016). Social constructivist approach to web-based EFL learning: Collaboration, motivation, and perception on the use of Google docs. *Educational Technology & Society*, 19(1), 171–186.
- Marleni, M. (2020). Enhancing the students' writing skill through technological writing feature of Wridea. *Journal of English Education and Teaching*, 4(1), 140–153.
- McCarthy, J. (2010). Blended learning environments: Using social networking sites to enhance the first year experience. *Australasian Journal of Educational Technology*, 26(6), 729–740.
- Mills, K. A. (2010). What learners “know” through digital media production: Learning by design. *E-Learning and Digital Media*, 7(3), 223–236.
- Moonen, L. (2015). ‘Come on guys, what are we really trying to say here?’: Using Google docs to develop year 9 pupils' essay-writing skills. *Teaching History*, 161, 8–14.
- Noermanzah, N., & Friantary, H. (2019). Development of competency-based poetry learning materials for class X high schools. *International Journal of Recent Technology and Engineering*, 8(4), 6631–6638.
- Noermanzah, N., Abid, S., & Septaria, S. (2018). Improving the ability of writing a narrative charge by using animated images media student class V.B SD Negeri 17 Lubuklinggau. *BAHTERA: Jurnal Pendidikan Bahasa Dan Sastra*, 17(2), 114–127. <https://doi.org/10.21009/BAHTERA.172.9>
- Novelti, Kristiawan, M., & Erpidawati. (2019). Development of the descriptive writing learning model using the audio visual media. *International Journal of Recent Technology and Engineering*, 8(3), 3488–3497.
- Pennington, M. C. (2013a). Trends in writing and technology. *Writing & Pedagogy*, 5(2), 155–179. <https://doi.org/10.1558/wap.v5i2.155>

- Pennington, M. C. (2013b). Trends in writing and technology. *Writing and Pedagogy*, 5(2), 155–179.
- Qizi, O. N. B. (2020). Technology-supported online writing in education. *Вестник науки и образования*, 10(88), 76–78.
- Said, N., & Lee, K. W. (2014). The development of the writing portal (TWT) to support ESL pre-service teachers' writing needs. *International Journal on E-Learning Practices (IJELP)*, 1(1), 89–104.
- Seyyedrezaie, Z. S., Ghonsooly, B., Shahriari, H., & Fatemi, H. H. (2016). Mixed methods analysis of the effect of Google docs environment on EFL learners' writing performance and causal attributions for success and failure. *Turkish Online Journal of Distance Education (TOJDE)*, 17, 90–110. Retrieved from <http://dergipark.ulakbim.gov.tr/tojde/article/viewFile/5000196874/5000170473>
- Solomon, G., & Schrum, L. (2007). *Web 2.0: New tools, new schools*. ISTE International Society for Technology in Education.
- Storch, N. (2021a). Collaborative writing: Promoting languaging among language learners. *Working Collaboratively in Second/Foreign Language Learning*, 30, 13.
- Storch, N. (2021b). Collaborative writing: Promoting languaging among language learners. In M. García Mayo (Ed.), *Working collaboratively in second/foreign language learning* (pp. 13–34). De Gruyter Mouton. <https://doi.org/10.1515/9781501511318-002>
- Su, C. H., & Cheng, C. H. (2015). A mobile gamification learning system for improving the learning motivation and achievements. *Journal of Computer Assisted Learning*, 31(3), 268–286.
- Suwantarithip, O., & Wichadee, S. (2014). The effects of collaborative writing activity using Google docs on students' writing abilities. *Turkish Online Journal of Educational Technology-TOJET*, 13(2), 148–156.
- Tanrikulu, F. (2020). Students' perceptions about the effects of collaborative digital storytelling on writing skills. *Computer Assisted Language Learning*, 1–16, g. <https://doi.org/10.1080/09588221.2020.1774611>
- Thorne, S. L., & Reinhardt, J. (2008). Bridging activities, new media literacies: And advanced foreign language proficiency. *CALICO Journal*, 25, 558–572.
- Topacio, K. (2018). Exploring the use of online educational platform in teaching writing among ESL students. *Journal of Language and Linguistic Studies*, 14(1), 86–101. Retrieved from <https://dergipark.org.tr/tr/pub/jlls/issue/43213/527853>
- Trilling, B., & Fadel, C. (2012). *21st century skills: Learning for life in our times*. Wiley.
- Vandommele, G., Van den Branden, K., Van Gorp, K., & De Maeyer, S. (2017). In-school and out-of-school multimodal writing as an L2 writing resource for beginner learners of Dutch. *Journal of Second Language Writing*, 36, 23–36. <https://doi.org/10.1016/j.jslw.2017.05.010>
- Vygotsky, L. S. (1978). *Socio-cultural theory. Mind in society*. Harvard University Press.
- Williams, C., & Beam, S. (2019a). Technology and writing: Review of research. *Computers & Education*, 128, 227–242.
- Williams, C., & Beam, S. (2019b). Technology and writing: Review of research. *Computers & Education*, 128, 227–242. <https://doi.org/10.1016/j.compedu.2018.09.024>
- Woods, D., & Thoeny, P. (2011). *Wikis for dummies*. Wiley.
- Wu, H., Chiba, Y., Nose, T., & Ito, A. (2018, September). *Analyzing effect of physical expression on English proficiency for multimodal computer-assisted language learning*. Paper presented at Interspeech, Hyderabad, India. Retrieved from https://www.iscaspeech.org/archive/Interspeech_2018/pdfs/1425.pdf
- Yacob, N. S., & Yunus, M. M. (2019). A review: ESL learners' critical thinking and active learning through collaborative online writing activity (Google docs). *Jurnal Penyelidikan Sains Sosial (JOSSR)*, 2(3), 35–42.
- Yang, J. C., Ko, H. W., & Chung, I. L. (2005). Web-based interactive writing environment: Development and evaluation. *Journal of Educational Technology & Society*, 8(2), 214–229.

- Yi, Y., & Choi, J. (2015). Teachers' views of multimodal practices in K–12 classrooms: Voices from teachers in the United States. *TESOL Quarterly*, 49(4), 838–847. <https://doi.org/10.1002/tesq.219>
- Yücel, Ü. A., & Usluel, Y. K. (2016). Knowledge building and the quantity, content and quality of the interaction and participation of students in an online collaborative learning environment. *Computers & Education*, 97, 31–48.
- Yunus, M. M., & Salehi, H. (2012). The effectiveness of Facebook groups on teaching and improving writing: Students' perceptions. *International Journal of Education and Information Technologies*, 6(1), 87–96.
- Zawilinski, L. M. (2012). *An exploration of a collaborative blogging approach to literacy and learning: A mixed methods study* (Unpublished doctoral dissertation). University of Connecticut.
- Zhou, W., Simpson, E., & Domizi, D. (2012). Google docs in an out-of-class collaborative writing activity. *International Journal of Teaching and Learning in Higher Education*, 24(3), 359–375.
- Zhu, C. (2012). Student satisfaction, performance, and knowledge construction in online collaborative learning. *Educational Technology & Society*, 15, 127–136. Retrieved from <http://www.jstor.org/stable/jeductechsoci.15.1.127>

İlknur Yüksel is the assistant professor at ELT Department of Eskişehir Osmangazi University. She has doctoral degree of ELT. Her research interests are academic literacy, technology integration and teacher training.

Banu Çiçek Başaran Uysal is the doctorate assistant at ELT Department of Eskişehir Osmangazi University. She has doctorate degree of ELT. Her research interests are second language acquisition, technology integration and teacher training.

Emine Eren Gezen is the research assistant at ELT Department of Eskişehir Osmangazi University. She is studying her PhD. Her research interests are linguistics and teacher training.

Ümit Özkanal is the assistant professor at ELT Department of Eskişehir Osmangazi University. He has doctoral degree of Curriculum Evaluation and Development. His research interests are curriculum evaluation, teacher training.

Avoiding Plagiarism in the Information Age: Tools and Recommendations



Mertcan Üney

Abstract All the technological improvements and the invention of the internet led us through the information age. Today it is too easy to reach any kind of data with just one click which may cause plagiarism. Search engines, forums and websites contain billions of explanations about billions of subjects. These explanations do not arise from only one source, everyone around the world may contribute by explaining an issue, sharing their research paper and articles, or expressing their opinions via social media, forums and websites. It is always good to share an opinion, thus it will fulfil its purpose but we need to be careful while using every kind of opinion, which belongs to someone else. Millions of people write articles, prepare presentations, and use all the information from other articles and research papers. The sources for information could be books or the internet but we can presume mostly the internet in the 21st century. People can easily copy and paste every opinion and information and make it look like their own without addressing the author or without giving the reference. Plagiarism is an important issue for students who study in any grade. Renard (*Educ Leadership* 57(4):38–42, 1999) expresses that it is almost impossible for teachers to distinguish the original opinions and cited information. This chapter will be a guideline containing useful online tools to avoid and detect plagiarism and also you can find some recommendations on how to teach plagiarism.

Keywords Avoiding plagiarism · Writing skills · Ethics

M. Üney (✉)

Abant İzzet Baysal University, Bolu, Türkiye

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_13

1 Introduction

When we examine most of the student's papers or homework, it is highly possible to find a copy and paste information without any resource mentioned (Renard, 1999). This situation is very frequent and is seen as normal among most of the students (Devoss & Rosati, 2002) and even students can purchase pre-prepared papers or homework (Clayton, 1997). Today's world enables us to reach every kind of information with search engines, multimedia, online journals etc. all containing countless articles, books that can be accessed easily from everywhere (Ural & Sulak, 2012). Internet became the first resource to look at for students and researchers in the information era. They do not need to be in the library physically and read like in old times, it is possible to find the answer within minutes via the internet. This situation has its outcomes, unfortunately, these opportunities brought out a widespread academic dishonesty problem (McCabe, 1999), in other words, plagiarism. Easy internet access has been shown as one of the main reasons for declined academic integrity (Scanlon & Neumann, 2002). It is highly possible to encounter plagiarism these days (Naik et al., 2015) and not only in advanced academic articles or research but also in the papers of high school students or undergraduate students (McCabe, 1999; Park, 2003; Eret & Gökmenoğlu, 2010). This chapter shows the general problem of plagiarism in the academic field, the effects of the internet on plagiarism, online tools to avoid plagiarism and implications on teaching plagiarism. In the literature, it is possible to find various reasons for plagiarism such as poor academic skills, inadequate understanding of plagiarism, time/family/peer pressure (Devlin & Gray, 2007). You can find similar reasons in Turkish context research, too. According to studies conducted in Turkey, peer pressure, grade anxiety, lack of knowledge, time are some of the identified reasons for plagiarism expressed by students and instructors (Eraslan, 2011; Semerci, 2004, Yazici et al., 2011). Lack of time is an important issue for students. They tend to leave the production of work to the last minute and this action ends with the temptation to take shortcuts. Especially cut and paste plagiarism method may appear in this kind of circumstance. Inadequate writing skills, on the other hand, is another frequent reason for plagiarism among students and students are apt to see plagiarism as a way of improving their work.

To understand the aspects of plagiarism we should start with the definition. Cambridge Dictionary website defines plagiarism as "copying someone else's work or ideas". Liddell (2003) defines plagiarism as stealing someone's "intellectual property", when someone creates an idea it is his/her property and using this property without his/her permission means stealing which is academic theft. Olson and Shaw (2011) use plagiarism to "describe cases in which one person uses another person's idea without the original creator's explicit permission" (p. 432). Academic integrity has become a general concern over the years. This issue is complex and it is seemed complicated among instructors and students also it is embedded in political, social and cultural matrices (DeVoss & Rosati, 2002; Currie, 1998). Another basic term to define plagiarism could be cheating and it is highly possible to encounter in all grades like kindergarten (Olson & Shaw, 2011; Yang et al., 2014),

secondary school (Kam et al., 2018), high school (McCabe, 1999; Scanlon & Neumann, 2002; Sisti, 2007) and undergraduate (Park, 2003; Gullifer & Tyson, 2014; Eret & Ok, 2014) deliberately or inadvertently. Most of the time students and academics might not be aware of plagiarism in their papers due to a lack of knowledge. This issue may be frequent among young students because they could not understand the concept of idea ownership, for adults, on the other hand, it is easier to raise awareness for this concept (Olson & Shaw, 2011). There should be efficient plagiarism education starting from the elementary schools, at least we need to introduce the “intellectual property” term to students. This is helpful for both avoiding plagiarism and copyright awareness. Gökmenoğlu (2017) has great research on plagiarism in the Turkish context starting with an example of her friend whose paper had been copied and used for academic purposes, later on, she experienced such an unfortunate situation, besides she realizes that she cannot go to law to defend herself.

2 Plagiarism in Different Grades

There are various researches on awareness of students on plagiarism in different grades. At the early ages, children gain the concept of possessing an object but it is hard for them to consider the term of idea as possessive. Sometimes in children’s responses, we may observe anger when someone steals their ideas, for example, Susan Isaacs observed a nursery school classroom and in her paper, she mentions some children get upset when someone else says their nursery rhyme (Isaacs, 1934). Of course, we cannot accept this situation as a piece solid evidence for cognitive development against plagiarism because of its rarity but it is an example. Olson and Shaw’s (2011) research revealed that 5 years old have a basic understanding of others have ideas. Yang et al. (2014) conducted cross-cultural research among American, Mexican and Chinese three to six years old children, results show that children with different cultural backgrounds show similar negative reactions to plagiarism but they do not recognize plagiarism as an illegal act they just react according to videos had been shown to them to teach plagiarism. This research results also may not be an unquestionable result to evaluate kindergarten level children’s awareness against plagiarism they just do not like ‘copycats’ but on the other side, they develop this basic understanding of intellectual theft concept.

Kam et al. (2018) researched 257 secondary Hong Kong students. They list four different potential causes for plagiarism, slack attitude; students plagiarize because of laziness, inadequate academic ability, school and teacher indifference towards plagiarism and academic pressure. According to one of their results, most of the students are not familiar with plagiarism. They do not know its moral responsibilities and as they mentioned in their paper this result is a worrying outcome.

McCabe’s (1999) research is another valuable paper for the literature related to high school students’ attitudes towards plagiarism. He uses focus group discussions for a wider understanding of students’ viewpoints about academic dishonesty. He emphasizes the impact of technology, especially the internet. Regarding the year of

the research, it is not hard to predict it was the “golden year” of internet plagiarism. Participants mention that they copy and paste from the internet for cheating and most of them are comfortable because they also utter that their teachers and school do not think of this situation is as a problem. Most of them use the same sentence “everybody cheats”. As a result of the research McCabe suggests that teachers and school administrations should educate students starting from elementary school against academic dishonesty and how it is their responsibility. Scanlon and Neumann (2002) mention another method for cheating among high school students using the internet which is paper purchasing from different websites. Students can buy pre-prepared homework papers and they see this as a big concern for academic dishonesty. Sisti’s (2007) research supports McCabe, Scanlon and Neumann. He conducted his research with five schools and analyzed students’ justifications for cheating regardless of plagiarism. There are responses like “I do not have enough time” but the researcher mentions that this motive needs more analysis, there is a low rate for the justification of “everybody is doing it” and several students expressed that there is not a clear school policy for plagiarism.

Park, (2003) displays the plagiarism problem in higher education in his paper. It is obvious that low academic integrity also can be seen in higher education level and this situation is getting increase especially with the wide use of the internet. Methods like copy and paste and term paper purchasing continue for this level too. According to his paper plagiarism is seen as a major problem in the UK’s institution of higher education. Gullifer and Tyson (2014) suggest that academic integrity should be taught to higher education students. In their research, they sent an Academic Misconduct Policy to students and according to their report, students read it and get enough knowledge about plagiarism. Nevertheless, researchers express that they need to learn how to practice this knowledge as behavior. BBC News Turkish channel has been released a video about the plagiarism situation in Turkey, they mention research conducted at Bosphorus University, results of the research show that one-third of academic writings in Turkey contains a high incidence of plagiarism, unfortunately (BBC News Türkçe, 2021). Eret and Ok (2014) conducted their study in Turkey with teacher candidates and according to the results, they confirm that there is an increase in the plagiarism rate with the influence of the internet and there is a need for institutional precautions. It should not be forgotten that students will cheat and it is not easy to prevent this bad behavior, one of the best solutions is communication between faculty, instructors and students, especially students who need to be convinced that cheating and plagiarism immoral acts (Trinchera, 2002).

3 Types of Plagiarism

Previously I have mentioned some of the plagiarism types while explaining how students plagiarize in different grades. Naik et al. (2015) have their categorization (See Fig. 1). Turnitin has released a spectrum of problematic tags; Clone is used for stealing someone else’s work word by word and using as it’s your own; CTRL+C

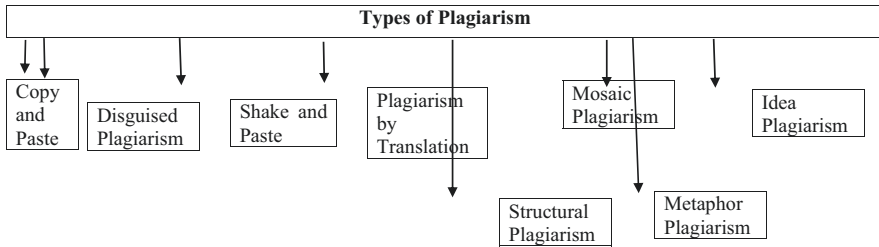


Fig. 1 Types of Plagiarism. (Adapted from Naik et al., 2015, p. 16)

means using most parts of one source without changing and giving references; Mashup refers to copying multiple resources and mixing them as one (Turnitin, 2017), these are three examples of 10 tags. Debnath (2016) identifies types of plagiarism as text plagiarism and idea plagiarism. He divides text plagiarism to four sub-categories; (a) substantial copy-paste, (b) literal copying, (c) paraphrasing, (d) text-recycling (self-plagiarism).

3.1 Copy and Paste

Direct copy from another resource word to word without giving acknowledgements (Maurer et al., 2006). This type is quickly recognizable (Naik et al., 2015). Generally, a student or researcher finds a related paper and copies given ideas as his/her ideas without a reference also copies words, sentences without change and present them as their own (Renard, 1999). Trinchera (2002) mentions how students were rushing to finish their papers before the deadline and all of them were highlighting other papers to copy and paste later on while he was working in the reference desk of a library. This scenario may sound so familiar to most of the teachers and instructors. Completing homework or project on the previous day of the deadline is a common habit for most of the students. They usually just write and search the related results on an online search engine then copy the sentences from different websites without a reference. Collecting different sentences from various sources is also called “shake and paste” and “mosaic” plagiarism (Naik et al., 2015). Most of them feel comfortable about this issue because they think no one cares what they do and they will not be punished for this habit (McCabe, 1999).

3.2 Disguised Plagiarism

When a student or researcher find an interesting sentence in an article related to his/her paper he/she might take this sentence and changes the words to be able to use it as his/her idea. Using synonym words without giving references also considered

plagiarism. Sentences from another source can be disguised by changing word order or by adding and removing words (Lancaster, 2003). Paraphrased sentences without giving the source is a form of disguised plagiarism. This type of plagiarism is similar to the “shake and paste” type, too.

3.3 Plagiarism by Translation

In the information age, it is very easy to reach every kind of research, article or academic paper in every language via the internet. Finding a related article or any kind of academic paper and publishing it like your own by translating to another language without the reference is considered plagiarism (Naik et al., 2015; Maurer et al., 2006). In my opinion, this method could be named direct idea theft because I cannot think of another word to identify this behavior. This type may be seen not only in academic papers but also in the publishing industry, too. Şahin et al. (2015) investigated 40 classic books that had been distributed via newspaper for a campaign in Turkey. They have detected several (re)translation issues. Results show that it is impossible to find any information about some bestseller books’ authors. They also report that similar problems can be seen all around the world.

3.4 Self-Plagiarism

We should not think of plagiarism as the act of stealing someone else’s idea or work, sometimes when a researcher refers to his/her work or uses the idea from his/her paper without giving a reference to himself/herself this is considered as plagiarism, either (Maurer et al., 2006).

4 Methods and Plagiarism Detection Tools

Since plagiarism increased over time people developed new ways of detection, especially web-based detection tools emerged for the need for more accurate and fast results. This rapid increase has been a real problem for universities, schools and institutions therefore using software detection tools became necessary for them but still, it is not possible to find all plagiarism acts in the research that is mostly because these software detection tools can find similarities with the globally published papers (Ali et al., 2011). When a student used a search engine for plagiarism instructor has the chance to find out the source, however, it is time-consuming for them since there are many papers to review (Neill & Shanmuganthan, 2004). One of the most common approaches is to compare documents on a word by word basis also you can use search engines to find possible similarities with the paragraphs (Maurer

et al., 2006). You can investigate the acts of intelligence theft by searching, using detection services or analyzing via plagiarism detection software programs (Vernon et al., 2001). Lancaster (2003) suggests four-stage detection process, collection stage involving submissions of works, analysis stage containing computerized analysis of submitted works, confirmation stage including human-led examination for similarity and investigation stage comprising possible penalties for possible plagiarism.

We can divide detection methods into two as external plagiarism detection methods that can be divided to sub categories as grammar-based, semantic-based, cluster-based, cross-lingual based, citation-based, character-based and intrinsic plagiarism detection methods also can be divided sub-categories like grammar semantics hybrid-based, structure-based, syntax plagiarism detection methods (Naik et al., 2015).

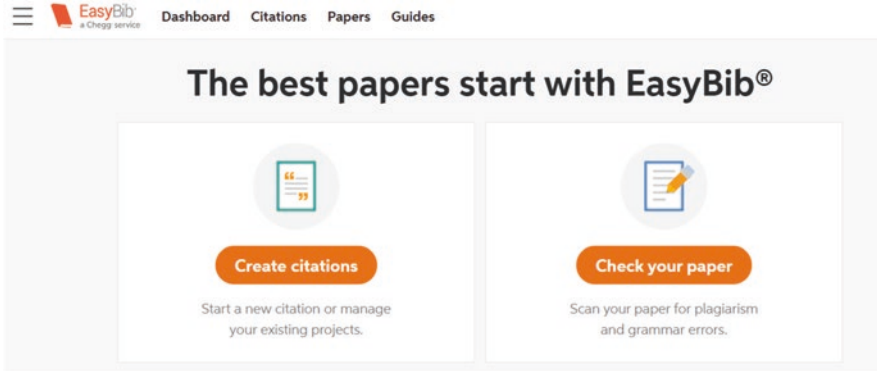
Grammar-based plagiarism detection method is used to detect clone documents and it is not suitable to find plagiarism in the modified documents and paraphrased documents (Naik et al., 2015; Ali et al., 2011). The semantic-based model uses the vector space model to detect the similarities and is considered as one of the most important methods however, it does not give reliable results for the paraphrased documents (Naik et al., 2015; Ali et al., 2011). Clustering-based plagiarism detection method is used to reduce the searching time (Ali et al., 2011).

The Joint Information Systems Committee (JISC) released a Technical Review of Plagiarism Detection Software Report, they examined five detection services and they concluded that most of the software and services were “relatively effective” at detecting plagiarism, including Turnitin (Gauder, 2004). Mainstream search engines like Google, Yahoo or Yandex are always an option especially if there are a few papers to go over. Websites like Grammarly, Easybib, Chegg are useful internet-based plagiarism check sites, one of the limitations is that they are paid services, however, they have free trial options, too.

4.1 Detection Tools, Affordances and Constraints

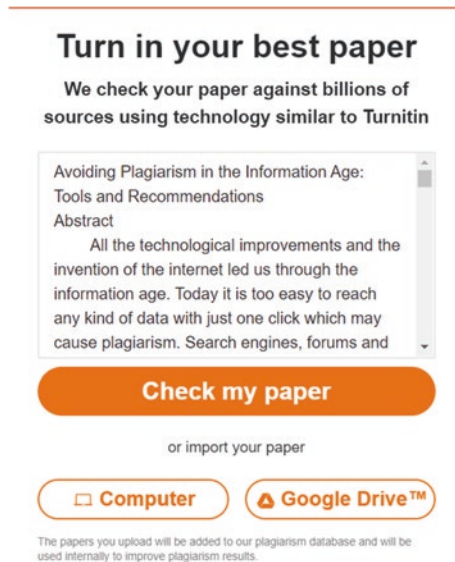
Easybib website has an easy interface; alongside of paper check option it also provides citation creation option, too. You can copy and paste your paper and check for plagiarism (See Picture 1). When you paste your paper, you click “check my paper” button (See Picture 2) and get your results. Website reports your grammar results, plagiarism results and an expert check if you wish (See Picture 3). It may recommend unrelated corrections, so you should revise it before the final version. You can improve your account with payment but you can also use the website free.

Chegg website also provides a copy and paste option (See Picture 4). Chegg company provides mainly homework solutions, career opportunities, internships etc. Chegg writing is one of their services and the website has the same interface and report options as Easybib. You can use their services free but you need to pay for unlimited services.

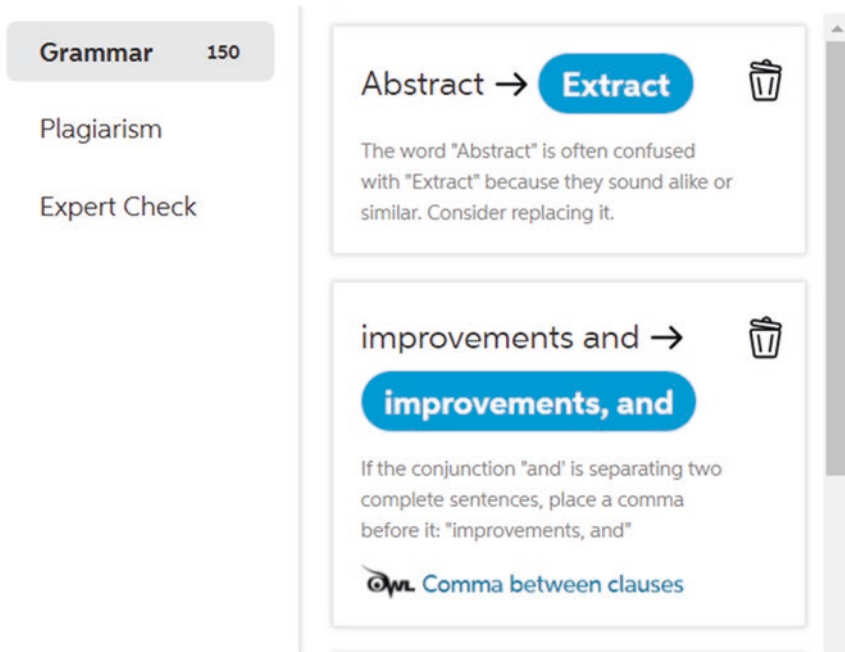


Picture 1 Main page of Easybib websites providing options like creating new citations and checking your paper (easybib.com)

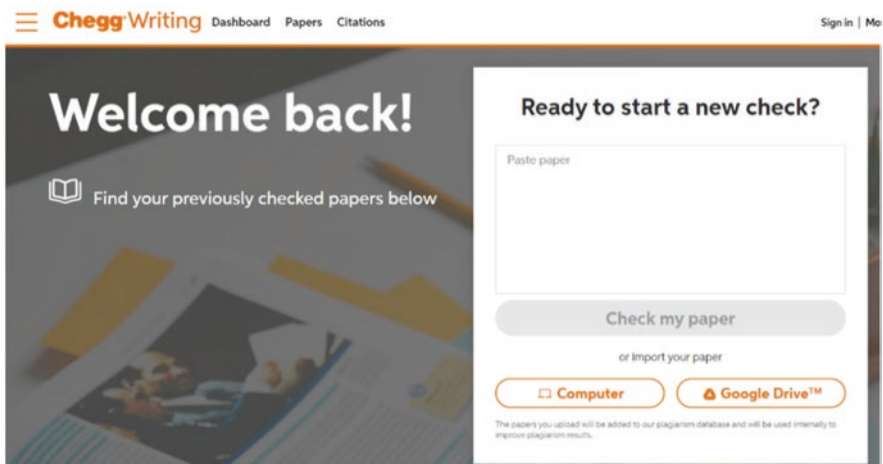
Picture 2 Copy and paste box (easybib.com)



Among the detection tools, Turnitin.com might be considered as one the most useful ones and it is the most referred detection tool in the literature (Lancaster & Culwin, 2005). It has been developed by John Barrie. Crosschecking method is used by Turnitin, which means the system checks submitted assignments to detect plagiarism incidents, and this website is used by almost 15,000 institutions around the world (Levine & Pazdernik, 2018). It contains unique fingerprints for the given documents and able to look for similarities in a wide range of data. It is also useful for students to scan their papers for possible plagiarism occasions with real-time feedback before submitting them (Sisti, 2007). As a reminder, do not forget that you must be an official student or instructor of an institute to create a user profile (See



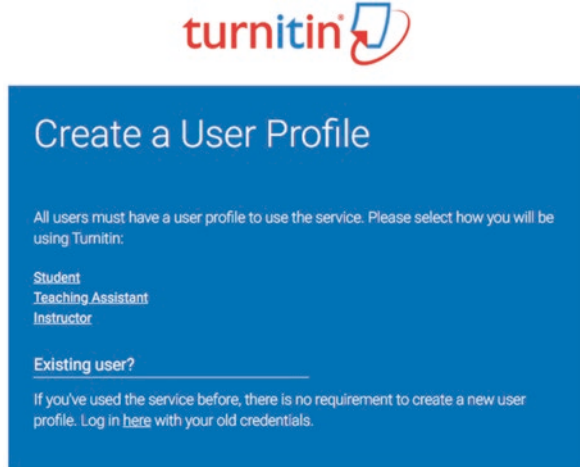
Picture 3 Report types and correction examples (writing.easybib.com)



Picture 4 Plagiarism check page of Chegg.com named Chegg Writing (writing.chegg.com)

Picture 5). It enables instructors to gather all his/her students' papers in one class group. Users are able to upload text formats like .doc, .pdf and .wpd files. After the papers have been uploaded to the system, it generates a report containing the originality of the paper (See Picture 6) on a scale of 1–5 with the URL links of

Picture 5 Turnitin Create User Profile page with the student, teaching assistant and instructor options (https://www.turnitin.com/login_page.asp?lang=tr_TR)



ORIGINALITY REPORT			
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS
36%	11%	17%	33%
PRIMARY SOURCES			
1	Submitted to Massey University Student Paper	18%	
2	Submitted to GradoGuru Publication	6%	
3	Submitted to Foothill College Student Paper	4%	
4	www.geography.ccsu.edu Internet Source	4%	
5	Submitted to CSU, Chico Student Paper	2%	
6	Submitted to South Birmingham College Student Paper	1%	
7	Submitted to University of College Cork Student Paper	1%	
8	Submitted to CSU, Fullerton Student Paper	1%	
9	nou.edu.ng Internet Source	<1%	

Body

Humidity

Humidity refers to water vapour in the air. The capacity of air to hold water vapour is primarily a function of temperature. Warmer air has a greater capacity for holding water vapour than cooler air. The temperature at which a body of air becomes saturated is its dew-point temperature. Relative humidity is a ratio of the amount of water vapour that is actually in the air, compared with the maximum water vapour the air could hold at a given temperature. If the air is saturated with all the moisture it can hold for its temperature, the relative humidity is 100%. A further increase of water vapour or a decrease in temperature results in active condensation. Relative humidity varies due to evaporation, condensation or temperature changes. All these affect both the moisture content and the capacity of the air to hold water vapour. It is highest at dawn, when air temperature is lowest and the capacity of air is less, and also lowest in late afternoon, where higher air temperatures increase the capacity of air to hold water vapour.

Adiabatic Processes

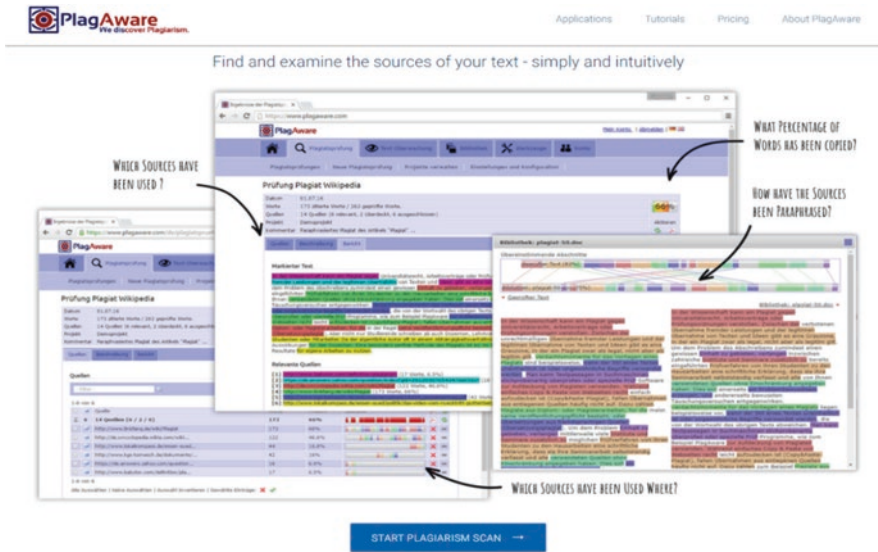
Adiabatic Warming and Cooling

In order for precipitation to occur, processes need to take place. Adiabatic processes are the changes in temperature that occur due to variations in the air pressure. When water

Picture 6 Similarity report example (owll.massey.ac.nz/referencing/turnitin.php)

similarities of other texts (Gauder, 2004). One of the most useful features is its language variety it serves many different languages.

Essay Verification Engine (EVE) contains a very useful essay database. Program’s author describes its function in a personal conversation with Braumoeller and Gaines (2001) as follows: “EVE fragments the essay based on several rules and uses these fragments to conduct searches in a variety of areas... The essay stays on your computer, where your EVE software performs matches and statistical analysis against material it retrieves from web” (p. 836). It is not internet-based and you may pay to use it or you can use the trial version (EVE Plagiarism Detection System,



Picture 7 An example of the PlagAware website’s plagiarism report (plagaware.com)

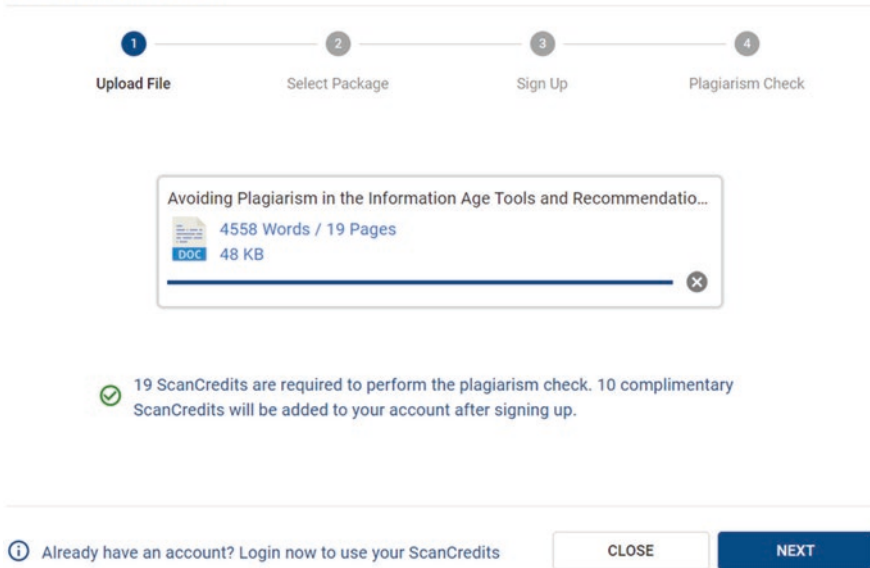
2009). Applicants can get a report containing a list of the percentage of plagiarism, the list of URLs and annotated copy of the paper (Neill & Shanmuganathan, 2004).

PlagAware is a professional online textual plagiarism detection engine. It is a classic search engine that allows users to detect and scan plagiarism, also provides detailed reports to help fast detection of plagiarism to its users containing used sources, percentages of copied words, paraphrased sources etc. (See Picture 7). There are six stages to upload your file and to check your paper for plagiarism; upload file (See Picture 8), select package, sign up, billing address, checkout, and plagiarism check (See Picture 9). This engine’s software system allows automatic observation against possible content theft (PlagAware, 2021). One of the advantages of this engine is that it has an online database allowing students or instructors to check their homework, articles etc. before they hand them over. It has multiple document comparison features. The primary language of this engine is German also supports English and Japanese as secondary languages (Ali et al., 2011).

PlagScan is another online textual plagiarism website based on up-to-date linguistic research, mainly used academic publications so it enables documents including books, articles, journals, PDFs. The website provides accurate measurement to detect copy and paste or word switching plagiarism. There are several upload options. (See Picture 10) One of the biggest constraints of this website, it has a credit system; you need to buy “plagpoints”. It supports all languages with Latin or Arabic characters for checking (Ali et al., 2011; See Picture 11).

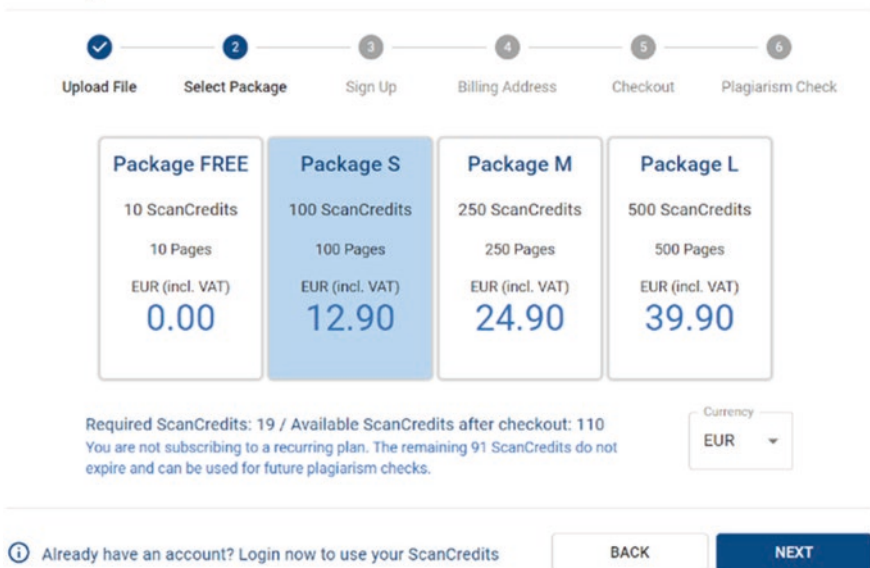
CheckForPlagiarism.net counts as one of the best plagiarism detection services by its users. To maximize accuracy it uses methods like document fingerprint and

Your Plagiarism Check

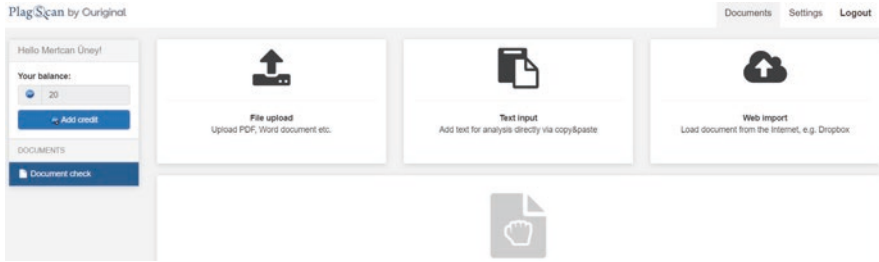


Picture 8 Upload file page of PlagAware (my.plagaware.com/wizard)

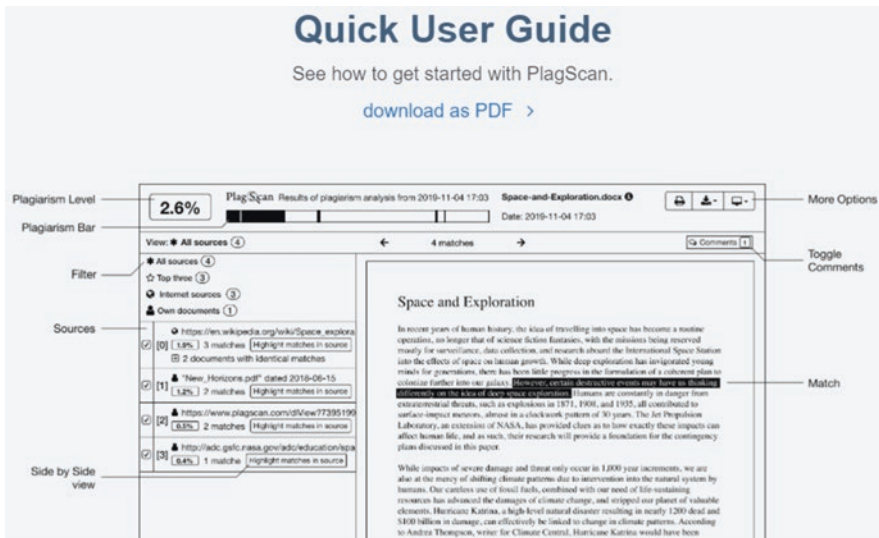
Your Plagiarism Check



Picture 9 Six stages of PlagAware (my.plagaware.com/wizard)



Picture 10 Upload options of PlagScan with your credit balance on the right ([plagscan.com](https://www.plagscan.com))



Picture 11 User Guide page of PlagScan website (<https://www.plagscan.com/en/quick-user-guide>)

document source analysis. It contains millions of documents (paper, articles, and assignments) in its database and can analyze articles over the World Wide Web. This website is one-step ahead of other tools and websites with its ability to check publications not available online. You can login for student and researcher account (See Picture 12) or academic account for teachers and institutions. (See Picture 13) Each account has their unique features. It has multiple document comparison options, too and supports English languages, French, German, Portuguese, Spanish, Italian, Arabic, Korean and Chinese languages (Ali et al., 2011). One of the cons of this website is that it is not free to use (See Picture 14).

