# Teaching in the Time of Corona(Virus): A Cross-Institutional Study of Online English Language Teaching in Hong Kong Higher Education



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**Abstract** This research is aimed at establishing how teaching culture has been transformed by the implementation of online teaching and learning during the COVID-19 pandemic crisis. In particular, the study evaluates how this paradigmatic shift towards online learning has impacted the teaching culture of Hong Kong from the perspective of teachers working in higher education who have moved to teaching online. This overarching research objective is pursued through investigating the impact of online learning from within the theoretical frameworks of both Education and Media Psychology, examining how the new media employed in online teaching can transform teaching through its mediation between teacher and learner from an interdisciplinary perspective.

**Keywords** Online English language teaching · Online education · Positive psychology

# 1 Introduction

This paper analyses the impact of online teaching using the perspectival lens of positive media psychology, examining how this application of new media is transforming the experiences of teachers and how it may be leveraged to improve the well-being of students now learning online. Several core questions were answered over the course of this research including: how is online teaching affecting the experience and well-being of teachers; how may any negative impacts be offset; and in what ways can benefits be maximised and enhanced by the implementation of new

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media in teaching? These questions are explored in this study through the undertaking of both primary and secondary research. The study introduces the contextual background to the topic considering the implementation of online teaching in the wake of the COVID-19 pandemic from both a global perspective and that of higher education in Hong Kong. This is followed by a review of the literature on online education, applying an interdisciplinary approach to present a synthesis of literature from within the Education field and a positive psychology approach to Media Psychology. The primary data analysed during this study is comprised of both questionnaire and interview data derived from students of English Language learning online at higher education institutions across Hong Kong. This variety of primary questionnaire and interview data allows for both quantitative and qualitative analyses and the triangulation of findings across both sources. The survey evidence was analysed by applying appropriate statistical and quantitative techniques, whilst an analytical thematic coding approach was applied to the critical review of interview responses. This research has found that online teaching can be leveraged to improve the well-being of students following the paradigmatic shift towards online teaching and learning as precipitated by the COVID-19 pandemic crisis.

#### 1.1 Research Background

The unprecedented and disruptive effects of the 2020 Covid-19 pandemic have shocked and transformed the global higher education industry as digital, remote learning solutions have emerged in the wake of quarantines, lockdowns, and closures (Oraif & Elyas, 2021). For faculty members, this transition means a shift in pedagogical tools, techniques, and strategies as educators have shifted their classrooms from traditional, face-to-face education to online, geographically distant digital solutions (Daumiller et al., 2021). This strategy of proactive pandemic coping has involved the introduction of the massive open online course (MOOC) which combines students of varying backgrounds, geographies, and experience levels into a singular pursuit of curricular achievement (Anderson et al., 2020). In Hong Kong, a city that has initiated her exploration of digital learning as early as 2018, the technological shift towards online learning solutions was efficient and structurally anticipated (Lau et al., 2020). However, for students and teachers, evidence from prior research in this field (Marshall & Wolanskyj-Spinner, 2020; Oraif & Elays, 2021; Rahman, 2020) reveals varied experiences, behavioural challenges, and adaptive limitations. Accordingly, this research adopts a positive psychological approach to analyse student experiences in online tertiary education following the 2020 global pandemic and to assess the impacts of the technological shift towards online learning in higher education.

# 1.2 Research Aim and Objectives

The primary aim of this study is to critically assess the effects of Covid-19 on a paradigmatic shift towards online learning and the influences on higher education teaching strategies in Hong Kong. In accomplishing this research aim, the following core objectives have been pursued:

- To critically discuss the mediative effects of online technologies in shaping the teacher-student relationship.
- To assess the role of new media employed in online teaching on teacher culture and behaviour in Hong Kong higher education.
- To analyse productive learning strategies and student experiences to identify opportunities for improving virtual learning in the future.
- To highlight critical areas of opportunity for refocusing and supporting teacher strategies designed to improve student learning experiences in virtual learning.

# 1.3 Research Questions

Several core research questions that have been answered over the course of this study:

- 1. What are the primary forces shaping new media learning in modern higher education classrooms?
- 2. What role has Covid-19 played in transitioning Hong Kong higher education towards online learning solutions?
- 3. How has new technology altered teaching and learning experiences and created new behaviours amongst teachers and students with reference to English learning in different contexts in higher education?
- 4. How may negative impacts be offset; and in what ways can benefits be maximised and enhanced by the implementation of new media in teaching?