Accounts for Students and Researchers Print Email

Plagiarism Checking Accounts: Students & Researchers (School, College, University, and Polytechnic Institutes)

TRY US FOR FREE

FEATURES

5

ACCOUNTS FOR STUDENTS[®]

(High School, College, University, PhD Researchers)

- PUBLICATIONS CHECKING**
Internet, Books, Journals, Databases (IEEE, JSTOR, EBSCO etc.)
- NO TIME LIMIT**
Submit at your own pace with no time limit on account expiration
- MULTIPLE LANGUAGES AND FILE FORMATS**
100+ languages and multiple file formats supported
- MULTIDISCIPLINARY DATABASE SEARCH**
Business, Law, Medical, Engineering, Economics, Arts, Sciences etc.
- GET YOUR PAPERS READY FOR SUBMISSION**
Plagiarism Checking / Plagiarism Corrections / Full Proofreading

FEATURESREVIEWSAWARDSTRUSTWORTHYCLIENTS

Picture 12 Students and Researchers account features (checkforplagiarism.net/students)

Academic Accounts (Teachers and Institutions) Print Email

FREE TRIAL

FEATURES

5

ACADEMIC ACCOUNTS[®]

(teachers and institutions)

- PUBLICATIONS CHECKING**
Check through Books, Journals, Periodicals and Internet sources
- NO TRAINING REQUIRED**
Easy to use system for faculty and students
- MULTIPLE LANGUAGES AND FILE FORMATS**
100+ languages and multiple file formats supported
- MULTIPLE USER ACCOUNTS (FREE)**
Multiple user accounts for teachers and students, at no additional cost
- FLAT FEE STRUCTURE**
Flat fee for *unlimited document submissions

FEATURESREVIEWSAWARDSTRUSTWORTHYCLIENTS

Picture 13 Academic Accounts features (checkforplagiarism.net/academic-accounts)



Picture 14 Main page of [Checkforplagiarism.net](https://www.checkforplagiarism.net/) (https://www.checkforplagiarism.net/)

5 Avoiding Plagiarism

There have been listed some plagiarism detection methods and tools in the previous section. Throughout the years from the beginning of effective usage of the internet for plagiarism until today students and researchers have developed several ways to plagiarize, however instructors, universities and institutions find a solution against every kind of intellectual theft to prevent the decrease of academic integrity. Instructors' behaviors and institutions' policies are considered as the number one reason causing plagiarism. There are researches looked into reasons behind students' acts of plagiarism and it has been reported that students do not bother because they seem this action normal since no one cares or everybody does it according to

their point of view (McCabe, 1999). We can presume that students will be less likely to plagiarize when they are aware of the detection tools and methods (Martin, 2005). One of the best ways to keep students and people in general away from the act of intellectual theft is educating and informing them, they need to understand the meaning of plagiarism (Vernon et al., 2001). Teachers need to clarify their policy on plagiarism at the beginning of the term and then remind it whenever they assign their students a writing task; in addition, students need to be taught about right note-taking and academic writing skills (Wilhoit, 1994). Teachers may identify penalties like a written or verbal warning, lower grades and extra assignments; institutional level precautions may include official censure, academic integrity training, suspension and expulsion (Maurer et al., 2006). Landau et al.'s (2002) research show that undergraduate students can learn and avoid plagiarism. McCabe and Pavela (2004) suggests ten principles of academic integrity for faculty; (a) recognize and affirm academic integrity as a core institutional value, (b) foster a lifelong commitment to learning, (c) affirm the role of the teacher as guide and mentor, (d) help students the potential of the Internet, (e) encourage student responsibility for academic integrity, (f) clarify expectations for students, (g) develop fair and creative forms of assessment, (h) reduce opportunities to engage in academic dishonesty, (j) respond to academic dishonesty when it occurs, (k) help define and support campus-wide academic-integrity standards. They named these principles "honor codes" for faculties.

Indiana University Bloomington School of Education offers an online plagiarism detection test and certificate you when you pass this test successfully. Personally, I had to pass this test as a term assignment for a research and methods lessons while in my M. A education. Mammen and Meyiwa (2013) conducted a case study about perceptions and concerns on plagiarism in a South African University, according to their results 79%, 84% and 89% of participants received in-text referencing, compiling a list of references and avoiding plagiarism education while 21%, 16% and 11% did not receive and the latter group have concerns about their plagiarism and referencing skills. Eret and Gökmenoğlu (2010) suggest that universities and institutions integrate a "course on plagiarism and academic skills" thus students will be able to raise awareness and gain academic knowledge about the real meaning of plagiarism. Kam et al. (2018) conducted their research at a secondary school in Hong Kong. They express that students are unsure about plagiarism, to inform them and raise awareness against plagiarism schools and teachers need to educate their students as soon as possible. To sum up, plagiarism is a common problem for academia and looks like it will continue becoming an issue in the future unless authorities take serious precautions and start appropriate plagiarism integrated course programs in their syllabuses from kindergarten to higher education. If we want a permanent solution to prevent the decrease in academic integrity we need to start educating children and the most important thing here we need to teach ethics to our students.

References

- Ali, A. M. E. T., Abdulla, H. M. D., & Snasel, V. (2011, April). Overview and comparison of plagiarism detection tools. In *Dateso* (pp. 161–172).
- BBC News Türkçe. (2021). *BBC News Türkçe*. https://www.youtube.com/watch?v=XmzfRyHUjkY&ab_channel=BBCNewsT%C3%BCrk%C3%A7e
- Braumoeller, B. F., & Gaines, B. J. (2001). Actions do speak louder than words: Deterring plagiarism with the use of plagiarism-detection software. *PS: Political Science and Politics*, 34(4), 835–839.
- Clayton, M. (1997). Term papers at the click of a mouse. *Christian Science Monitor*, 89(232), 1.
- Currie, P. (1998). Staying out of trouble: Apparent plagiarism and academic survival. *Journal of Second Language Writing*, 7(1), 1–18.
- Debnath, J. (2016). Plagiarism: A silent epidemic in scientific writing—Reasons, recognition and remedies. *Medical Journal Armed Forces India*, 72(2), 164–167.
- Devlin, M., & Gray, K. (2007). In their own words: A qualitative study of the reasons Australian university students plagiarize. *High Education Research & Development*, 26(2), 181–198.
- DeVoss, D., & Rosati, A. C. (2002). “It wasn’t me, was it?” plagiarism and the web. *Computers and Composition*, 19(2), 191–203.
- Eraslan, A. (2011). Prospective mathematics teachers and cheating: It is a lie if I say I have never cheated! *Education and Science*, 36(160), 52.
- Eret, E., & Gokmenoglu, T. (2010). Plagiarism in higher education: A case study with prospective academicians. *Procedia-Social and Behavioral Sciences*, 2(2), 3303–3307.
- Eret, E., & Ok, A. (2014). Internet plagiarism in higher education: Tendencies, triggering factors and reasons among teacher candidates. *Assessment & Evaluation in Higher Education*, 39(8), 1002–1016.
- EVE Plagiarism detection system/plagiarism check blog. FREE tips on plagiarism detection. (2009, March 20). <http://plagiarismanalyzer.org/blog/2009/03/20/eve-plagiarism-detection-system/>
- Gauder, H. (2004). The hunt for plagiarism: Using the right tools for the right job. *Internet Reference Services Quarterly*, 8(4), 27–51.
- Gökmenoğlu, T. (2017). A Review of Literature: Plagiarism in the papers of Turkish context. *Higher Education Studies*, 7(3), 161–170.
- Gullifer, J. M., & Tyson, G. A. (2014). Who has read the policy on plagiarism? Unpacking students’ understanding of plagiarism. *Studies in Higher Education*, 39(7), 1202–1218.
- Isaacs, S. (1934). *Social development in young children: A study in beginnings*. Routledge.
- Kam, C. C. S., Hue, M. T., & Cheung, H. Y. (2018). Plagiarism of Chinese secondary school students in Hong Kong. *Ethics & Behavior*, 28(4), 316–335.
- Lancaster, T. (2003). *Effective and efficient plagiarism detection*. Doctoral dissertation, London South Bank University.
- Lancaster, T., & Culwin, F. (2005). Classifications of plagiarism detection engines. *Innovation in Teaching and Learning in Information and Computer Sciences*, 4(2), 1–16.
- Landau, J. D., Druen, P. B., & Arcuri, J. A. (2002). Methods for helping students avoid plagiarism. *Teaching of Psychology*, 29(2), 112–115.
- Levine, J., & Pazdernik, V. (2018). Evaluation of a four-prong anti-plagiarism program and the incidence of plagiarism: A five-year retrospective study. *Assessment & Evaluation in Higher Education*, 43(7), 1094–1105.
- Liddell, J. (2003). A comprehensive definition of plagiarism. *Community & Junior College Libraries*, 11(3), 43–52.
- Mammen, K. J., & Meyiwa, T. (2013). Perceptions and concerns on plagiarism and its implications for teacher education: A case study of a South African University. *International Journal of Educational Sciences*, 5(2), 99–108.
- Martin, D. F. (2005). Plagiarism and technology: A tool for coping with plagiarism. *Journal of Education for Business*, 80(3), 149–152.

- Maurer, H. A., Kappe, F., & Zaka, B. (2006). Plagiarism-A survey. *Journal of Universal Computer Science*, 12(8), 1050–1084.
- McCabe, D. L. (1999). Academic dishonesty among high school students. *Adolescence*, 34(136), 681.
- McCabe, D. L., & Pavela, G. (2004). Ten (updated) principles of academic integrity: How faculty can foster student honesty. *Change: The Magazine of Higher Learning*, 36(3), 10–15.
- Naik, R. R., Landge, M. B., & Mahender, C. N. (2015). A review on plagiarism detection tools. *International Journal of Computer Applications*, 125(11).
- Neill, C. J., & Shanmuganthan, G. (2004). A Web-enabled plagiarism detection tool. *IT professional*, 6(5), 19–23.
- Olson, K. R., & Shaw, A. (2011). ‘No fair, copycat!’: What children’s response to plagiarism tells us about their understanding of ideas. *Developmental Science*, 14(2), 431–439.
- Park, C. (2003). In other (people’s) words: Plagiarism by university students—literature and lessons. *Assessment & Evaluation in Higher Education*, 28(5), 471–488.
- PlagAware. (2021). *PlagAware*. <https://www.plagaware.com/about>. Last access 24 Feb 2021.
- Renard, L. (1999). Cut and paste 101: Plagiarism and the net. *Educational Leadership*, 57(4), 38–42.
- Şahin, M., Duman, D., & Gürses, S. (2015). Big business of plagiarism under the guise of (re) translation: The case of Turkey. *Babel*, 61(2), 193–218.
- Scanlon, P. M., & Neumann, D. R. (2002). Internet plagiarism among college students. *Journal of College Student Development*, 43(3), 374–385.
- Semerci, Ç. (2004). Tip fakültesi öğrencilerinin kopya çekmeye ilişkin tutum ve görüşleri [Attitudes and ideas of medicine faculty students towards cheating]. *Fırat Üniversitesi Sağlık Bilimleri Dergisi*, 18(3).
- Sisti, D. A. (2007). How do high school students justify internet plagiarism? *Ethics & Behavior*, 17(3), 215–231.
- Trinchera, T. (2002). Cut and paste plagiarism: What it is and what to do about it. *Community & Junior College Libraries*, 10(3), 5–9.
- Turnitin. (2017). *Turnitin*. <https://www.turnitin.com/static/plagiarism-spectrum/>
- Ural, M. N., & Sulak, S. A. (2012). Plagiarism via internet on undergraduate students in Turkey. *Journal of educational and Instructional studies in the World*, 2(3), 229–234.
- Vernon, R. F., Bigna, S., & Smith, M. L. (2001). Plagiarism and the Web. *Journal of Social Work Education*, 37(1), 193–196.
- Wilhoit, S. (1994). Helping students avoid plagiarism. *College Teaching*, 42(4), 161–164.
- Yang, F., Shaw, A., Garduno, E., & Olson, K. R. (2014). No one likes a copycat: A cross-cultural investigation of children’s response to plagiarism. *Journal of Experimental Child Psychology*, 121, 111–119.
- Yazici, A., Yazici, S., & Erdem, M. S. (2011). Faculty and student perceptions on college cheating: Evidence from Turkey. *Educational Studies*, 37(2), 221–231.

Mertcan Üney graduated from Abant İzzet Baysal University department of English Language Teaching and finished his M.A at Bahçeşehir University in the field of English Language Teaching. He currently works as an English Language Teacher in Ministry of National Education.

Part III
Research in Action

“Corpus Made My Job Easier”: Preservice Language Teachers’ Corrective Feedback Practices in Writing with Corpus Consultation



Betül Bal-Gezegin, Erdem Akbaş, and Ahmet Başal

Abstract Recently several studies have targeted the phenomenon of feedback-giving practices and reported that providing concise, accurate, and unintuitive feedback plays an important role in improving students’ writing. Giving feedback however can be challenging for language teachers, and they might need to consult strategies to provide students with accurate and effective feedback. Using a corpus, a large collection of real language samples which can be investigated with specific tools, is one of these strategies that language teachers can use in giving effective feedback. This study investigates the perceptions of preservice language teachers about corpus consultation when giving corrective feedback. To this end, in this qualitative study, a group of preservice language teachers was given written texts as an error correction exercise. The participants corrected the errors with the help of a corpus. A survey with open-ended questions and a focus group interview were held to determine the perceptions of the participants. Based on the analysis of data, three themes emerged (advantages and challenges of corpus consultation and purposes of corpus use). The results provide an overview of how pre-service language teachers perceive corpus consultation and corpus use in the process of giving corrective feedback. This exploration of corpus-based feedback practices by preservice language teachers can make essential contributions to language teaching practices in particular and the corrective feedback literature in general. Despite some limitations, this study presents the potential benefits and challenges of using corpus-based feedback

B. Bal-Gezegin (✉)
Ondokuz Mayıs University, Samsun, Türkiye
e-mail: betul.balgezegin@omu.edu.tr

E. Akbaş
Erciyes University, Kayseri, Turkey
e-mail: erdemakbas@erciyes.edu.tr

A. Başal
Yıldız Technical University, Istanbul, Turkey
e-mail: abasal@yildiz.edu.tr

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_14

reported by preservice language teachers. The pedagogical implications of the findings are also discussed.

Keywords Corpus consultation · Corrective feedback · Preservice language teachers · Language teaching · Writing

1 Introduction

Most language learners find it challenging and demanding to write in another language since it requires a high level of linguistic accuracy. Aiding foreign-language learners to reach (at least to pursue constantly) this level in their writing is therefore important. It includes giving corrective feedback, necessary for writing development (Hyland & Hyland, 2019), on students' text errors, which is regarded as a routine responsibility of L2 writing teachers. Despite contradictory views of the benefits of corrective feedback, we believe that "an error on a page is an important opportunity for acquisition" (Gaskell & Cobb, 2004, p. 304). Through corrective feedback, language teachers help to raise their students' awareness (Rutherford, 1987). However, giving corrective feedback is not as easy as it is assumed, particularly for non-native-language teachers. Here, corpus consultation could be one option that can strengthen non-native-language teachers' hands in giving corrective feedback.

A corpus has been defined as "systematically collected, naturally-occurring categories of texts" (Friginal & Hardy, 2014, p. 20). Simply put, a corpus is a principled collection of authentic language. Corpus-based applications have become more common in line with computers' exponentially growing processing power. In a foreign-language teaching context, corpus enables the analysis of a huge dataset of a given language and informs its users about the use of the language in terms of its lexis, patterns, and grammar. Such information can come in handy for non-native-language teachers since their knowledge of and intuition about the target language are relatively limited compared with those of the native-speaker teachers of that language. When non-native-language teachers review their students' texts, they occasionally experience difficulties due to such limitations. Corpus consultation is undoubtedly one viable option which can assist them and compensate for their limits in the target language when giving corrective feedback. In other words, corpus consultation in the process of providing corrective feedback on students' writing errors ranging from word level to sentence level could be well-suited for non-native-language teachers to address their students' writing needs.

The use of a corpus, an extension of corpus linguistics, by language teachers both in and outside the class is relatively limited (Mukherjee, 2004; Tribble, 2000). This can also be the case for consulting a corpus for error correction. For this reason, it is important to equip language teachers who are mostly graduating from their departments without the knowledge and skills of corpora and corpus applications in language teaching (Farr, 2010). With this in mind, this book chapter explores the perceptions of pre-service English-language teachers who received training on the

use of a corpus and corpus tools when giving corrective feedback. Through this exploration, we seek to showcase the importance of training language teachers in the use of corpora and corpus tools before they graduate from their departments. The chapter begins by detailing corrective feedback and the place and affordances of corpora and corpus tools in the feedback-giving process. We shall then discuss the corrective feedback practices of the pre-service language teacher group described above.

2 Literature Review

For some time, the effectiveness of giving corrective feedback on the written products of learners has been controversial since several scholars (see Truscott, 2004, 2007) believe that error correction should be removed from teaching and learning processes. Some studies (i.e., Bitchener, 2008), however, have shown that the supply of corrective feedback (direct or indirect) provides learners with opportunities to develop their writing. Based on a meta-analysis of this issue, Kang and Han (2015) demonstrated that written corrective feedback has a moderately substantial impact on the development of the written accuracy of L2 learners. One of the central issues in corrective feedback is mainly linked to the type of feedback given. Regarding indirect corrective feedback practices, Tocchi-Beller and Swain (2005) stated that for cognitively more active learners in the process of solving a problem it can increase their chances of acquiring the language.

In contrast, some studies support the provision of direct feedback practices by teachers to meet the feedback expectations of learners (Hyland & Hyland, 2006) and help learners to understand what is wrong with their production explicitly, leading to writing development (Bitchener, 2008; Storch, 2018). The direct use of corpus, known as principally collected electronic texts representing real language (Timmis, 2015), and corpus query tools appears to be a widely employed practice in language pedagogy, primarily when written corrective feedback is of great concern to a language teacher. With the help of corpora, it is practical to delve into a wealth of texts to explore how the language works concerning a range of issues such as the frequency of words, collocates of particular words, and specific grammar use, which might, in turn, provide insights and support to the language learner (Flowerdew, 2009). In line with this, a growing number of studies (for example, Boulton, 2017; Chen & Flowerdew, 2018) have explored the effectiveness and affordances of corpus use and documented that it has a substantial value regarding language learning. These studies essentially promote the use of corpora in language pedagogy not just for developing materials and activities but also in the utilization of corpora, multi-million-word collections of texts, by learners known as data-driven learning (DDL). This is in line with the argument of Leńko-Szymańska and Boulton (2015) that the integration of language corpora simply presents ‘multiple affordances’ in language pedagogy. For example, Crosthwaite (2017, p. 448) described DDL as “an alternative to teacher-led, rule-based approaches to language pedagogy” since it allows learners to become autonomous and responsible for their own learning.

With respect to the value of corpus and concordance queries in error correction and feedback practices, Gaskell and Cobb (2004) showed that after a four-week training session on how to benefit from concordance searches, L2 learners (lower-intermediate) reduced their error rates in ten error types, three of which were noted to be significantly reduced (word order, capitals/punctuation, and pronouns). Strikingly, seven of the participants in Gaskell and Cobb's (2004) study continued to consult the corpus to provide evidence for their error correction with concordance lines even though they were not expected to do so throughout the experiment. This could lead to the conclusion that learners could become independent concordance users for checking how their errors could be corrected. Such an autonomous perspective would equip learners with a desirable attitude to resolve their erroneous language use and create a considerably more powerful learning experience to fill the gaps in their knowledge by 'noticing' (Schmidt, 1990). Crosthwaite et al. (2020) pointed out that the integration of corpora and corpus consultation yields independent and incidental learning since the process can contribute to learners' exploration of actual language use with various focuses ranging from the frequency of the formation of a lexical/grammatical unit to the lexical/grammatical appropriacy of an item in the context as well as correct forms of units (spelling, punctuation, and form).

Highlighting the view that unsupervised corpus consultation by language learners might not result in accuracy in language, Tono et al. (2014) explored whether guided corpus consultation is effective in terms of addressing learners' grammatical and lexical errors. The results showed that learners with a higher proficiency level and writing longer texts appeared to benefit from guided error feedback from their instructors and revised their texts accordingly. Corpus consultation could therefore play a relatively significant role in providing opportunities for learners if/when they are guided to fix what seems problematic. Crosthwaite et al. (2020, p. 3) stated that corpus consultation "extends to a constructivist approach to L2 error resolution" since it provides reliable and rich opportunities with several affordances ranging from indicating appropriacy through real data and frequency information to fixing errors in single and multi-word units as well as grammatical issues. To do so, however, both learners and teachers are likely to need experience and practical knowledge on how to benefit from corpus consultation to integrate the corpus into the teaching and learning of the target language. Pérez-Paredes et al. (2011) pointed out that previous studies of the integration of corpora into language pedagogy have mainly dealt with corpus consultation by learners for the sake of learning different aspects of the target language. Mukherjee (2004) suggested that teachers also need to be aware of the potential and language-pedagogical applications of corpus use in terms of their contextual needs for teaching the language. However, less is known about the extent to which pre-service language teachers could find the use of corpora (in)effective in terms of providing feedback.

Following Guénette and Lyster (2013) who adopted the view of the need for "space to reflect, to practice, to confer and to exercise autonomy" suggested by Barkhuizen and Borg (2010, p. 238), we also focused on preservice language teachers, specifically English L2 teacher candidates, to give them this space through corpus consultation and to explore their practices for providing corrective feedback.

We concentrated mainly on the strengths and weaknesses of the corpus consultation of these L2 pre-service teachers in order to deepen our understanding of whether they developed any practical pedagogical knowledge throughout the process. This was mainly because preservice language teachers might lack the ability to adopt effective strategies and preferences in performing a feedback-giving task and rely overwhelmingly on their intuition in the target language since they might not have enough experience for such a process. Accepting the view that prior beliefs with respect to language-learning experiences could be substantially hard to change, we suggest that it is only possible when/if the necessary training is given and enough ‘space’ is provided.

With this in mind, the aim of this study was to explore the extent to which corpus consultation by pre-service language teachers could help them to provide feedback on students’ written work and what the whole process teaches them both as learners and as prospective language teachers. In addition, we wanted to see the extent to which the participant preservice language teachers found corpus consultation practical for resolving errors by giving feedback individually. We strongly believe that the findings of this study are likely to contribute to the available body of research on feedback practices and L2 teachers’ beliefs as well as to language-teacher education by showing the effectiveness of equipping preservice language teachers with the ability to use corpus/corpus tools and encouraging them to consult a corpus when providing feedback. The reason why we focused on this particular group of participants was twofold. We wanted to see whether L2 preservice language teachers could make informed decisions when giving feedback through a corpus which they can also benefit from when they start teaching. We also wanted to determine whether L2 preservice language teachers realise that they could also increase their awareness of target language use (discovery learning) through the process of corpus consultation and improve their language-related knowledge and skills, such as grammatical and lexical choices, syntactical issues, and punctuation.

3 Methodology

3.1 Method

A qualitative research design was adopted in this study. Thematic content analysis was used to interpret the data obtained from the responses of the participants to a survey consisting of open-ended questions and a focus group interview. The following research question and sub-questions guided the study:

RQ1. To what extent do pre-service language teachers benefit from corpus tools while giving corrective feedback?

RQ1a. In which areas does corpus consultation provide pre-service language teachers with opportunities?

RQ1b. Does corpus consultation for corrective feedback purposes cause any challenges?

3.2 *Participants*

The participants were ten (male $n = 5$; female $n = 5$) pre-service English language teachers. All the participant preservice language teachers were in their fourth (final) year of the English Language teaching programmes from different universities in Turkey. The participants had previously received training on how to benefit from corpus and corpus tools for various purposes in language teaching and learning.

3.3 *Data Collection and Data Analysis*

To find answers to the research question and the sub-questions, we invited pre-service language teachers ($n = 10$), who previously received training to develop their corpus literacy skills, to provide feedback by consulting corpus tools to a learner text with a range of errors (i.e., tenses, word choices, collocations, and so on) in L2 English. The data for this study were obtained through two data collection tools: (1) a survey with open-ended questions and (2) a focus group interview exploring the feedback practices of the participants. The study utilized qualitative content analysis which is described as “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (Hsieh & Shannon, 2005, p. 1278). The responses given to the survey questions and the transcriptions of the focus group interview were analysed by three researchers. The analysis was an iterative and cyclical process with repeated readings of the data multiple times by each researcher. First, the transcriptions were coded by each researcher, and the codes were reviewed together. The codes were then grouped into categories and themes were developed by analyzing these categories and subcategories (see Table 1). The researchers discussed any discrepancies and reached a consensus over the most appropriate themes and categories. These categories and themes are set out in the findings section of the chapter along with the most representative excerpts from the participants’ responses. The researchers sought to select excerpts which are illustrative, succinct, and representative to help us answer the research question(s). In some cases, more contextualization was needed and some relatively lengthy excerpts were also selected. All the excerpts selected in line with these criteria were then interpreted by the researchers with care to support the emerging categories and themes.

3.4 *The Procedure*

First, online meetings were held to give background information such as the goals of the study, the participants’ responsibilities during the research, and the procedure in general. A text containing a number of errors made purposefully by the

Table 1 Codes, categories and themes

Codes	Categories	Themes
<ul style="list-style-type: none"> · confidence/feeling safe/assured · comfort · fun · enjoyment · relief · enthusiasm 	Affective benefits	Theme 1 Benefits/advantages of corpus consultation
<ul style="list-style-type: none"> · consolidation · easiness · evidence-based · content development · time-saving · energy-saving · provides authentic language · practical 	Benefits to the teacher (self)	
<ul style="list-style-type: none"> · provides authentic language · reaching examples easily · autonomous learner · provides opportunities for fossilized errors · new learning · noticing · motivation 	Benefits to the language learner (self)	Theme 2 Challenges of corpus use
<ul style="list-style-type: none"> · need to know how to make queries · possibility of forgetting how to use corpora · needs practice 	Personal challenges	
<ul style="list-style-type: none"> · time-consuming · finding the right corpus · user-friendly 	Tool-related challenges	
<ul style="list-style-type: none"> · phrases · collocations · frequency · synonyms · context check (concordance lines) 	Language aspects	Theme 3 Purposes of corpus use

researchers but not indicated in the text was sent to the participants who were required to self-identify the errors. The researchers asked participants to screen-record and think-aloud while they were correcting the errors which they could identify to ensure why, when, and how they consulted a corpus and used corpus tools in the process. After sending their corrected texts and the video recordings to the researchers, the students were asked to answer the open-ended questions in the survey. As a follow-up, we conducted a focus group interview with the participants for an hour to deepen our understanding of the participants’ responses in the open-ended survey and cross-examine the findings we obtained. During the meeting, the

participants discussed the overall process and talked about their correction experiences in detail based on the questions provided by the researchers. The interview was held in participants' native language so that they could express their corpus consultation experiences effectively. The session was video-recorded and transcribed for the analysis.

4 Findings and Discussion

From the responses to the survey question and the focus group interview, three main themes with several categories emerged as shown in Table 1. The codes and categories were grouped under the three main themes: (i) benefits and advantages of corpus consultation during feedback giving, (ii) challenges of corpus consultation (the study's goals), and (iii) purposes of corpus consultation.

The first theme, benefits/advantages of corpus consultation, had categories of *affective benefits*, *benefits to the teacher* (self), and *benefits to the language learner*. The second theme, challenges of corpus use, was divided into personal challenges and corpus tool-related challenges. The third theme, purposes of corpus use, comprised the language aspects which the participants had queried in the corpus. These language aspects include phrases, collocations, frequency, synonyms, and context checks. These themes and their categories are further discussed below, with excerpts taken from participants' responses to the survey question and the focus group interview.

4.1 *Benefits/Advantages of Corpus Consultation for Giving Feedback*

The survey and focus group interview findings showed that the participants found corpus consultation for giving direct feedback to be a beneficial technique. The advantages reported were grouped into three main categories: affective benefits, benefits to the teacher and benefits to the language learner. The data showed that the participants commented on the benefits as language learners as well as language teachers. These benefits and advantages of corpus use are discussed in detail below; in order to ensure participants' anonymity, P. followed by a number refers to the participant and the number given to the participant in the study.

4.1.1 Affective Benefits

As can be seen in Table 1, affective benefits include *confidence/feeling safe/feeling assured, comfort, fun, enjoyment, relief, and enthusiasm*. These feelings were reported by the participants who used corpus tools to provide corrective feedback on the given text. Such positive feelings can ease the use of corpus and corpus tools by language teachers when giving corrective feedback. Here are some excerpts showing how the participants felt positively while consulting the corpus in giving feedback:

Excerpt 1: P.3

Derlem araçları özellikle de linggle emin olmadığım yerlerde işimi çok kolaylaştırdı. Bu süreçte araçlar işimi rahatlatdı diyebilirim.

(*English translation: The corpus tools, especially linggle, made my job a lot easier when I wasn't sure. I can say that the tools relieved me in this process.*) (relief)

Excerpt 2: P.6

Derlem araçlarını kullanırken güvende hissettim. Çünkü oralandaki verilerin benim sezgilerimden daha doğru olduğunu biliyordum.

(*English translation: I felt safe using the corpus tools because I knew that the data there was more accurate than my intuition.*) (feeling safe)

Excerpt 3: P.7

Yanışların doğru şeklini derlem araçlarıyla bulmak oldukça keyifliydi. Bulmaca çözer gibi eğlenceliydi.

(*English translation: It was pretty enjoyable to find the corrections for errors with the corpus tools. It was fun, like solving a puzzle.*) (enjoyment)

Although the number of studies that have reported the affective benefits of corpus consultation is limited, a few studies have shown similar results that students enjoy engaging with a corpus and reaching information not found in other materials (for example, Sun, 2007; Yoon, 2008). Enthusiasm was another affective benefit of corpus use found in this study; it had previously been reported by Chambers (2007) who stated that in addition to the usual advantages found, an unexpected result obtained in her study was students' enthusiasm for using a concordance.

4.1.2 Benefits to the Teacher (Self)

The participants in the study were pre-service teachers who were going to be English-language teachers. When their attitudes towards using corpora for providing corrective feedback were analysed, we found that there were various benefits of corpus consultation for these participants. They regarded the corpus consultation procedure to be easy, practical, consolidated, and time- and energy-saving. They also reported that they could use the corpus for content development in their future teaching contexts. Corpus consultation was found beneficial since it enables

reaching evidence-based and authentic language samples. It was found that the participants were more sure of errors in the text and their corrections of those errors when they supported their intuition about errors with evidence from the corpus consultation. This can lead to more satisfactory corrective feedback on the errors in the text. The following excerpts from their responses demonstrate this finding:

Excerpt 4: P.5

Derlem işimi kolaylaştırdı, daha önce nasıl kontrol ediyormuşum bilmiyorum.

(*English translation:* Corpus [use] made my job easier; I did not know what I was doing to check (errors) in the past.) (easiness)

Excerpt 5: P.2

Stajdayken öğrencilere okuma parçası buluyorum, zor olanları bundan sonra derlem ile basitleştireceğim.

(*English translation:* While I am in the internship (school experience), I need to find reading passages for students. From now on, I shall simplify the difficult ones with the corpus.) (content development)

Excerpt 6: P.1

Aramalarıma yanıt alamadığım zamanlar oldu ama yine de kolaylaştırdı.

(*English translation:* There were times when I could not find answers to my queries but still it (corpus consultation) eased (error correction).) (easiness)

4.1.3 Benefits to the Language Learner (Self)

A number of studies have reported the advantages of direct learner access to corpora (Boulton, 2009, 2010; Braun, 2007; Hong & Oh, 2008). The advantages reported in this current study are not only for teachers using a corpus but also language learners who are going to be English teachers. They are therefore both feedback providers and language discoverers at the same time. These two roles led to separate sets of advantages for the two groups reported by the participants. Although there were overlaps between the benefits to these two groups, there were also specific benefits found for language learners. These advantages were reported to be being able to access authentic examples of the target language and various language samples, and being able to discover new language patterns. It was also found that the participants thought that corpus use contributes to the profile of the ‘autonomous learner’ since it enables them to control their own learning process and to get involved with the target language. Being an autonomous learner is a significant factor because it triggers students’ motivation, enthusiasm, and willingness. If students become autonomous learners, they can continue learning outside the classroom. The participants reported that being able to use a corpus outside school on their own is valuable. Most of the time, especially when they were unsure about a language structure or vocabulary, they felt the need to consult a resource to feel secure.

Another benefit of corpus use for the participants found in this study was the notion of noticing. The pre-service teachers reported that they could notice language patterns and tendencies by looking at concordance lines, making it easier for them to formalize abstract rules for themselves and create a space of self-discovery. Noticing is believed to play a vital role in L2 acquisition (DeKeyser, 2000; Schmidt, 1995; Skehan, 1998) and it triggers the cognitive process of language acquisition. Schmidt (1995) emphasised that noticing is needed for an input to become an intake and that there is a strong relationship between noticing and long-term memory. Noticing is, therefore, a necessary factor influencing language acquisition.

Another benefit of corpus use for language learners reported by the participants was being able to work on their own fossilized errors. The students said that by analysing concordance lines to find the correct form of the target errors, they became aware of their fossilized errors and had opportunities to see the correct version of their errors in the concordance analysis. Boulton (2010) similarly found that problematic linguistic items were better remedied with the help of corpus use. One of the participants reported on fossilized errors that:

Excerpt 7: P.8

Derleme bakmak yaptığım düzeltmeler hakkında güvende hissetmemi sağlıyor ve kendimde veya düzeltme yapacağım tarafta fosilleşmiş hatalar oluşmasını engelleyeceğine veya varsa düzeltmek için önemli bir adım olacağına inanıyorum.

(*English translation:* Looking at the corpus makes me feel confident about the corrections I’ve made, and I believe it will prevent my fossilized errors or on the part I am going to correct, or it will be an essential step to repair, if any. (opportunity to work on fossilized errors))

Excerpt 7 reporting on fossilized errors shows that the use of a corpus and corpus tools by the pre-service teachers in this study is not only beneficial for giving corrective feedback but also beneficial for them personally in developing their language knowledge since they are also language learners.

4.2 Challenges of Corpus Use

Consulting corpora has challenges as well as benefits, advantages, and opportunities. The participants’ comments in the focus group interview and in their responses to the survey conducted in this study showed that they faced challenges when they used corpus for providing corrective feedback on the target text. These challenges were twofold: personal challenges and tool-related challenges. The former is about participants’ individual experiences and the problems which they faced due to their lack of practice, training, or background information on how to use corpus, make queries, and work on concordance lines. Three students stated that although they had received training, they still felt naive and inexperienced while searching the corpus for specific linguistic structures. As further explained by one of the participants, she had stopped searching for grammatical structures just because she could

not remember how to use the search function effectively by using wildcards and other techniques. This shows that despite receiving training, it takes time for the participants to develop their skills in the use of corpus and corpus tools. The following excerpt shows the challenge which stems from a lack of knowledge on how to make queries:

Excerpt 8: P.5

Gramer konusunda derleme nasıl bakacağımı hatırlamadığım için bakamadım.

(*English translation: Since I could not remember how to search a corpus for grammatical structures, I did not check them.*)

Another participant reported that he did not consult corpora to correct grammar errors because he did not feel comfortable and confident enough to consult corpora for grammatical purposes. He further explained the reason why he did not have enough experience and practice at making such queries:

Excerpt 9: P.4

... derlem süreci kolaylaştırdı ama pratik yoksunluğundan, kendimi rahat hissetmediğim zaman gramer aramalarında, derlemi gramer amaçlı kullandığımda rahat etmedim.

(*English translation: ... the corpus consultation eased the process, but due to lack of practice, there were times when I did not feel comfortable with grammar queries. I did not feel comfortable using the corpus for grammatical purposes.*)

There is always a possibility of forgetting how to consult corpora for different purposes such as vocabulary, grammar, collocation, and punctuation. But as the participants themselves stated, the more they use the corpus, the less likely they will be to forget how to use it. Practice increases the performance of consulting corpora effectively and finding the correct answers to the possible questions. This shows that although short training on corpus use and corpus tools is beneficial, participants need continuous practice to become better users of them. Tono et al. (2014) suggested that training on how to exploit corpora might even resolve users' reluctance triggered by a lack of pedagogical knowledge and experience. So, training pre-service teachers with regular sessions ranging from the basics of integrating corpus use into the classroom by teachers to exploiting a corpus to provide feedback could result in more favourable attitudes towards pursuing corpus use for teaching and learning opportunities.

The second group of challenges, tool-related challenges, included participants' reflections and attitudes such as deciding on the most suitable corpus to use, corpus consultation being time-consuming at certain times and finding some corpus tools not user-friendly. Tono et al. (2014) found that the level of user-friendliness of a corpus could cause unwillingness to use it, which could hinder maximizing the use of corpora for various purposes. Most of the participants in this current study reported that although they found corpus consultation effective, beneficial, and confirmatory, they nevertheless regarded the overall process to some extent to be time-consuming. They reported that it requires expertise and a lot of time to find suitable

corpora to consult, to make proper queries about a potential error, to read between concordance lines, and to correct errors based on the search results.

It should be noted that participants’ opinions on time and corpus consultation were relatively conflicting. Although most of the participants thought that corpus consultation requires more time than traditional error correction procedures, a few students found corpus consultation to be time-saving, as Excerpt 10 suggests:

Excerpt 10: P.3

Öğretmenler için en önemli şey vakittir. Pratik ve hızlı olmalıyız ki her şeye vakit ayıralım. Pratik, hızlı, kolay ve ulaşılabilir olduğu için öğretmenler kesinlikle öğrenip kullanılmalı.