# 1.4 Research Overview

This chapter has provided an in-depth overview of the core aim and objective of this study and outlined the central research questions that were answered during this mixed methods process. The remainder of this paper will progress from a general overview of academic theories and core concepts related to virtual learning experiences to a targeted, positive psychological review of student experiences in Hong Kong virtual learning. Finally, this study will offer recommendations for improving teacher–student relationships and maximising the effectiveness of virtual learning environments in the future.

#### 2 Literature Review

#### 2.1 Introduction

The unprecedented impacts of Covid-19 have facilitated a radical shift in higher education, and as a result, diversified the focus of research in this field of study. By combining teaching strategies with student perceptions of virtual learning, the following sections will comparatively review the extant literature in this field. Key insights related to improving the learning experience and maximising teacher effectiveness are introduced as core themes in the subsequent empirical research.

#### 2.2 Virtual Learning and New Media, a Teaching Perspective

For educators, the "online delivery of courses with work-at-home protocols and ubiquitous online work-related activity creates a lack of physical, temporal, and/or psychological boundaries between school and home" (MacIntyre et al., 2020, p. 1). To cope with such pressures, MacIntyre et al. (2020) observes that teachers develop either approach (e.g., acceptance, support, planning, active coping) or avoidant (e.g., disengagement, denial, blaming, venting) strategies that moderate their productive or unproductive responses. Whilst positive, approach-based coping mechanisms are desirable, Gao and Zhang (2020) remind that the recent pandemic was both sudden and disruptive, resulting in skills, awareness, and experience gaps that affected teacher behaviour and stress management practices. Whereby educators are increasingly proficient with ICT resources, the emphasis on pedagogical and content-specific knowledge resources has limited the translation of these course-based skills into digital and technological solutions to the pressures and stresses of online teaching (Gao & Zhang, 2020; Jiang et al., 2020; Wang et al., 2020). The underlying modality for effective online education involves distinct, techno-social skills which Jiang et al. (2020) argue must be transferred to teaching professionals to support more positive pedagogical responses in the virtual classroom.

The virtual teaching environment subjects students to a disconnected position, distancing their involvement via technological, module, and communicative barriers (Kim & Asbury, 2020). To overcome such constraints, Halim (2021, p. 92) reports on the innovative strategies adopted by an English language teacher in order to ensure that the "teaching was not dull" by adopting scaffolding techniques and interactive communication strategies to improve the virtual experience. Through virtual, synchronised classroom discussions to self-paced learning resources to intraclassroom collaboration and discourse, multimedia virtualisation of the learning process requires integrated solutions that are application-mediated, but socially engaging (Halim, 2021). Whilst integrative activities and engaging content materials may encourage some students to participate productively in the learning process, Yandell (2020) reminds that the heterogeneity of technological, material, and

metacognitive resources possessed by these students means that accommodation and adaptation must be integrated into the teaching modalities. By incorporating various 'breakout rooms', establishing question and answer (Q&A) support procedures, and developing multimedia PowerPoint presentations, Moorhouse (2020, p. 610) recognises that virtual teaching is about adaptive and responsive solution-finding regardless of technological hurdles.

# 2.3 Student Skills, Competencies, and Challenges in Digital Education

Central to understanding the effects of virtual learning environments on student behaviour, researchers (e.g., Weber & Ahn, 2021; Yu et al., 2010) have recently drawn on social learning theory to explain behavioural mirroring, reinforcement, and self-efficacy. Bandura's (1977) conceptualisation of social learning hypothesises that individuals learn behaviours and engage with peers to self-regulate their learning behaviours in order to achieve positive outcomes. Yu et al. (2010) recognise that through social networking, intranets, and online discourse, students are able to develop new skill sets that not only improve their online learning capabilities, but their capacity as students overall. Drawing upon this theory of learning effects, Weber and Ahn (2021, p. 115) observe that if effective, virtual learning environments "provide learners meaningful interactions with their professions and peers, foster a culture of learning, and support multiple learning styles". The problem with this applied theory in virtual environments is that Bandura (1977) predicts a need for social interaction in order to stimulate and reinforce associated behaviours. With universities continuing to adopt the MOOC format of online education, Anderson et al. (2020) confirm empirically that only those students who participate in group exercises and discussions gain access to the developmental skills and social support necessary to improve their overall learning experience.