(*English translation:* The most important thing for teachers is time. We must be practical and fast so that we have time for everything. Since it (corpus use) is practical, fast, easy, and accessible, teachers should learn and use it.)

Earlier studies reflecting on the challenges of corpus use have stated that the greatest challenge which students face is related to analysing concordance lines effectively. Students feel overwhelmed by having to deal with a large number of samples generated by their searches (Liu & Jiang, 2009). In brief, when participants’ attitudes towards the challenges of corpus consultation are analysed, it seems that the challenges which are mentioned can be overcome through guidance, practice, experience, and training. Moreover, the design and development of *pedagogical corpora* without losing the authenticity of the language is needed and might overcome some of the difficulties faced by the participants in this study discussed above.

4.3 Purposes of Corpus Use

One of the survey and focus-group interview questions was on the purposes of corpus consultation. The findings show that the participants consulted a corpus to search for phrases, collocations, frequency, synonyms, and context checks. The results are similar to the findings of previous studies on the same issue. For example, Satake (2020, p.1) reported that “Corpus use allowed easy access to the exact target phrases and frequency information of co-occurring words ...”. Nevertheless, there are also disagreements with previous studies; Gaskell and Cobb (2004) found that their participants were willing to use concordances to work on grammar, which contradicts the findings of the current study. The participants in this study were more interested in searching and correcting vocabulary rather than grammar.

Samples from the participants’ searches include ‘a large impact on’ as opposed to ‘a large influence on’, collocations of ‘peaceful’ and ‘finding a peaceful atmosphere’, a synonym of the word ‘salient’, ‘struggle’ as opposed to ‘straggle’, and comparing ‘straggle’ with ‘move away’ and looking at the discourse to decide on the meaning. The comments from the participants show that corpus consultation was substantially helpful for providing feedback on vocabulary choices. This was

also found by Flowerdew (2010), who stated that a corpus provides the users with mastery of phraseological patterning (collocations, colligations, semantic preferences and prosodies), information that cannot be easily obtained from dictionaries and other sources.

5 Conclusion

The current study reports the perceptions and experiences of pre-service English teachers on corpus consultation for giving corrective feedback. The participants' perspectives were grouped into themes of benefits, challenges, and purposes of corpus use. Overall, the results show that the preservice language teachers favoured consulting corpora and were motivated to incorporate it in both learning and teaching English. As the findings have shown, corpus consultation not only contributes to their teaching in terms of giving feedback but also to their autonomy, noticing, and motivation as learners.

Because of the crucial fact that the participants in this study were non-native English-language teacher candidates, in the process of giving corrective feedback, they might need to consult a reliable source in order to be able to correct errors and feel secure and confident in doing so. A suitable corpus with its affordances could well address such needs. The use of a corpus and corpus tools helps non-native-language teachers to make more informed decisions about correcting errors in the target language. When giving corrective feedback, rather than relying solely on their intuition based on their relatively limited target-language knowledge and experience as non-native speakers, language teachers can reap the substantial benefits provided by the use of a corpus to support their intuitive decisions. These benefits were noted by the participants in this study under the themes of benefits of corpus consultation and purposes of corpus use. Furthermore, all the participants who consulted corpora for giving feedback in this study clearly stated that they would continue to use a corpus in the future. This finding points to the potential, robustness, and strength of corpus use in giving feedback on written products, which language teachers consider challenging (Guénette & Lyster, 2013; Junqueira & Payant, 2015).

Under the theme of challenges of corpus use, the preservice language teachers mentioned personal and tool-related challenges to giving corrective feedback, pinpointing the need for training them in corpus use. Conrad (2000) recommended that language-teacher candidates need to be introduced to corpora use throughout their pre-service education programme. We believe that integrating such training into language-teacher education programmes is much needed when the affordances of corpora for language teaching are considered. The challenges of corpus use found in this study can be helpful in designing and developing a corpus training curriculum for language teachers.

References

- Barkhuizen, G., & Borg, S. (2010). Editorial: Researching language teacher education. *Language Teaching Research*, 14(3), 237–240. <https://doi.org/10.1177/1362168810365234>
- Bitchener, J. (2008). Evidence in support of written corrective feedback. *Journal of Second Language Writing*, 17, 102–118. <https://doi.org/10.1016/j.jslw.2007.11.004>
- Boulton, A. (2009). Data-driven learning: Reasonable fears and rational reassurance. *Indian Journal of Applied Linguistics*, 35(1), 81–106. <https://doi.org/10.1017/S0958344009000068>
- Boulton, A. (2010). Learning outcomes from corpus consultation. In M. Moreno Jaén, F. Serrano Valverde, & M. Calzada Pérez (Eds.), *Exploring new paths in language pedagogy: Lexis and corpus-based language teaching* (pp. 129–144). Equinox.
- Boulton, A. (2017). Corpora in language teaching and learning. *Language Teaching*, 50, 483–506. <https://doi.org/10.1017/S0261444817000167>
- Braun, S. (2007). Integrating corpus work into secondary education: From data-driven learning to needs-driven corpora. *ReCALL*, 19(3), 307–328. <https://doi.org/10.1017/S0958344007000535>
- Chambers, A. (2007). Popularising corpus consultation by language learners and teachers. In E. Hidalgo, L. Quereda, & J. Santana (Eds.), *Corpora in the foreign language classroom* (pp. 3–16). Rodopi.
- Chen, M., & Flowerdew, J. (2018). A critical review of research and practice in data-driven learning (DDL) in the academic writing classroom. *International Journal of Corpus Linguistics*, 23, 335–369. <https://doi.org/10.1075/ijcl.16130.che>
- Crosthwaite, P. (2017). Retesting the limits of data-driven learning: Feedback and error correction. *Computer Assisted Language Learning*, 30(6), 447–473. <https://doi.org/10.1080/09588221.2017.1312462>
- Crosthwaite, P., Storch, N., & Schweinberger, M. (2020). Less is more? The impact of written corrective feedback on corpus-assisted L2 error resolution. *Journal of Second Language Writing*, 49, 100729. <https://doi.org/10.1016/j.jslw.2020.100729>
- Conrad, S. (2000). Will corpus linguistics revolutionize grammar teaching in the 21st century? *Tesol Quarterly*, 34(3), 548–560. <https://doi.org/10.2307/3587743>
- DeKeyser, R. (2000). The robustness of critical period effects in second language acquisition. *SSLA*, 22, 499–533. <https://doi.org/10.1017/S0272263100004022>
- Farr, F. (2010). How can corpora be used in teacher education? In A. O’Keeffe & M. McCarthy (Eds.), *Routledge handbook of corpus linguistics* (pp. 620–632). Routledge. <https://doi.org/10.4324/9780203856949-44>
- Friginal, E., & Hardy, J. A. (2014). *Corpus-based sociolinguistics: A guide for students*. Routledge. <https://doi.org/10.4324/9780203114827>
- Flowerdew, L. (2009). Applying corpus linguistics to pedagogy. *International Journal of Corpus Linguistics*, 14(3), 393–417. <https://doi.org/10.1075/ijcl.14.3.05flo>
- Flowerdew, L. (2010). Using corpora for writing instruction. In A. O’Keeffe & M. McCarthy (Eds.), *The Routledge Handbook of Corpus Linguistics* (pp. 444–457). Routledge. <https://doi.org/10.4324/9780203856949-32>
- Gaskell, D., & Cobb, T. (2004). Can learners use concordance feedback for writing errors? *System*, 32(3), 301–319. <https://doi.org/10.1016/j.system.2004.04.001>
- Guénette, D., & Lyster, R. (2013). Written corrective feedback and its challenges for pre-service ESL teachers. *Canadian Modern Language Review*, 69(2), 129–153. <https://doi.org/10.3138/cmlr.1346>
- Hyland, K., & Hyland, F. (2006). Interpersonal aspects of response: Constructing and interpreting teacher written feedback. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing* (pp. 206–224). Cambridge University Press. <https://doi.org/10.1017/CBO9781139524742.013>
- Hyland, K., & Hyland, F. (2019). Contexts and issues in feedback on L2 writing. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (Cambridge applied linguistics) (pp. 1–22). Cambridge University Press. <https://doi.org/10.1017/9781108635547.003>

- Hong, S.-Y., & Oh, S.-Y. (2008). The effects of corpus-based learning of vocabulary and grammar on Korean high-school students. *English Language Teaching*, 20(1), 261–283. <https://doi.org/10.17936/pkelt.2008.20.1.013>
- Hsieh, H., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Junqueira, L., & Payant, C. (2015). “I just want to do it right, but it’s so hard”: A novice teacher’s written feedback beliefs and practices. *Journal of Second Language Writing*, 27, 19–36. <https://doi.org/10.1016/j.jslw.2014.11.001>
- Kang, E., & Han, Z. (2015). The efficacy of written corrective feedback in improving L2 written accuracy: A meta-analysis. *The Modern Language Journal*, 99(1), 1–18. <https://doi.org/10.1111/modl.12189>
- Leńko-Szymańska, A., & Boulton, A. (2015). *Multiple affordances of language corpora for data-driven learning*. John Benjamins. <https://doi.org/10.1075/scl.69>
- Liu, D., & Jiang, P. (2009). Using a corpus-Based lexicogrammatical approach to grammar instruction in EFL and ESL contexts. *Modern Language Journal*, 93(1), 61–78. <https://doi.org/10.1111/j.1540-4781.2009.00828.x>
- Mukherjee, J. (2004). Bridging the gap between applied corpus linguistics and the reality of English language teaching in Germany. In U. Connor & T. Upton (Eds.), *Applied corpus linguistics: A multi-dimensional perspective* (pp. 239–250). https://doi.org/10.1163/9789004333772_014
- Pérez-Paredes, P., Sánchez-Tornel, M., Alcaraz Calero, J. M., & Jiménez, P. A. (2011). Tracking learners’ actual uses of corpora: Guided vs non-guided corpus consultation. *Computer Assisted Language Learning*, 24(3), 233–253. <https://doi.org/10.1080/09588221.2010.539978>
- Rutherford, W. (1987). *Second Language Grammar: Learning and teaching*. Longman.
- Satake, Y. (2020). How error types affect the accuracy of L2 error correction with corpus use. *Journal of Second Language Writing*, 50, 1–14. <https://doi.org/10.1016/j.jslw.2020.100757>
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129–158. <https://doi.org/10.1093/applin/11.2.129>
- Schmidt, R. (1995). *Attention and awareness in foreign language learning*. University of Hawaii Press.
- Skehan, P. (1998). *A cognitive approach to language learning*. Oxford University Press.
- Storch, N. (2018). Written corrective feedback from sociocultural perspectives: A research agenda. *Language Teaching*, 51(2), 262–277. <https://doi.org/10.1017/S0261444818000034>
- Sun, Y. C. (2007). Learner perceptions of a concordancing tool for academic writing. *Computer Assisted Language Learning*, 20(4), 323–343. <https://doi.org/10.1080/09588220701745791>
- Timmis, I. (2015). *Corpus linguistics for ELT: Research and practice*. Routledge. <https://doi.org/10.4324/9781315715537>
- Tocalli-Beller, A., & Swain, M. (2005). Reformulation: The cognitive conflict and L2 learning it generates. *International Journal of Applied Linguistics*, 15(1), 5–28. <https://doi.org/10.1111/j.1473-4192.2005.00078.x>
- Tono, Y., Sataki, Y., & Miura, A. (2014). The effects of using corpora on revision tasks in L2 writing with coded error feedback. *ReCALL*, 26(2), 147–162. <https://doi.org/10.1017/S095834401400007X>
- Tribble, C. (2000). Practical uses for language corpora in ELT. In P. Brett & G. Motteram (Eds.), *A special interest in computers: Learning and teaching with information and communications Technologies* (pp. 31–41). IATEFL.
- Truscott, J. (2004). Evidence and conjecture on the effects of correction: A response to Chandler. *Journal of Second Language Writing*, 13, 337–343. <https://doi.org/10.1016/j.jslw.2004.05.002>
- Truscott, J. (2007). The effect of error correction on learners’ ability to write accurately. *Journal of Second Language Writing*, 16, 255–272. <https://doi.org/10.1016/j.jslw.2007.06.003>
- Yoon, H. (2008). More than a linguistic reference: The influence of corpus technology on L2 academic writing. *Language Learning & Technology*, 12(2), 31–49.

Betül Bal-Gezegin is an associate professor in the department of English Language Teaching at Ondokuz Mayıs University, Samsun, Turkey. She mainly teaches courses of research methods, CALL and pragmatics. She obtained her MA degree at Georgia State University, Applied Linguistics program in the USA as a Fulbright scholar. She holds a PhD in Foreign Language Education at Middle East Technical University. Her academic interests mainly lie within the domains of Corpus Linguistics, Intercultural Communication, CALL and ESP/EAP. Her latest publications include book chapters and research articles on corpus-based investigation of academic writing, metadiscourse markers in writing, teaching writing, and language teaching with corpus.

Erdem Akbaş is an Assistant Professor at the Department of Foreign Languages Education at Erciyes University, Kayseri, Turkey. Presenting his research extensively at various reputable international conferences, he published articles in national and international journals/books. Dr. Erdem Akbaş co-organized the first-of-its-kind conference on Metadiscourse in 2017, 2019 and 2021; published an edited book and an edited special issue on Metadiscourse.

Ahmet Başal, (PhD) is an associate professor in the Department of Educational Sciences at Yıldız Technical University in Turkey. His research publications and research interests include teacher education, web-based language learning and teaching, use of technology in language learning and teaching, instructional design and language teaching materials development.

Blogging to Build Collaborative Evaluation in L2 Writing



Zeynep Bilki and Pelin Irgin

Abstract The wide use of technology and the context of the current global pandemic have sharpened the focus on online writing environments, collaborative writing, and peer feedback. The conceptualization of writing as a social act has also led to a significant interest in peer and collaborative writing, especially emphasizing the need for understanding the role of peer evaluation in online writing environments. Although teacher and peer feedback have received increasing attention in L2 writing classrooms and research, collaborative feedback in online writing settings has rarely been studied. To extend the research with current digital tools, this present study aimed to investigate 35 tertiary level L2 learners' experiences on the use of student blogs for the online peer evaluation process conducted in the 14-week long academic writing course. Collected data including EFL writers' reflections completed after three writing tasks on three different genres was analyzed qualitatively through Braun and Clarke's six-phase inductive thematic analysis. Findings suggest that from the perspective of L2 writers, integrating blogging into the writing process has been an effective way in establishing a broader writing community for a successful peer review culture in online writing as well as generating audience awareness in writing by broadening L2 writers' roles in the process. The findings have implications for the potential understanding of L2 writers' peer feedback experiences in L2 digital writing, and for providing a pedagogical framework to foster collaborative online feedback in instructional practices. The study highlights avenues for future research to foster L2 writing in an increasingly digital age.

Keywords Blogging · L2 writing · Digital writing · Online peer evaluation

Z. Bilki (✉) · P. Irgin
TED University, Ankara, Turkiye
e-mail: zeynep.bilki@tedu.edu.tr

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_15

1 Introduction

Writing skills are crucial but at the same time a difficult skill to acquire for students in higher education especially for the students who write academically in their second language, English. Both researchers and practitioners thus try to find ways to create more motivating and authentic writing environments for English as a Foreign Language (EFL) writers (Huang, 2016). In many traditional writing settings, students' instructors are usually the only audience for the students' writing (Aljumah, 2012), and especially in EFL contexts, there is a general perception that teacher feedback is more useful than peer feedback (Ruegg, 2014; Yang et al., 2006). The advent of technology and contemporary social tools (e.g. Wikis, Blogs) has transformed the traditional writing environment from one writer and one feedback provider to more collaborative and authentic environments where writers open their writing channels to the world (Elola & Oskoz, 2017). This transformation supported by social technologies changed the conceptualization of writing as a social act which also reflects the importance of social interaction in meaningful language learning and development (Wu et al., 2015) from the sociolinguistic perspective. This basically led to significant interest in peer feedback and collaborative writing (Godwin-Jones, 2018) especially emphasizing the need for understanding the role of peer evaluation in online writing environments (Ducate & Arnold, 2012).

Second language (L2) field has witnessed a growing body of research on peer feedback, which has primarily focused on how to make full use of feedback to contribute to students' writing and content development (Zhao, 2010), sociocultural and cognitive benefits of peer feedback (Hu & Lam, 2010; Yu et al., 2016; Zheng, 2012), computer-mediated peer-feedback and the effect of different feedback tools on L2 writer's performance (Chen, 2012; Ciftci & Kocoglu, 2012; Guardado & Shi, 2007; Zhang et al., 2014). The findings of the studies regarding online feedback have suggested mixed findings, some of which supported the advantage of e-feedback on writing performance (Ciftci & Kocoglu, 2012), some others (Zhang et al., 2014) reported writers' both negative and positive attitudes towards online peer feedback. Although L2 writing literature has investigated various aspects of peer feedback in different writing contexts, the field needs further research on understanding L2 writers' perceptions on receiving and giving online collaborative feedback during the writing process. Most studies examining peer feedback also suggest that all different feedback approaches including teacher, peer, and self-feedback should be integrated into the L2 writing classroom for investigation (Birjandi & Hadidi Tamjid, 2012) as they all can serve different purposes in students' writing.

Previous studies (Robertson, 2011) have demonstrated that blogging as a social tool provided students with high levels of autonomy, enabled students to "exchange social and cognitive support with their peers" (Robertson, 2011, p. 1643). Although there are studies focusing on the use of blogs in L2 writing as a collaborative tool (Hanjani, 2016) and the facilitation of peer feedback through blogs (Dippold, 2009), the field needs further research in understanding students and teachers' perceptions

on integrating peer evaluation into actual L2 writing classes through blogs and their perceptions on peer interaction and group dynamics (Huang, 2016; Yu & Lee, 2016). L2 writers' perceptions on blog-based peer evaluation might provide implications for L2 writing research and practice for example in investigating the role of teachers in implementing peer feedback (Yu & Lee, 2016) in online collaborative writing settings. To be able to contribute to the field, this present study aimed to present more voices from EFL writers experiencing online peer evaluation based on collaborative peer interaction in an actual writing class through blogs.

2 Review of Literature

2.1 *From Peer Feedback in L2 Writing to Online Feedback*

In traditional writing classes where the focus is on the product-oriented activity, teachers are usually the only audience of written products and also the only feedback provider on the product. On the other hand, collaborative learning activities help to establish the concept of audience or readership (Amir et al., 2011) by encouraging learners stepping out of the self and producing for a group of readers. Peer feedback in L2 writing has been regarded as a salient feature of the process writing approach (Cao et al., 2019; Hyland & Hyland, 2006) that shifted L2 writing from the finished text to the process in which writing takes place. It has also changed this one-way communication between student and teacher into a dynamic and recursive process of meaning-making (Chenoweth & Hayes, 2001) by bringing more social constructive learning (Vygotsky, 1978) of writing, where L2 writers in pairs or groups provided and responded to their peers' comments or feedback.

Recent research in peer feedback has primarily centered on exploring different aspects of peer feedback such as instructional, sociocultural and cognitive benefits of peer feedback (Hu & Lam, 2010; Yu et al., 2016; Zheng, 2012) and the effectiveness of peer feedback in L2 writing development (Zhao, 2010; Ruegg, 2014). With the development of technology, the traditional written feedback coming mostly from teachers has taken on a new social dimension and has become an alternative to face-to-face peer feedback (Guardado & Shi, 2007) by simplifying the logistics of peer assessment considerably, and reducing the complications of turnaround time and keeping records (Tannacito & Tuzi, 2002). In addition to sharing their writings with others in collaborative writing settings such as in blogs, L2 writers also have had the opportunity to interact with their readers by receiving e-feedback from them. Studies comparing online peer-feedback with face-to-face feedback reported the benefits of online peer feedback in providing a less threatening environment that encourages more equal participation, and providing students with interaction (Chang et al., 2011).

Some other studies (Ciftci & Kocoglu, 2012; AbuSeileek & Abualsha'r, 2014) focusing on the impact of online peer feedback on text revisions and students'

writing performance reported that L2 writers showed better writing performance compared to traditional peer feedback. Students' attitudes towards online peer feedback are however mixed. While some studies reported that students had mixed feelings towards online feedback and found online textual exchanges more challenging than face-to-face interaction (Guardado & Shi, 2007), some others reported the motivating nature of online peer feedback in enhancing students' awareness of the audience and the importance of revision by reducing their stress and cultivating positive attitudes toward writing (Jin & Zhu, 2010). Despite the existence of these studies in the field, the use of online peer feedback in collaborative writing environments is still a growing trend that is believed to bring positive learning effects on L2 writing (Yu & Lee, 2016). To be able to figure out how effectively online peer feedback can be incorporated into the L2 writing process, it is essential to ensure the efficacy of online peer feedback from both students' and teachers' perspectives by examining its use in processed-based actual writing classes using collaborative online writing tools.

2.2 Blogs as a Social Tool in L2 Writing Classes

Peer feedback as a facilitator of peer interaction and collaboration creates “a facilitative socio-interactive environment in which L2 learners receive social support and scaffolding from their peers” (Hu & Lam, 2010, p. 373). With their interactive and social nature, blogs thus have become useful and authentic platforms for writers in serving this main purpose of peer feedback in addition to facilitating the exchange of ideas and self-reflection. It allows students to write for readers beyond teachers and classmates as opening their writing to the world (Arslan & Sahin-Kizil, 2010; Dippold, 2009).

Blogs have been investigated by several studies and reported as an effective and motivating tool for developing writing skills (Arslan & Sahin-Kizil, 2010; Chen, 2012; Huang, 2016; Sun & Chang, 2012). In their studies exploring blogs as a forum for L2 writers in practicing different forms of academic writing, Sun and Chang (2012) found that blogs helped writers to co-construct knowledge about academic writing, to reflect on language learning skills, and to establish a learning community through multiple methods of online social support. Arslan and Sahin-Kizil (2010) investigated the effect of blog-centered writing instruction on students' writing performance and concluded that blogs have the potential to promote more effective writing instruction especially in areas of writing as content and organization. In their mixed-methods study exploring the use of blogs as out-of-class assignments for the development of learners' writing performance, Zhang et al. (2014) found that group collaborative writing via blogging can not only encourage collaboration and self-reflection but also engage learners in noticing and co-construction of knowledge. As described above, although peer feedback has got increasing

attention in L2 writing classroom and research, the field needs further research on collaborative feedback in online writing settings (Yu & Lee, 2016) by which we will be able to hear voices of L2 writers on receiving and giving feedback during the online writing process. Understanding writers' thoughts on the peer feedback process conducted in blogs will be able to add to the literature about L2 writing using social tools as well as help practitioners and researchers to conceptualize how online collaborative feedback can be effectively integrated into the L2 writing process and can facilitate the use of peer evaluation in writing courses. In this study, we explored a group of EFL writers' experiences on the use of student blogs for the online peer evaluation process conducted in a naturalistic setting of an academic writing course. We had two guiding questions:

1. What are the EFL students' perceptions on the benefits of online peer evaluation incorporated into an academic writing course?
2. What are the EFL students' perceptions on the use of personal/student blogs for the online peer evaluation process?

Referring to the call for future research from previous studies (e.g., Godwin-Jones, 2018; Yu & Lee, 2016), this qualitative study is essential in presenting L2 individual writers' own perceptions on online peer evaluation in a blog-based writing setting, and in presenting data from an academic writing course in which web-based peer feedback has been implemented practically and collaboratively.

3 Methods

3.1 Context and Participants

In our contextualized research, we present an academic writing context in which we employed a process-based approach by nourishing collective consciousness in academic writing with the incorporation of writing blogs. The research was conducted as part of an academic writing course offered in the language teacher education program at a foundation Turkish University. The 14-week long course focused on academic writing skill development, and improvement of understanding self and peer revisions in process-based L2 writing with the use of blogging. The writing procedure used throughout the course is explained below in the procedure section.

Our participants were 35 tertiary-level freshmen students enrolled in the online academic writing course. The language proficiency level of students when they start their departmental programs was upper-intermediate (B2) according to the Common European Framework Reference (CEFR) (Council of Europe, 2001). The participants had no experience on peer evaluation and collaborative feedback in academic writing and the use of blogs as a supplementary tool for the writing process.

3.2 Data Collection Procedure

Full ethical approval was obtained from the institution prior to data collection. Initially, each participant registered in the writing course was informed about the research process and ethical issues by one of the researchers. Several sources of data were collected including student written assignments published in their blogs, peer comments created following peer revision guidelines, and student written reflections on their writing and peer evaluation process. This paper draws on the written reflections in which the participants shared their reflections on each writing task by answering the guiding questions provided by the researchers. Participation in the research was voluntary and all 35 students who completed the online writing course volunteered to participate in the study.

3.3 Process of Online Blog Writing and Peer Evaluation

This study used task-oriented peer response group dynamics to create collaborative online feedback in instructional practice. Using online blogs, we guided the students through the process to establish an interactive environment in which students read their friends' written works and provided online feedback on the selected works. Figure 1 illustrates the linear procedure we followed to supply an online writing environment and peer evaluation.

Students started the course with a training session in which they learned how to set up their writing blogs via WordPress (<https://wordpress.com/>) and practiced on blog entries and exchanging online peer feedback. The blogs created only for the course purposes were kept limited with the three assigned genres – data commentary, expository and argumentative writing. Before each online writing task and revision process, the instructor delivered explicit instruction on each genre. The students were explicitly informed about the self and peer review process before the first writing task and followed a clear timeline for each task and peer evaluation. The blogs were accessible only to the students registered to the course and the course instructor.

After the first and final drafts of three genres were posted on the blogs (See Figs. 2 and 3) for peer revision, students read and provided online feedback on their friends' written works by the use of self and peer evaluation rubrics and a peer



Fig. 1 The writing cycle via blogging

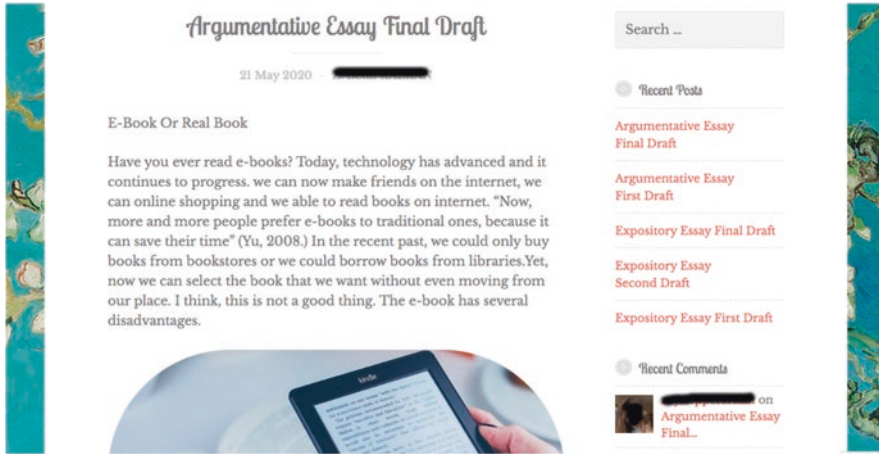


Fig. 2 Screenshot of a student blog

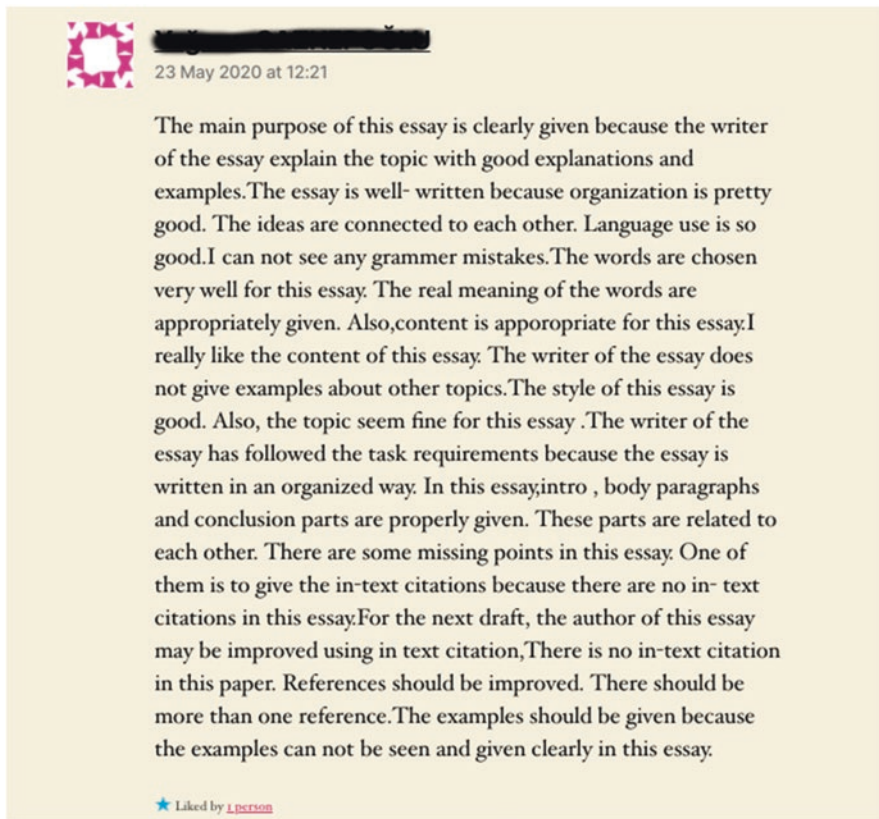


Fig. 3 Screenshot of a posted comment at a student blog

revision guideline. The rubrics included items structured under content, organization of thoughts, and writing style. Peer review guidelines included five questions highlighting the items in the rubric (Appendix A). Students revised their papers following the peer comments in their blogs and shared their revised paper at their writing blogs to receive peer and teacher feedback. They submitted their final revised paper to the course instructor. After completing each processed-based writing task, students wrote a reflection paper on each task experience by answering the guiding questions provided by the researchers (Appendix B). With the students' reflections, we aimed to obtain an insight into their understanding on online peer evaluation and the use of blogs for peer evaluation process.

3.4 Data Analysis

Thirty-five total student reflections were analyzed and coded manually using Braun and Clarke's (2006) six-phase inductive thematic analysis: (1) Familiarizing yourself with your data, (2) Generating initial codes, (3) Searching for themes, (4) Reviewing potential themes, (5) Defining and naming themes, and (6) Producing the report. The descriptive codes representing similar topics were combined into potential themes. To ensure the validity of the developed themes and the coding procedure, the analysis was carried out jointly by two researchers. Intercoder reliability calculated using Cohen's kappa coefficient was .85, which was within the .85–.9 range (Miles & Huberman, 1994). As the researchers built thematic categories and sub-categories, individual perspectives were discussed and final themes were determined. Representative verbatim quotes were selected to describe the emergent themes from various participants to depict a well-balanced picture.

4 Findings and Discussion

Based on the thematic analysis of the student reflections, we present our findings under four main themes related to our two research questions. The themes emerging in the data are as follows: Theme #1: Enhancing L2 writing awareness and behavior; Theme #2: Broadening student roles in L2 writing; Theme #3: Turning into critical writers; and Theme #4: Building a broader writing community via blogging.

Theme #1: Enhancing L2 writing awareness and behavior

One common reflection that emerged in our data was on how online peer evaluation enhanced students' writing efforts and relatedly led to improvement in their writing performance and behavior. The participants apparently accepted the online peer evaluation as a second realm in L2 writing classroom beside their individual efforts to develop their writing skills. The following excerpt from Selin is one common reflection shared by the participants.

Peer evaluation is very beneficial in L2 academic writing. It helps me to improve my writing skills. I will be able to find my mistakes easily. The more I read essays of my peers, the more my writing skills might get better ... (Selin)

The entire writing process was a new learning for the participants not only in identifying and correcting typographical mistakes on proofreading as well as learning from others on academic writing style and organization of a specific genre. In the following excerpts, participants explicitly noted that online peer evaluation provided them motivation and concentration for writing, and also increased their awareness in paying closer attention to different elements of their own writing.

Reading and revising my peer's evaluation benefited me in some ways like seeing my peer's mistakes, getting information about a lot of topics, learning new words, and of course, you are looking at people's style, language use, and organization. (Ahmet)

In the reflections, we evidenced that the interactive online environment enhanced the participants' self-awareness and improved their reflection skills. By both receiving and giving feedback, they had a connection with other writers. The interaction between them mediated by the blogs helped the participants to reflect on their own writing and self-analyze their writing strengths and weaknesses. In the following excerpts, participants explicitly state how this interactive process helped them recognize the missing points in their writing.

Peer evaluation helps us to see the mistakes that we could not notice during the writing process.....I find peer evaluation useful. (Rüya)

It was very helpful for me to revise my peer's paper because I strongly believe that reading my peer's essays makes me understand what I'm going to do for my essay. For example, I did not use a quotation in my paper but my friend used a quotation in his/her paper. I realize that I have to use a quotation in my paper. Also, I have a chance to evaluate myself better. (Elif)

As further sampled in the excerpts below, the participants explicitly commented on how they appreciated their readers' feedback and how this feedback they received provided them with an opportunity to co-construct their knowledge on the writing. They called this entire process as an improvement of their writing.

When someone reads our writings, they can see our mistakes in a different way because sometimes we cannot see our mistakes the way that other people see. Their opinions might change our knowledge about writing so we can improve our writing skills. (Selin)

... It is a good way to learn other's opinions about my essay because I want to know if it is good or not and they give an idea about how it should be because I have a few missing parts. Also, they found my essay well written and understandable... (Ayşe)

This theme aligns with the findings of some previous studies (Aljumah, 2012; Zhang et al., 2014) that similarly state the facilitative role of peer feedback on providing opportunities for students to explore ways of negotiating meaning and to practice on a wide range of language skills. Similar to Chen's study (2012) that reported students' improvement in their effective writing behavior with the use of blog-based peer review, for the participants of the present study, online

peer-interaction via blogs as a social affordance facilitated their learning as well as promoting self-reflection on their writing. They took the opportunity to share knowledge and ideas which improved their self-awareness (Sun & Chang, 2012) and provided scaffolding and social support (Hanjani, 2016; Hu, 2005; Huang, 2016; Hyland, 2016; Hyland & Hyland, 2006).

Theme #2: Broadening student roles in L2 writing

The analysis of the reflections revealed that the L2 writers in this online evaluation process indicated awareness of adopting different roles rather than being solely a writer. They had been writers writing and sharing their works; readers analyzing other writers' works and reviewers responding to their essays, and both writers and readers returning to their essays and responding to the posted comments on their own essays. While reflecting on the writing process, participants drew on these different roles of writers and feedback providers such as self, peer, and teacher.

I find peer evaluation useful. I think it was good since I felt like a teacher. (Ela)

... This is necessary to prepare for our future. We will be teachers and we will be prepared for evaluating and commenting... (Aylin)

Both excerpts evidence that the student writers started to understand the role of teachers and took more responsibilities while giving and receiving feedback to their peers. In addition to taking this experience as an opportunity to prepare them for their future career, they indicated awareness of how the peer-evaluation process led them to be self-evaluators of their own skills and to develop empathy towards writing teachers. In his reflection, Orhan commented: *"I want to increase my writing skills so I can use them in my professional career. Peer evaluation is good for learning your weak points."* As a sign of empathy, Beyza said: *"..... it is really hard to read everyone's essay in a short time. Surely, we need to adopt this since we are prospective teachers."* One other role they adopted was being a good observer. Ceren wrote: *"Peer evaluation is an activity that needs to be learned but you have to be a very good observer to be able to do that. Hence, it requires a lot of time to be beneficial"*, which highlighted the role of peers as an observer.

As exemplified above, blog-based online L2 writing in this study provided a systematic medium for student interactions and expanded their writing experiences as the students assumed multiple roles in the writing process. Online peer feedback was helpful for L2 writers to achieve transitions from self-regulation as a single writer to other regulations including teacher and peer roles (Hyland & Hyland, 2006). Undertaking different roles in the online writing process engages L2 writers more in peer revision including receiving and providing feedback (Chen, 2016; Sun & Chang, 2012), which results in arousing a sense of responsibility.

Theme #3: Turning into critical writers

The third theme that emerged in our data was how the participants turned into critical writers by developing writing behaviors such as accepting new ideas through experiencing blog-mediated peer feedback and having critical voices on what they

read. As evidenced from the reflections below, peer feedback via blogging provided the students a multidimensional perspective of L2 academic writing and developed their awareness of having tolerance for differences and accepting others' views that were different from theirs.

...Because of the fact that we learn how to criticize and evaluate others, we can now know how to see our mistakes and how to comment on others' essays by changing our perspectives. (Ceren)

Pros of the peer evaluation/peer comment are realizing your mistakes, new ideas and new thoughts that you can add to your essay. (Ahmet)

These examples show how the writers in this study developed critical voices on what they read and also improved their synthesizing skills during the process of evaluating others' written works. The participants viewed the feedback as a bridge that connected the peers from different perspectives on various topics.

For the participants, the online peer feedback process did not only make linguistic forms salient to feedback recipients but also broadened their perspectives in terms of how a particular problem in others' writing can be properly evaluated and addressed. In her reflection, Cansu said: *"I learned how to make a comment on someone's paper. Another pro of peer comment is that I learned how to examine someone's writing well. For example, it is really important to know when I evaluate someone's writing which points I should be careful while I am making comments on my peer's writings is crucial."*

This finding was similar to that reached out by previous research (Chu et al., 2012) highlighting educational affordances of blogs in L2 learning; and social and cognitive support with peers (Robertson, 2011). Additionally, the finding was consistent with the results of Zhang et al. (2014) and Chang et al. (2011) who pointed out that peer-interaction and blog-based social collaboration could give rise to having more tolerance and understanding and increase to build a community of student writers. Lastly, it was seen that student blogs offered the students the opportunity to voice out their ideas in a public community as similarly stated in Aljumah's (2012) research. The process of online evaluation and appreciation of the peers' writing via blogging exposed students to diverse viewpoints as well as fostered their critical and synthesizing skills (Huang, 2016; Sun & Chang, 2012).

Theme #4: Building a broader writing community via blogging

The fourth theme directly relating to our second research question was on the role of blogging in building a broader writing community for the writers. As exemplified in the previous themes, our analysis provided evidence on how participants perceived blogs as a setting in which they displayed their own works but at the same time a writing community where they had a chance to interact with other writers as feedback-providers and givers. In the following excerpt, Sinem called this community as an academic atmosphere and identified the entire process as an advantage.

It was an advantage for us to post our essays on the blog and then evaluate them, because in this way we have created a more academic and serious atmosphere. (Sinem)

Participants' reflections also showed that blogs were settings where they learned from each other while constructing knowledge and developing their own written works. *In student's blogs, we can see each other's essays. That is why we can learn from each other. (Onurhan)*

Through blogging, the participants were able to express and share thoughts, ideas, and information with a wider public. For instance, Selin commented:

Instead of dealing with mailing, we save time by making direct comments in blogs. It is also nice that it is a site where we all share our articles. We can see each other's comments and compare our own ideas. So we can learn everyone's ideas and knowledge. Peer evaluations are really beneficial for all of us.

From the perspectives of EFL writers in this study, blogging has enabled L2 learners to learn in an interactive manner (Hu & Lam, 2010) to become writers in a social setting with a real audience. Blogs were regarded as user-friendly websites which were easy to maintain and frequently updated by their owners.

Overall, the themes that emerged in our data supported that peer feedback facilitated collaboration by creating "a facilitative socio-interactive environment in which L2 learners receive social support and scaffolding from peers" (Hu & Lam, 2010, p. 373). Blogging as a mediating technological tool has been a medium for the creation of this interactive environment with text-based communication (Sun & Chang, 2012) and for encouraging writers to adopt different roles in the L2 writing community.

5 Conclusion

The findings of this study revealed that from the perspective of L2 writers, integrating blogging into the L2 writing process was an effective way in establishing a successful peer review culture and writing community by encouraging them for collaborative revision and mutual work besides fostering a sense of ownership in their blogs. Findings showed that for the participants of this study, online peer feedback via blogging turned into a writing community where participants shared knowledge and ideas, learned from others, enhanced their self-awareness on their own writing behavior; broadened their roles as a writer with a sense of audience, and raised an awareness of becoming critical writers and evaluators. These findings were in line with a cohort of studies (Zhao, 2010; Zhang et al., 2014) focusing on the contribution of peer feedback to L2 writing and the studies focusing on the use of blogs in providing peer feedback or collaborative revision (Arslan & Sahin-Kizil, 2010; Chen, 2012; Huang, 2016; Sun & Chang, 2012).

The writing process today is not an individual activity completed in a class but it is a social act that increases the interest in collaborative and peer evaluation (Ducate & Arnold, 2012; Godwin-Jones, 2018). This present study as one example of processed-based online writing also attests to the important role of online writing and peer evaluation from the perspectives of L2 writers. The findings of the study provide insights for L2 writing classrooms and writing instructors. First, the findings suggest that in an online collaborative revision setting where each writer

reaches a wider audience, writing potential and motivation in L2 writing can be maximized for individual L2 writers by giving them opportunities to interact with other students as both readers and writers. Second, the findings showed that increased involvement in the writing and revision process enhanced writers' self-awareness in analyzing their own and peers' writings by thinking critically and improved their self-reflection skills. These findings suggest that writing instructors should consider creating online peer evaluation practices for their L2 writers that would allow them to reflect upon their own writing and transfer these collaborative practices to their individual writing. Third, as the findings revealed, blogging is one essential mediating technological tool in creating an interactive L2 writing and collaborative feedback process. The use of blogs and online peer evaluation allowed all writers in this study to view, provide and receive feedback, share their revised works with a real audience by experiencing multiple roles as a writer, reader, feedback provider, and self-evaluator. Thus, writing instructors should create opportunities for students to use blogs during the L2 writing process, which would increase their awareness of their own writing while experiencing collaborative feedback and new online social roles. Finally, this study presents writers' online peer evaluation experiences guided by the instructor and course materials that support online writing and peer evaluation. This suggests that peer evaluation through blogging might be one of the online writing class requirements, but students should be encouraged in this process to attend online writing opportunities more carefully especially under the guidance of and after receiving training from the writing instructor. Instructors should train and guide students in using blogs and providing online feedback, which would help them recognize their development through meaningful reflective practices.

This study has several limitations. First, this study has a small sample size. As a contextual study, it reports the Turkish EFL student writers' peer feedback experiences in online L2 writing via blogging. Further research is needed to detect the impact of peer collaborative revision in L2 online writing, which will be implemented in actual L2 class practices. In addition, given that the study was carried out using the reflection papers and posted comments as class requirements, the generalizability of the findings may be somewhat limited. So, further research with mixed-method approaches may be conducted. Future research is also needed to explore whether or not L2 writers continue the use of blogging and collaborative revision after the class ended.

6 Classroom Procedures

As described in L2 writing literature, blogs as one of the collaboration tools bring several benefits to L2 writers such as taking ownership of their writing, becoming better observers of others' writing, developing a powerful understanding of the audience in noticing and co-construction of knowledge. In this present study, our purpose was to explore the efficacy of online peer evaluation from students' perspective by examining its use in a blog-based writing setting. We chose "Wordpress"

as an online writing platform, as it is well-suited to the objectives of our online academic writing course in which we aimed to create a comfortable writing setting for our students where they would be able to share their written products with and receive feedback from their audience easily and interactively.

Wordpress is an all-purpose platform with multiple free design templates to create blogs and websites. Today blogging with Wordpress nearly powers 40% of all websites. Users who visit Wordpress website, <https://wordpress.com/>, to start their own blogs first need to sign up following the “get started” button on the home page, which takes them to the page to create their accounts using their personal emails (Fig. 4 Step 1). After providing necessary information on this page, users click the “create your account” button and go to a new page where they set up their domain name (Fig. 4 Step 2). Domain name is the URL address of their online blogs (<https://domainname.com>). Although they are free to type any domain name relevant to the purpose and content of their blogs, users, especially beginner bloggers are suggested to select a free domain name out of paid options recommended by Wordpress platform (Fig. 4 Step 3).

Once the users click the “free site” option, they are taken to their blogs’ settings page (Fig. 5) where they can easily change the settings of their blogs including privacy settings and invitees. When they click the “visit site” button on the settings page, they go to their blog page. In the first visit to their blogs, users need to “launch” their blogs before starting blog design (Fig. 6). Users click the “customize” button to design their blog pages (e.g., changing colors, creating a new menu etc.), click the “edit” button to add content (e.g., images, texts, videos) to their blog pages (Fig. 6). After they set up the content of their blogs, users go back to “my sites” settings page and visit the “users” option in the menu to invite visitors to their blogs (Fig. 7).

Wordpress offers their users a free domain name which gives enough storage for student writers to publish their posts in different formats including texts, images,

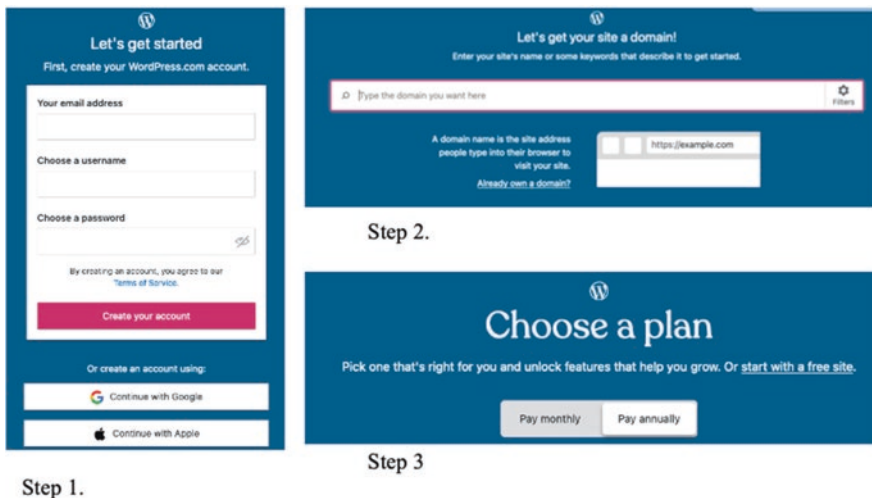


Fig. 4 Creating a wordpress account in 3 steps

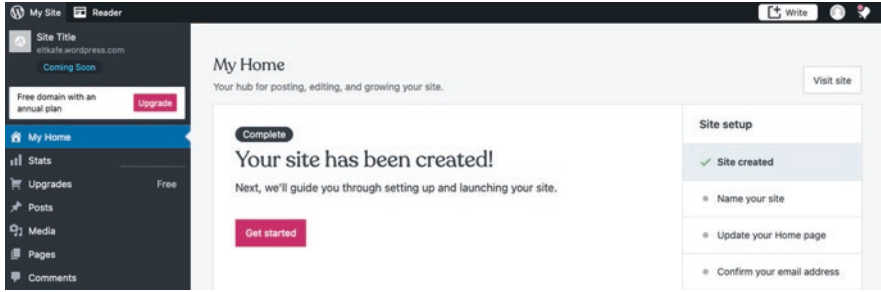


Fig. 5 Wordpress “My Site” settings page

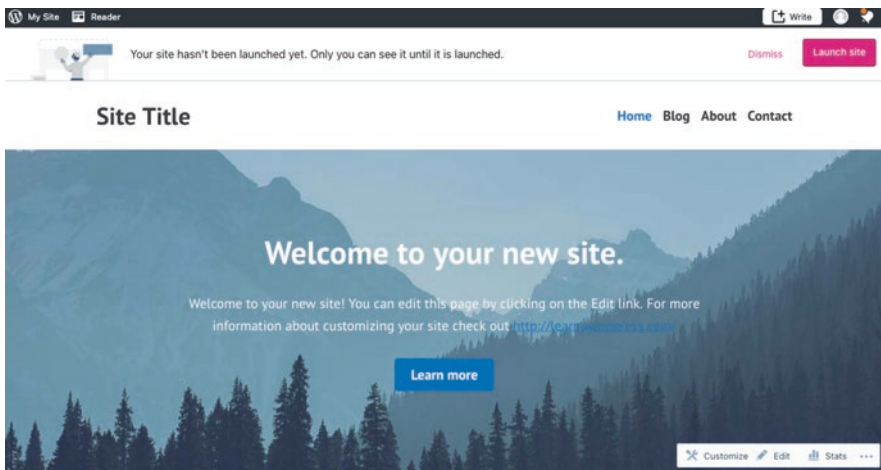


Fig. 6 First visit to blog page

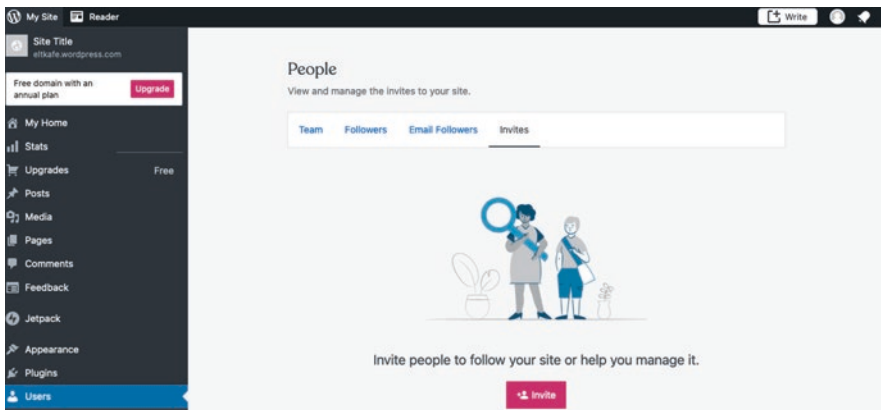


Fig. 7 My sites “users” page to invite visitors

and videos. This free storage is suitable for L2 writing classrooms and individual L2 writers, as their posts are mostly text-based requiring limited storage. However, this limited free storage might run out fast once users keep uploading audios and videos. Many useful plugins are not in Wordpress free directory either and the tool offers limited themes to select for free domain users.

One other advantage of blogging with Wordpress is that users control the privacy settings of their blogs. Depending on their purpose, they can keep their sites private or choose classroom-only or public options as well. In our writing course, our students used their blogs only for the course purpose, thus, their blogs were completely private with the only users and viewers being the instructor and the enrolled students. They had the opportunity to make their sites public after the course was over, which helped them to create a broader sense of audience and of participating in a global community as well. One critical advantage of Wordpress blogs for L2 writers is also that it provides writers with generating and facilitating effective blog conversations with their readers as they can add “comments” widgets just under their blog posts.

We used Wordpress as an online writing platform in our academic writing course offered at a higher education level. One of the objectives of our course was to create a collaborative online writing platform for our L2 writers where they would be able to publish the drafts of their essays in an online platform and share their products with their classmates easily rather than only sharing with and receiving feedback from their instructor. Before designing their blogs, our students received training from the course instructor on creating and publishing blogs in Wordpress. Receiving training on both blog design and peer-feedback is critical for the conduct of an efficient collaborative online writing process. In this academic writing course where students experienced process-based L2 writing, they could receive comments from their class audience easily and interactively just under their blog posts. As a writer, each of them could experience a real online writing platform with a broader sense of audience. The writing procedure described in our study is a sample semester-long implementation of blog writing and therefore, both the writing procedure and the study findings reflecting students’ perceptions towards the blog writing tasks and online feedback are valuable to read for all other L2 writing instructors who plan to use online platforms for L2 writing courses in higher education level and for peer or collaborative feedback training.

Appendices

Appendix A: Peer Revision Guideline

1. Do you think that the main purpose of this essay is clearly given?
2. Have you found the essay well-written and understandable? If yes, what have you found particularly effective in the essay? (Content, language use, style, organization, etc.)

3. Do you think the writer of the essay has followed the task requirements?
4. Find at least three missing points in the essay that you think to be improved for better comprehension.
5. Write the possible missing points in the margins as areas for the writer to answer in the next draft.

Appendix B: Written Reflection Guiding Questions

1. What is your viewpoint about peer evaluation/peer comment in L2 academic writing?
2. What are the pros or cons of peer evaluation/peer comment?
3. What use did you make of your peer's suggestions? Did you use them in your revision? If yes, what use were they? If no, why?
4. Did you benefit from reading and revising your peer's essay? If yes, what were the benefits? If no, why?
5. Do you feel you have made progress in three essay genres: data commentary, expository, and argumentative essay? If yes, what went well and how did you make it? If no, why? What do you need to do?
6. What are the pros or cons of peer evaluation/peer comment in your personal/ student blogs?
7. Is there anything else you would like to add about peer evaluation/peer comment and writing course in general?

References

- AbuSeileek, A., & Abualsha'r, A. (2014). Using peer computer-mediated corrective feedback to support EFL learners' writing. *Language Learning & Technology, 18*(1), 76–95. <http://dx.doi.org/10.125/44355>
- Aljumah, F. H. (2012). Saudi learner perceptions and attitudes towards the use of blogs in teaching English writing course for EFL majors at Qassim University. *English Language Teaching, 5*(1), 100–116. <https://doi.org/10.5539/elt.v5n1p100>
- Amir, Z., Ismael, K., & Hussin, S. (2011). Blogs in language learning: Maximizing student's collaborative writing. *Procedia-Social and Behavioral Sciences, 18*, 537–543. <https://doi.org/10.1016/j.sbspro.2011.05.079>
- Arslan, R. S., & Sahin-Kizil, A. (2010). How can the use of blog software facilitate the writing process of English language learners? *Computer Assisted Language Learning, 23*(3), 183–197. <https://doi.org/10.1080/09588221.2010.486575>
- Bhattacharya, A., & Chauhan, K. (2010). Augmenting learner autonomy through blogging. *ELT Journal, 64*(4), 376–384. <https://doi.org/10.1093/elt/ccq002>
- Birjandi, P., & Hadidi Tamjid, N. (2012). The role of self-, peer and teacher assessment in promoting Iranian EFL learners' writing performance. *Assessment & Evaluation in Higher Education, 37*(5), 513–533. <https://doi.org/10.1080/02602938.2010.549204>

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Cao, Z., Yu, S., & Huang, J. (2019). A qualitative inquiry into undergraduates' learning from giving and receiving peer feedback in L2 writing: Insights from a case study. *Studies in Educational Evaluation*, 63, 102–112. <https://doi.org/10.1016/j.stueduc.2019.08.001>
- Chang, C. K., Chen, G. D., & Hsu, C. K. (2011). Providing adequate interactions in online discussion forums using few teaching assistants. *TOJET: The Turkish Online Journal of Educational Technology*, 10(3), 193–202.
- Chen, K. T. C. (2012). Blog-based peer reviewing in EFL writing classrooms for Chinese speakers. *Computers and Composition*, 29(4), 280–291. <https://doi.org/10.1016/j.compcom.2012.09.004>
- Chen, T. (2016). Technology-supported peer feedback in ESL/EFL writing classes: A research synthesis. *Computer Assisted Language Learning*, 29(2), 365–397. <https://doi.org/10.1080/09588221.2014.960942>
- Chenoweth, A., & Hayes, J. (2001). Fluency in writing: Generating text in L1 and L2. *Written Communication*, 18, 80–98.
- Chu, S. K., Chan, C. K., & Tiwari, A. F. (2012). Using blogs to support learning during internship. *Computers & Education*, 58(3), 989–1000. <https://doi.org/10.1016/j.compedu.2011.08.027>
- Ciftci, H., & Kocoglu, Z. (2012). Effects of peer e-feedback on Turkish EFL students' writing performance. *Journal of Educational Computing Research*, 46(1), 61–84. <https://doi.org/10.2190/EC.46.1.c>
- Council of Europe (2001). *Common european framework of reference for languages: Learning, teaching, assessment*. Strasbourg: Language Policy Unit.
- Diab, N. M. (2010). Effects of peer- versus self-editing on students' revision of language errors in revised drafts. *System*, 38, 85–95. <https://doi.org/10.1016/j.system.2009.12.008>
- Dippold, D. (2009). Peer feedback through blogs: Student and teacher perceptions in an advanced German class. *ReCALL: Journal of Eurocall*, 21, 18–36. <https://doi.org/10.1017/S095834400900010X>
- Ducate, L., & Arnold, N. (2012). Computer-mediated feedback: Effectiveness and student perceptions of screen-casting software versus the comment function. In G. Kessler, G. I. Elola, & A. Oskoz (Eds.), *Technology across writing contexts and tasks* (pp. 31–56). CALICO.
- Dudeny, G., & Hockly, N. (2007). *How to teach English with technology*. Pearson Education.
- Elola, G. I., & Oskoz, A. (2017). Writing with 21st century social tools in the L2 classroom: New literacies, genre, and writing practices. *Journal of Second Language Writing*, 36, 52–60. <https://doi.org/10.1016/j.jslw.2017.04.002>
- Godwin-Jones, R. (2018). Second language writing online: An update. *Language Learning & Technology*, 22(1), 1–15. <http://dx.doi.org/10125/44574>
- Guardado, M., & Shi, L. (2007). ESL students' experiences of online writing. *Computers and Competition*, 24, 443–461.
- Hanjani, A. M. (2016). Collaborative revision in L2 writing: Learners' reflections. *ELT Journal*, 70(3), 296–307.
- Hanjani, A. M., & Li, L. (2014a). EFL learners' written reflections on their experience of attending a process genre-based, student-centered essay writing course. *The Asian Journal of Applied Linguistics*, 1(2), 149–166.
- Hanjani, A. M., & Li, L. (2014b). Exploring L2 writers' collaborative revision interactions and their writing performance. *System*, 44, 101–114. <https://doi.org/10.1016/j.system.2014.03.004>
- Hawe, E. M., & Dixon, H. R. (2014). Building students' evaluative and productive expertise in the writing classroom. *Assessing Writing*, 19, 66–79.
- Hu, G. (2005). Using peer review with Chinese ESL student writers. *Language Teaching Research*, 9, 321–342. <https://doi.org/10.1191/1362168805lr169oa>
- Hu, G., & Lam, S. T. E. (2010). Issues of cultural appropriateness and pedagogical efficacy: Exploring peer review in a second language writing class. *Instructional Science*, 38, 371–394. <https://doi.org/10.1007/s11251-008-9086-1>

- Huang, H. Y. C. (2016). Students and the teacher's perceptions on incorporating the blog task and peer feedback into EFL writing classes through blogs. *English Language Teaching*, 9(11), 38–47. <https://doi.org/10.5539/elt.v9n11p38>
- Hyland, K. (2016). *Teaching and researching writing*. Routledge.
- Hyland, K., & Hyland, F. (2006). *Feedback in second language writing: Contexts and issues*. Cambridge University Press.
- Jin, L., & Zhu, W. (2010). Dynamic motives in ESL computer-mediated peer response. *Computers and Composition*, 27, 284–303.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded source-book*. Sage.
- Robertson, J. (2011). The educational affordances of blogs for self-directed learning. *Computers & Education*, 57(2), 1628–1644. <https://doi.org/10.1016/j.chb.2014.09.012>
- Ruegg, R. (2014). The effect of assessment of peer feedback on the quantity and quality of feedback given. *Papers in Language Testing and Assessment*, 3(1), 24–43.
- Sun, Y. C., & Chang, Y. J. (2012). Bloggling to learn: Becoming EFL academic writers through collaborative dialogues. *Language Learning and Technology*, 16(1), 43–61. <https://dx.doi.org/10125/44274>
- Tannacito, T., & Tuzi, F. T. (2002). A comparison of e-response. Two experiences, one conclusion. *Karros*, 7(3), 1–14.
- Tsui, A. B. M., & Ng, M. (2000). Do secondary L2 writers benefit from peer comments? *Journal of Second Language Writers*, 9(2), 147–170.
- Tuzi, F. (2004). The impact of e-feedback on the revisions of L2 writers in an academic writing course. *Computers and Composition*, 21, 217–235.
- Vygotsky, L. S. (1978). In M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.), *Mind in society: The development of higher mental psychological process*. Harvard University Press.
- Wigglesworth, G., & Storch, N. (2012). What role for collaboration in writing and writing feedback. *Journal of Second Language Writing*, 21(4), 364–374. <https://doi.org/10.1016/j.jslw.2012.09.005>
- William, G., & Kaplan, R. B. (1996). *Theory and practice of writing*. Pearson Education.
- Wu, W. C. V., Petit, E., & Chen, C. H. (2015). EFL writing revision with blind expert and peer review using a CMC open forum. *Computer Assisted Language Learning*, 28(1), 58–80. <https://doi.org/10.1080/09588221.2014.937442>
- Yang, M., Badger, R., & Yu, Z. (2006). A comparative study of peer and teacher feedback in a Chinese EFL writing class. *Journal of Second Language Writing*, 15(3), 179–200.
- Yu, S., & Lee, I. (2016). Peer feedback in second language writing. *Language Teaching*, 49(4), 461–493. <https://doi.org/10.1017/S0261444816000161>
- Yu, S., Lee, I., & Mak, P. (2016). Revisiting Chinese cultural Issues in peer feedback in EFL writing: Insights from a multiple case study. *Asia-Pacific Education Research*, 25(2), 295–304. <https://doi.org/10.1007/s40299-015-0262-1>
- Zhang, H., Song, W., Shen, S., & Huang, R. (2014). The effects of blog-mediated peer feedback on learners' motivation, collaboration, and course satisfaction in a second language writing course. *Australasian Journal of Educational Technology*, 30(6), 670–685. <https://doi.org/10.14742/ajet.860>
- Zhao, H. (2010). Investigating learners' use and understanding of peer and teacher feedback on writing: A comparative study in a Chinese English writing classroom. *Assessing Writing*, 15, 3–17. <https://doi.org/10.1016/j.asw.2010.01.002>
- Zheng, C. (2012). Understanding the learning process of peer feedback activity: An ethnographic study of exploratory practice. *Language Teaching Research*, 16, 109–126. <https://doi.org/10.1177/1362168811426248>

Zeynep Bilki is a faculty member in English Language Education program at TED University, Turkey. She earned her MA and PhD in Foreign Language & ESL Education at the University of Iowa, USA. Her research interests include technology enhanced language learning and teaching, language teacher education, and second language integrated reading and writing. She has been an English language educator and teacher educator in Turkey and USA.

Pelin Irgin is an assistant professor of English Language Education at TED University in Turkey. She received her PhD degree in English Language Teaching at Hacettepe University, Turkey and completed her doctorate thesis research at University of Reading, UK. Her research interests are language learning and cognition, EFL listening comprehension and listening strategies, and L2 writing. She is currently serving on the editorial boards of international publications.

Exploring Student-Teacher Interaction and Learner Autonomy Through Writing Online Journals via Emails and Penzu: A Mixed-Method Analysis of Turkish Students' Perceptions



Serpil Meri-Yılan

Abstract The prevalence of online education has raised concerns about maintaining student-teacher interaction and learner autonomy. With the outbreak of the COVID-19 pandemic, these concerns have levelled up, so more studies have been called for. Therefore, this chapter presents empirical research on students' interaction with their peers, teacher and content, as well as on students' management and regulation of their learning. The study in the chapter investigated Turkish university-level students' perceptions about their learning through teacher interaction and autonomous learning. The students first interacted with their teacher through writing dialogue journals via emails for 4 weeks and then kept personal writings in Penzu for 4 weeks. Data from questionnaires and interviews showed that the students had positive beliefs on writing dialogue and personal journals since they thought that they improved their language learning skills thanks to their experience in writing emails and Penzu journals. Also, they indicated that Penzu enabled them to regulate their writing process freely. The chapter ends by suggesting that studies should further explore language use and pragmatic features of student writings to understand students' learning deeply; and that programme designers should consider integrating automated writing evaluation tools to enhance autonomous learning more.

Keywords Online journal · Interaction · Learner autonomy · Penzu

S. Meri-Yılan (✉)
Ağrı Ibrahim Cecen University, Ağrı, Türkiye

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022
G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing
Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_16

317

1 Introduction

Student-teacher interaction and learner autonomy have been discussed in classroom learning for decades and a large number of studies have found that a teacher has an impact on students' learning as well as student motivation and autonomy (Ilias & Nor, 2012; Little, 1995; Manke, 1997; Palfreyman, 2014). Bearing the effectiveness of both this form of interaction and learner autonomy in mind, recent research has examined students' learning in online environments. Therefore, the present study aims to explore student-teacher interaction and learner autonomy in e-learning environments from the perspectives of university-level students. Nowadays, as more online tools have been used in language learning contexts not just for academic purposes but also for social reasons, so has online education prevailed and attracted the attention of educators. Besides the prevalence of online learning, the current time has witnessed the COVID-19 pandemic, which caused some educational institutions to move their classroom education to entirely online education. Therefore, investigating online learning interaction and autonomous learning is indisputable for this study, which was conducted in the time of crisis. In the meantime, some researchers have looked into the impact of writing online journals on student-teacher interaction (Bloch, 2002) and learner autonomy (Lee, 2011). Email has been regarded as an effective tool to 'send and receive messages online at anytime and anywhere' (Foroutan & Noordin, 2012, p. 10), especially for second language (L2) education and during the time of crisis to form a real-like communication environment (Rheingold, 1993). Also, a number of journaling tools, among which the current study chose Penzu because of its offer to write freely and privately, have been utilized to foster students' ownership of their own writings (McGrail & Davis, 2011).

On the basis of the abovementioned studies, the current study examined students' perceptions about keeping online journals in L2 via emails and Penzu. The study took place in the first academic term of 2020–2021, when teaching has been moved to online since the outbreak of the COVID-19 pandemic. Although the second half of last academic year witnessed this new type of online teaching, namely, emergency remote teaching, students taking part in this study were freshers. Since students cannot attend the class and will have never seen their classmates and teachers face-to-face, there have been concerns on students' interaction with their peers, teacher and content, as well as on students' management and regulation of their learning. Has levelled up this year. Bearing these concerns in mind, the aim of this study is two-fold. It first intends to investigate student-teacher interaction through writing dialogue journals via emails. It then aims to examine students' perceptions about their own autonomous learning through keeping online journals via Penzu. Therefore, it seeks to answer the following research questions:

1. According to students, in what ways does writing online dialogue journals facilitate student-teacher interaction?
2. What do students think about the benefits and drawbacks of writing online dialogue journals?

3. In what ways does Penzu promote autonomous learning from the students' perspectives?
4. What are the students' perceptions on the benefits and drawbacks of Penzu?

2 Background Information

Journal writing, particularly in language learning contexts, provides opportunities for learners to interact with their teacher in a friendly environment rather than in a threatening one (Foroutan & Noordin, 2012). This form of writing is divided into two types as far as this study is concerned: Writing dialogue journals (WDJ) via emails and keeping online journals (KOJ) via Penzu. Therefore, this section will briefly explain these two concepts with their related issues.

The former, WDJ, is described as 'a daily written communication between two persons' (Wang, 1998, p. 3). Crystal (2001) debates that sending and receiving emails has a pedagogical value in that a learner needs to produce a piece of linguistic work that may be different from one in a traditional learning environment. Moreover, Bloch (2002) argues that email messages have a crucial role in constructing an interactive learning environment between learners and their teacher. On the other side, Collins dictionary (2011) defines interaction as 'a mutual or reciprocal action or influence.' In this sense, WDJ and interaction are interrelated concepts; however, in WDJ, interaction takes place through a written communication in terms of this study's interest. Ample studies have been carried out to see WDJ's relation with interaction, but, even so, there is a shortage of investigating WDJ's effect on L2 students' learning where education is totally online.

As for the latter, KOJ is defined as involving 'students expressing their reactions and feelings about a topic' (Walter-Echols, 2008, p. 120). Yi and Angay-Crowder (2018) connect it with another term, self-sponsored writing, in which writers attend writing activities voluntarily and express their thoughts freely and frankly. Although it used to be 'personally oriented', it is currently 'socially oriented' thanks to emerging technologies (Yi & Angay-Crowder, 2018, p. 2). Previous research focused on promoting writing proficiency has utilized a variety of blogging tools such as Multiply (Nepomuceno, 2011), Blogger (Gerich, 2013) or Facebook (Barrot, 2016) or a blog platform offered either by their own institutions (Lin et al., 2014) or through a project-led initiation (Witte, 2007). These studies have mainly been concerned with group interaction on the one hand and contributed to the understanding of learner-led learning through blogging on the other. Learner autonomy is commonly described as taking responsibility for one's own learning (Benson, 2013a, b; Dickinson, 1987; Holec, 1981; Little, 1991). This kind of handling learning does not have to take place in only academic environments but can also do in social ones (Holec, 1981). Also, a teacher's involvement in learning is as indispensable as a content's involvement (Dickinson, 1987), which is neglected on some learning occasions (Little, 1991). As Benson (2013a) claims, autonomous learning is related to a learning process instead of a specific education mode; however, digital tools can

be appropriately integrated into learning processes to let learners get engaged into activities as well as take charge of their own learning (Benson, 2013b). In this context, the present study implemented Penzu, an online diary tool, where users keep their posts freely and securely, in order to see students' views on autonomous learning through Penzu. Although some research (Thabet, 2014; Yüce, 2020) has suggested using Penzu to increase L2 students' writing proficiency, the field is lacking in presenting empirical findings on its impact on students' perceptions about autonomous learning.

3 Literature Review

3.1 *Student-Teacher Interaction via Emails*

Interaction has been an essential part of education (Kuo et al., 2014), regardless of its types such as learner-to-learner, learner-to-teacher, learner-to-content (Lear et al., 2010). Today, information and communications technology (ICT) tools have been utilized to facilitate interaction and engagement in L2 education (Azmi, 2017). Among them, email messages have been considered a means to sustain learners' engagement in learning, especially in writing and composition courses (Bloch, 2002). Gaer (1999) bases the reliance on emails on the ground of the authenticity they allow. For example, learners can use different language forms, which gives them freedom, while, in face-to-face communication, they may feel under pressure (Warschauer, 1999) that prevents them from producing the target language fluently (Li, 2000). Apart from the interest on language fluency, the focus on emails has been on promoting learners' reflection. Warschauer's (1999) study on Japanese students' email exchanges with their teacher has shown that students frankly expressed their concerns about their academic life in the United States through email exchanges with their English language instructor.

However, the dangers may take place when composing email messages. For instance, learners as well as instructors misunderstand and/or conflict with each other more commonly in online environments than face-to-face communications (Bloch, 2002) and it takes some time to resolve the misunderstanding and/or the conflict. Also, sending an email message hastily may cause some problems such as distributing it to a wrong person or group (Sproull & Kiesler, 1991).

Although recent studies (Godwin-Jones, 2018; Haider, 2019; Sun et al. 2018) have amply examined interaction among students through the use of emails, they have suggested integrating emails into online learning environments. Despite these ample studies on learner-to-learner interaction, some studies have explored learner-to-instructor interaction through sending emails in different aspects. Studies by Cuthrell and Lyon (2007) and Lai et al. (2020) highlight that teachers' periodical use of emails to their students enables them to contact more students. Ko and Rossen (2010) point out that classroom announcements via emails worked well for

students, too, as confirmed by Wandler and Imbriale (2017) as well. Martin and Bolliger (2018) investigated students' perceptions about learner-to-teacher interaction while Bolliger and Martin (2018) did on teachers' perceptions about this form of interaction. Both studies' findings were along similar lines in that both groups (i.e. students and teachers) saw this form of interaction as necessary and sending emails facilitated the interaction between students and their teachers. A study by Kim and Keller (2008) draws the attention to further issues in that personal email messages between both groups increased motivation and confidence in the treatment group. It also claims that stating students' names had a positive impact on students' engagement.

3.2 Learner Autonomy Through Online Diaries

Use of the ICT tools has prevailed in L2 writing because they enable L2 writers to search, translate, summarise and take notes of contents they need to learn (Godwin-Jones, 2018; Lai, 2017). Therefore, the focus has not been on only improving writing skills but also empowering self-confidence and independence (Alsamadani, 2017). In order to encourage learners to write more for their L2 skills, blogging has been involved in writing and composition courses. Its effectiveness for KOJ is listed as developing writing proficiency (Lin et al., 2014; Vurdien, 2012), motivation and learner autonomy (Lee, 2011; Nezakatgoo & Fathi, 2019; Priyatno, 2017) as well as critical thinking and problem solving skills (Lee, 2011). For example, a study by Lin et al. (2014) found out that students who daily blogged online had better L2 writing performance than others who used a traditional blog writing with a pen on a paper. Also, Lee's (2011) research investigating students' development of intercultural competence through blogging reported that tasks types play a crucial in fostering learner autonomy and enhancing cognitive, metacognitive skills and reflective skills. From another point of view, Tayan (2017) calls attention to an essential use of blogging by first-year L2 students to promote independent learning and autonomy. On the other hand, a few previous studies have raised some issues such as students' low frequency of KOJ (Lin, 2013; Wu, 2008) and the limited social interaction because of the loss of the Internet access (Lee, 2011).

Above all, previous research on KOJ has mainly focused on collaborative writing (Ahmad, 2020; Amir et al., 2011; Vurdien, 2012; Wang, 2015), through which bloggers either post their views about a topic and receive feedback and comments from their peers or work together as a group to improve their writing proficiency. However, the field is absent from exploring how learners are affected when being allowed to use blogs freely and privately (Lin et al., 2014). To address this absence, the present study benefited from an online diary tool, Penzu, on which very few research has been conducted though. A very recent study by Yüce (2020) interviewed 9 English as a L2 instructors in a Turkish state university in terms of Penzu's impact on improving students' writing skills in L2 classrooms. Nearly all interviewees agreed that Penzu can improve writing skill and should be integrated into

classes, and its strengths are that it is captivating for new generation and available for free and anytime, anywhere. They saw that its weakness is that there is no feedback provision.

4 Methodology

4.1 *Research Design*

To investigate students' perceptions about keeping online journals as well as dialogue journals, a mixed-methods research design was implemented (Creswell, 2013). Based on the scope of the mixed-methods research design, this study began with the quantitative strand ensued by the qualitative strand to have a deeper understanding of issues that came out in the quantitative data. The main objective of the research design is to illustrate a wider picture of the context, namely, students' beliefs with regard to their learning through online journal writing (Creswell, 2013). In this sense, findings will be presented by combining data from both strands in a complementary and comparative way.

4.2 *Participants*

33 Turkish students (24 females and 9 males) aged between 16 and 32 years old were recruited through the researcher's email invitation. Their levels of English were at beginner ones based on the exam prepared according to the Common European Framework of Reference for Languages (CEFR) by five experts. They were attending a preparatory class in the Department of Turkish-English Translation and Interpretation at a Turkish state university located in the eastern part of Turkey. Because of the transition to entirely online education, they were taking English for academic purposes courses on speaking, writing, reading and listening in a totally remote way. They were chosen because they had not met their lecturer before and they had not taken any writing course totally online before.

4.3 *Penzu*

4.3.1 The Features of Penzu

Penzu is a free online tool that can be used for keeping diaries and journals. It provides a secure and private platform where users can also upload photos and add tags to their posts or entries. It can be accessed through any device, such as a laptop, mobile phone and tablet, without any problem with free syncing. Users can share

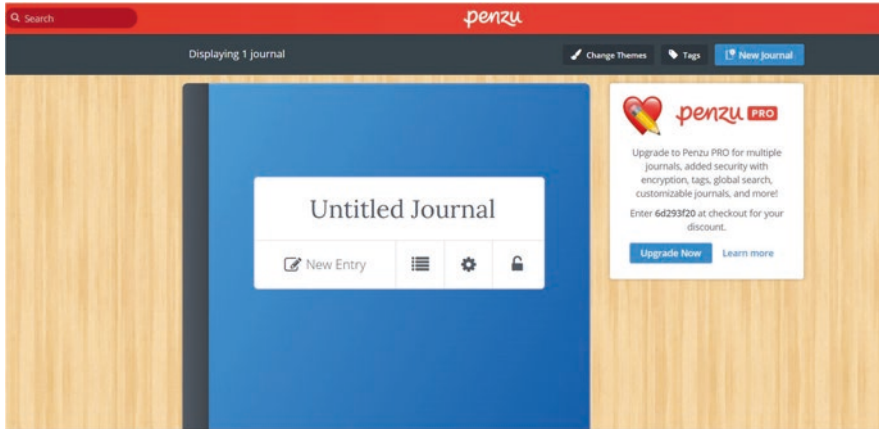


Fig. 1 A screenshot of Penzu

posts with others selectively and customize their journal as they wish. Additionally, it has a feature to write offline.

4.3.2 Brief Tutorial

Here is the information about how to use and write posts in Penzu. First, grab your digital device with an Internet connection. Then, go to [Penzu.com](https://penzu.com) to create an account. Here, you need to enter your name, email and password for the account. After this, name your journal and start writing. Here, you will see a webpage of Penzu as shown in Fig. 1. You can change the themes of your Penzu page. You can customize the themes of the journal in the setting, see entries shared with you, and lock the journal with a password. After clicking on ‘new entry’, you can enter a title to the entry and write your entry in any font type, size and colour you would like to do. You can add tags and insert photos to the entry, share it with others and export and print it. To share the written entry via either a private email or a public link, click on the three dots icon on the right side of the platform.

4.3.3 Possible Advantages and Disadvantages/Limitations

Penzu offers many advantages in keeping an online journal. First and foremost, it offers unlimited entries for free. Privacy is one of its most favoured benefits. This means that entries are kept with a password securely and users can also share their entry either publicly or privately. Another main benefit is that it enables writing and syncing in multi-platforms. When mobile apps are used, it enables offline writing. Also, it is useful in customizing themes of a journal, commenting on shared entries, saving entries automatically and showing a word count.

However, a few disadvantages of Penzu lie in that its pro (paid) version provides more practical features than its free version. Some of these important ones are exporting entries to PDFs, creating more than one journal, tagging and locking entries individually and receiving premium support and military-grade journal encryption. The shortcoming of this last feature in the free mode puts a limit on the use of Penzu in a professional way.

4.4 Data Collection Procedures and Instruments

The study was conducted during the first semester of the 2020–2021 academic year. For the Writing course, the goal was to increase students' writing skills from the beginner level to the upper-intermediate level as well as help them to start the first-year university study level after passing an upper-intermediate level exam designed based on the CEFR.