As communities of practice (CoPs), social linkages across digital channels allow students to actively engage in information seeking, sharing, and discussion via remote portals (e.g., chat rooms, intranet), video chat (e.g., zoom), and interactive experiences (e.g., gaming, creative activities) (Anderson et al., 2020). As students have been exposed to heightened pressures in unfamiliar, virtual education systems, Marshall and Wolanskyj-Spinner (2020) suggest that network-based stress management and support solutions are critical to improving student coping measures and developing strategies for managing emotional and social pressures. Rahman (2020) reports that due to deficiencies in self-regulatory behaviours and student motivations, the effectiveness of the learning experience and the discipline of the virtual classrooms can inhibit educational productivity. By targeting improved student motivation, stimulating active learning experiences, and developing communication solutions that support individual student needs, Daumiller et al. (2021) argue that the risk of student burnout and heightened performative stress can be systematically diluted.

It is the pursuit of familiarity and meaningful experience which Oraif and Elyas (2021) suggest not only elevates student-self regulatory behaviour, but also creates conditions through which teachers can engage more productively with their student population.

#### 2.4 Summary

The disruptive impacts of Covid-19 require a degree of student and educator resiliency that often conflict with personal, technological, and systemic capabilities. From environmental influences to time management, digital identity-shaping and the incongruous effects of virtual learning during the pandemic on student–teacher experiences reveal the need for additional research regarding specific, positive coping and supporting strategies. The following chapter outlines the methods that were deployed to assess the experiences of Hong Kong students thrusted into virtual learning during the pandemic since 2020.

#### **3** Research Methodology

#### 3.1 Introduction

The scope of research surrounding teacher pedagogy and tactics is broad, encompassing a breadth of both social and scientific studies that endeavour to interpret behaviours according to their situational and causal conditions. The current investigation has adopted a pragmatic perspective, applying a positive psychological philosophy to the collection and interpretation of both primary and secondary evidence relate to the effects of Covid-19 on the technological shift towards online learning in higher education studies. The following sections outline the justification for this approach and highlight the sources of evidence collected over the course of this study of mixed methods.

#### 3.2 Research Paradigm

Distinct from the conventions of traditional, pathology-based psychology, a positive psychological paradigm represents the "science and applications related to the study of psychological strengths and positive emotions" (Snyder et al., 2011, p. 18). Derived from social constructions and socio-cultural interpretations, this approach explores the positive contagion forces which shape, sustain, and project health and productive outcomes (Snyder et al., 2011). By focusing on theoretical constructs such as self-determination theory, intrinsic motivation, emotional intelligence, creativity, and quality of life, positive psychology extrapolates strengths and patterns of positivity from both good and bad scenarios to refocus cognitive processes on healthy and productive solutions (Carr, 2013). Whereby Gable and Haidt (2005, p. 104) attribute the positive psychological philosophy to patterns which allow "flourishing or optimal functioning", when applied to empirical research, Sheldon and King (2001, p. 216) argue that the conventions of positive psychology are innately embedded in the study of "ordinary human strengths and virtues". Accordingly, this study was designed to emphasise the positive, productive, and contributory roles of technological immersion and pedagogy in modern higher educational settings.

#### 3.3 Research Approach

Underscoring the design of this study was an initial revelation that positive psychology provides a "different lens though which to understand human experience", deriving a shared language, shared interpretation, and shared understanding from the comparative revelations of the research subjects (Linley et al., 2006, p. 7). Operationalising such comparative pursuits, pragmatism represents a pursuit of causal linkages between both situational triggers and behavioural influences, addressing both the causes and effects of positive empirical outcomes (Morgan, 2014). Accordingly, this study has combined both quantitative and qualitative methods into a single, pragmatic, mixed methods approach to social research that seeks to construct understandings of student experiences with virtual learning from a positive, adaptive perspective of future technological integration (Creswell & Clark, 2017). The quantitative instrument applied to this study is characterised by several targeted sections that were thematically extrapolated from the prior literature in this field:

- Section 1: Demographic Overview: A series of scalar prompts designed to group the participants according to key personal identifiers (e.g., gender, education level) and experiential patterns (e.g., class numbers, contact hours).
- Section 2: Technological Overview: A review of technologies, behaviours, and practices employed during the pandemic and its remote learning expectations.
- Section 3: Online Learning Overview: An assessment of student perceptions regarding online learning before and after Covid-19 using varying 5-point Likert scales to assess opinions and perceptions.

The survey was administered remotely using GoogleDocs and employed a dedicated, internal link within the Hong Kong educational system to encourage participation. Participants include students who are currently reading for associate degrees, undergraduate programmes or postgraduate programmes in Hong Kong. This is a university-wide research project in which data collected from the survey includes students from The University of Hong Kong, The Chinese University of Hong Kong, The Hong Kong University of Science and Technology, The Hong Kong Polytechnic University, The City University of Hong Kong, The Hong Kong Baptist University, and The Open University of Hong Kong. Once the survey results had been collected, additional evidence regarding post-Covid-19 learning experiences was supplemented by secondary sources including academic journals and industry reports. These secondary results were predominately qualitative and designed not only to interpret the effects of the global pandemic on higher learning education patterns, but also forecast the future of digital learning technologies in the educational system in Hong Kong and its world impacts.

## 3.4 Sampling and Participant Selection

To narrow the results captured over the course of this study and focus on student experiences, a non-probabilistic, purposive sampling approach was initially adopted (Bryman, 2015). This approach involved establishing several overarching inclusion criteria including student status (active), online education experience (ongoing), course specifics (English Language) and geography (Hong Kong). Subsequently an opportunistic approach was employed to contact students from a variety of higher education institutions in Hong Kong with courses in English Language as the major medium of instruction. The initial target for this study was established ranging from 200 to 300 participants. A large degree of participation was recorded from the 380 query letters distributed across different online channels, with a total sample of 176 participants (58.7%) completing the survey over the two-month administration period.

#### 3.5 Data Analysis

The results were aggregated using online instruments, summarised in GoogleDocs, and then downloaded into Microsoft Excel to normalise and group the prompts for both visual and statistical analysis. Using various graphing models, visual comparisons of the participant results provided a baseline comparison of means that could be used to interpret groups biases and overarching consensus (Bryman, 2015). Subsequently the software SPSS was also used to conduct statistical comparisons of these weighted means by comparing independent variables (e.g., demographic and experience factors) with dependent variables (e.g., online learning experiences). Singh (2007) recommends a one-way ANOVA comparison of means for administering these comparative tests, resulting in an output of statistical significance (P) that reflects the weighted degree of the quantitative relationship. Crosstabular comparisons were subsequently used to explain these relationships and confirm the significance of the weighted groupings in relation to the virtual classroom transformation.

#### 3.6 Ethical Concerns

This study has critically assessed the perceptions of a diversified population of current students from the tertiary sector in Hong Kong. An array of ethical concerns and risks were observed before administering this survey including exposure and criticism if feedback was revealed to university officials. Accordingly, Punch (2014) recognises that ethical integrity is essential to protect participants from harm (non-maleficence), generating beneficial and objective results (beneficence), and ensuring the fairness of the interpretations. For this study, informed consent was obtained from the participants via the digital link itself that outlined the purpose of the study and the protections that were afforded to each participant (Hammersley and Trainou, 2015). Specifically, such protections included anonymity throughout the process and an at-will survey that could be exited at any time if the questions were deemed unfair or inappropriate (Babbie, 2015).

#### 3.7 Summary

This chapter has outlined the application of the positive psychological approach to a mixed methods study of students' learning experiences in English Language acquisition as a second language in higher education. Through the triangulation of these mixed methods results with the underlying academic theories and emergent intraindustry insights, this research offers a comprehensive overview of the transformative effects of classroom virtualisation and online learning. The following presents these findings in their entirety and discusses their significance relative to the core objectives and overarching focus of this study.

# 4 Data Presentation and Findings

#### 4.1 Introduction

By adopting a positive psychological approach to this study, the primary objective in surveying these tertiary students was to illuminate the positive behaviours and experiences with reference to virtual learning during this complex pandemic period. These findings combined with an overview of the transition from traditional to virtual learning practices in Hong Kong is combined to highlight the transformative effects and influences of a new paradigm in higher education. The following sections demonstrate the triangulation of the evidence with the core concepts and theories in this field to illuminate a positive pathway towards the progression of digital teaching and learning experiences as a game changer.

# 4.2 Overview of Online Learning in Hong Kong

In 2018, Hong Kong education officials introduced Responsive4U, a "blended learning experiment amongst four local universities" that enabled students to take for-credit courses administered via a combination of online and in-person classes (Lau, 2020, p. 1). By 2020, the programme had expanded to encompass 11 courses which had been attended by 2,000 students (Lau, 2020). With a budget expected to eclipse HKD\$781.2 million for the three-year programme (2019-2022), the anticipatory experiment proved visionary at the start of the 2020 pandemic, establishing the model for transitioning Hong Kong's higher education into a remote learning sphere (Lau, 2020). Inside programme feedback predicts that following the success of the intra-pandemic response, hybrid or flexible education programmes which combine both online and offline courses will be expanded as structural and temporal barriers are gradually eliminated from the higher education practice (Lau, 2020). Through innovative technologies such as an artificial intelligence (AI) chatbot, instructors are able to field questions from thousands of students without requiring on-demand responses, improving downstream communication efficiency, and providing support to students in the event of uncertainty or concern (Lau, 2020).