Table 1 illustrates data collection procedures with the applied timeline. To start with, the researcher asked 45 students to create an account in Google and send an email to her account in order for them to be familiar with sending emails after she demonstrated how to write an email, for example, what to write the subject line etc. As they had not met their professor face-to-face, they were encouraged to contact their professor through sending emails. There was also another reason to do that: In the context of the study, newcomers usually feel shy to communicate with their professor. In order to overcome participants' shyness, the researcher asked them to send their professor an email about their background, hobbies or plans or anything they wished to tell. Next, their professor replied their emails by sharing her interests or information about herself. This way of sending emails back and forth between the participants and their professor for 4 weeks aimed to answer RQs 1 & 2 to see

Table 1 Data collection timeline

Procedure	Time	Objective
Training and orientation	Week 1	To increase students' familiarity with sending emails
Writing online dialogue journals	From Week 2 till Week 6	To build up student-teacher interaction
Distributing a questionnaire on interaction	Week 7	To collect data about student-teacher interaction To answer RQs 1 & 2
Keeping online journals through Penzu	From Week 8 till Week 12	To enhance learner autonomy
Distributing a questionnaire on learner autonomy	Week 13	To collect data about students' autonomous learning To answer RQs 3 & 4
Semi-structured interviewing	Week 14	To collect data about student-teacher interaction and learner autonomy To answer all RQs

student-teacher interaction. In the seventh week, they were asked to fill out a questionnaire distributed through a Google form. The questionnaire started with items asking about their use and possession of digital devices. Other three items were designed based on the basic issues on interaction, such as whether writing dialogue journals helped them to learn better; if so, how, and what its benefits and drawbacks were. This means that the items were mainly open-ended questions. 33 of 45 students in the Writing course gave their responses to the items in the questionnaire. 12 of them did not or could not fill out it because they did not wish to do that, as the participation was voluntary, or they could not have enough Internet access. In the coming 4 weeks, 45 students were asked to keep online journals through Penzu as part of their grade in their writing course. Based on the suggestion of previous studies (Lin, 2013; Wu, 2008), keeping Penzu journals was made compulsory in this study since they may not sustain their writing or write them less than the required frequency. Meanwhile, Penzu was chosen in this study because Penzu allows users to write diaries freely online, keep personal writings privately (Yüce, 2020) as well as share them with others for collaboration purposes (Son, 2011) or their professor as happened in this study. In the thirteenth week, they were asked to fill out a questionnaire that includes 10 items (see Table 2) regarding their experiences in Penzu. These items were designed based on a 5-point Likert scale (Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), Strongly Disagree(SD)). The questionnaire

Table 2 Students’ answers to learner autonomy scale

Items	F	SD	D	N	A	SD
	%					
1. I was able to choose the most suitable topics to write in Penzu.	F	0	0	3	11	7
	%			14.3	52.4	33.3
2. I realized that I could take responsibility for my learning while writing in Penzu.	F	0	0	5	4	12
	%			23.8	19	57.1
3. I used learning strategies to develop my English while writing in Penzu.	F	0	0	4	9	8
	%			19	42.9	38.1
4. I discovered my strengths while writing in Penzu.	F	0	1	6	7	7
	%		4.8	28.6	33.3	33.3
5. I discovered my weaknesses while writing in Penzu.	F	0	0	4	10	7
	%			19	47.6	33.3
6. I identified my learning needs while writing in Penzu.	F	0	0	4	12	5
	%			19	57.1	23.8
7. I can evaluate my writings in Penzu.	F	1	3	11	5	1
	%	4.8	14.3	52.4	23.8	4.8
8. I prepared my writings in Penzu without any help from a tutor or an expert.	F	0	1	4	5	11
	%		4.8	19	23.8	52.4
9. I needed help from a tutor or an expert while writing in Penzu.	F	3	8	3	7	0
	%	14.3	38.1	14.3	33.3	
10. I utilized different resources while writing in Penzu.	F	1	7	5	6	2
	%	4.8	33.3	23.8	28.6	9.5

was drawn from learner autonomy scales of Meri-Yılan (2017) and Orakci and Gelisli (2017). The rationales for using these scales were to investigate students' views on autonomous learning in e-learning environments and examine their experiences in online learning. 21 of 33 participants responded to each item through a Google form. In the last week of the semester, 8 participants were interviewed through a web conferencing tool by giving their further thoughts on the negative and positive sides of writing online journals as well as dialogue journals, which was intended to delve into two main issues of the study, namely, interaction and learner autonomy.

4.5 Data Analysis

Data from the quantitative research instruments, questionnaires, were analysed through descriptive statistics, in which the percentages (%) and frequencies (F) of the participants' beliefs on items were given through the automatic calculation of the Google forms. Data from the qualitative research, interviews, were analysed based on grounded theory that provides 'an in-depth analysis of a phenomenon' (Dörnyei, 2007, p. 262). The data were coded through Microsoft Excel inductively, by which thematic areas were labelled and data were coloured (Bree & Gallagher, 2016). However, in the presentation of the findings, data from both instrument types were integrated and combined since the data from 8 interviewees would not be enough to analyse and present data separately and similar issues were raised during the interviews.

4.6 Ethical Considerations

The ethics of the study was ensured to be reviewed thoroughly. Two more reviewers who have had an experience in the field for decades checked over and discussed its ethical parts with the researcher. It was ensured that the participants were part of the study voluntarily after having been informed about the aims of the research, and their participation would not have any impact on their grades for their writing course. In the meantime, keeping online diaries in Penzu was mandatory but participating the questionnaire and interviews was voluntary. Each of them consented that their responses could be used for the perusal of the research and clicked on the statement 'I agree to take part in the study and I can withdraw from the study any time.' through the Google forms prior to giving their responses.

5 Findings

5.1 *Participants' Use and Possession of Digital Devices, and Access to the Internet*

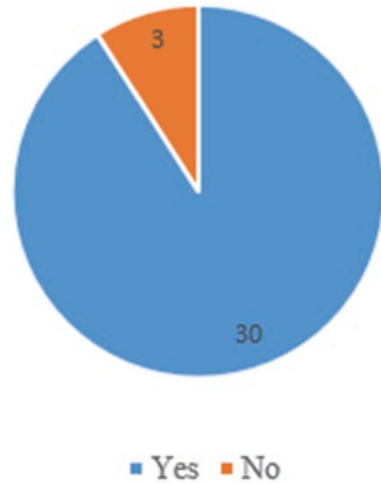
Data from the questionnaire items regarding participants' use and possession of digital devices indicate that most of 33 participants seemed to be able to join online classes and have no difficulty in accessing the Internet. 20 (60.6%) of 33 participants stated that they had been using digital devices for 6 or more years, whereas 7 (21.2%) of them reported to have been doing this for 4 or 5 years. The rest (6 participants) wrote that they had been utilizing them for less than 3 years. With regard to having digital devices, 10 (30.3) of them indicated that they possessed at least four different digital devices such as a tablet, smartphone, laptop or computer to attend virtual classes. Nearly all (93.9%) of them indicated that they had got a smart phone while slightly less than half (48.5%) of them owned a laptop. 12 (36.4%) of them were keeping a computer whereas 10 (30.3) of them were holding a tablet. Similarly, approximately all (93.9) of them had mobile phone Internet access. Just less than one-third (30.3) had broadband at home. In addition, one student commented that she had to travel their relative's place to use their broadband.

5.2 *Participants' Perceived Ways of Facilitation of Writing Dialogue Journals*

With regard to their response to the item of the questionnaire, whether writing dialogue journals facilitated their interaction with their professor or not, almost all (90.9%) of 33 participants agreed with this item, while only three (9.1%) of them disagreed with it (see Fig. 2).

The majority (75%) of them in the questionnaire described this interaction as 'talking' or 'communicating' with their professor. They stated that the interaction was motivating, encouraging and continuous, which made them feel happy and establish a bond between them and their professor in a positive way. Interviewee 1 stated 'I put my problems into words while talking with my professor.' A few participants exemplified these problems as 'attending the class late' and 'submitting an assignment late'. Also, more than half (60%) of them in the questionnaire expressed that they were able to share their views with their professor. Interviewee 2 expanded her view saying 'What we share makes us interact with my professor. This also leads to knowing each other better. Thus, even if it is a remote interaction, a character is created in our brain.' Similarly, Interviewee 5 said 'Partly my professor is acquainted with me, partly I am acquainted with my professor.' Interviewee 3 added 'By this, I could easily accommodate myself into a new environment'. Interviewee 4 highlighted the importance of this kind of interaction for the maintenance of learning motivation stating 'I can even hear my professor's voice in emails that makes me

Fig. 2 Participants' answers to the facilitation of writing online dialogue journals on student-teacher interaction



in comfort even though I have not seen her face-to-face.' Interviewee 6 believed that their interaction became stronger and their acquaintance with learning became better through sending emails back and forth. Interviewee 7 elaborated the acquaintance with some examples in her sides as follows:

I feel that my professor knows me well now. I think that meeting face-to-face is not very crucial. Interacting with someone who knows your hobbies or characteristics, for example, if you are fun or silent, when the person hears your name, is not the same thing with interacting with others who know nothing about you. The only thing that has never changed has been her sincerity to keep this former interaction.

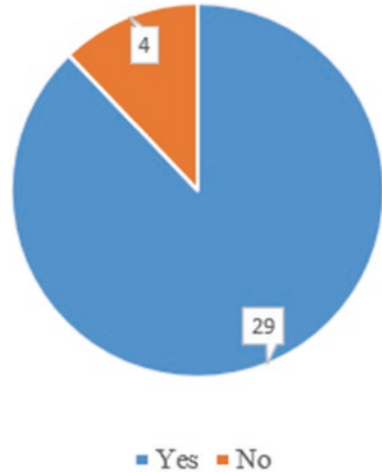
Interviewee 8 related this form of interaction with receiving answers about not only academic issues but also daily issues. He continued 'I shared one of my memories with my dear professor, which strengthened our communication, respect and love.'

5.3 Participants' Perceived Benefits and Drawbacks of Writing Dialogue Journals

Figure 3 shows 33 participants' answers to the question of whether writing dialogue journals helped their learning, more than four-fifth (87.9%) of 33 participants agreed that writing dialogue journals helped their learning improve. However, four of them disagreed with this. In terms of giving details about in which way it enhanced their learning, they expressed diverse views and experiences in learning in the questionnaire. In addition, all of 33 participants described its benefits, whereas five participants expressed its drawbacks.

The most uttered aspect of learning was writing as reported by 10 participants in the questionnaire. Interviewee 1 also said that she overcame her usual problem as follows:

Fig. 3 Participants' answers to the impact of writing online dialogue journals on their learning on their learning



The main problem of language students or students who learn a foreign language is to generate a sentence and communicate with someone in the target language. I am one of them who can understand but cannot convey their understanding. However, while talking with you through emails, I feel excited to reply back to my professor who sent me an email. With this excitement, I can even handle the sentences that I could not write before but now can write through my research and efforts to give answers in a better way, which has contributed to my learning a lot.

Interviewee 2 highlighted that she learned how to write an academic email and what to consider while writing that kind of emails. Interviewee 3 added her improvement of writing in all aspects saying ‘Although just a few weeks passed, I can realize that my writing has developed. I can easily identify places of punctuations, subject, verb, adjective or adverb.’ Interviewee 4 exemplified how his writing was understood as follows:

For example, you responded my email. This means that my email was understandable, which is very important for me. Because I tried to write all sentences on my own and rarely got help to do that. Shortly, I have made progress in English.

The second most expressed aspect was vocabulary and grammar as reported by eight students. Five interviewees consented that this way of sending emails back and forth not only helped them gain new vocabulary but also mastered words they had forgotten or had not been good at forming into sentences.

The third most articulated aspect was speaking as said by seven students who described their email exchange as ‘talking with the professor’. Interviewee 5 said that she could not assess her speaking and writing in her previous education level, but at that time she gained the ability to assess her English and she was able to see her progress.

Being informed about the writing course such as exams, quizzes or any issues arisen was seen an advantage. Interviewee 6 said:

As teaching is currently online, I cannot attend some classes on some occasions. But thanks to your emails, I feel motivated to follow up your quizzes and assignments, and no information pollution occurs. I could not hear about two exams of different courses before, but this email exchange makes all of us informed.

Also, they commented that they could easily contact their professor, which enabled them to receive right information and right feedback to see their mistakes.

One interviewee pointed out that his communication tool from 8 a.m. till 5 p.m. was the email, so it worked well for him. Another one said that the email was an interactive tool that made them express themselves in a written language.

The development of critical thinking was seen as an advantage by Interviewee 8 as follows:

I have not written this kind of emails and letters before, so I used to have inability to judge issues, which led me not to ask any questions about issues in the classroom or even during my informal communications. But now I can do it very efficiently. It has also affected my communication.

As regards the drawbacks of writing dialogue journals, some issues were raised. The most stated one in the questionnaire by six students was the challenging part of remote education as they could not see and interact with their professor face-to-face. They thought that it would be more efficient if they had been taught in the classroom. The second most uttered one by five students was a late email response. In this context, Interviewees 2 and 8 indicated that they could understand why they had received a late reply following ‘We know that it is not easy to answer all emails immediately as there are loads of other students. However, if the education were face-to-face, responses would be quicker.’

5.4 Participants’ Perceived Autonomous Learning Through Keeping Online Diaries in Penzu

Table 2 shows 21 participants’ responses to ten items of Learner Autonomy Scale. More than four-fifth agreed that they were able to decide which topics to write about (see Item 1), took advantage of learning strategies in order to improve their English language skills (see Item 3) and detected their learning weaknesses (see Item 5) as well as needs (see Item 6) in the process of keeping their Penzu journals. The rest neither agreed nor disagreed with these items. Furthermore, slightly less than four-fifth accepted that they became aware of their responsibilities for their own learning (see Item 2), noticed their strengths (see Item 4) and produced their writings without any human-based help (see Item 8) in the writing process. But only one participant was against Items 4 and 8, while others were neutral to these three items. In a similar vein, more than half indicated that they did not need a human-based help (see Item 9); however, more than one-fifth agreed to have required it and three of them were unsure to do that. Despite most of their agreement on handling their learning (see Item 2), mildly more than half were undecided to evaluate their Penzu writings

(see Item 7), whereas nearly one-third acknowledged this but the others (19.1%) did not. Moreover, nearly two-fifth stated that they had not made use of online educational resources (OER) (see Item 10), while partly more than one-third stated that they had done this. Only seven participants were neutral to this item. As regards the use of OER, 8 interviewees said that they had used translation tools occasionally.

5.5 Participants’ Perceived Benefits and Drawbacks of Keeping Online Diaries Through Penzu

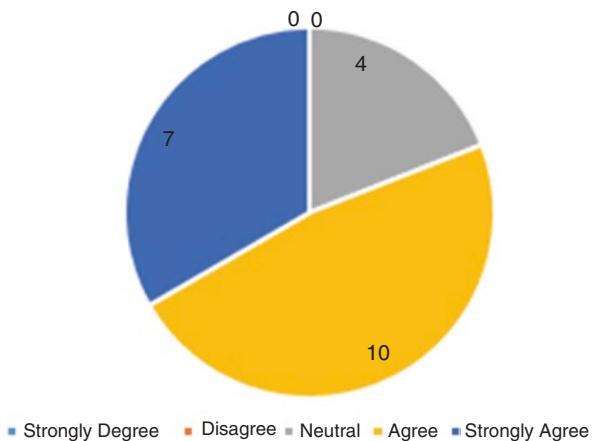
Figure 4 illustrates 21 participants’ views on Penzu. The figure shows that the majority (80.9%) of them agreed that their journal writing in Penzu impacted their learning positively, whereas 19% of them neither agreed nor disagreed with its impact. Data from questionnaires indicate that Penzu had a constructive effect on participants’ writing, speaking, critical thinking and problem solving skills and autonomous learning. In addition, data from interviews support the questionnaire findings.

The most stated advantage by 8 participants in the questionnaire was to improve writing. Interviewee 1 identified this kind of writing as ‘both writing and using words on my own correctly’. Admittedly, Interviewee 2 related its impact to their writing development that facilitated their autonomous learning as expressed below:

We made an effort to produce a variety of sentences and word phrases, which, in fact, has contributed to us. Also, we had the opportunity to search words we usually did not know and use in our daily conversations. We could realize our mistakes and repeat what we learned when we revised our writings.

Similarly, Interviewee 3 regarded the writing improvement as drawing on different phrases instead of common ones as follows: ‘I can now see that I can use new

Fig. 4 21 participants’ views on Penzu’s positive impact on their learning



phrases that I could think of doing before. I describe my learning as jumping over where I was.'

The second most uttered one by 6 participants in the questionnaire was to become aware of mistakes and weaknesses. Some linked this awareness with the benefit of Penzu in that they could read back their writings anytime, anywhere. Interviewee 4 said 'I can go back to my writings a month later and see how much I have made progress.'

The third most expressed one by 5 participants in the questionnaire was to develop speaking skills well as encourage them to think in English. Interviewee 5 considered it reinforcing what had been gained and learned.

The fourth most reported one by 3 participants in the questionnaire to enhance critical thinking and problem solving. Interviewee 5 indicated 'Writing so many texts in a few weeks helped me think critically and generate new opinions.' Interviewee 6 continued 'I can implement a solution when having difficulties in writing a piece of work.'

Lastly, Interviewee 8 clearly said that he could take responsibility for his own learning, which 'is the most essential contribution of Penzu for me' and 'makes me fearless of online education.'

As for its challenges, two issues were raised. 5 participants in the questionnaire stated that choosing a topic was difficult. Interviewee 8 added 'I would not write only one paragraph, so it was challenging to select an appropriate topic to put pen to paper each time.' The other issue was not to receive feedback as expressed by one participant in the questionnaire saying 'After writing each paragraph, there was no immediate feedback, which I needed much.'

6 Discussion

Not just the development of ICTs but also the eruption of the COVID-19 pandemic has affected educational institutions to move their classroom learning to online learning. It is very significant that students' voices which have been largely lacking in the field of online journal writing are covered in this research, and a study is also necessary to hear about students' voices about keeping online journals privately and freely (Lin et al., 2014). In examining journal writing via emails and Penzu, this research has identified positive aspects rather than negative ones as students mentioned.

To facilitate student-teacher interaction, an online tool is necessary (Azmi, 2017), especially for the first-year students (Tayan, 2017) who have not met their lecturer face-to-face yet. In the context of this study, email messages worked as a medium to 'talk' and 'communicate' with their lecturer as stated by the participants. Moreover, this form of interaction is linked with the ways email messages can impact students' learning. This was also expressed by the participants in this study in that email messages, being motivating, encouraging and continuous, created a bond between a student and a teacher, which is corroborated by Bloch (2002). In

line with Warschauer (1999), the present study also argues that this kind of bond generates trustworthiness, for example, through the participants' narration about their personal problems to the professor, which can lead to the increase of interaction. However, this study discusses that students express their feelings not only about their academic concerns as also found out by Warschauer (1999), but also about their personal characteristics and hobbies, both of which are required to make students feel like learning in a face-to-face environment. Apart from the reliance on the teacher, respect and love are empowered through sending emails back and forth. These empowerments probably come from WDJ's authentic elements such as constructing a real-like environment as can be seen in this study, which is in accordance with Gaer (1999). In addition, its interactive elements help to build up a reliable relationship between and a safe environment for students and teachers, which echoes Ekşi's (2013) claims.

There is a common understanding that WDJ is very efficient in learning contexts (Bolliger & Martin, 2018; Cuthrell & Lyon, 2007; Gaer, 1999; Godwin-Jones, 2018; Haider, 2019; Ko & Rossen, 2010; Lai et al., 2020; Martin & Bolliger, 2018; Sun et al. 2018; Wandler & Imbriale, 2017; Warschauer, 1999), which parallels the findings of this research. At a considerably beneficial aspect of WDJ, as is also acknowledged by previous studies, is improving writing proficiency as well as composing both formal and informal emails, namely, in all aspects of writing as also stated by Interviewee 3 in the study. Following this, vocabulary and grammar development is what the participants uttered the secondly most. Increasing speaking proficiency is what previous studies have not reached out but what this study found out. Besides, other benefits are listed as preparing for the writing course well, providing feedback and enriching critical thinking. In regard to its drawbacks, this study found out that face-to-face interaction with a teacher was absent, which may also affect the belated replies to students' emails. These drawbacks might be because the writing courses were delivered totally online in this study. On the one hand, Bloch (2002) adds to these issues that online messages may cause misunderstanding and conflict. On the other hand, Ko and Rossen (2010) draw attention to the regular use of emails to sort out the issues. All in all, this study aligns with studies by Martin and Bolliger (2018) in that students have positive perceptions about email messages for learner-teacher interaction.

In examining students' perceptions about learner autonomy through keeping online diaries in Penzu, more than half of the participants agreed that they were able to make decisions on their writing topics and apply different learning strategies; discover their weaknesses, strengths and learning needs; take responsibility for their own learning and carry out activities without any human-based help while writing their journals in Penzu. According to Pajares et al. (2007), writers who say 'I can do' have more efficacy than other writers who say 'I cannot do'. It is also very crucial that technological use enables students to widen their knowledge with their prior learning experiences and integrate the current learning experiences into new learning processes (Benson, 2013b; Ghavifekr & Rosdy, 2015). In this regard, journal keeping in Penzu can lead to positive beliefs in managing learning process, which may result in taking responsibility for learning. As the majority of the

participants (80.9) supported, Penzu can impact writing processes efficiently and act as a medium for learners to demonstrate their abilities to manage their writing tasks. On the one side, slightly more than half of them were neutral to whether they could evaluate their writings in Penzu. On the other side, drawn from the comments made by the participants, the freedom Penzu lets learners helps them to see and correct their mistakes and have novel learning experience on their own. Moreover, the flexibility of Penzu allows learners to go back to writings anytime and anywhere, which is corroborated by Yüce's (2020) study. More importantly, this study indicated that this flexibility serves as a controller about learning progress as stated by Interviewee 4. Yet, this does not only focus on the composition but also gives some suggestions on its use to further increase other skills. Despite previous research's claim on reading skills (Lee, 2011), the present study debates that speaking skill is enhanced when learners internalize their composition process and consider as if they were narrating their composition in English without using their source language. In addition to speaking, this kind of internalization process triggers critical thinking and problem solving. In this respect, this study asserts the review of Williams and Beam (2019) to the extent that 'technology-mediated instruction supported students' composing process and skills' (p. 227). As regards the drawbacks of KOJ in Penzu, some participants listed the difficulty in choosing a writing topic and the lack of feedback. It is very important to offer necessary help in online environments that can be through blog entries by teachers. For instance, in terms of feedback, Arslan and Şahin-Kızıl (2010) compared two student groups, one of which received writing instruction in both a blogging platform and classroom, and the other of which had writing instruction just in the classroom. However, the former group underwent a variety of writing input through model paragraphs, interactive exercises and web materials, which resulted in an increase in their writing performance in comparison to the latter's performance. As for the topic selection, writers can be supplied with explicit instruction on what to write and how to choose a topic (Morgan, 2012), which helps to benefit from Penzu more effectively.

7 Conclusion and Implications

The findings of the current study demonstrated that WDJ via emails and KOJ via Penzu benefited students' writings. Student-reported data indicated that students had positive views on WDJ since their interaction with their teacher levelled up thanks to both WDJ's impact on the development of their writing, vocabulary, grammar, speaking and critical thinking skills and the provided feedback by the teacher. Furthermore, they found Penzu effective because of its flexible feature that enabled them to not only regulate their writing process but also improve speaking, critical thinking and problem solving skills. These findings echo previous research on WDJ via emails (Martin & Bolliger 2018) and on KOJ via Penzu (Yüce, 2020).

Further, the findings suggest that feedback should be provided for students to evaluate their learning promptly. Engeness (2018) recommends the integration of

technology-based feedback systems and peer feedback to develop L2 students' assessment skills. Even though this recommendation goes beyond the scope of this research, this chapter supports Engeness's (2018) suggestion. Future investigation on use and integration of automated writing evaluation tools into writing journals could help understanding of self-evaluation and self-management.

Future studies might also look into language use in student emails. Pragmatic features of emails (Haider, 2019) that lie outside the scope of the study might help to understand in what ways communication through WDJ develops and/or decreases between students and teachers. There may also be a need to consider how teachers' intentions and discursive strategies (Mynard, 2018) impact students' learning and agency since teachers play a considerably vital role in learning process.

References

- Ahmad, S. Z. (2020). Cloud-based collaborative writing to develop EFL students' writing quantity and quality. *International Education Studies*, 13(3), 51–64.
- Alsamadani, H. A. (2017). The effectiveness of using online blogging for students' individual and group writing. *International Education Studies*, 11(1), 44–51.
- Amir, Z., Ismail, K., & Hussin, S. (2011). Blogs in language learning: Maximizing students' collaborative writing. *Procedia-Social and Behavioral Sciences*, 18, 537–543.
- Arslan, R. Ş., & Şahin-Kızıl, A. (2010). How can the use of blog software facilitate the writing process of English language learners? *Computer Assisted Language Learning*, 23(3), 183–197.
- Azmi, N. (2017). The benefits of using ICT in the EFL classroom: From perceived utility to potential challenges. *Journal of Educational and Social Research*, 7(1), 111–118.
- Barrot, J. S. (2016). Using Facebook-based e-portfolio in ESL writing classrooms: Impact and challenges. *Language, Culture and Curriculum*, 29(3), 286–301.
- Benson, P. (2013a). *Teaching and researching: Autonomy in language learning* (2nd ed.). Routledge.
- Benson, P. (2013b). Learner autonomy. *TESOL Quarterly*, 47(4), 839–843.
- Bloch, J. (2002). Student/teacher interaction via email: The social context of Internet discourse. *Journal of Second Language Writing*, 11(2), 117–134.
- Bolliger, D. U., & Martin, F. (2018). Instructor and student perceptions of online student engagement strategies. *Distance Education*, 39(4), 568–583.
- Bree, R. T., & Gallagher, G. (2016). Using Microsoft Excel to code and thematically analyse qualitative data: A simple, cost-effective approach. *All Ireland Journal of Higher Education*, 8(2), 2811–2824.
- Collins dictionary. (2011). *Interaction*. Retrieved from <https://www.collinsdictionary.com/dictionary/english/interaction>
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed method approaches* (4th ed.). SAGE.
- Crystal, D. (2001). *Language and the Internet*. Cambridge University Press.
- Cuthrell, K., & Lyon, A. (2007). Instructional strategies: What do online students prefer? *Journal of Online Learning and Teaching*, 3(4), 357–362.
- Dickinson, L. (1987). *Self-instruction in language learning*. Cambridge University Press.
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press.
- Ekşi, G. Y. (2013). E-dialogue journal: Student teachers' perspectives on their school experience. *Procedia-Social and Behavioral Sciences*, 70, 1810–1819.

- Engeness, I. (2018). What teachers do: Facilitating the writing process with feedback from essay-critic and collaborating peers. *Technology, Pedagogy and Education*, 27(3), 297–311.
- Foroutan, M., & Noordin, N. (2012). Effect of dialogue journal writing through the use of conventional tools and e-mail on writing anxiety in the ESL context. *English Language Teaching*, 5(1), 10–19.
- Gaer, S. (1999). Classroom practice: An introduction to email and world wide web projects. In J. Egbert & E. Hanson-Smith (Eds.), *Call environments: Research, practice and critical issues* (pp. 65–78). TESOL.
- Gerich, D. (2013). Beyond the class blog: Creative and practical uses of Blogger for the ESL classroom. *TESOL Journal*, 4(1), 175–181.
- Ghavifekr, S., & Rosdy, W. A. W. (2015). Teaching and learning with technology: Effectiveness of ICT integration in schools. *International Journal of Research in Education and Science*, 1(2), 175–191.
- Godwin-Jones, R. (2018). Second language writing online: An update. *Language Learning & Technology*, 22(1), 1–15.
- Haider, I. (2019). Cyberpragmatics: Assessing interlanguage pragmatics through interactive email communication. In S. Papageorgiou & K. M. Bailey (Eds.), *Global perspectives on language assessment: Research, theory, and practice* (pp. 152–169).
- Holec, H. (1981). *Autonomy in foreign language learning*. Pergamon.
- Ilias, K., & Nor, M. M. (2012). Influence of teacher-student interaction in the classroom behavior on academic and student motivation in teachers' training institute in Malaysia. *Academic Research International*, 2(1), 580–589.
- Kim, C., & Keller, J. M. (2008). Effects of motivational and volitional email messages (MVEM) with personal messages on undergraduate students' motivation, study habits and achievement. *British Journal of Educational Technology*, 39, 36–51.
- Ko, S., & Rossen, S. (2010). *Teaching online: A practical guide* (3rd ed.). Routledge.
- Kuo, Y. C., Walker, A. E., Schroder, K. E., & Belland, B. R. (2014). Interaction, Internet self-efficacy, and self-regulated learning as predictors of student satisfaction in online education courses. *The Internet and Higher Education*, 20, 35–50.
- Lai, C. (2017). *Autonomous language learning with technology: Beyond the classroom*. Bloomsbury Publishing.
- Lai, C. H., Jong, B. S., Hsia, Y. T., & Lin, T. W. (2020). *Using reminder tools to increase learning motivation: A comparison of mobile devices, email and e-learning platforms*. International Association of Online Engineering. Retrieved February 23, 2021 from <https://www.learn-techlib.org/p/218402/>
- Lear, J. L., Anson, C., & Steckelberg, A. (2010). Interactivity/community process model for the online education environment. *Journal of Online Learning and Teaching*, 6(1), 71–77.
- Lee, L. (2011). Blogging: Promoting learner autonomy and intercultural competence through study abroad. *Language Learning & Technology*, 15(3), 87–109.
- Li, Y. (2000). Linguistic characteristics of ESL writing in task-based e-mail activities. *System*, 28(2), 229–245.
- Lin, M. H. (2013). Effects of classroom blogging on ESL student writers: An empirical reassessment. *The Asia-Pacific Education Researcher*, 23(3), 577–590.
- Lin, M. H., Li, J. J., Hung, P. Y., & Huang, H. W. (2014). Blogging a journal: Changing students' writing skills and perceptions. *ELT Journal*, 68(4), 422–431.
- Little, D. (1991). *Learner autonomy. 1: Definitions, issues and problems*. Authentik.
- Little, D. (1995). Learning as dialogue: The dependence of learner autonomy on teacher autonomy. *System*, 23(2), 175–181.
- Manke, M. (1997). *Classroom power relations: Understanding student-teacher interaction*. Routledge.
- Martin, F., & Bolliger, D. U. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. *Online Learning*, 22(1), 205–222.

- McGrail, E., & Davis, A. (2011). The influence of classroom blogging on elementary student writing. *Journal of Research in Childhood Education*, 25, 415–437.
- Meri-Yilan, S. (2017). *'Take your time' to 'find yourself!': An exploration of scaffolded autonomous e-learning environments amongst international students in a UK university*. Doctoral dissertation, University of Southampton.
- Morgan, L. (2012). Generation Y, learner autonomy and the potential of Web 2.0 tools for language learning and teaching. *Campus-Wide Information Systems*, 29(3), 166–176.
- Mynard, J. (2018). Still sounds quite a lot to me, but try it and see': Reflecting on my non-directive advising stance. *Relay Journal*, 1, 98–107.
- Nepomuceno, M. M. (2011). Writing online: Using blogs as an alternative writing activity in tertiary ESL classes. *TESOL Journal*, 5(2), 92–105.
- Nezokatgoo, B., & Fathi, J. (2019). Second language writing through blogs: An investigation of learner autonomy. *Iranian Journal of Applied Language Studies*, 11(2), 165–190.
- Orakci, S., & Gelisli, Y. (2017). Learner Autonomy Scale: A Scale Development Study. *Malaysian Online Journal of Educational Sciences*, 5(4), 25–35.
- Pajares, F., Johnson, M. J., & Usher, E. L. (2007). Sources of writing self-efficacy beliefs of elementary, middle, and high school students. *Research in the Teaching of English*, 104–120.
- Palfreyman, D. M. (2014). The ecology of learner autonomy. In G. Murray (Ed.), *Social dimensions of autonomy in language learning* (pp. 175–191). Palgrave Macmillan.
- Priyatno, A. (2017). Promoting learner autonomy through Schoology m-learning platform in an EAP class at an Indonesian university. *Teaching English with Technology*, 17(2), 55–76.
- Rheingold, H. (1993). *The virtual community: Homesteading on the electronic frontier*. Addison-Wesley.
- Son, J. B. (2011). Online tools for language teaching. *TESL-EJ*, 15(1), 1–12.
- Sproull, L., & Kiesler, S. (1991). *Connections: New ways of working in networked organizations*. MIT Press.
- Sun, Z., Lin, C. H., Wu, M., Zhou, J., & Luo, L. (2018). A tale of two communication tools: Discussion-forum and mobile instant-messaging apps in collaborative learning. *British Journal of Educational Technology*, 49(2), 248–261.
- Tayan, B. M. (2017). Students and teachers' perceptions into the viability of mobile technology implementation to support language learning for first year business students in a Middle Eastern university. *International Journal of Education and Literacy Studies*, 5(2), 74–83.
- Thabet, S. (2014). New E-tools in teaching writing under the umbrella of literature. *International Journal of Computing*, 3(1), 12–20.
- Vurdien, R. (2012). Enhancing writing skills through blogs in an EFL class. In *European association for computer-assisted language learning (EUROCALL)* (pp. 155–158) Retrieved February 23, 2021 from <https://files.eric.ed.gov/fulltext/ED544534.pdf>
- Walter-Echols, E. (2008). Journaling as writing practice, reflection, and personal expression. In *CamTESOL conference on english language teaching: Selected papers* (Vol. 4, pp. 120–131).
- Wandler, J. B., & Imbriale, W. J. (2017). Promoting undergraduate student self-regulation in online learning environments. *Online Learning*, 21(2), 1–16.
- Wang, Y. M. (1998). E-mail dialogue journaling in an ESL reading and writing classroom. *International JI of Educational Telecommunications*, 4(2/3), 263–287.
- Wang, Y. C. (2015). Promoting collaborative writing through wikis: A new approach for advancing innovative and active learning in an ESP context. *Computer Assisted Language Learning*, 28(6), 499–512.
- Warschauer, M. (1999). *Electronic literacies: Language, culture, and power in online education*. Lawrence Erlbaum.
- Williams, C., & Beam, S. (2019). Technology and writing: Review of research. *Computers & Education*, 128, 227–242.
- Witte, S. (2007). "That's online writing, not boring school writing": Writing with blogs and the Talkback Project. *Journal of Adolescent & Adult Literacy*, 51(2), 92–96.

- Wu, W. S. (2008). Using blogs in an EFL writing class. In S. Priya (Ed.), *Netlingo: The metamorphosis of language* (pp. 426–432). The Icfai University Press.
- Yi, Y., & Angay-Crowder, T. (2018). Self-sponsored writing. *The TESOL Encyclopedia of English Language Teaching*, 1–6.
- Yüce, E. (2020). Keeping online diary as an integrated activity for developing writing skill in EFL classes through Penzu. *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 9(1), 132–140.

Serpil Meri-Yilan is an assistant professor at Agri Ibrahim Cecen University, Turkey. She gained her MA in 2011 and PhD in 2017, in Applied Linguistics for Language Teaching at the University of Southampton. She is also currently the research collaborator of ImmerseMe, and senior reviewer for IAFOR Journal of Education. She is the editor of a book titled *ICT-Based Assessment, Methods, and Programs in Tertiary Education*. She presents and writes papers on foreign language learning and teaching. Additionally, her research interests include e-learning, learner autonomy, motivation, digital storytelling, humanization of ELT, and social inclusion and justice.

Using Wikis for Collaborative EFL Writing: Lessons Learned from an Online Writing Course



Behice Ceyda Cengiz

Abstract Grounded in social constructivism, wiki-based collaborative writing has grabbed the attention of L2 researchers and teachers due to its promising potential for developing L2 writing skills (Li M, *Int J Educ Technol Appl Linguist* 41(3):752–769, 2013). This chapter presents a description of a five-week online writing course in which online synchronous lessons were combined with the use of PBWiki to teach 10 university-level Turkish EFL learners how to write a cause-effect essay through collaborative writing activities. First, the author sets the scene for the online writing course by giving a detailed description of the context of the study, weekly content and tasks, and other design/implementation decisions made to run the course. Secondly, an evaluation of the course is provided based on the analysis of data collection tools including a questionnaire, interview, archives of the wiki discussion, and history. Next, the author reflects on the findings gained from these data collection tools regarding learners' overall satisfaction with the course and their collaborative and revision behaviors in PBWiki. The findings of the study suggest that despite the favorable perceptions of the learners about the efficacy of the wiki-integrated online writing course, implementing wikis in wholly online writing courses is challenging especially in terms of achieving high-level collaboration among learners. Finally, the chapter concludes with the author's suggestions for the more effective utilization of wikis in online writing courses.

Keywords Wikis · Collaborative writing · EFL writing · Online writing course

B. C. Cengiz (✉)
Zonguldak Bülent Ecevit University, Zonguldak, Türkiye
e-mail: ceyda@beun.edu.tr

© The Author(s), under exclusive license to Springer Nature Switzerland AG 2022
G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_17

1 Introduction

Collaborative writing has long been applauded for its contributions to the development of L2 learners' writing skills (Kost, 2011). Collaborative writing refers to a process-based approach to writing in which learners co-produce texts during various stages of writing including the processes of "planning, generation of ideas, deliberations about the text structure, editing and revision" (Storch, 2013, p. 2). The end result of this collaborative effort is co-owned by these members since they fulfill these activities together and interact throughout the process (Li, 2018). Here, the distinction between collaboration and cooperation needs to be made for a clear understanding of these concepts. In cooperation, there is a division of labor among the group members who make individual contributions to group work (Arnold et al., 2012). However, collaboration requires the group members to take a responsibility of the whole text (Kost, 2011) and realize common goals by interacting and making joint decisions during all stages of writing (Li, 2018).

Earlier research has showed that collaborative writing helps to develop "a sense of community" among L2 learners and support their reflective thinking skills (Aydın & Yıldız, 2014). Since collaborative writing enables the production of "meaningful output" and creates authentic opportunities for "learner-to-learner interaction" and collaboration (Abrams, 2016, p. 1260), they may potentially result in the improvement of EFL/ESL learners' writing skills (Elola & Oskoz, 2010). The sense of having a reader audience is also a motivating factor for L2 learners affecting their writing confidence (Kuteeva, 2011; Storch, 2012; Wang, 2015). In the last decades, collaborative writing activities have started to be implemented widely in the computer-mediated communication (CMC) environments especially in wikis (Aslan & Ciftci, 2019; Li & Zhu, 2013). It has been shown that learners using wikis for collaborative writing activities can express their opinions in an equitable way (Larson, 2009) and benefit from the time and space advantages offered by the online medium (Du et al., 2016).

In the current study, PBWiki as a popular wiki site was integrated into an online writing course in order to conduct collaborative writing activities for a group of Turkish EFL learners studying at tertiary level. The motivation behind the study was the researcher's previous teaching experiences in face-to-face writing classes in which she observed the learners had positive perceptions about collaborative writing activities and had increased self-confidence about writing while getting peer support during writing process. It was anticipated that being lectured on how to write a cause-effect essay during synchronous sessions and co-constructing an essay with group members would help the students to deal with the challenges of essay writing more easily. In this study, following a short review of literature an overview of the aforementioned course is presented with a detailed description of the context of the study, weekly content and tasks, and other design/implementation decisions made to run the course. Later, the course is evaluated based the analysis of questionnaire and interview data along with the archives of the wiki discussion, and history. Finally, implications of the study for future practice are proposed for L2 researchers and practitioners.

2 Literature Review

Wiki is one of the popular websites that allow for collaborative writing as a platform in which learners can write on an online text and edit freely with the contributions of different writers (Li, 2013). With the 'Edit', 'History' and 'Discussion' sections, the users of wiki can easily co-create texts by posting their writing and editing others' writings, view others' contributions and engage in asynchronous discussion for brainstorming and exchanging ideas about their writing (Li, 2012). Research to date has indicated that the various affordances of collaborative writing as mentioned above can be easily realized in wikis.

Various strands of research have been the focus of researchers on the use of wiki for collaborative writing activities so far. Student perceptions of wikis have shown that L2 learners found wikis beneficial and were positive about using them (Alharbi, 2020; Hosseini et al., 2020; Rahimi & Fathi, 2021). Improving writing skills and quality, offering increased opportunity for language practice and promoting audience awareness among learners have been shown as the benefits of wiki as reported by EFL/ESL learners in earlier studies (e.g., Bikowski & Vithanage, 2016; Kost, 2011; Li, 2018; Wang, 2015). Learners reported that group members' joint contributions helped them with idea creation and text organization by facilitating the writing process (Bikowski & Vithanage, 2016; Li & Zhu, 2013). Research on student perceptions also identified many challenges pertaining to wiki-mediated collaborative writing (Abrams, 2016; Arnold et al., 2009). It was shown that effective collaboration through wikis was found to be affected not only by individual efforts but also by group dynamics as well as other hardships (Du et al., 2016). In her review of the studies published between the years of 2008 and 2017, Li (2018) listed these challenges as related to the perceived time constraints with coordinating different contributions by learners, hardship of creating a co-owned text, insufficient "language proficiency" and "unequal participation" of learners (p. 895). Task type, learners' engagement with the task and their group members were also found to affect the degree of collaboration taking place in the groups (Abrams, 2016; Boling et al., 2012). Additionally, the group members' unwillingness to contribute to or revise the text, their feelings of isolation and lack of self-regulation skills were shown to prevent the learners from displaying collaborative behaviors during wiki-based collaborative activities (Järvelä & Hadwin, 2013; Kale, 2013; Su et al., 2019).

Another strand of research was centered on comparing the effect of traditional individual writing versus wiki-mediated collaborative writing activities on the writing performance of L2 learners (Hsu, 2019; Hsu & Lo, 2018). These studies generally tended to demonstrate that the wiki group outperformed the individual writing group in terms of such aspects as language accuracy, grammar, content and organization (e.g. Elola & Oskoz, 2010; Fernandez Dobao, 2012; Hosseini et al., 2020; Rahimi & Fathi, 2021; Storch & Wigglesworth, 2007; Wang, 2015).

Interaction patterns present in learners' collaborative work were another topic addressed by L2 researchers. Several researchers attempted to identify if the student

interactions were collaborative (learners working jointly for co-constructing a text) or cooperative (learners doing their own parts in writing and later uniting these parts) while others put forward more straightforward categorizations of interaction patterns observed in the groups. For example, Bradley et al. (2010) and Arnold et al. (2012) found that learner groups tended to display cooperative behavior while revising the texts composed by their group and did not collaborate with each other in real sense. Storch (2002) laid the groundwork for the latter group of studies by suggesting four types of interaction patterns: (1) collaborative (2) dominant/dominant (3) dominant/passive (4) expert/novice. The collaborative pattern referred to the most ideal type of interaction in which all students contributed to group work by fulfilling their responsibilities equally. In other types, the learners had varying degrees of willingness to engage in their peers' texts, take control of the group work or be active in managing the task or scaffolding the group members. Building on Storch's work, several researchers suggested other categories for describing interaction patterns (e.g., Li & Kim, 2016; Li & Zhu, 2013; Li & Zhu, 2017). For instance, Li and Zhu (2013) investigated the interaction patterns the students in an EAP course displayed while writing research proposals. They posited that the observed interaction patterns were collective, expert/novice, dominant/defensive and cooperative. The last two categories differed from those of Storch's in that the dominant/defensive category referred to the learner groups who had unwillingness for group interaction. The cooperative category involved those students having no engagement with others' texts and working individually on their parts. In their study with university students who were to write essays collaboratively Lai et al. (2016) found that although the course instructors provided them with scaffolding and support, the students generally did not manifest the collaborative pattern. The relationship between interaction patterns and writing products has also been examined by some researchers (Li, 2018). For example, Li and Zhu (2017) posited that the collective interaction pattern yielded best writing products in terms of such writing aspects as "rhetorical structure, coherence and accuracy" (p. 38) while the dominant/defensive patterns displayed the poorest writing quality in terms of these aspects.

Revision behaviors of learners, which refer to learners' efforts to improve the joint text based on the scaffolding of peers, have been scrutinized in some studies (e.g. Aydin & Yildiz, 2014; Kost, 2011; Li & Zhu, 2013). For example, Arnold et al. (2012) categorized the types of revisions into such dimensions of writing as content, grammar and style. These studies overall indicated that learners attended to form (e.g. grammar, word choice, verb tenses) and/or content (e.g. adding or deleting information to make meaning clearer) while revising peers' texts.

A review of literature shows that wiki was mostly integrated into a face-to-face writing classes and thus used in a blended mode in earlier studies for writing instruction (e.g., Ma, 2020; Su et al., 2019). However, the integration of wikis into fully online writing courses has not received much attention. Drawing on previous research on wiki, this study sets out to examine the students' perceptions about the use of wikis in a fully online EFL course and their collaborative behaviors while

utilizing wikis. Thus, the research questions of the current study were the following: (1) What are a small group of Turkish EFL learners' perceptions about a wiki-mediated online writing course? (2) To what extent do a small group of Turkish EFL learners display collaborative writing behavior as reflected in wiki discussion and history modules?

3 Methodology

3.1 Participants

There were 10 participants who took part in the current study. All of these participants were enrolled in a 2-year translation program at a university located in a small city in the Black Sea region of Turkey. They were all Turkish, females and their age ranged between 19 and 21. Before they started their studies in their department, they attended a 1-year preparatory program and reached B1 level in English. During their participation in the study, they just had completed their first year in their associate program and their proficiency level was between B1 and B2. During their first year in the associate program, they took two composition classes. In the first class that they attended during 2019–2020 fall semester, they learnt about paragraph structure and how to write two different types of paragraphs: stating reasons and giving examples paragraph and opinion paragraph. In the spring semester, they were taught about essay structure and how to write a compare and contrast essay. Both of these classes had a flipped format. That is, the instructor sent the students some study materials before class and classroom time was devoted for group work which involved activities such as discussion of content, applying the newly gained information to other examples and collaborative writing.

The participants of the current study were recruited through convenience sampling. The researcher who was also the instructor of these students in the aforementioned composition classes sent the class members an email by informing them about the study. 15 students volunteered; however, 5 of them decided to leave the study in the first week. As a result, the study was carried out with the remaining 10 students who joined the live sessions and/or did at least some of weekly tasks. They were given the choice to choose their groups since it was considered that getting students to choose their groups themselves tended to motivate them for group work (Bikowski & Vithanage, 2016). There were 4 students in both Group 1 and Group 2 while Group 3 was only composed by 2 students. During week 1, the researcher decided to choose a group leader for each group due to inactivity of some students during the collaborative writing activities reflecting on earlier research showing that group leaders might be helpful for guiding the group interaction and collaboration (e.g., Li & Zhu, 2017).

3.2 Overview of the Online Writing Course

The online writing course was designed to help the students learn how to write a cause-and-effect essay. The course, which lasted for 5 weeks between the dates of August 7 and September 11, 2020, had two components. One of these components was the online sessions held in Zoom once a week in which the instructor gave lectures on cause-and-effect essay structure. As seen in Table 1, she focused on how to

Table 1 Weekly content and tasks

Weeks	Weekly content	Weekly tasks
Week 1	1. Cause and effect essay organization 2. Essay outline	1. Study the content about cause-and-effect essay organization 2. View sample essays 3. Identify your group's essay topic with your group members by discussing about it in the comment section of wiki 4. Brainstorm with your group members and make an outline collaboratively through the edit and comment sections of wiki using the outline template given by your instructor
Week 2	3. Writing an introductory paragraph (e.g., hook, middle sentences, thesis statement) 4. Examples of some introductory paragraphs and some examples of thesis statement in cause-and-effect essays	1. Exchange ideas with your group members in the comment section of wiki and write an introductory paragraph collaboratively through the edit section of wiki 2. Use the essay evaluation rubric to give your peers feedback on the introductory paragraph 3. Edit and revise the final version of the introductory paragraph based on your friends' feedback
Week 3	1. Writing a body paragraph (e.g., topic sentences, supporting sentences) & viewing sample body paragraphs 2. Cause / Effect Essay Specific Vocabulary	1. Exchange ideas with your group members in the comment section of wiki and write the first body paragraph collaboratively through the edit section of wiki 2. Use the essay evaluation rubric to give your peers feedback on the first body paragraph 3. Edit and revise the final version of the first body paragraph based on your friends' feedback
Week 4	1. Some linking devices that can be used in conclusion paragraphs 2. Grammar: If/so that	1. Exchange ideas with your group members in the comment section of wiki and write the second body paragraph collaboratively through the edit section of wiki 2. Use the essay evaluation rubric to give your peers feedback on the second body paragraph 3. Edit and revise the final version of the second body paragraph based on your friends' feedback
Week 5	Conclusion paragraph 1. Writing a conclusion paragraph (e.g., summary of the causes and the writer's final comments) 2. Some linking devices that can be used in conclusion paragraphs	1. Exchange ideas with your group members in the comment section of wiki and write the conclusion paragraph collaboratively through the edit section of wiki 2. Use the essay evaluation rubric to give your peers feedback on the conclusion paragraph 3. Edit and revise the final version of the conclusion based on your friends' feedback

make an outline and write introductory, body and conclusion paragraphs in these sessions as well as covering the vocabulary items and grammar topics that can be useful while writing cause-and-effect essays.

As the second component of the course collaborative essay writing activities were implemented in PBWiki. PBWiki (<https://www.pbworks.com/>) is a wiki platform that helps educators, businesses and individuals to work efficiently and collaboratively since its foundation in 2005. Wikis enable individuals to create, edit, delete and modify content on the webpage and do collaborative work effectively. To this end, a wiki was created for each group and the students used their wikis for brainstorming together, co-writing different sections of their essays and giving each other feedback by using the evaluation rubric given by the instructor. Apart from this wiki, another wiki was created for the whole class to provide the students with detailed information about the course (e.g., syllabus, tasks, etc.) and study materials on the content covered in the live sessions.

At the beginning of each week, the researcher sent the students an email by informing them about the weekly content and tasks. Following the live sessions, the students were to co-write one paragraph of their essays as a group, give feedback to each other's texts using the essay evaluation rubric and come up with the final version of the paragraph by doing the necessary corrections. Before the first week commenced, the researcher held an orientation session with the students in Zoom to explain the syllabus of the online writing course. She also gave a short tutorial on PBWiki by showing them how to edit the wiki, write a comment and view the history page. Additionally, she went over the essay revision rubric and illustrated examples of revised texts through the use of that rubric to make sure that it is understood clearly by the students.

The role of the instructor during students' online collaborative writing in PBWiki was multifaceted. One of her roles was to encourage student participation in the co-writing process by appreciating their effort through positive comments or asking for active participation from them when they were inactive. She also asked questions to the students when some of the student comments in wiki were not clear, reminded them of the deadlines, or answered their questions. Another role of her was to give video feedback to the students' writing on the grammar, content and essay organization when the students completed writing some parts of the essay each week.

At the end of the online writing course, the researcher e-mailed each participant by asking them to fill in an online questionnaire created through Survey Monkey. When all of the participants completed the questionnaire, she e-mailed them again by asking if they volunteered to participate in an online interview with the researcher in the following days. Upon their acceptance of joining the interview, the researcher interviewed them in Zoom for 10–15 min in Turkish language since she thought they would express themselves more comfortably in their native language.

3.3 *Data Collection Tools and Data Analysis*

To evaluate the online writing course, the researcher used many data collection tools including a questionnaire, interview, archives of the wiki discussion, and history. The questionnaire items were taken from a number of studies which investigated L2 learners' perceptions of wiki-mediated learning (e.g., Ducate et al., 2011; Elola & Oskoz, 2010; Lee, 2010) with some adaptations made to some questions and with the addition of one item due to idiosyncrasies of the current study. In the questionnaire, there were 21 items. Some of these items were related to the value of wiki in terms of its contribution to the development of grammar, content, organization and writing skill as felt by the learners and their overall satisfaction with wiki-mediated learning (Items 1, 2, 3, 4, 5, 6, 12,13, and 14). Some items pertained to student involvement and contributions (Items 17, 18, 19, 20 and 21) while the remaining items dealt with the quality of group work as perceived by the learners (Items 7, 8, 9, 10, 11, 15 and 16). Item 19 served to examine the learners' opinions about the perceived value of having a leader in their groups. Each item in the five-point Likert scale required the participants to choose from one of these: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D) or Strongly Disagree (SD). "Quasi-statistics' as a term that was put forward by Becker (1970) (as cited in Maxwell, 2010, p. 476) were utilized to analyze the data. That is, first the number of participants that chose one of these points of the Likert scale (e.g., SA, A, U, D or SD) was noted by the researcher for each statement. Later, by adding the numbers in SA and A sections and those in D and SD sections, a percentage point was calculated for each Likert scale point for each statement.

The interview questions were adapted from the questions used in Li and Zhu's (2013) study. There were five open-ended questions, one of which aimed to look into the participants' general perceptions about the different aspects of the online writing course including the live sessions, the teacher's video feedback to student essays, so on and so forth. The remaining four questions focused specifically on their opinions about wiki-mediated collaborative writing activities done in PBWiki. For analysis, all interview data were transcribed verbatim and analyzed through content analysis. That is, the researcher looked at all transcripts and identified recurrent themes by grouping related codes into common categories (Wilkinson, 2004). Due to space limitations, only the wiki discussion and history of Group 1 were analyzed. For this analysis, the number of student posts in wiki discussion was calculated per week and the contributors of the edit section were also scrutinized in order to see how balanced student contributions were to the collaborative writing activities. The wiki discussion was also analyzed thematically by using Li's (2013) wiki discussion categories (e.g., content discussion, social talk, task management, technical communication, language negotiation) in order to categorize group members' communication in wiki discussion.

4 Results

4.1 Analysis of Questionnaire Responses

An analysis of questionnaire responses showed that of the 10 participants, 7 of them agreed to Item 1: “*Using the wiki to work collaboratively with my group mate(s) improved my written grammar.*” while 3 of them were undecided about this statement. Similarly, for Item 4 “*Using the Comments section to work collaboratively with my group mate(s) improved my written grammar*”, there were 2 participants who were either undecided or disagreed with that statement. As for items 2, 3, 5 and 6, there was a consensus among the participants (90% of them) about the positive effect of wiki-mediated collaborative writing on the development of the content and structure of their writing. It was seen that the majority of the students (80%) had a positive experience with writing wikis and agreed that “*contributing to wiki pages helped me write a better in-class essay*”. However, there were mixed opinions for Item 12 in that 4 participants disagreed with the statement “*I prefer writing in wikis to writing traditional compositions*” while there was an agreement among the remaining 6 participants about this item.

The responses to items related to group work were more varied than the responses to the items in other sections of the questionnaire. 70% of the participants agreed with Item 7 “*I enjoyed working with my friend(s) to create wiki pages*” and used the history page to view pages before editing others’ entries (Item 8) while 30% were undecided about Item 7 and 30% disagreed with Item 8. All of the participants agreed with Item 9, 10 and 11 showing that they appreciated using the Comments section of wiki for posting comments and communicating with group mate(s) (Item 9) and for revising or editing the group mates’ work (Item 10 and 11). However, their evaluation of the collaboration taking place in their group showed that there were distinct opinions. In response to Item 15, “*My group mates and I collaborated well together,*” 60% agreed and 20% were undecided while 20% disagreed with the statement suggesting that not every participant was content with the quality of collaboration in their groups. As for Item 16 “*I would have preferred to work alone,*” the responses were mixed in that 40% agreed, 10% were undecided and 50% disagreed with this statement. When the groups were compared in terms of student responses to Item 15 and 16, it was seen that there was at least one participant from each group who thought they did not collaborate well together and preferred working alone to group work for improving their writing skills (Table 2).

Finally, the responses related to involvement and contributions showed that the participants generally viewed their own involvement and contributions to the project as satisfactory while they did not have the same idea about their group members’ participation in the project. The majority of the participants (70%) disagreed with item 17, “*Everybody in my group was equally involved in the process and in the creation of wiki content*”, showing that there was an unequal participation in group activities as reported by the participants. 80% appreciated the presence of a leader in each group while one participant who only had one group member was undecided

Table 2 Survey of learner perceptions

Statements	SA	A	UD	D	SD
<i>Methods</i>					
1-Using the wiki to work collaboratively with my group mate(s) improved my written grammar	1	6	3	0	0
	70%		30%	0%	
2-Using the wiki to work collaboratively with my group mate(s) improved the content of my writing.	4	5	0	1	0
	90%		0%	10%	
3-Using the wiki to work collaboratively with my group mate(s) improved the structure of my writing.	6	3	1	0	0
	90%		10%	0%	
4-Using the Comments section to work collaboratively with my group mate(s) improved my written grammar.	4	4	1	1	0
	80%		10%	10%	
5-Using the Comments section to work collaboratively with my group mate(s) improved the content of my writing.	4	5	1	0	0
	90%		10%	0%	
6-Using the Comments section to work collaboratively with my group mate(s) improved the structure of my writing.	4	5	1	0	0
	90%		10%	0%	
12-I prefer writing in wikis to writing traditional compositions.	2	4	0	3	1
	60%		0%	40%	
13-I believe that contributing to wiki pages helped me write a better in-class essay.	5	3	2	0	0
	80%		20%	0%	
14-Overall, I had a positive experience with writing wikis.	4	4	2	0	0
	80%		20%	0%	
<i>Group work</i>					
7-I enjoyed working with my friend(s) to create wiki pages.	3	4	3	0	0
	70%		30%	0%	
8-I often used the history page to view pages before I edited others' entries.	6	1	0	2	1
	70%		0%	30%	
9-I found the Comments section useful for posting comments and communicating with my group mate(s)	10	0	0	0	0
	100%		0%	0%	
10-I enjoyed the revision process and I learnt from making edits.	4	6	0	0	0
	100%		0%	0%	
11-I felt comfortable editing my group mates' work.	5	5	0	0	0
	100%		0%	0%	
15-My group mates and I collaborated well together.	2	4	2	2	0
	60%		20%	20%	
16-I would have preferred to work alone.	2	2	1	1	4
	40%		10%	50%	
<i>Involvement and Contributions</i>					
17-Everybody in my group was equally involved in the process and in the creation of wiki content.	0	2	1	3	4
	20%		10%	70%	
18-My degree of involvement changed during the different phases of the project.	3	6	1	0	0
	90%		10%	0%	
19-I find the presence of a leader in the group beneficial.	5	3	1	1	0
	80%		10%	10%	
20-I was able to make important contributions to shape our wiki page.	1	6	3	0	0
	70%		30%	0%	
21-I consulted/checked with resources other than the content in the wiki page to figure out language specific questions I had during the project.	1	6	0	1	2
	70%		0%	30%	

about this item and one group leader who complained about being a leader disagreed with this item (Item 19). 90% agreed with Item 20, “*I was able to make important contributions to shape our wiki page*” and 10% was undecided about this statement. Although the participants reported to have worthwhile contribution to the wiki page, 90% also agreed with item 18, “*My degree of involvement changed during the different phases of the project,*” showing that their contributions to the wiki project was not very consistent. In response to Item 21 “*I consulted/checked with resources other than the content in the wiki page to figure out language specific questions I had during the project,*” there was agreement among the 70% of the participants whereas 30% disagreed with this item indicating that they did not use any resources other than those provided in the wiki page.

4.2 Analysis of Interviews

Analysis of interview transcripts showed that all of the 10 participants wanted to have a similar experience with using wiki for collaborative writing activities in the future, suggesting that they found wiki-mediated collaborative writing activities useful for improving their writing skills. 3 categories were identified, based on students’ reports.

4.2.1 Beneficial Aspects of the Online Writing Course

Live Sessions

All participants found the live sessions beneficial for learning about how to write a cause-effect essay. It was evident that since the wiki part of the course was asynchronous, the students enjoyed having live sessions as a synchronous component of the course. As one student noted, “The live sessions were very useful. You explained each topic very clearly every week by giving examples. I was able to understand all content and ask my questions more easily because you were there.”

Video Feedback to Student Essays

All of the participants reported that they appreciated the video-feedback provided for their essays by the instructor. They stated that the video-feedback facilitated their understanding of their mistakes in their essays as one student expressed: “Because it was a video, I was able to watch the video many times and better understand my mistakes”. Another student indicated that she valued teacher feedback more than peer feedback by saying: “I like to get feedback from you, not from my friends because I know that your feedback is definitely true while it is not the same for the feedback given by my friends’.”

Teacher Presence

Some students referred to the teacher presence in the online writing course as a factor that motivated them to participate actively in the online course. One student stated: “You sent us e-mails writing about what we would learn that week and need to do as weekly tasks. You also wrote comments to our posts in wiki frequently. It was nice to see that you answered our questions and you were there following us. You did your best to lead us during the writing process, too. When you posted a comment in wiki about how we should do something, we discussed about your comment in our group”.

4.2.2 Challenges of Wiki-Mediated Collaborative Writing Activities

Time Management

Time management was indicated as a common problem in all three groups. Since it was summer time and it was not an official course, the students had different obligations and found it really hard to adjust themselves to do the weekly tasks with their group members. The students found it challenging to set a time for group work that suited every group member. One group leader explained this situation as the following: “Not everyone was available all the time. I wrote to my friends in WhatsApp for arranging a certain time for the group activities. But we couldn’t set a common time because we were not suitable at the same time.”. Another group leader added by saying: “We couldn’t arrange the time well because all of us had to work and could not meet regularly. Some friends proceeded with the project while the others did not participate in the activities. We also couldn’t finish the tasks on time.”

Communication Among Group Members

It was evident from the comments of all students that promoting effective communication among group members was a challenge for all of the groups. Since wiki was an asynchronous platform, the students had to wait for some time for a reply after they posted a comment on wiki page. Each group, therefore, found it more convenient and practical to use WhatsApp as an instant messaging application to make group decisions or at least to arrange the times for doing collaborative writing on wiki page. One group leader stated the following: “The first week we used WhatsApp for exchanging ideas to choose among the essay topics on the wiki page. It was easier to reach everyone through WhatsApp than PBWiki. I did not like waiting for a reply from my friends for a few days. Only after you warned us that we should use the wiki page not WhatsApp for discussion, we turned back to PBWiki”.

Participation in Group Work

Low and unequal participation of students in group activities was another challenge indicated by the majority of students. One student noted: “Everyone was not active in the group. One friend, for example, went to her village and she did not write anything on wiki page for three weeks”. Another student stated: “I did not have a computer. I only have a phone. It is hard to write from the phone so most of the time I wrote to our group in WhatsApp rather than on wiki page.” Active participation in group work was a greater need in a group composed by two students, as noted by one of these students: “It would have been better if there were 3 or 4 people in our group and they were active people. I felt myself alone in the project.”

Collaboration

Student comments showed that there were mixed views among students on the degree of collaboration taking place during wiki-mediated collaborative writing activities. It was inferred from their comments that for some students, small contributions from group members to collaborative writing were considered as ‘collaboration’ although the group activities were not at sufficient level to achieve collaboration in real sense. One student stated: “When I wrote a comment, they did not like it sometimes and suggested using something else in the essay. They also warned me when I chose a word that did not fit into the sentence. I liked the collaboration in the group.” However, according to the other students, which constituted the majority, collaboration remained at a low level and was inconsistent as expressed by one of the students: “We had some kind of collaboration but it was not the case all the time. Most of the time we worked individually. I was the one who wrote to the wiki page regularly. I wanted to discuss my opinions with my friends but I couldn’t find anyone to do it other than one group friend.” It was seen that the degree of collaboration was reported to be very low especially in the group which consisted of 2 students since they did not collaborate but cooperated to share the workload with each other. One of these students noted the following: “We couldn’t do any collaboration in real terms. When our group started to split and we were left as only 2 people in the group, we worked individually. My friend wrote the whole introductory paragraph. I wrote the other paragraph. When my friend was away to her hometown, I wrote all of the remaining paragraphs.”

4.3 Analysis of Wiki Discussion and History

When the number of comments made by students on the discussion section of wiki was analyzed for Group 1, it was seen that 3 of the 4 group members generally wrote comments to the wiki discussion although the degree of their participation in group discussion varied over weeks. One of the students was very inactive during

the collaborative writing process in that she did not add any comment to the wiki discussion except for week 1. As shown in Table 3, the number of student posts was the highest in Week 1 and Week 3 while that number started to decrease in Week 4 and there were very few student contributions to wiki discussion in Week 5.

An analysis of the wiki discussion demonstrated that the students did not display collaborative behaviors to achieve collaborative writing in real sense. Although there was some kind of interaction among the students who exchanged ideas with each other during the pre-writing and writing stages, it was seen that many of the student posts were non-collaborative in nature. Since real collaboration was considered to take place when students built on and contributed to each other’s ideas and reached a shared group decision about what to write in the wiki by engaging in discussion, student contributions in this study were found not to exhibit these characteristics. That is, it was often the case that the students did not co-construct the text but built on the efforts of more active students while the less active students accepted others’ suggestions, made small suggestions for the others’ writing or did not even have any comment on others’ contributions. This can be seen in the following excerpt.

As seen in the above Fig. 1, in week 2 one student writes the entire introductory paragraph on her own by using the outline prepared by the group in the previous week and the group leader replies to her by acknowledging her efforts and giving some suggestions on her writing. The situation in which writing is not done collaboratively but individually without the group’s discussion and consensus on the writing becomes more evident in the final weeks in which student participation in wiki

Table 3 Contributions to wiki discussion

Weeks	Total number of posts	Student 1 (leader)	Student 2	Student 3	Student 4
Orientation	38	14	11	12	1
Week 1	72	28	21	23	0
Week 2	28	11	9	8	0
Week 3	57	23	19	15	0
Week 4	20	2	15	3	0
Week 5	6	2	4	0	0

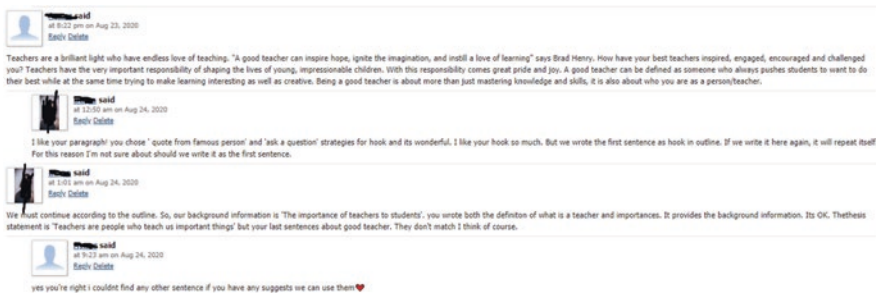


Fig. 1 An excerpt from the wiki discussion

discussion is very low. In Week 5, for example, two students (one being the group leader) write their own paragraphs separately in the discussion section of the wiki and the group leader ends up with the final version of the paragraph by combining her own paragraph with that of her group member.

An analysis of the wiki discussion based on the wiki discussion categories developed by Li (2013) showed that many instances of content discussion, social talk and task management were identified from the wiki discussion in the first 3 weeks. The students oftentimes engaged in content discussion by expressing their own opinions and reflecting on others' ideas. However, task management was identified as a problem within the group since the process of coming up with a final decision after group discussion was often missing, which can be seen in the excerpt below.

Student 3: We will start to write a general definition.

Student 1: Yes. Girlss, 'What makes a person to be a good teacher' just think about it. Whats your idea? the love of teaching, children.... then, we decide to the main idea of essay

Student 3: I think Firstly, The Teachers like own jobs because If teachers like own job children like school, homework, etc.

Student 2: I think that beside education it is important for people to understand human feelings. When you do something you should do it with love and passion so it'll be easier for students to have sympathy not only for lessons but for the teacher.

Student 3: I think we will start to write about teachers be very importance our life.

As seen in such examples as above, the group discussion often failed to have an end product. Therefore, one student took the initiative to make her own decision about the content discussed by the group and added the final version of the paragraph to the edit section of the wiki. This was also observed through an analysis of wiki history which indicated that only some students added content to the edit section of wiki while some never did so. In Week 4 and 5, for example, only the group leader added her writing to the edit section of wiki which was shown in Table 4.

Another finding was that social talk was very common in the group in that the group members always appreciated each other's efforts and valued their contributions as shown in the Fig. 2 below. The findings also suggested that that there were only few student discussions centered on language negotiation during the pre-writing and writing stages. However, although revision stage was aimed to focus specifically on providing the group members with language related feedback, it was

Table 4 Contributions to edit section of wiki

Weeks	Contributors of the edit section
Week 1	Student 1 & 2
Week 2	Student 1 & 2
Week 3	Student 1 & 2
Week 4	Student 1
Week 5	Student 1

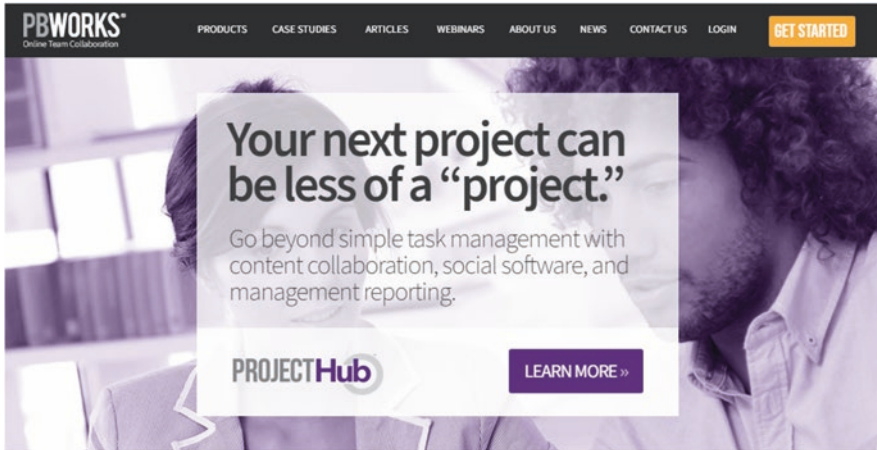


Fig. 2 PBWiki home page

seen that the students ignored this task by not engaging in any language negotiation. Finally, it was observed that the students never used the discussion section of wiki for technical communication purposes.

5 Discussion and Conclusion

The findings of the study demonstrated that the participants were overall satisfied with the online writing course that incorporated wiki-mediated collaborative writing activities and live sessions in which students were lectured on how to write cause and effect essay. A great majority of the students believed that the collaborative writing activities done in PBWiki helped to improve the content and structure of their writing and develop their writing skills. Earlier research also corroborated this finding by showing that wiki-mediated collaborative activities supported the development of students' writing quality and skills according to student perceptions (e.g., Aydin & Yildiz, 2014; Bikowski & Vithanage, 2016; Elola & Oskoz, 2010; Hosseini et al., 2020; Wang, 2015).

The student reports and analysis of wiki discussion indicated that not all students were equally active in the wiki page. Although some students had more active participation, even their degree of involvement in the collaborative writing tasks changed over the different phases of the project. The low and unstable participation of some students can be due to the fact that it was not an official course and students' participation in the course was wholly voluntary. Due to the low participation of some students in the collaborative writing activities, the researcher decided to choose a leader for each group with a role to lead the group members to do the collaborative writing tasks, which was liked by most of the students. Selecting a group

leader with this role was also present in Li and Zhu's (2017) study. It was seen that the leader helped with the management of collaborative activities and facilitated group work by directing the group member's attention to the tasks and deadlines.

Despite some inactive students in group work, most of the students reported they enjoyed working with their group members. They also asserted that they felt themselves comfortable editing their group mates' writing. These positive opinions might be due to the fact that the students made their groups on their own which is also suggested in earlier studies (e.g. Bikowski & Vithanage, 2016). However, more than half of the students did not speak highly of the collaboration that took place in their groups and half of the students also stated that they would have preferred to work alone. Similarly, some students in Bikowski and Vithanage's (2016) and Ducate et al. (2011)'s study were not content with group work and interaction which is a common problem in wiki-mediated collaborative activities (Li, 2018). It was seen that the students' dissatisfaction about the group work was often due to the communication problems they had within their groups. They reported that since wiki was an asynchronous communication platform, even agreeing on a certain time for group work that suited everyone was a challenge, which made the group work difficult and led to delays in the accomplishment of weekly tasks. They also referred to time management as a big challenge for their groups which hindered effective group communication and interaction. This finding was also evident in earlier studies which identified time management as a challenge in wiki-mediated collaborative writing activities (Bikowski & Vithanage, 2016; Castañeda & Cho, 2013; Su et al. 2019).

The students posited that they benefited from the live sessions since the instructional content became clearer for them and they liked the comfort of asking their questions to the instructor easily in these sessions. It was evident that the synchronous component of the course was valued highly by the students since the communication problems faced during the wiki-mediated collaboration was missing in these sessions. At the beginning of the study the students also used Whatsapp for group communication for various purposes such as arranging meeting times and discussing content. These findings suggested that the students could benefit from the integration of some other synchronous tools such as chat applications (e.g., Skype) into the wiki-mediated collaboration in order to improve the quality of group communication (Li, 2018).

Another finding was that the students were satisfied with the degree of teachers' presence in the wiki platform. They appreciated that the instructor followed their progress by writing motivating comments for their good work, warning them about the approaching deadlines or asking them to increase their participation when they were not active in wiki. In some earlier studies, the teachers also had certain roles such as directing students' attention to unanswered posts and time management (e.g., Alghasab & Handley, 2017), which contributed to the effective functioning of group work. Additionally, it was shown that the students found the video feedback they received for their paragraphs quite beneficial.

When the collaborative behaviors of the students in Group 1 were examined albeit superficially through an analysis of wiki discussion and history, it was

revealed that the students did not manage to collaborate in real sense due to many problems faced by the students. Time management difficulties, inactive participation of some students and communication problems faced within the groups explained this situation according to the students. However, it was also evident from the students' posts in wiki and student reports that the students did not have a clear idea about the notion of collaboration, which also prevented from displaying truly collaborative behaviors in the wiki page.

The scrutiny of student posts in wiki discussion demonstrated that students' revision behaviors were quite inadequate in terms of the number of posts related to form focused peer feedback during both the writing and revision stages. The feedback given by the students often focused on the content or structure of writing while the task of giving language related feedback was ignored by the students. This might be due to the students' low opinion about their proficiency level which might have led them to refrain from giving form focused feedback to their peers. In an elementary Spanish course, Lee (2010) had a similar finding in that the students did not feel themselves confident about correcting others' writing, which affected the revision process negatively. Lee (2010), therefore, emphasized the important role of the instructor in scaffolding students to give effective peer feedback by giving examples, modeling and providing the students with some techniques and strategies.

6 Implications for Practice

Although the study has some limitations in terms of generalizability due to the few number of participants, it is believed that some pedagogical suggestions can still be put forward for future studies. Firstly, since the students in the current study did not find it practical to use only wiki for communication purposes during collaborative writing activities as an asynchronous platform, it can be advisable to combine the use of wiki with some chat tools, which can facilitate communication and maximize student interaction (Li, 2018). Secondly, in order to make sure that the notion of collaboration is understood clearly and conducted in the right way by the students, student training on how to collaborate effectively through wiki can be given emphasis in future implementations. Student training can also focus on illustrating effective revision behaviors to the students and getting them to practice revising others' writing. To prepare group for collaborative work, the group members can be taught some "collaborative writing regulation activities" such as keeping individual and group regulation journals (Wang, 2022, p. 2). Finally, grouping of students should also be considered in that it would be more ideal to make groups by choosing students from different proficiency levels which might contribute to the quality of peer interaction and increase students' revision behavior (Li, 2018).

Appendix

How to Create Your PBWiki

Users need to visit the website (<https://www.pbworks.com/>) and click on ‘Get Started’ in the upper right corner of the website (see Fig. 2).

Later, a pop-up box appears on the screen, which asks users to choose one of the following: ProjectHub, AgencyHub, LegalHub, BusinessHub, WikiHub and EduHub. For teaching purposes, it is necessary to choose EduHub as the educational edition of PBWiki, in which users can choose from the three options shown in Fig. 3.

There are different plans one can prefer in PBWiki. The free plan can be enough for teachers’ use at least for some time since it allows 100 users and provides 2GB storage space as displayed in Fig. 4.

The next step requires users to fill in the needed information and then click the “Next” button. Here, the users choose the name of their wiki. For instance, if one writes myEnglishJourney into “Choose Your Address” section, the URL of the wiki will be <http://myenglishjourney.pbworks.com/> (see Fig. 5).

Later, a confirmation e-mail is sent to the e-mail address typed in the sign up page. Once the PBworks account is confirmed by clicking the link provided in the e-mail, the website directs you to a page where you need to decide who can view this page (e.g. anyone, only people I invite or approve) and agree the terms and services of PBWiki. After doing these, it is necessary to click on “Take me to my workspace” button to go to your wiki as shown in Fig. 6.

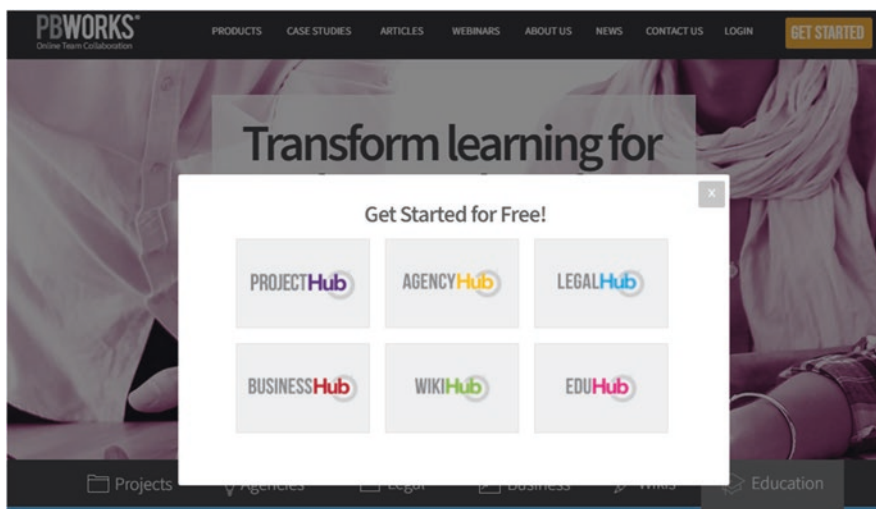


Fig. 3 Different editions of PBWiki

The image shows the PBWiki sign-up page with a header 'Sign up' and a sub-header 'Choose a plan that fits your needs!'. Below this is the tagline 'Create safe, collaborative spaces for your classroom or campus'. Three pricing plans are presented in columns:

- Campus:** School Districts, College Campuses, Library Systems. Features: Unlimited workspaces, 1000 users, 40GB storage, Full customization. Price: \$849 per year. Includes Classroom Accounts, Priority email support, and Zip data export.
- Classroom:** K-12 Classrooms, College Classrooms, Libraries. Features: 1 workspace, 100 users, 40GB storage, Full customization. Price: \$109 per year. Includes Classroom Accounts, Priority email support, and Zip data export.
- Basic:** Hobbyists & Clubs, Personal Use, Productivity. Features: 1 workspace, 100 users, 2GB storage, Limited customization. Price: FREE. Includes Classroom accounts, Basic email support, and No data export.

Each plan has a 'SELECT' button and a 'learn more' link.

Fig. 4 PBWiki sign up page

The image shows the PBWORKS account creation page. It has a header 'PBWORKS' and a sub-header 'Sign up'. The form includes:

- Choose your address:** A text input field for the domain name, followed by 'http://' and '.pbworks.com'.
- Agree to non-commercial use:** A checkbox with the text 'I agree that this workspace is for non-commercial use only'.
- Create your account:** A section with the text 'Already have an account? Log in.' and four input fields: 'Your name', 'Your email address', 'Enter password', and 'Confirm password'. A note below the email field says 'We will send a confirmation message to this address.'

A 'Next >' button is located at the bottom right of the form.