Despite the potential advantages of programmes like Responsive4U, a recent assessment of student experiences with digital education conducted by Xiong et al. (2020) revealed a very low satisfaction rate (just 27%) across more than 1,200 responses from students at eight public universities in Hong Kong. Critical of the online learning experience, student feedback suggested that online learning effectiveness was lower than face-to-face, whilst more than 54% indicated that their study time efficiency was negatively effected by the virtual environment (Xiong et al., 2020). Central to such problems were an array of concerns, with a lack of selfdiscipline (60%) and a poor learning atmosphere (56%) receiving the majority of the responses from these virtual learning students (Xiong et al., 2020). Academic research in this field conducted by Wang et al. (2019) has demonstrated that the likelihood of student distraction in online environments is greater, creating barriers to effective study habits and information retention. Whilst, at the same time, Hong Kong educators have reported that hand's-on and face-to-face learning are especially essential for some specific programmes in higher educational levels (e.g., clinical studies, medicine, speech pathology (Matchar, 2020).

With inside feedback from university educators across Hong Kong institutions suggesting that virtual learning will undoubtedly remain a part of the educational experience moving forward, the digital revolution continues to challenge normative paradigm of learning and online interaction (Matchar, 2020). By refocusing teaching curriculum and content, instructors have adapted to Zoom-based and virtual meeting sessions, encouraging students to engage in more productive work habits to maintain programme momentum (Lau et al., 2020). Lecturers are equally challenged, often-times recording multiple videos and distributing content virtually without the advantages of face-to-face assessments, interactions, and communication (Lau et al., 2020). By adopting new strategies for developing and sustaining rapport with students, Lau

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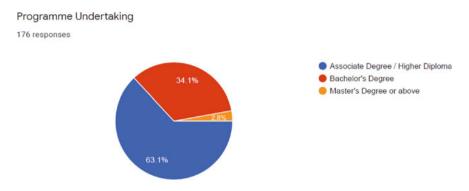


Fig. 1 Programme undertaking

et al., (2020, p. 1) report that instructors are transitioning otherwise "boring and difficult subjects" towards more positive, productive virtual solutions for resilient students engaged in intra-pandemic growth and education.

# 4.3 Survey Findings

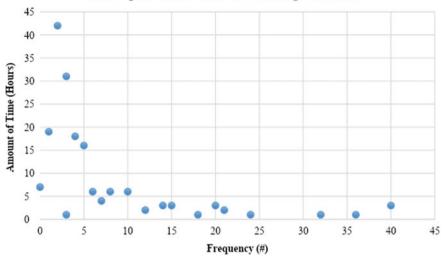
The following sections analyse the results of the quantitative survey, critically comparing key perspectives offered by these university students in Hong Kong from 2020 to 2021 in order to assess their digital learning experiences and competency (both positive and negative).

#### 4.3.1 Demographic Overview

The initial prompts forming the basis for the independent variables were demographic or experiential. For example, the gender bias in this study was equitable with 52% of the participants identifying as male and 48% identifying as female. There was a substantial bias in the age range, with 98.3% between the ages of 18 and 30, a predictable response for a sampling of university students. From a programme perspective, Fig. 1 visualises the weighted distribution, with 63.1% of the participants pursuing their Associate Degree or Higher Diploma and an additional 34.1% pursuing their Bachelor's Degree.

#### 4.3.2 Online Learning Overview

Given the suddenness of the 2020 pandemic, 61.4% of the students reported that they had not received any training or support for using virtual classrooms prior to their



#### **Time Spent on Revision of Learning Materials**

Fig. 2 Time spent on revision of learning materials

initial attendance. Amongst those students (38.6%) who did receive support, stepby-step directions and virtual instructions were the most common modes of preparation and training. Figure 2 summarises the perceptions of the quality of training or support received by these students for online learning, whereby just 28.9% found such training good or excellent, whilst the majority (49.4%) identified the training as average.

To assess the effectiveness of digital learning on student experiences, comparisons were drawn between before and after-effects of this learning process. For the perceived efficacy of the online learning environment before and after Covid-19, respectively, the change in mean response from 3.02 before Covid-19 to 3.19 after Covid-19 suggests that there was improvement in the general belief that the online learning environment was believed to be effective.