Fig. 5 Creating an account in PBWiki

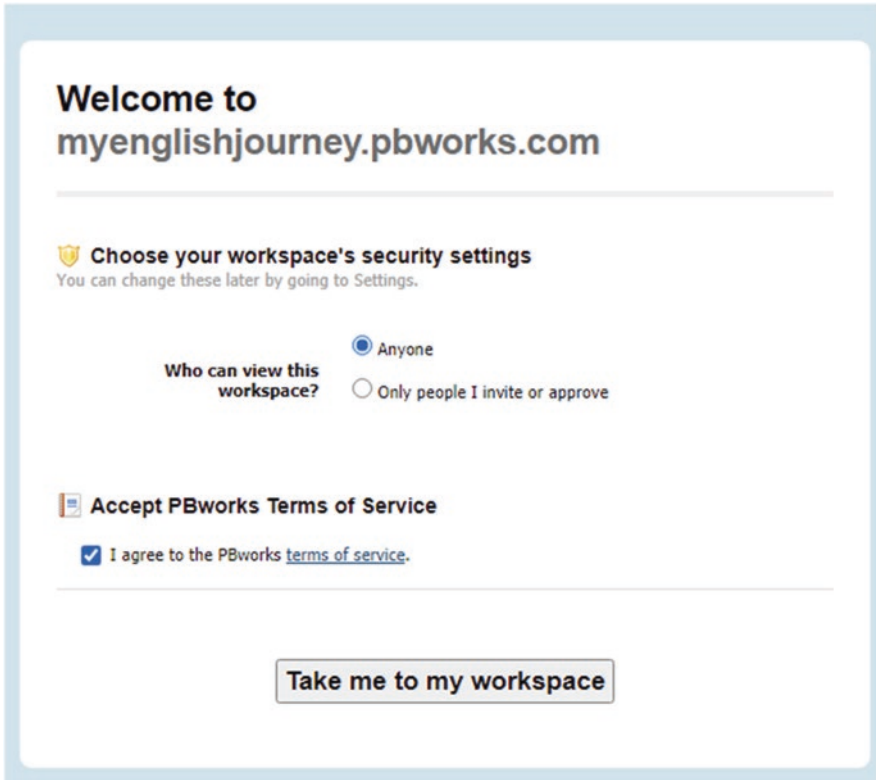


Fig. 6 Choosing security settings

How to Edit the Wiki and Add New Pages and Files

The home page displays “View” and “Edit” modes on the top left side of the page. The PBWorks Manual on the home page is aimed to help users learn how to use the wiki. The “Help” button in the top corner of the webpage can be used for asking questions to the wiki team.

All the wiki pages, files and images are listed on the Navigator menu on the right side of the page. To view a page, it is necessary to click on “View” button. To edit a page, one needs to click on “Edit” button. In Edit mode, users can add content, tables, URL links, files, images, and videos and save these changes by clicking on “Save” button (see Fig. 7).

To see and/or modify the pages and files, it is necessary to click on “Pages & Files” button on the upper left side of the webpage as can be seen in Fig. 7 above. Here, it is also possible to add a new page or folder by clicking on “New” button and “Upload Files”. To view all pages and files, there are “All Pages” and “All Files” buttons. One can also visit each page by clicking on the name of these pages and “Delete” and “Move” the files and pages (see Fig. 8).

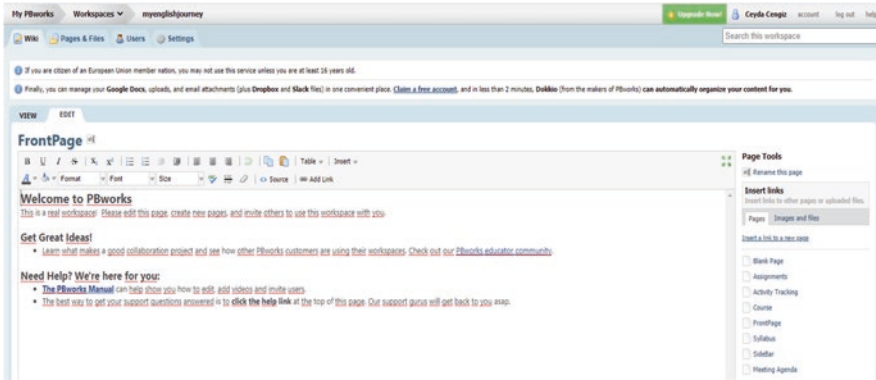


Fig. 7 Edit mode of PBWiki

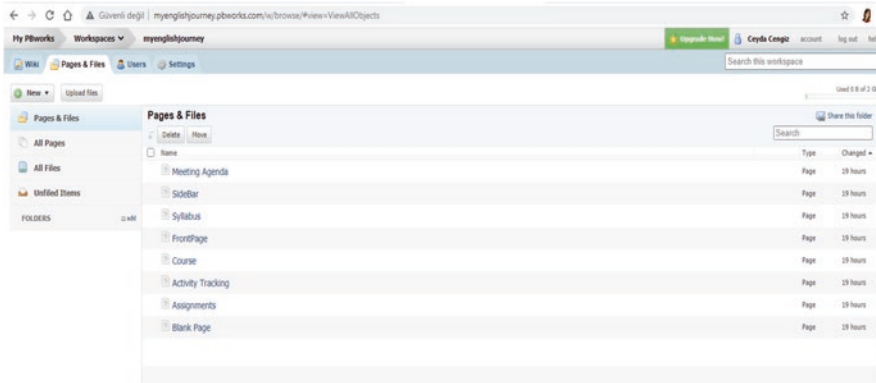


Fig. 8 Adding new pages and files

Using the Comment Section

There is “Add a Comment” section below the page which can be used for class discussion. Here, one can write, “Delete” a comment and “Reply” to the comments of others (see Fig. 9).

Adding Users to the Wiki

To add users to your wiki, you need to go to “Users” in the upper left corner of the home page and then click on “Add more users” (see Fig. 10). Here, it is required to write the e-mail addresses of the students to enroll them in your wiki.

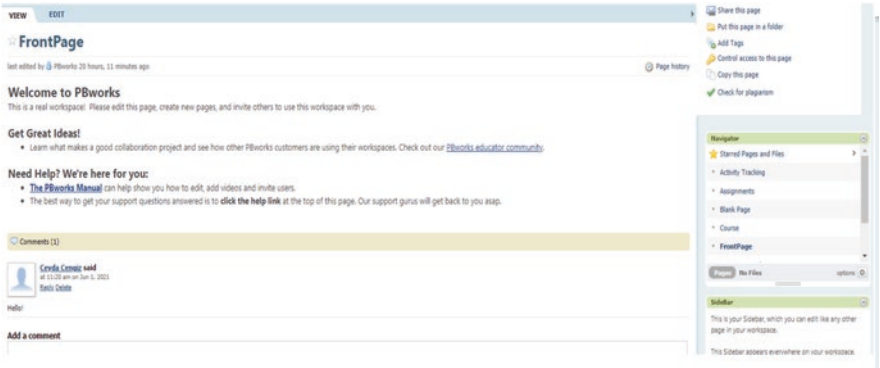


Fig. 9 The comment section of PBWiki

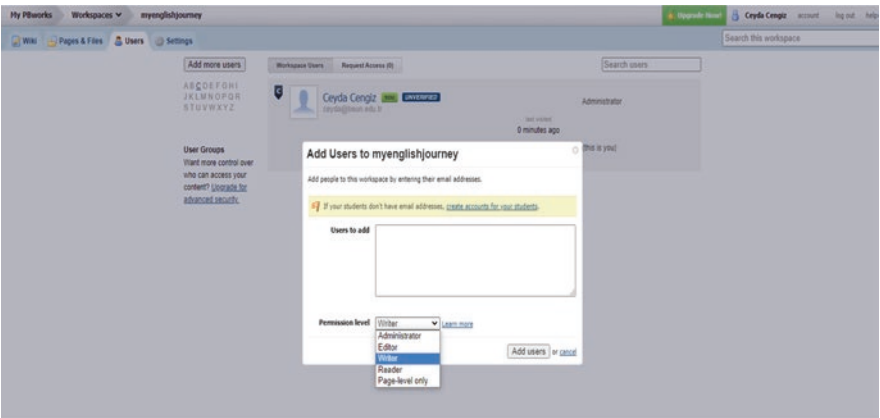


Fig. 10 Adding users to the wiki

As a teacher, you can decide on the permission level of the users by choosing from different options such as “Writer”, “Administrator”, and “Editor”. Alternatively, you can click on “Invite more people” on the home page or “Add a new writer to the workspace” to do the same procedure. The students can also “Request access to the workspace” if they want to join your wiki. If the students do not have e-mail addresses, it is also possible to use classroom accounts by providing the students with usernames and passwords to get them to enroll in your wiki. The activity of the users in the wiki can be traced by checking the “Recent Activity” on the right end of the home page, which lists all the changes made by the users of the wiki.

Possible Advantages of Using Wikis in Language Classrooms

Wikis can be used for various purposes in language classrooms. They can be a motivating writing tool for language learners since they give them a real audience, which might affect their attention to the grammatical accuracy and coherence of their writings (Kuteeva, 2011). Wikis are also advantageous due to their easiness of use for learners and teachers. After a short tutorial on the technical features of wikis, language learners may start doing various tasks on wikis right away. For example, keeping e-portfolios on their wikis might be one of these tasks. Students can also be asked to participate in wiki projects, which require them to do research, synthesize information from different sources and use various language skills at the same time as well as collaborating with peers throughout the process (Liu, 2012).

One of the biggest advantages of wikis is that they are ideal for doing collaborative writing activities. The discussion section of wikis enables students to co-produce texts by exchanging ideas with peers during the writing process. They can also give peer feedback, which might enhance the quality of their writing (Bikowski & Vithanage, 2016). Language teachers can also use wikis for other purposes such as making classroom announcements, sharing course content, getting students to discuss some reading materials or videos.

Possible Limitations of Wikis

The asynchronous nature of wikis is a limitation since it is often a challenge for students to manage the time well to hold and sustain effective asynchronous discussion. Students may use the wiki at different times and it might be demotivating for students to wait for others to contribute to the wiki and reply to their posts. Since it is not possible to see who is online in wiki, students might also need other forms of communication such as chat applications to arrange the timing and management of group tasks. Due to these challenges, students might feel the need to engage in synchronous discussion at least in some phases of collaborative writing process. Unequal participation of students might be another demotivating factor for active students and make it hard for the group to have quality discussion and reach a shared decision on the writing product.

Sample Activity

This activity can be adapted to be used at different age and proficiency levels. If we have primary, middle or high school students, we can divide the class into groups and ask each group to design a poster or brochure about a topic in wiki. This topic

can be taken from the textbook, be related to what is covered in class, or chosen by the teacher or students themselves. For example, if the topic is England, different groups can be asked to prepare a poster/brochure about one aspect of England such as its culture, sightseeing places and so on and so forth. The students might be motivated to use visuals to create interesting posters/brochures. The group members can be asked to have discussion about their writings and the design of their wikis, give feedback to each other and make changes to their wikis if necessary. They can also evaluate the other groups' work by using a checklist prepared by the teacher and/or provide the groups with aural or written feedback on different aspects of their wikis such as their visual attractiveness and the quality of the writing in wikis. This activity can also be suitable to be used at tertiary level. In the same way as described above, university students can be asked to write a short research paper or an essay collaboratively as an after-class assignment.

References

- Abrams, Z. (2016). Exploring collaboratively written L2 texts among first-year learners of German in Google Docs. *Computer Assisted Language Learning*, 29(8), 1259–1270.
- Alghasab, M., & Handley, Z. (2017). Capturing (non-) collaboration in wiki-mediated collaborative writing activities: The need to examine discussion posts and editing acts in tandem. *Computer Assisted Language Learning*, 30(7), 664–691.
- Alharbi, M. A. (2020). Exploring the potential of Google Doc in facilitating innovative teaching and learning practices in an EFL writing course. *Innovation in Language Learning and Teaching*, 14(3), 227–242. <https://doi.org/10.1080/17501229.2019.1572157>
- Arnold, N., Ducate, L., & Kost, C. (2009). Collaborative writing in wikis: Insights from culture projects in German classes. In L. Lomicka & G. Lord (Eds.), *The next generation: Social networking and online collaboration in foreign language learning* (pp. 115–144). CALICO.
- Arnold, N., Ducate, L., & Kost, C. (2012). Collaboration or cooperation? Analyzing group dynamics and revision process in wikis. *CALICO Journal*, 29(3), 431–448.
- Aslan, E., & Ciftci, H. (2019). Synthesizing research on learner perceptions of CMC use in EFL/ESL writing. *The CALICO Journal*, 36(2), 100–118. <https://doi.org/10.1558/cj.34818>
- Aydin, Z., & Yildiz, S. (2014). Using wikis to promote collaborative EFL writing. *Language Learning & Technology*, 18(1), 160–180.
- Becker, H. S. (1970). Field work evidence. In H. Becker (Eds.), *Sociological work: Method and substance* (pp. 39–62). Transaction Books.
- Bikowski, D., & Vithanage, R. (2016). Effects of web-based collaborative writing on Individual L2 writing development. *Language Learning & Technology*, 20, 79–99.
- Boling, E. C., Hough, M., Krinsky, H., Saleem, H., & Stevens, M. (2012). Cutting the distance in distance education: Perspectives on what promotes positive, online learning experiences. *Internet and Higher Education*, 15, 118–126. <https://doi.org/10.1016/j.iheduc.2011.11.006>
- Bradley, L., Lindstrom, B., & Rystedt, H. (2010). Rationalities of collaboration for language learning in a wiki. *ReCALL*, 22(2), 247–265.
- Castañeda, D. A., & Cho, M.-H. (2013). The role of wiki writing in learning Spanish grammar. *Computer Assisted Language Learning*, 26(4), 334–349. <https://doi.org/10.1080/09588221.2012.670648>
- Du, H. S., He, W. J., & Chan, R. C. H. (2016). Collaborative writing with wikis: An empirical investigation. *Online Information Review*, 40(3), 380–399. <https://doi.org/10.1108/OIR-06-2015-0173>

- Ducate, L., Anderson, L., & Moreno, N. (2011). Wading through the world of wikis: An analysis of three wiki projects. *Foreign Language Annals*, 44(3), 495–524.
- Elola, I., & Oskoz, A. (2010). Collaborative writing: Fostering foreign language and writing conventions development. *Language Learning and Technology*, 14(3), 51–71.
- Fernandez Dobao, A. (2012). Collaborative writing tasks in the L2 classroom: Comparing group, pair, and individual work. *Journal of Second Language Writing*, 21(1), 40–58.
- Hosseini, M. S., Bavali, M., & Rezvani, R. (2020). Wiki based collaborative writing in EFL classrooms: Fluency and learners' attitudes in focus. *Cogent Arts & Humanities*, 7(1), 1–28. <https://doi.org/10.1080/23311983.2020.1826649>
- Hsu, H. C. (2019). Wiki-mediated collaboration and its association with L2 writing development: An exploratory study. *Computer Assisted Language Learning*, 32(8), 945–967. <https://doi.org/10.1080/09588221.2018.1542407>
- Hsu, H. C., & Lo, Y. F. (2018). Using wiki-mediated collaboration to foster L2 writing performance. *Language Learning & Technology*, 22(3), 103–123.
- Järvelä, S., & Hadwin, A. F. (2013). New frontiers: Regulating learning in CSCL. *Educational Psychologist*, 48(1), 25–39.
- Kale, U. (2013). Can they plan to teach with Web 2.0? Future teachers' potential use of the emerging web. *Technology, Pedagogy and Education*, 23(4), 1–19.
- Kost, C. (2011). Investigating writing strategies and revision behavior in collaborative writing projects. *CALICO Journal*, 28(3), 606–620.
- Kuteeva, M. (2011). Wikis and academic writing: Changing the writer-reader relationship. *English for Specific Purposes*, 30, 44–57.
- Lai, C., Lei, C., & Liu, Y. (2016). The nature of collaboration and perceived learning in wiki-based collaborative writing. *Australasian Journal of Educational Technology*, 32(3), 80–95.
- Larson, L. C. (2009). Reader response meets new literacies: Empowering readers in online learning communities. *The Reading Teacher*, 62(8), 638–648.
- Lee, L. (2010). Exploring wiki-mediated collaborative writing: A case study in an elementary Spanish course. *CALICO Journal*, 27(2), 260–276.
- Li, M. (2012). Use of wikis in second/foreign language classes: A literature review. *CALL-EJ*, 13(1), 17–35. Retrieved from <http://callej.org/journal/13-1.html>
- Li, M. (2013). Individual novices and collective experts: Collective scaffolding in wiki-based small group writing system. *An International Journal of Educational Technology and Applied Linguistics*, 41(3), 752–769.
- Li, M. (2018). Computer-mediated collaborative writing in L2 contexts: An analysis of empirical research. *Computer Assisted Language Learning*, 31(8), 882–904. <https://doi.org/10.1080/09588221.2018.1465981>
- Li, M., & Kim, D. (2016). One wiki, two groups: Dynamic interactions across ESL collaborative writing tasks. *Journal of Second Language Writing*, 31, 25–42.
- Li, M., & Zhu, W. (2013). Patterns of computer-mediated interaction in small writing groups using wikis. *Computer Assisted Language Learning*, 26(1), 62–81.
- Li, M., & Zhu, W. (2017). Explaining dynamic interactions in wiki-based collaborative writing. *Language Learning & Technology*, 21(2), 96–120.
- Liu, Y. S. (2012). Using Wikispaces to facilitate teaching and learning. *TESL-EJ*, 16(2).
- Ma, Q. (2020). Examining the role of inter-group peer online feedback on wiki writing in an EAP context. *Computer assisted language learning*, 33(3), 197–216.
- Maxwell, J. A. (2010). Using numbers in qualitative research. *Qualitative Inquiry*, 16(6), 475–482.
- Rahimi, M., & Fathi, J. (2021). Exploring the impact of wiki-mediated collaborative writing on EFL students' writing performance, writing self-regulation, and writing self-efficacy: A mixed methods study. *Computer Assisted Language Learning*. <https://doi.org/10.1080/09588221.2021.1888753>
- Storch, N. (2002). Patterns of interaction in ESL pair work. *Language Learning*, 52(1), 119–158. <https://doi.org/10.1111/1467-9922.00179>

- Storch, N. (2012). Collaborative writing as a site for L2 learning in face-to-face and online modes. In G. Kessler, A. Oskoz, & I. Elola (Eds.), *Technology across writing contexts and tasks*. CALICO.
- Storch, N. (2013). *Collaborative writing in L2 classrooms: New perspectives on language education*. Multilingual Matters.
- Storch, N., & Wigglesworth, G. (2007). Writing tasks: Comparing individual and collaborative writing. In M. P. Carcia Mayo (Ed.), *Investigating tasks in formal language learning* (pp. 157–177). Multilingual Matters.
- Su, Y., Li, Y., Liang, J. C., & Tsai, C. C. (2019). Moving literature circles into wiki-based environment: The role of online self-regulation in EFL learners' attitude toward collaborative learning. *Computer Assisted Language Learning*, 32(5–6), 556–586.
- Wang, Y. (2015). Promoting collaborative writing through wikis: A new approach for advancing innovative and active learning in an ESP context. *Computer Assisted Language Learning*, 28(6), 499–512.
- Wang, L. (2022). Effects of regulation on interaction pattern in web-based collaborative writing activity. *Computer Assisted Language Learning*, 35(1–2), 1–35.
- Wilkinson, S. (2004). Focus group research. In D. Silverman (Ed.), *Qualitative research: Theory, method and practice* (2nd ed., pp. 177–199). Sage.

Behice Ceyda Cengiz has received her BA and MA degrees from the Department of Foreign Language Education at Middle East Technical University (METU). She holds a PhD degree in Computer Education and Instructional Technology at METU. She currently works as an instructor at the Department of Foreign Languages and Cultures at Zonguldak Bülent Ecevit University. Her research interests include foreign language education, online professional development and teacher education.

The Effect of an Online Writing Community on ELT Students' Academic Writing Motivation



Gülin Zeybek, Nihan Erdemir, and İdil Sayın

Abstract The aim of this study is to investigate the views of students, studying in the department of English Language Teaching in a state university in Türkiye on using an online writing community, namely Wattpad, for their academic writing practices and its effect on their academic writing motivation. The research adopted mixed method research design, in which researchers aimed to collect both qualitative and quantitative data to explain the phenomenon being observed. In this eight-week quasi-experimental study, quantitative data were collected with pre-and post-tests through Academic Writing Motivation Scale (Payne, Development of the academic writing motivation questionnaire [Unpublished doctoral dissertation]. University of Georgia, 2012) in order to understand the effect of Wattpad on participants' motivation in academic writing. 31 freshman ELT students participated in the study. Furthermore, in order to understand their views on using this online writing community for practicing their academic writing skills, a semi-structured focus group interview was conducted with randomly selected five students. The reliability analyses were done for both data collection tools. In order to find out the effect of Wattpad on participants' academic writing motivation, paired-samples T-test was conducted. Qualitative data analysis was done by content analysis. The results of this study revealed that the motivation levels of ELT freshman students have significantly increased after the eight-week intervention with Wattpad. Moreover, students indicated that using Wattpad for their academic writing skills improved their both general and academic writing abilities, fostered peer feedback and increased their creativity.

Keywords Academic writing · Online writing community · Wattpad · Motivation

G. Zeybek (✉)

Isparta University of Applied Sciences, Isparta, Türkiye

N. Erdemir

Süleyman Demirel University, Isparta, Türkiye

İ. Sayın

Hacettepe University, Ankara, Türkiye

© The Author(s), under exclusive license to Springer Nature
Switzerland AG 2022

G. Yangın-Ekşi et al. (eds.), *New Directions in Technology for Writing Instruction*, English Language Education 30,
https://doi.org/10.1007/978-3-031-13540-8_18

367

1 Introduction

Recent developments in the field of second/foreign language writing (L2) for academic purposes with the integration of technology have led to a renewed interest in writing practices. More specifically, the recent pandemic conditions in the world have urged for the necessity of using technology at distance learning, and also accelerated the process of integration with technology. Over the last two decades the development of newer approaches to writing instruction and rapid changes in technology have overlapped, thus introducing technology-mediated writing tools into L2 writing process (Andrews & Smith, 2011; McGrail & McGrail, 2014; Torky, 2015). It is now well established from a variety of studies that these writing tools could serve for the essentials of the process genre-based approach to writing in the sense of following the steps of process writing (Torky, 2015), creating a context through online spaces (Markham, 2003; Torky, 2015) and uniting with audience through online writing communities (Barbeiro, 2010; Holliday, 2004).

Given the rapid developments in technology-mediated writing, much writing research focused on different online spaces such as blogs and wikis (McGrail & McGrail, 2014), Scholar (Lammers et al., 2014), Google docs and social networks (Çiftçi & Aslan, 2019). At the same time, with the development of understanding that writing is a social activity, online spaces have become essential places for learners to write their L2 texts for communities. Since these communities share “a broadly agreed set of common public goals” (Swales, 1990, p. 24), learners are expected to write a text by considering the expectations and conventions within the Online Writing Communities (OWCs) and hence they could practice in a more meaningful context. Further to that, researchers have shown that OWCs offer a variety of conveniences for providing and receiving feedback (Lacle & Stappers, 2019; Merrill & Rodriguez, 2005), enhancing collaboration (Dweyer & Larson, 2014; Hitchcock et al., 2016), facilitating ubiquity (Turner, 2014; McCarthey et al., 2014) and fostering motivation (Williams & Beam, 2019; Zheng & Warschauer, 2017).

To date, several studies provided insights into the views (e.g., Lacle & Stappers, 2019; Tang et al., 2020) towards and the effects (e.g. Jusmaya, 2019; Hanifah, 2019; Yuniar et al., 2019) of OWCs. These studies indicate a positive tendency by learners to utilize these online communities in writing instruction. Although there is an extensive research on OWCs, a search of the literature revealed that few studies have examined Wattpad, mainly focusing on the role of Wattpad in motivation. Therefore, this study attempts to investigate the effect of Wattpad on learners’ motivation, and suggest the outcomes to teachers, practitioners and material designers.

1.1 Academic Writing & Technology

Approaches to teaching writing have changed the practices over the years though all of these approaches aimed to develop writing skills of learners in second/foreign language writing (L2) (Hyland, 2003). It remained uncertain for a long time which

approach should be adopted in writing classes (Grabe & Kaplan, 1996; Spack, 1988; Shih, 1986). Up to now the four main approaches have become influential in writing. The first one is product-based approach. It was introduced in the 1960s and put emphasis on the product rather than the procedure learners go through (Harmer, 2007; Nunan, 1991). The knowledge of vocabulary and grammar was considered important, thereby promoting the structures at the sentence level (Erdal Bulut, 2019; Nunan, 1988). First presenting the model text, teacher draws learners' attention to these structures, and then learners organize their ideas and produce a text which is similar to the model (Steele, 2004). Since the text is evaluated by its accuracy, variety and use in the sense of grammar and vocabulary, this approach is found inefficient.

Since this approach came in for criticism, the process-based approach was developed in the 1970s. Contrary to the first approach, process-based approach focuses on writing skills of learners including prewriting, drafting, revising and editing (Hasan & Akhand, 2010). Learners' receiving feedback from their teacher and peers and rewriting their text (Kroll, 1991) transform the nature of writing from linear to cyclical (White & Arndt, 1991) and recursive form (Raimes, 1983). By means of giving importance to the collaboration with peers, and self-regulated learning (Brown, 2001), this approach has a foundation in recent trends. Nevertheless, it is criticized for its being time consuming (Harmer, 2007) and also neglecting different discourse types (Badger & White, 2000).

Therefore, thirdly genre-based approach was introduced in the next decade, 1980s. It focuses on the sociocultural aspects of writing. In order to understand these aspects learners are expected to understand particular genres (Paltridge, 2004). Genre is defined as a language use through similar discourse features in a group of texts by its users (Hyland, 2007). Therefore, learners are aimed to have knowledge of the audience, purpose, rhetorical organization and conventions of this genre determined by its discourse communities so that learners could establish a link between the text and context (Hyon, 1996). Discourse communities refer to a group of people who have "a broadly agreed set of common public goals", thereby using some specific "communicative events" in a given genre (Swales, 1990, p. 24). For example, in a particular genre of English for Academic Purposes (EAP) these communities share a similar aim which can be recognized by particular discursual features. In this sense, understanding the conventions of these discourse communities would help learners to write in a more effective way. However, genre-based approach was also criticized because of its difficulty of teaching genres to learners (Paltridge, 2004).

As an alternative approach, the fourth one process genre-based approach was introduced by means of combining genre knowledge and process writing (Badger & White, 2000). In a recursive way of six processes including preparation, modelling, planning, joint constructing, independent constructing and revising, learners are aimed to have knowledge of the genre by understanding purpose (why they are writing for), audience (whom they are writing for) and organization (how they are writing) (Halliday, 1994). As it is clearly seen, there is a growing body of literature that recognizes the importance of reader/audience and reader expectations along with

recent approaches to teaching writing. Therefore, this paper aims to contribute to this growing area of research by tracing the ways learners are engaged with the writing process in which readers are involved, and reader expectations are considered.

Besides these new approaches to teaching writing, technology have also revolutionized the practice of writing with the developments in the internet in recent years (Andrews & Smith, 2011; Torky, 2015). Since technology has been incorporated into EFL writing, learners could write a text for a real audience in the internet in contrast to earlier ways of writing with pen and paper within the classroom border. With the concept of reader in their mind learners have started to understand their readers' characteristics and could write a text by considering their readers' expectations (Barbeiro, 2010; Holliway, 2004). The shift from placing themselves at the center towards understanding readers' needs was named as decentering (Blau, 1983; cited in McGrail & McGrail, 2014). In this way, the connection with readers could be established through the technology-mediated writing tools such as blogs and wikis (McGrail & McGrail, 2014), Scholar (Lammers et al., 2014), Google docs and social networks (Çiftçi & Aslan, 2019). Since these writing contexts are considered as "sociocultural places in which meaningful human interaction occur" (Markham, 2003, p. 6), they are in line with recent approaches to writing instruction. For example, Torky (2015) first found that learners' writing in these online contexts compatible with process writing in the sense of following the steps drafting, revising and publishing, and second s/he suggested these contexts serves for the communicative aspect of writing process in an interaction with teacher, peers and audience. After all, considering "writing is constructed as a social practice" (Catterall et al., 2011), the concept of writing for communities has gained importance. Therefore, some researchers (e.g. Maher et al., 2013) suggested writing communities should be created for learners in order to exchange their experiences and support each other. Drawing upon the developments in technology, these writing communities have been inevitably moved to online spaces, thereby promoting the emergence of online writing communities (OWCs).

1.2 *Online Writing Communities*

Community on a social platform is defined as "a group of people who have similar interests or who want to achieve something together" by Cambridge Dictionary. In a similar sense, OWCs are characterized as online spaces where writers publicize and exchange opinions on their writings such as poems, articles and stories (Boot, 2011). They offer an interactive place for various writers regardless of their age and skills (Lacle & Stappers, 2019). Online spaces for writing can range from short writing prompts as in the forms of tweets, blog posts or Facebook group shares to OWCs that are specifically designed for practicing and producing writing such as Creative Writing Forums, She Writes and Wattpad (Thomas, 2021a, b). Even though the goals of these spaces are not fully educational, many teachers and learners integrate these technological tools in the process of their writing instruction. Especially

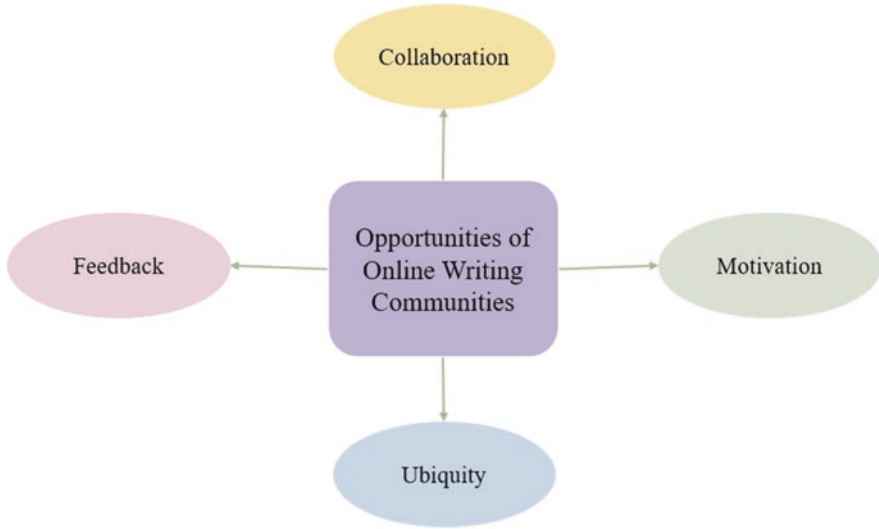


Fig. 1 Opportunities of online writing communities

in L2 classes OWCs are gaining popularity day by day, and offer foreign language learners abundant drafting, commenting, revising and publishing opportunities (Tang et al., 2020). The opportunities that OWCs provide for learners are grouped under four main categories based on the findings of research in the literature (see Fig. 1).

1.2.1 Feedback

The desire that gathers people around online writing spaces as a community is their desire to receive feedback on their posts as well as to share their writings (Birch, 2016). OWCs offer very practical ways to give feedback. Some of these ways are being able to write comments by directly marking the part on which feedback will be given on the article, determining a score for the article with the voting system, being able to comment as a whole and even making changes on the article (Merrill & Rodriguez, 2005). In these online spaces, people can get professional feedback from experts who are experienced in writing, as well as from readers who are equal or inferior to them in terms of writing skills. Thus, learning environments with high communication based on discussion are created (Lacle & Stappers, 2019).

In the development of writing skill, feedback from the peer as well as the teacher plays a beneficial role (Tang et al., 2020). Although the feedback given by the teacher is seen as more sophisticated, reliable and professional (Gielen et al., 2010), it has been observed that learners whom peer feedback is given have a more positive attitude towards writing (Carless et al., 2011; Nystrand & Brandt 1989a, b). Also, writing skills of learners who receive feedback from their peers develop at a better

level (Hansen & Liu, 2005). For example, learners who receive peer feedback can better revise their writings as it is easier to understand their peers (Yang et al., 2006). In addition, learners can reach their peers more easily in comments or corrections that they do not understand and ask questions more easily. In contrast, learners may be afraid to reach out to their teachers to explain the feedback about which they are confused (Zhao, 2010). In addition, learners' being able to get feedback quickly through OWCs helps them get used to frequent and collaborative feedback (Birch, 2016). Considering that teachers often need to provide feedback to many learners at the same time, the ability to write instant, interactive and effective feedback from both peers and others by using these spaces allows for a faster development (Friend et al., 2016). In addition to all these, through OWCs, learners can be exposed to much more writing discourse to improve themselves better by getting the chance to examine not only the feedback they have written or received, but also the feedback given to other writers (Colby, 2021). This also provides an environment for language learners where they feel safe to practice their writing skills and produce (Black, 2005).

1.2.2 Collaboration

Collaboration in OWCs in Hunt-Barron and Colwell (2014, p. 139)'s study is defined as having several components such as "(a) an online space for learners to post work and provide feedback; (b) the ability for learners to track changes made to their work; (c) the ability for a student to request feedback from peers in writing at any stage of their writing; and (d) the ability for learners to respond to feedback from their peers." Feedback made on these spaces contributes to the productive and reflective thinking processes of the peers, while at the same time, learners have the opportunity to evaluate their own thoughts by collaborating with others at a global scale (Dweyer & Larson, 2014). Learners working collaboratively on these online spaces form a community that includes questions, comments, and a wide variety of answers from which they develop divergent perspectives (Dwyer, 2010; Larson, 2009). Through this online collaboration, learners produce more successful writing outputs and become more efficient writers (Freedman, 1992). The study of Williams and Beam (2019) has shown that even the most reluctant learners have been eager to participate in the digital writing process thanks to collaborative work, and their self-confidence has increased considerably. Through collaboration provided in online environments, learners' social interactions (Sessions et al., 2016), self-confidence and engagement (Hitchcock et al., 2016), self-awareness of their strengths as writers (Thomas, 2006), and the ownership of their final products increase (Jocius, 2013). Also, it has been observed that this collaborative work eliminates the negativities in the interactions on feedback caused by the varieties in opinions arising from cultural differences (Edwards-Groves, 2011).

1.2.3 Ubiquity

Another feature of OWCs is that they offer ubiquitous learning environments by taking learners beyond the boundaries of the classroom (Turner, 2014; McCarthy et al., 2014). Ubiquitous learning is defined as learning anywhere and anytime. Along with the increased use of technology in language teaching recently, many mobile and online tools allow learning to continue outside of school (Zeybek, 2020). Especially, as the recent unfavorable situations world-wide that have forced many to continue learning through distance education, the importance of these ubiquitous tools have increased considerably. Both teachers and learners seek new technologies and online spaces in order to carry out undisrupted education. Thanks to OWCs and similar websites, it has become much easier to reach learners outside the school and enhance the opportunities to practice L2. It has been observed that learners write more than ever thanks to online these online spaces (Mangen, 2014).

1.2.4 Motivation

In addition to writing practices, previous research has established that the integration of technology into writing instruction has also influenced learners' motivation (Williams & Beam, 2019; Zheng & Warschauer, 2017). First, learners are "motivated to participate in instructional activities because they wanted to use the technology" (Williams & Beam, 2019, p. 237). A possible explanation for this might be that today's learners can easily adopt, and also adapt to technology. In this way, learners' willingness along with their ability seem to be closely linked to intrinsic motivation. Since they inherently enjoy, learners are eagerly engaged with an instructional activity according to Ryan and Deci (2007), and this type of motivation might significantly enhance their writing practice. Another motivational factor of online/digital writing is the interaction with audience. The fact that learners publish their text and share with real audience in online writing communities has often become a source for motivation (Halsey, 2007). Last, online collaboration promotes motivation among learners in the sense of having support from their peers (Lee & Chen, 2000). When learners receive feedback from peers, they will revise the text, edit and rewrite. In this sense, online collaboration is compatible with process writing.

It is thought that linking technology and English teaching and providing learners with real-life environments for writing skills have an important effect on increasing learners' motivation (Yim & Warschauer, 2014). The fact that OWCs are interesting and people write on these spaces with their own will increases the motivation of learners, especially those who are bored with classroom activities (Gelman et al., 2016; Korobkova, 2014). Moreover, studies in the field have shown that OWCs increase learners' motivation to write more and reach more readers (Lacle & Stappers, 2019; McCarthy et al., 2014). Also, learners' taking their own responsibilities about what and how they want to write is seen as a factor that increases their motivation (Lamonica, 2010).

1.3 Wattpad as an Online Writing Community

OWCs are one of the emerging technological tools in education and they offer several possibilities for both teachers and learners. Among these OWCs Wattpad is one of the most popular online spaces enabling learners to practice their writing skills.

Wattpad was founded in 2006 by Allan Lau and Ivan Yuen in Toronto, Canada. Available from all technological devices, Wattpad is based on stories written by users. According to the statistics released by Wattpad, as of 2020, it serves more than 90 million users with nearly 1 billion stories and users spend more than three billion minutes engaging with those stories monthly (Wattpad, 2021). In this sense, Wattpad, also called as ‘YouTube for stories’ (Ramdarshan Bold, 2016, p. 4), has changed the slogan “Stories you’ll love”, which was used from 2006 to 2019, to “Where stories live”, arguing that stories are a dynamic structure that communicates with its readers (Wattpad, 2019). Wattpad provides a social, experimental and relaxing environment and includes various online tools to enable readers, and experienced and novice writers to exchange ideas together (Ramdarshan Bold, 2018; Tirocchi, 2018; Bal, 2018; Korobkova, 2018). These tools allow users to read, write and comment on others’ works, publish their works in series, vote for works, play games, follow others’ profiles and become members of clubs (Davies, 2017; Tirocchi, 2018; Thomas, 2021a, b). Wattpad is often favored for the uncomplicated interface and the anonymity of the users. Therefore, it has been frequently preferred in educational research (Bal, 2018; Rahman & Iwan, 2019; Anggitasari et al., 2020; Permatasari et al., 2020). Several opportunities of Wattpad for its users are shown in Fig. 2.

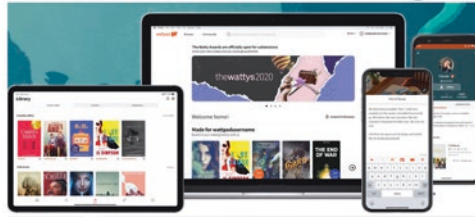
Considering the opportunities Wattpad offers to its users and its possible contributions to education, this study aimed to investigate the views of students, studying in the department of English Language Teaching (ELT) in a state university in Tukey, on using an OWC, namely Wattpad, for their academic writing practices and its effect on their academic writing motivation. In this light, answers to the following questions were sought:

1. What is the effect of using Wattpad for academic writing practices on Turkish ELT freshman students’ academic writing motivations?
2. What are the Turkish ELT freshman students’ perceptions of using Wattpad for academic writing practices?

2 A Sample Study on Wattpad

The current study adopted Mixed Method Research design, in which researchers aimed to collect both qualitative and quantitative data to explain the phenomenon being observed. In this eight-week quasi-experimental study with one group pre-test post-test design (Privitera & Ahlgrim-Dezell, 2019), quantitative data were collected with Academic Writing Motivation Scale (Payne, 2012) used as pre- and

Compatible with several technological devices



Support for the writers

wattpad books

Your voice belongs on bookshelves

Wattpad Books aspires to recognize and reflect diverse voices by taking Wattpad stories to published book and onto bookshelves around the world.

Wattpad Books works with partners such as:

macmillan ANVIL

Writing Contests

Enter writing contests to get published, win awards, and partner with global brands.

The Wattys

Wattpad's annual awards program committed to celebrating the best stories around the world.

Wattpad Picks

Get featured on our hand-picked reading list.

wattpad studios

Your original story could be the next big hit

Wattpad Studios discovers untapped, unsigned, and talented writers on Wattpad and connects them to global multi-media entertainment companies.