A second set of prompts evaluated the perceived effectiveness of assessment before and after Covid-19. With a pre-Covid-19 mean of 3.08 and a post-Covidmean of 3.23, these findings confirmed that student perceptions of effectiveness were higher following Covid-19 experiences. An ANOVA comparison of means revealed a statistically significant relationship between the After-Covid-19 perceptions of assessment and classroom size (F = 7.442, P = 0.000). Crosstabular analysis revealed that participants in smaller courses were most likely to find online assessment effective, whilst participants in larger courses felt more ambiguously about such assessment practices. A statistically significant relationship with Gender (F = 3.956, P = 0.048) was also observed in relation to after-Covid-19 assessment. Crosstabular analysis revealed that male students (30.8%) were less likely to find assessment to be effective or very effective than their female (45.2%) counterparts. By comparing the pre- and post-covid perceptions regarding online as the new learning mode with a pre-Covid-19 mean of 3.31 and a post-Covid-19 mean of 3.27, these findings reveal that the attitude towards online learning declined during this period. In fact, 19.3% of the participants opposed to online learning after Covid-19 as compared to 13.1% before the transition.

Just 30.1% of the students felt that online learning for the upcoming semester would be effective. In contrast, 32.4% believed that such learning processes would be ineffective, whilst the remainder (37.5%) were uncommitted either way. ANOVA analysis of the relationship between programme undertaking and expectation of learning continuously online revealed a statistically significant result (F = 3.592, P = 0.030). Crosstabular analysis revealed that students in their lower level studies (Associate Degree and Higher Diploma Degree) would be more open to online study than those in a Bachelor's or Master's Degree course.

#### 4.4 Discussion and Analysis

Despite the digitalisation of higher education solutions following the Covid-19 outbreak, the transition away from classroom experiences has not wholly distanced students from their instructors, educators, and peers. Instead, new strategies for engaging students in online learning including breakout rooms, class discussions, Zoom meetings, and message boards have been developed to support student participation (Oraif & Elvas, 2021). Such communities of practice (CoPs) integrate teacher moderators and student leaders in the negotiation of the learning process, requiring both productive collaboration and active engagement to improve the nature of these exchanges (Halim, 2021). The CoP insights drawn from Anderson et al. (2020) reveal the social advantages of collaborative learning in MOOC courses and largescale educational environments where individual consideration is marginalised by the scope and integration of the classroom itself. The feedback from the students in this survey confirms that due to the accelerated nature of this transition, many students did not receive the training and support they needed to thrive online. Moving forward, it is imperative that educational institutions consider such needs and develop additional support tools to improve the seamlessness and effectiveness of the digital instruction.

For educators confronted with the sudden and structurally radical shift from traditional to digital learning, MacIntyre et al. (2020) acknowledges an adaptation period which involves coping strategies that are determined by various forces including teacher experience, motivation, agenda-setting, and technical skillsets. Where educators do not feel sufficiently competent to engage in digital learning, experience gaps can lead to higher stress levels and less effective teaching practices, potentially threatening the learning effectiveness of the online education process (Gao & Zhang, 2020). It was evident from the feedback from these students that this transition has resulted in a somewhat effective and somewhat supportive online education environment that is likely associated with two overlapping variables: the lack of preparedness for digital learning and the lack of teacher preparedness for digital pedagogy and technological support. As multi-role adopters in this process, University educators in Hong Kong have been challenged not only to support their classes in terms of curricular dissemination, but also in terms of technological support and accommodation, expectations that can be mitigated in the future through improved system, student, and teacher preparedness.

There are several considerations that were extracted from the student feedback that can be weighed in relation to teacher strategies and online learning support. Firstly, students are interested in high-engagement content that mirrors their expected learning cycle. This means that if educators communicate expectations up front, create opportunities for self-paced learning, and outline attainable targets or goals, students will have greater opportunities to improve their time management, school-life balance, and self-motivated learning outcomes. Further, there is a distinction in digital learning, whereby Rahman (2020) observes a difference in accountability expectations as students take control over their learning outcomes. In this way, educators become allies and students participate in an educational process that, although moderated and supported by the instructor, is not dependent upon the same daily lectures and downstream trickle of knowledge. Instead, self-regulatory behaviour based upon developing learning capabilities is viewed by Oraif and Elyas (2021) as a core antecedent to high-functioning digital learner status.

Despite the flexibility of digital learning and the critical role played by virtual learning during the global pandemic, Marshall and Wolanskyj-Spinner (2020) acknowledge that many students lack self-regulation and motivation to participate effectively in such solutions over the long term. As a result of these skill deficiencies and behavioural limitations, Daumiller et al. (2021) observe attitudinal barriers that have created conflicts between the idealised educational scenario and student experiences. Such findings are confirmed in the current study that has revealed a perceptual division amongst English students wherein some have found English learning to be effective, whilst others have failed to achieve similar outcomes and felt under-supported in their learning. Daumiller et al. (2021) conform to a similar phenomenon in relation to student burnout, whereby some students viewed digital learning as a positive challenge, whilst others adopted a negative attitude which shaped their course perceptions and their perceptions of their instructors as well. In reviewing the open-ended findings from the participants in the current study, the evidence suggests that students who thrive in digital learning will develop productive coping strategies such as modifying their learning environment, engaging in recorded materials, and communicating with educators directly. Other students who exhibited frustrations cited a lack of social experiences and motivation, as well as poor performance as their core frustrations and sources of burnout. These findings offer a baseline for support students in the future through study habits and coping strategies that target student-centred needs.

#### 4.5 Summary

This chapter has presented the results of the empirical findings and revealed a generally positive sentiment towards digital learning amongst learners in English Language acquisition in Hong Kong. However, the evidence also indicates that without additional support and programme development, students in tertiary education will continue to experience pressures of performativity and isolation. The following chapter will conclude these findings and offer some recommendations for further research in this field.

#### 5 Conclusion and Recommendations

#### 5.1 Conclusion

First and foremost, the authors would like to thank their academic fellows who kindly disseminated and encouraged their students to join this research project. Since 2018, Hong Kong has established its position as a digital leader by introducing online and hybrid courses designed to meet the changing needs of students and educators in higher education in Hong Kong. As a result of the 2020 pandemic, the unprecedented shift towards virtualisation of most university courses has resulted in positive and negative experiences amongst students and educators. Accordingly, the primary aim of this study is to critically assess the effects of Covid-19 on a paradigmatic shift towards online learning and the influences on tertiary education and its teaching culture in Hong Kong. By initially reviewing the core concepts and theories in the field of study, insights regarding the transformative effects of digital learning experiences are introduced, whilst intra-pandemic findings from prior research are illuminated. Subsequently, this research captures empirical feedback from university students in Hong Kong and applies a positive psychological analysis to the consideration of future teaching strategies and educational opportunities.

This study has determined that students must develop coping mechanisms and stress-reduction strategies in order to thrive and engage in digital classroom activities. Educators can help achieve such outcomes by integrating multiple layers of pedagogy into the educational process including group work, direct discussions, video lectures, and summary insights. For learners in English Language, practice and participation are always needed. Utilising various technological resources and tools should be considered before designing future curriculum. Ultimately, the significance of this unplanned Covid-19 experiment in Hong Kong has manifested a growing range of online courses that will be supported by a teaching population that is increasingly aware of student needs, capable of self-regulation and stress management, and are flexible in the delivery of effective, integrated classroom experiences.

# 5.2 Limitations

The empirical findings presented over the course of this study were extrapolated from a structured questionnaire that was administered to students across major universities in Hong Kong. The regionalisation of this study is limited and purposeful to allow direct comparability of the results. By focusing on student experiences and perceptions, these insights have highlighted opportunities for educators to support future learning outcomes and address some of the hurdles and challenges that were identified during the pandemic. This limitation has restricted perspectives from educators and universities; however, secondary evidence from industry reports and university feedback has been used to supplement these findings.

## 5.3 Recommendations

The current study has extrapolated insights from student perceptions regarding the effects of digitalisation on intra-pandemic learning experiences. Additional research is needed to explore the effectiveness of learning strategies and habits, whilst further feedback from inside stakeholders should also be considered. The following two studies are recommended for expanding the scope of research in this field:

**Recommendation 1: A University-Based Case Study of Digitalisation**: By capturing insider perspectives regarding the process of digitalisation and the underlying effects on pedagogy, it is predicted that strategies for improving digital learning can be introduced at the levels of educators, universities, and managerial administrators.

**Recommendation 2: A Student Assessment of Digital Learning Habits**: Through an experimental assessment of the effects of positive digital learning habits on student learning capabilities, it is predicted that blueprints for improving student learning in digital environment can be developed to support future student development.