Wattpad Studios works with partners such as:

hulu SBFV

1 Create
Share your unique voice and original story on Wattpad. Find the writing resources you need to craft a story only you can tell.

2 Build
Establish a global fan base as your story gains readership and momentum. Connect with other like-minded writers through storytelling.

3 Amplify
Gain Wattpad Star status and get your story published or adapted into film or television with Wattpad Books and Wattpad Studios!

50+
Writing Resources

90 MILLION
Readers

1000+
Story deals

User friendly interface

1 - Category list
2 - Search button
3 - Write button
4 - Button for adding the story to your library
5 - Voting for the story

6 - Profile settings
7 - Following the writer of the story
8 - Share button of the story
9 - Inline comment
10 - Progress bar

11 - Button to see the next part of the story
12 - Regular comment

Fig. 2 Opportunities of Wattpad

post-tests in order to understand the effect of using Wattpad on participants' academic writing motivation. Furthermore, in order to understand their views on using this online writing community for practicing their academic writing skills, a semi-structured focus group interview was conducted with randomly selected five students among the participants.

2.1 Participants

Participants in the study were determined by convenience sampling which is one of the nonprobability sampling methods (Lavrakas, 2008). 31 ELT freshman students studying at a state university in Türkiye participated in the actual study. Additionally, 20 ELT freshman students who did not participate in the actual study took place in the piloting of the scale. Age and gender distribution of pilot study's participants is given in Table 1 and actual study's participants is given in the Table 2.

2.2 Data Collection Instruments & Procedure

2.2.1 Academic Writing Motivation Scale

Quantitative data were collected using the scale developed by Payne (2012) to examine the effect of using Wappad in academic writing practices on Turkish ELT freshman students' academic writing motivation. This scale was used to collect and analyze quantitative data by converging with qualitative data. This multidimensional scale consists of 37 Likert-type items in 8 dimensions. The scale was administered to students in its original language (English). No changes were made in the scale items, only the age question was added to the demographic questions in order to get more detailed information about the participants. Before the actual study, pilot testing was done with 20 Turkish ELT freshman students who did not participate in the actual study. Since the scale is multidimensional and tau-equivalent, stratified alpha coefficient was preferred as the reliability coefficient ($\alpha = 0.847886$) (Cronbach et al., 1965; Cho, 2016). This scale was conducted before and after Wappad practices as a pre- and post-tests.

Table 1 The distribution of participants by gender & age (Pilot study)

Gender & age	18	19	20	Total
Female	4	9	1	14
Male	1	4	1	6
Total	5	13	2	20

Table 2 The distribution of participants by gender & age (Actual study)

Gender & age	18	19	20	Total
Female	6	14	1	21
Male	1	7	2	10
Total	7	21	3	31

2.2.2 Semi-Structured Focus Group Interview

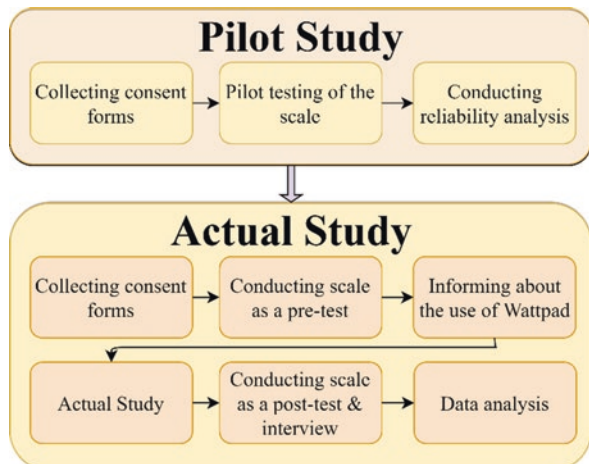
Semi-structured focus group interview was conducted to collect qualitative data to understand the in-depth opinions related to the academic writing practices on Wattpad of Turkish ELT freshman students. The interview questions were prepared by researchers, were checked by an expert specialized in ELT, and last they were revised. Interview questions are as follows:

- How would you evaluate the effect of using Wattpad for academic writing practices on your academic writing skills?
- How would you consider Wattpad as an online writing community?
- Can you compare your writing practices on paper with your writing practices on Wattpad?

2.2.3 Procedure

The work-flow diagram of the study is given in Fig. 3. Firstly, participants were asked to fill out consent forms. Later, researchers gave a brief instruction to inform the participants about the use of Wattpad. Each student was given a specific and identifying user ID that they can use on Wattpad to keep their identities confidential. Thus, while their identities remained anonymous in the Wattpad community, the use of identifying IDs among the participants enabled the participants to comment on each other's work. Participants were required to write essays in line with the instructions given by the researchers within the scope of the Writing Skills I course and to publish these on Wattpad any time outside of the class. During the eight-week quasi-experimental study, the participants wrote 2 essays in total and published them on Wattpad (for a sample activity see Fig. 5). The topics and essay types were 'Something Edible' in descriptive essay type and 'Technology in Language Education' in cause-and-effect essay type, respectively. Each participant checked

Fig. 3 Work-flow diagram of the study



other participants’ essays by using an academic writing checklist developed by Xie (2017) and commented their findings on other participants’ essays. After the intervention, Academic Writing Motivation Scale was applied again as a post-test. In addition, a semi structured focus group interview was conducted. The eight-week intervention process is given in Figs. 4 and 5.

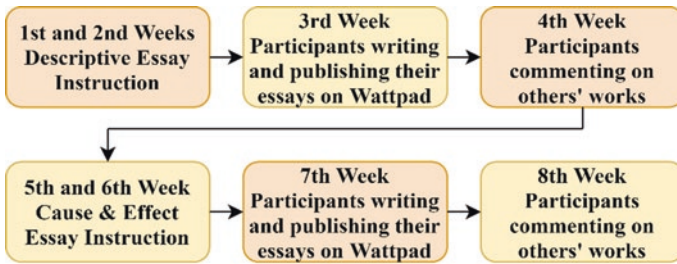


Fig. 4 The eight-week intervention process

Aim: To practice writing skills for descriptive essay
Focus: Descriptive adjectives; Vocabulary on expressions related with five senses
Level: Intermediate and above
Preparation: Various objects that can be smelled/touched/tasted, etc. E.g. little stones, leaves, Turkish delight, marshmallow, a piece of garlic, etc.

Procedure

Warm-up

- First ask students to cover their eyes so that they cannot see the objects you will give them. Distribute each object to a student in the class and ask them analyze them without looking. They can smell, touch or even taste their objects and get a detailed picture in their minds.
- Then, ask students to uncover their eyes and examine their objects and notes about their features depending on their five senses.

Main Activity

- Ask students to create a Wattpad account and identify a user ID. Then ask them to share their ID with their peers.
- Ask students to write an at least three paragraph descriptive essay with introduction, body and conclusion paragraphs on Wattpad based on the objects they examined in the class. Ask them to give as much detail as they can in order for the reader to fully visualize and feel the object they describe.
- Remind students that they can use hashtags (#) to popularize their essays according to the subjects they mentioned in their essays.

Follow-up

- Ask each student to review at least one of their peer’s essay and make corrections/editing on Wattpad. Tell students that they can also write comments on each other’s essays.
- You can also hold an in-class session about students’ descriptive essays and give whole-class feedback and highlight the main deficiencies of the essays.

Notes

1. Using Wattpad for writing essays will help you save time by enabling students more time to think about, plan and write their essays compared to in-class writing. In this way, more accurate and organized essays can be achieved.
2. Wattpad or other OWCs can provide an environment to which your students are more accustomed; thus, enabling them to feel more comfortable when writing and commenting on each other. Also, peer-feedback and peer-learning are supported in its highest levels.

Fig. 5 Sample activity with wattpad

2.3 Data Analysis

In order to examine the effect of using Wattpad on Turkish ELT freshman students’ academic writing motivation, data collected from the pre- and post-tests were analyzed with inferential statistics. Before conducting statistical analysis, data were prepared for data analysis at the data preprocessing stage and no missing data was found. Afterwards, the assumptions that must be met to use the parametric tests were checked on the data. After the controls, it was observed that the data met the assumptions of the parametric tests and Paired Samples T-test was used in data analysis. Cohen’s d was calculated to determine the effect size of the statistically significant result.

Qualitative data were analyzed using the Constant Comparative Method (CCM). Researchers coded the expressions that reflect participants’ views and created categories by combining similar codes. Main categories were created by combining similar categories. Afterwards, data were analyzed qualitatively by another researcher experienced in qualitative data analysis, and inter-rater reliability was found to be .91 which corresponds to high inter-rater reliability.

3 Findings

3.1 What Is the Effect of Using Wattpad for Academic Writing Practices on Turkish ELT Freshman Students’ Academic Writing Motivations?

In order to determine the appropriate statistical analysis, it was first checked whether the data collected with the scale met the assumptions of the parametric tests. With this aim in mind, normality of the data was checked with Kolmogorov-Smirnov (pre-test = .200; post-test = .081 .081) and Shapiro-Wilk tests (pre-test = .83 .83; post-test = .12). Analysis showed that the data had a normal distribution. In addition to these tests, z score for skewness and kurtosis were calculated and result (pre-test = .032, .05; post-test = 1.38, .06) was found to be between the appropriate values [-1.96, +1.96 (Kim, 2013)]. Finally, it was concluded that the data showed a normal distribution. Therefore, the data collected with the scale were analyzed with the Paired Sample T-test. Paired Sample T-test result is given in Table 3.

As is seen in Table 3, the difference between the pre- and post-tests was statistically significant ($p < .05$). In order to determine the practical significance of the

Table 3 Paired sample T-test result of the data collected from the scale

		Mean	Sd	t	df	Sig (2-tailed)	Cohen’s d
Academic writing motivation	Pretest	104.32	13.40	-7.28	30	.00	0.851
	Posttest	115.74	11.56				

application, the effect size was calculated by Cohen's d coefficient. As a result of the calculation, it was concluded that using Wattpad for academic writing practices had a very high-level effect on Turkish ELT freshman students' academic writing motivations ($d = .851$).

3.2 *What Are the Turkish ELT Freshman Students' Perceptions of Using Wattpad for Academic Writing Practices?*

In order to understand the views of participants regarding the use of Wattpad for their academic writing practices a semi-structured focus group interview was conducted. Qualitative data were analyzed by CCM, resulting in a total of nine categories ($N = 57$). Categories and their percentages are presented in Fig. 6 below.

Increased Academic Writing Skills (28%) was found as the most frequently stated category by Turkish ELT freshman students participated in the study. They stated that Wattpad helped them develop their academic writing skills, to be more careful and meticulous while writing, to research the topic of the essay more, to take responsibility for their writing experiences and to improve their ability to use checklists. One student stated that:

Since I knew the whole class could read when I published my essay on Wattpad, I started to write more carefully and meticulously. (participant 1)

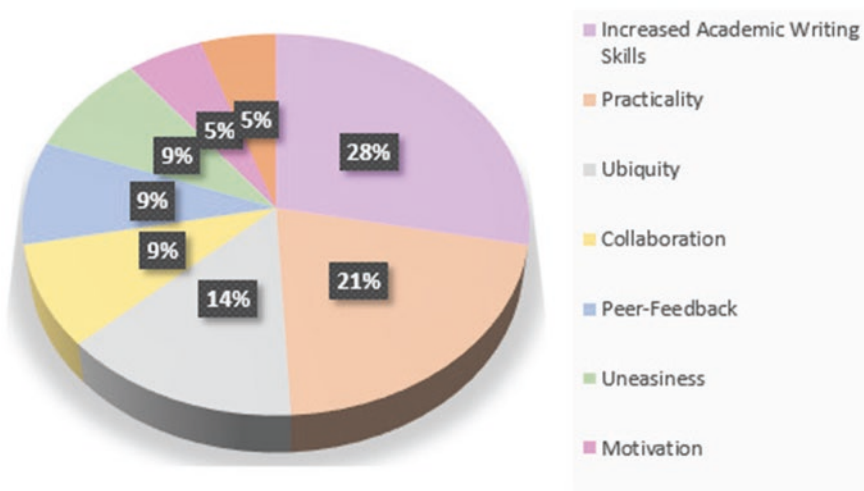


Fig. 6 The distribution of categories and their percentages

This category may be explained by the fact that students knowing that they will share their essays in an environment accessible by everyone and their essays will be evaluated by their peers may have encouraged them to take initiatives to develop their writing skills.

Practicality (21%) was another category mentioned by students several times. Students found using Wattpad for their academic writing practices practical and compared it to pen and paper practices by saying that they could reach other sources (on the internet) and more readers easily, could receive feedback and using Wattpad is easier and less time-consuming because they are familiar with technological devices.

Since we are constantly dealing with technological devices, writing an essay on Wattpad is easier than writing with a pen and paper. (participant 3)

Considering the explanations of Participant 3, the practices with Wattpad are found practical by the students as a result of their experiences with technology. Another explanation for this may be the Wattpad's simple user interface and the Wattpad instruction given before academic writing practices.

Ubiquity (14%) was another category found as a result of analysis. According to the students the ubiquity feature of Wattpad enabled them to write in a more comfortable environment, and consequently they spent more time and effort on their essays than they would spend in a normal classroom environment. Commenting on ubiquity, one of the students stated that:

Normally I can write an essay in 2 hours in the classroom environment, however, since Wattpad is accessible outside of the classroom and anytime, I work on an essay for one week meticulously. (participant 5)

This is likely to be related to the fact that by using Wattpad for academic writing practices, students were given the chance to write without leaving their comfort zone, therefore they worked longer and more meticulously on their essays. Additionally, instead of writing practices in the classroom environment with limited time and resources, writing practices that are done outside the classroom and where the responsibility lies with the students may have encouraged students to spend more effort on their works.

Collaboration (9%) In addition, students also mentioned that they could exchange ideas and work collaboratively by discussing essays with their peers thanks to Wattpad. As one student said:

If we have decided on a similar topic with my friends, we can easily discuss it to exchange ideas, and we can get inspiration from each other's essays. (participant 5)

Collaboration can be the result of the social space Wattpad provides to its users via online tools such as comments, profiles and messages. Another reason to this may be that students are asked to evaluate other students/peers, which may have led to teamwork by sharing their thoughts and experiences with each other.

Peer-Feedback (9%) is another aspect that found to be increased by using Wattpad (n = 5). Students indicated that they developed self-evaluation skills and felt like a teacher by giving and receiving peer feedback. Two students commented:

I felt like a teacher while examining my friend's essay. (participant 5)

Knowing that our friends will evaluate us allows us to look at our own essay with a critical perspective and self-criticize our work. (participant 4)

Students being assigned to evaluate their peers may have caused students to feel as if they were teachers. Additionally, evaluating their peers may have also positively affected self-evaluation skills. Also, the reason why students also developed self-evaluation skills may be that students do not like being corrected by their peers, and to prevent this, it may have forced them to adopt a critical perspective to present their essays in the best possible way.

Motivation (5%) was another category recurred. Similarly, students stated that their motivation increased thanks to the use of Wattpad (n = 3). According to the students, the fact that Wattpad offers a fun and competitive environment motivated them to write more and increased their self-esteem (n = 3). One of the students expressed his ideas as follows:

Seeing my essay's ranking in the categories and getting likes on Wattpad motivated me to write more. (participant 3)

This view of participant 3 suggests that being able to see the ranking of essays in the category in which the essay has been tagged may have caused students to feel appreciated and thus increased their motivation. Another explanation may be that students were not limited to in-class writing practices and that they were offered a technological alternative to pen and paper practices.

Uneasiness (5%) was the last category emerged from the data analysis. Unlike other categories which can be addressed as contributions, this category was about the drawbacks of using Wattpad. Students felt uneasy about the use of Wattpad for various reasons (n = 5). These reasons were found to be students' fear of their ideas being stolen and their prejudices about Wattpad being the homeland of teenage girls' fanfic stories. However, students also stated their prejudices about Wattpad have changed since their experiences with it showed that scientific essays can also be found on Wattpad. Regarding uneasiness, students stated that:

I was uneasy at the thought that they could steal my ideas, knowing that everyone is looking at others' essays to get ideas. (participant 1)

When I heard that we were going to use Wattpad, I approached this idea with caution, as it is known as a place where high school girls publish their fanfiction stories, but then my mind changed when I saw that scientific essays were also published on Wattpad. (participant 2)

These views suggest that uneasiness is caused by prejudices about Wattpad and the students' fear of their efforts getting copied by their peers.

4 Discussion

An initial object of this study was to identify the effect of Wattpad practices on participants' academic writing motivations. Quantitatively collected and analyzed data have shown that after they used Wattpad for their academic writing assignments, participants' motivation has increased significantly. The support from peers (Lee & Chen, 2000), reaching more readers, having the chance to write more (Lacle & Stappers, 2019; McCarthey et al., 2014), using technology (Williams & Beam, 2019; Zheng & Warschauer, 2017), and being able to reach real audience (Halsey, 2007) are some of the aspects that have been indicated to increase motivation in L2 writing through these online spaces. A possible explanation of this result may be the fact that Wattpad is a widely-used OWC and provide all these opportunities for its users and this may have been the paramount factor that effected the participants' academic writing motivations. Furthermore, the possible interference of participants' willingness to use technology cannot be ruled out as they mostly interact with recent technological innovations such as new devices, up-to-date software programs and applications in their daily lives. Thus, it could conceivably be hypothesized that being twined with technology may have effected learners' academic writing motivation positively.

The second aim of this study was to investigate the participants' views on their experiences with Wattpad in detail. With respect to this second research question findings have shown that Wattpad help L2 learners enhance their writing skills which is in line with the results of the most recent studies in the field (Jusmaya, 2019; Hanifah, 2019; Yuniar et al., 2019). Comparison of the findings with those of other studies confirms that OWCs help L2 learners practice their writing in various ways. Providing an environment in which they can collaborate with their peers (Dwyer, 2010; Larson, 2009; Williams and Beam, 2019), give and receive peer feedback (Lacle & Stappers, 2019; Colby, 2021), and practice in online spaces whenever and wherever they want (Turner, 2014; McCarthey et al., 2014) have been stated as the most outstanding opportunities of OWCs. Therefore, the views of the participants in the current study provide further support on the features offered by Wattpad for the development of academic writing skills. It can, thus, be suggested that Wattpad is an effective online space where L2 learners can interact with and learn from each other.

Another finding of the qualitative data analysis supported the quantitative results of this study. The results indicated that the participants found this experience highly motivating and they enjoyed a lot during their assignments on Wattpad. These results corroborate the findings of a great deal of the previous work indicating that both using technology in L2 writing practices (Williams & Beam, 2019; Zheng & Warschauer, 2017) and writing for real audience by knowing that their outputs will be seen by many others (Williams & Beam, 2019; Zheng & Warschauer, 2017) are the most well-known facts of increased motivation in online spaces. Therefore, the participants' eagerness to use technology for their writing assignments and the opportunities that Wattpad provides to them in terms of using technology and

reaching many people could be attributed to their increased motivation levels. Reported by Lamonica (2010), the learners' responsibility in writing by deciding on what and how to write can be interpreted as a factor in their increased motivation since the participants were left free in their choices of visual style –such as adding multimodal elements. This may also explain a relative correlation between responsibility and self-esteem. The possible responsibility of writing could have affected participants' confidence. Another possible explanation for this is that getting peer feedback and sometimes feedback from other users or maybe the ranking of their outputs among the other writings could have had an effect gaining self-esteem. Furthermore, which is also reflected in Williams and Beam (2019), these online spaces help learners decrease their reluctance and gain self-confidence thanks to the collaboration offered through them. It is therefore likely that the use of Wattpad increased learners' motivation and self-esteem in L2 academic writing.

With respect to the findings of the qualitative process, it was found out that Wattpad provided practicality for their writing assignments. Since learners dealt with writing by using technology during their assignments on Wattpad, they could use the technologies in hand for doing research as well. Furthermore, it is also possible to assume that since these learners are more used to recent technologies, it was more practical for them to write in online environments as they do mostly in their daily activities such as text messaging and social media use. Their increased motivation to use technology (Williams & Beam, 2019) can be used to explain their preferences as they mostly choose to write through their computers and mobiles instead of pen and paper. In general, therefore, it seems that Wattpad offered quite promising opportunities to contribute to L2 learners' academic writing skills.

This study set out with the aim of assessing the effect of Wattpad on L2 learners' academic writing motivation. Although the qualitative findings reflect various advantages of Wattpad on L2 learners academic writing skills, the participants also indicated that they were uneasy with the usage of this OWC during their assignments, though these utterances were rare. A possible explanation for this result may be the concerns of learners on plagiarism. This finding is consistent with that of Aytan (2017) who discussed the concerns of copyright and plagiarism issues on Wattpad. It seems possible that learners do not want their writing assignments copied by their peers. According to the information presented in Wattpad (2021)'s official site, the published writings cannot be made private since they are by default, public. Drawing upon this notice, it is possible to hypothesize that OWCs are not reliable platforms for both teachers and learners for whom originality and privacy are important in writing practices.

The present results are significant in at least two major respects. First of all, Wattpad, as a widely used OWC all around the world, is effective in increasing L2 learners' academic writing motivation. Second, Wattpad has been found to be highly beneficial in permitting peer-feedback, collaboration, ubiquity and self-esteem for academic writing skills. This combination of findings provides some support for the conceptual premise that OWCs are useful technological tools that boost academic writing instruction.

5 Conclusion

The present study was designed to determine the effect of Wattpad on learners' motivation in L2 writing process. The study has mainly found that learners' motivation for L2 writing noticeably increased. In light of the results of this study, several motivational aspects of Wattpad could be suggested for integrating OWCs into writing instruction. First and foremost, the use of technology provided enjoyment to learners in comparison to engagement with pen and paper within classroom border. Second, online collaborative learning enabled them to interact with each other by increasing social interaction, which has a positive influence on their eagerness. Third, L2 writing process became more purposive for learners in the sense that they could address to real audience and reach to larger communities through Wattpad.

Since the study was limited to the experimental group, it was not possible to compare the findings with the ones of a control group. Due to the lack of control group, pre- and post- tests were consulted. Despite this limitation, this work offers valuable insight into our understanding of recent approaches to writing instruction with the integration of online writing communities and suggest the role of Wattpad in promoting motivation among learners. These findings are expected to change the accustomed/traditional ways of writing instruction and enrich the course with technology-mediated writing instruction. In this way, teachers, practitioners and materials designers are likely to benefit from the findings of this research on writing instruction. Further research could focus on other possible impacts of Wattpad on L2 writing.

References

- Andrews, R., & Smith, A. (2011). *Developing writers: Teaching and learning in the digital age*. Open University Press.
- Anggitasari, M., Tarwana, W., Febriani, R. B., & Syafryadin, S. (2020). Using Wattpad to promote the students' responses to literary works: EFL college students' perspectives and experiences of enjoying short stories. *Jadila: Journal of Development and Innovation in Language and Literature Education*, 1(2), 182–192.
- Aytan, T. (2017). Evaluation of electronic writing experiences of Turkish teacher candidates at WATTPAD environment. *Higher Education Studies*, 7(4), 1–8.
- Badger, R. G., & White, G. (2000). A process genre approach to teaching writing. *ELT Journal*, 54(2), 153–160.
- Bal, M. (2018). Reading and writing experiences of middle school students in the digital age: Wattpad sample. *International Journal of Education and Literacy Studies*, 6(2), 89–100. <https://doi.org/10.7575/aiac.ijels.v.6n.2p.89>
- Barbeiro, L. F. (2010). What happens when I write? Pupils' writing about writing. *Reading and Writing*, 24(7), 813–834. <https://doi.org/10.1007/s11145-010-9226-2>
- Birch, H. J. (2016). Feedback in online writing forums: Effects on adolescent writers. *Teaching/ Writing: The Journal of Writing Teacher Education*, 5(1), 74–89.
- Black, R. W. (2005). Access and affiliation: The literacy and composition practices of English-language learners in an online fanfiction community. *Journal of Adolescent & Adult Literacy*, 49(2), 118–128.

- Blau, S. (1983). Invisible writing: Investigating cognitive processes in composition. *College Composition and Communication*, 34(3), 297–312. <https://doi.org/10.2307/358261>
- Boot, P. (2011). Predicting long-term activity in online writing communities: A Quantitative Analysis of Amateur Writing. In *Supporting digital humanities (Copenhagen 17–18 November 2011). conference proceedings*.
- Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). Longman.
- Carless, D., Salter, D., Yang, M., & Lam, J. (2011). Developing sustainable feedback practices. *Studies in Higher Education*, 36(4), 395–407.
- Catterall, J., Ross, P., Aitchison, C., & Burgin, S. (2011). Pedagogical approaches that facilitate writing in postgraduate research candidature in science and technology. *Journal of University Teaching & Learning Practice*, 8(2), 1–11.
- Cho, E. (2016). Making reliability reliable. *Organizational Research Methods*, 19(4), 651–682. <https://doi.org/10.1177/1094428116656239>
- Çiftçi, H., & Aslan, E. (2019). Computer-mediated communication in the L2 writing process: A review of studies between 2000 and 2017. *International Journal of Computer-Assisted Language Learning and Teaching*, 9(2), 19–36.
- Colby, R. S. (2021). Using online writing communities to teach writing MOOCs. In *Research anthology on facilitating new educational practices through communities of learning* (pp. 522–535). IGI Global.
- Cronbach, L. J., Schönemann, P., & McKie, D. (1965). Alpha coefficients for stratified-parallel tests. *Educational and Psychological Measurement*, 25(2), 291–312. <https://doi.org/10.1177/001316446502500201>
- Davies, R. (2017). Collaborative production and the transformation of publishing: The case of Wattpad. In J. Graham & A. Gandini (Eds.), *Collaborative production in the creative industries* (pp. 51–67). University of Westminster Press.
- Dwyer, B. (2010). *Scaffolding internet reading: A study of a disadvantaged school community in Ireland*. (Unpublished doctoral dissertation). University of Nottingham.
- Dwyer, B., & Larson, L. (2014). The writer in the reader: Building communities of response in digital environments. In *Exploring technology for writing and writing instruction* (pp. 202–220). IGI Global.
- Edwards-Groves, C. J. (2011). The multimodal writing process: Changing practices in contemporary classrooms. *Language and Education*, 25(1), 49–64.
- Erdal Bulut, S. (2019). *The effects of automated writing evaluation on EFL students' writing achievement and motivation towards writing*. [Unpublished master thesis]. İstanbul University.
- Freedman, S. W. (1992). Outside-in and inside-out: Peer response groups in two ninth-grade classes. *Research in the Teaching of English*, 26, 71–107.
- Friend, C., Morris, S. M., & Stommel, J. (2016). Writing at scale: Composition MOOCs and digital writing communities. In *Applied pedagogies: Strategies for online writing instruction* (pp. 180–195). Utah State University Press.
- Gelman, B. U., Beckley, C., Johri, A., Domeniconi, C., & Yang, S. (2016, April). Online urbanism: Interest-based subcultures as drivers of informal learning in an online community. In *Proceedings of the third (2016) ACM conference on learning@ scale* (pp. 21–30).
- Gielen, S., Peeters, E., Dochy, F., Onghena, P., & Struyven, K. (2010). Improving the effectiveness of peer feedback for learning. *Learning and Instruction*, 20(4), 304–315.
- Grabe, W., & Kaplan, R. B. (1996). *Theory & practice of writing*. Longman.
- Halliday, A. (1994). *Appropriate methodology and social context*. Cambridge University Press.
- Halsey, S. (2007). Embracing emergent technologies and envisioning new ways of using them for literacy learning in the primary classroom. *English Teaching: Practice and Critique*, 6, 99–107.
- Hanifah, F. M. (2019). *The comparison between Wattpad and blog in project based learning to teach written analytical exposition text (A Quasi-experimental study of the eleventh graders of SMA Ibu Kartini Semarang in the academic year of 2018/2019)* Doctoral dissertation, Universitas Negeri Semarang.

- Hansen, J. G., & Liu, J. (2005). Guiding principles for effective peer response. *ELT Journal*, 59(1), 31–38.
- Harmer, J. (2007). *The practice of English language teaching*. Longman.
- Hasan, M. K., & Akhand, M. M. (2010). Approaches to writing in EFL/ESL context: Balancing product and process in writing class at tertiary level. *Journal of NELTA*, 15(1–2), 77–88.
- Hitchcock, C. H., Rao, K., Chang, C. C., & Yuen, J. W. (2016). TeenACE for science: Using multimedia tools and scaffolds to support writing. *Rural Special Education Quarterly*, 35(2), 10–23.
- Hollaway, D. R. (2004). Through the eyes of my reader: A strategy for improving audience perspective in children's descriptive writing. *Journal of Research in Childhood Education*, 18(4), 334–349. <https://doi.org/10.1080/02568540409595045>
- Hunt-Barron, S., & Colwell, J. (2014). Illuminating change: Technology, feedback, and revision in writing. In *Exploring technology for writing and writing instruction* (pp. 135–151). IGI Global.
- Hyland, K. (2003). *Second language writing*. Cambridge University Press.
- Hyland, K. (2007). Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of Second Language Writing*, 16, 148–164.
- Hyon, S. (1996). Genre in three traditions: Implications for ESL. *TESOL Quarterly*, 30(4), 693–722.
- Jocius, R. (2013). Exploring adolescents' multimodal responses to *The Kite Runner*: Understanding how students use digital media for academic purposes. *Journal of Media Literacy Education*, 5(1), 310–325.
- Jusmaya, A. (2019). The effectiveness of using Wattpad on development students' writing ability. *IdeBahasa*, 1(2), 105–114.
- Kim, H. (2013). Statistical notes for clinical researchers: Assessing normal distribution (2) using skewness and kurtosis. *Restorative Dentistry & Endodontics*, 38(1), 52–54. <https://doi.org/10.5395/rde.2013.38.1.52>
- Korobkova, K. A. (2014). Schooling the directioners: Connected learning and identity-making in the one direction fandom. *Digital Media and Learning Research Hub*, 1, 39.
- Korobkova, K. (2018). Case 2.1.: 1D on Wattpad. In M. Ito, C. Martin, R. C. Prfister, M. H. Rafalow, K. Salen, & A. Wortman (Eds.), *Affinity online: How connection and shared interest fuel learning* (pp. 66–72). NYU Press.
- Kroll, L. R. (1991). Meaning making: Longitudinal aspects of learning to write. Paper presented at the annual meeting of the American Psychological Association, San Francisco, August.
- Laclé, T. V., & Stappers, L. I. A. (2019). *Online writing communities: Adolescents' perspective on learning* (Bachelor's thesis). Utrecht University. Retrieved from: <https://studenttheses.uu.nl/handle/20.500.12932/32520>
- Lammers, J. C., Magnifico, A. M., & Curwood, J. S. (2014). Exploring tools, places, and ways of being: Audience matters for developing writers. In K. E. Pytash & R. E. Ferdig (Eds.), *Exploring technology for writing and writing instruction* (pp. 186–201). IGI Global.
- Lamonica, C. (2010). *What are the benefits of blogging in the elementary classroom?* Education.
- Larson, L. C. (2009). Reader response meets new literacies: Empowering readers in online learning communities. *The Reading Teacher*, 62(8), 638–648. <https://doi.org/10.1598/RT.62.8.2>
- Lavrakas, P. J. (2008). *Encyclopedia of survey research methods: A-M*. Sage. <https://doi.org/10.4135/9781412963947>
- Lee, Y. H., & Chen, N. S. (2000). Group composition methods for co-operative learning in web-based instructional systems. In *Proceedings of the 8th international conference on computers in educational/international conference on computer-assisted instruction*.
- Maher, M., Fallucca, A., & Halasz, H. M. (2013). Write on! Through to the Ph.D.: Using writing groups to facilitate doctoral degree process. *Studies in Continuing Education*, 35, 193–208.
- Mangen, A. (2014). The disappearing trace and the abstraction of inscription in digital writing. In *Exploring technology for writing and writing instruction* (pp. 100–113). IGI Global.
- Markham, A. N. (2003). Images of internet: Tool, place, way of being. In *The fourth annual conference of the association of internet researchers*. Masters. MS thesis St. John Fisher College.

- McCarthy, S. J., Woodard, R., & Kang, G. (2014). Elementary teachers negotiating discourses in writing instruction. *Written Communication*, 31(1), 58–90.
- McGrail, E., & McGrail, J. P. (2014). Preparing young writers for invoking and addressing today's interactive digital audiences. In K. E. Pytash & R. E. Ferdig (Eds.), *Exploring technology for writing and writing instruction* (pp. 54–76). IGI Global.
- Merrill, M., & Rodriguez, M. (2005). New literacies: Technology literacy & online writing conferences. *International Journal of Learning*, 12(5), 293–299.
- Nunan, D. (1988). *Syllabus design*. Oxford University Press.
- Nunan, D. (1991). *Language teaching methodology*. Prentice-Hall International.
- Nystrand, M., & Brandt, D. (1989a). Response to writing as a context for learning to write. In C. Anson (Ed.), *Writing and Response* (pp. 209–300). National Council of Teachers of English.
- Nystrand, M., & Brandt, D. (1989b). Response to writing as a context for learning to write. In C. Anson (Ed.), *Writing and response: Theory, practice and response* (pp. 209–230). National Council of Teachers of English.
- Paltridge, B. (2004). Approaches to teaching second language writing. In *17th educational conference Adelaide*. http://www.Englishaustralia.com.au/ea_conference04/proceedings/pdf/Paltridge.pdf
- Payne, A. R. (2012). *Development of the academic writing motivation questionnaire* [Unpublished doctoral dissertation]. University of Georgia.
- Permatasari, I., Wijayanto, A., & Kristina, D. (2020). The strengths and weaknesses of extensive Reading using Wattpad; students' perceptions. *Indonesian Journal of EFL and Linguistics*, 5(2), 373–387.
- Privitera, G. J., & Ahlgrim-Delzell, L. (2019). Quasi-Experimental and Single-Case Experimental Designs. In *Research methods for education* (pp. 333–372). SAGE Publications.
- Rahman, I. A., & Iwan, I. (2019). Blending Wattpad platform and English prose course in industrial revolution era 4.0. *English Language in Focus (ELIF)*, 2(1), 25–32.
- Raimes, A. (1983). *Techniques in teaching writing*. Oxford University Press.
- Ramdarshan Bold, M. (2016). The return of the social author. *Convergence: The International Journal of Research into New Media Technologies*, 24(2), 1–20. <https://doi.org/10.1177/1354856516654459>
- Ramdarshan Bold, M. (2018). The return of the social author: Negotiating authority and influence on Wattpad. *Convergence*, 24(2), 117–136. <https://doi.org/10.1177/1354856516654459>
- Ryan, R. M., & Deci, E. L. (2007). Active human nature: Self-determination theory and the promotion and maintenance of sport, exercise, and health. In M. S. Hagger & N. L. D. Chatzisarantis (Eds.), *Intrinsic motivation and self-determination in exercise and sport* (pp. 1–19). Human Kinetics Europe Ltd.
- Sessions, L., Kang, M. O., & Womack, S. (2016). The neglected “R”: Improving writing instruction through iPad apps. *TechTrends*, 60(3), 218–225.
- Shih, M. (1986). Content-based approaches to teaching academic writing. *TESOL Quarterly*, 20(4), 617–648.
- Spack, R. (1988). Initiating ESL students into the academic discourse community: How far should we go? *TESOL Quarterly*, 22(1), 29–51.
- Steele, V. (2004). Product and process writing. *English online*. Retrieved February 27, 2020, from <http://www.englishonline.org.cn/en/teachers/workshops/teaching-writing/teaching-tips/product-process>
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge University Press.
- Tang, E., Cheng, L., & Ng, R. (2020). Online writing community: What can we learn from failure? *RELC Journal*. <https://doi.org/10.1177/0033688220912038>
- Thomas, A. (2006). Fan fiction online: Engagement, critical response and affective play through writing. *The Australian Journal of Language and Literacy*, 29(3), 226.
- Thomas, B. (2021a). “Stand out from the crowd!”: Literary advice in online writing communities. In *Writing manuals for the masses* (pp. 153–167). Palgrave Macmillan.

- Thomas, B. (2021b). "Stand out from the crowd!": Literary advice in online writing communities. In A. Masschelein & D. D. Geest (Eds.), *Writing manuals for the masses – The rise of the literary advice industry from Quill to keyboard* (pp. 153–167). Palgrave Macmillan.
- Tirocchi, S. (2018). Wattpad. In C. A. Scolari (Ed.), *Teen media and collaborative culture* (pp. 93–97). Universitat Pompeu Fabra.
- Torky, S. A. E. F. (2015). The role of online tools in promoting EFL writing: A pedagogical perspective. In R. Al-Mahrooqi, V. S. Thakur, & A. Roscoe (Eds.), *Methodologies for effective writing instruction in EFL and ESL classrooms* (pp. 248–267). IGI Global.
- Turner, K. H. (2014). Error or strength?: Competencies developed in adolescent Digitalk. In *Computational linguistics: Concepts, methodologies, tools, and applications* (pp. 70–88). IGI Global.
- Wattpad. (2019, February 9). *Wattpad*. Wattpad – Where stories live. Retrieved February 27, 2021, from <https://www.wattpad.com/brand/>
- Wattpad. (2021, January 21). *Wattpad's 2020 year in review: Catharsis through creativity, creating community, and changing the world with stories*. Retrieved February 24, 2021, from <https://company.wattpad.com/blog/2020/12/1/wattpads-2020-year-in-review-catharsis-through-creativity-creating-community-and-changing-the-world-with-stories>
- White, R., & Arndt, V. (1991). *Process writing*. Longman.
- Williams, C., & Beam, S. (2019). Technology and writing: Review of research. *Computers & Education*, 128, 227–242.
- Xie, Q. (2017). Diagnosing university students' academic writing in English: Is cognitive diagnostic modelling the way forward? *Educational Psychology*, 37(1), 26–47.
- Yang, M., Badger, R., & Yu, Z. (2006). A comparative study of peer and teacher feedback in a Chinese EFL writing class. *Journal of Second Language Writing*, 15(3), 179–200.
- Yim, S., & Warschauer, M. (2014). Technology and second language writing: A framework-based synthesis of research. In *Exploring technology for writing and writing instruction* (pp. 298–312). IGI Global.
- Yuniar, R. F., Widiati, U., & Astuti, U. P. (2019). The effect of using wattpad on process-genre approach towards writing achievement in tertiary level. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 4(7), 897–905.
- Zeybek, G. (2020). *Multimodal Mobile-assisted language learning classroom applications: A study in pre-service teacher education*. Unpublished Doctoral Dissertation, Anadolu University, Eskişehir, Türkiye.
- Zhao, H. (2010). Investigating learners' use and understanding of peer and teacher feedback on writing: A comparative study in a Chinese English writing classroom. *Assessing Writing*, 15(1), 3–17.
- Zheng, B., & Warschauer, M. (2017). Epilogue: Second language writing in the age of computer-mediated communication. *Journal of Second Language Writing*, 36, 61–67. <https://doi.org/10.1016/j.jslw.2017.05.014>

Gülin Zeybek is an assistant professor doctor in ELT and works as the director of School of Foreign Languages in Isparta University of Applied Sciences. She holds two MA degrees and a PhD degree in both areas of Foreign Language Education and Educational Technologies. She conducts research on FL teacher training with a special focus on technology integration.

Nihan Erdemir is an assistant professor of ELT at Süleyman Demirel University, Türkiye. She holds PhD from Gazi University, Turkey and an MA from the University of Vienna, Austria. She taught English and Turkish languages in Austria and Türkiye for over 7 years. Her research interests are academic writing, corpus linguistics, language teacher education and classroom research.

İdil Saym is a research assistant at Hacettepe University, Türkiye. She is a PhD candidate in ELT. Her research interests are gamification of EFL learning, artificial intelligence in education.