#### References

- Anderson, V., Gifford, J., & Wildman, J. (2020). An evaluation of social learning and learner outcomes in a massive open online course (MOOC): A healthcare sector case study. *Human Resource Development International*, 23(3), 208–237.
- Babbie, E. R. (2015). Practice of social research (4th ed.). Cengage Learning.
- Bandura, A. (1977). Social learning theory. Prentice-Hall.
- Bryman, A. (2015). Social research methods (4th ed.). Oxford University Press.
- Carr, A. (2013). Positive psychology: The science of happiness and human strengths. Taylor & Francis.
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research* (3rd ed.). Sage Publications.

- Daumiller, M., Rinas, R., Hein, J., Janke, S., Dickhauser, O., & Dresel, M. (2021). Shifting from face to face to online teaching during Covid-19: The role of university faculty achievement goals for attitudes towards this sudden change and their relevance for burnout/engagement and student evaluations of teaching quality. *Computer sin Human Behavior*, 1–15.
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology. *Review of General Psychology*, 9, 103–110.
- Gao, L. X., & Zhang, L. J. (2020). Teacher learning in difficult times: Examining foreign language teachers' cognitions about online teaching to tide over Covid-19. *Frontiers in Psychology*, 11, 1–14.
- Halim, A. (2021). Online instructional strategies for English language learning during Covid-19 pandemic: A case from a creative teacher. *Journal of Applied Linguistics and Literature*, 6(1), 87–96.
- Hammersley, M., & Trainou, A. (2012). *Ethics in qualitative research: Controversies and contexts*. Sage Publications.
- Jiang, H., Jiang, L., & Yu, R. (2020). The construction of online teaching modes during Covid-19. *China Educational Technology*, 399, 40–41.
- Kim, L. E., & Asbury, K. (2020). Like a rug had been pulled out from under you: The impact of Covid-19 on teachers in England during the first six weeks of the UK lockdown. *British Journal* of Educational Psychology, 90, 1062–1083.
- Lau, J. (2020). Online education: How Hong Kong got ahead of the game. *Times Higher Education*, Retrieved June 26, from Online education: how Hong Kong got ahead of the game | Times Higher Education (THE).
- Lau, J., Yang, B., & Dasgupta, R. (2020). Will the coronavirus make online education go viral? *Times Higher Education*, Retrieved March 12, from Will the coronavirus make online education go viral? | Times Higher Education (THE).
- Linley, P. A., Joseph, S., Harrington, S., & Wood, A. M. (2006). Positive psychology: Past, present, and (possible) future. *The Journal of Positive Psychology*, 1(1), 3–16.
- MacIntyre, P. D., Gregersen, T., & Mercer, S. (2020). Language teachers' coping strategies during Covid-19 conversion to online teaching: Correlations with stress, wellbeing, and negative emotions. *System*, 94, 1–13.
- Marshall, A. L., & Wolanskyj-Spinner, A. (2020). Covid-19: Challenges and opportunities for educators and Generation Z learners. *May Clinic Proceedings*, 95(6), 1135–1137.
- Matchar, E. (2020). What happened when Hong Kong's schools went virtual to combat the spread of coronavirus? *Smithsonian Magazine*, Retrieved March 9, from What Happened When Hong Kong's Schools Went Virtual to Combat the Spread of Coronavirus | Innovation | Smithsonian Magazine.
- Morgan, D. L. (2014). Integrating qualitative and quantitative methods: A pragmatic approach. Sage.
- Moorhouse, B. L. (2020). Adaptations to a face-to-face initial teacher education course forced online due to the Covid-19 pandemic. *Journal of Education for Teaching*, *46*(4), 609–611.
- Oraif, I., & Elyas, T. (2021). The impact of Covid-19 on learning: Investigating EFL learners' engagement in online courses in Saudi Arabia. *Educational Science*, 11, 1–19.
- Punch, K. (2014). Introduction to social research: Quantitative and qualitative approaches (3rd ed.). Sage Publications.
- Rahman, M. M. (2020). Challenges and solutions of teaching English as a foreign language online during a global pandemic like Covid-19: Saudi EFL teachers' perspectives. *Journal of Southwest Jiaotong University*, 55(6), 1–9.
- Sheldon, K. M., & King, L. (2001). Why positive psychology is necessary'. *American Psychologist*, 56, 216–217.
- Singh, K. (2007). Quantitative social research methods. Sage Publications.
- Snyder, C. R., Lopez, S. J., & Pedrotti, J. T. (2011). *Positive psychology: The scientific and practical explorations of human strength*. Sage Publications.

- Wang, C., Hsu, C. H. K., Bonem, E. M., Moss, J. D., Yu, S., Nelson, D. B., & Levesque-Bristol, C. (2019). Need satisfaction and need dissatisfaction: A comparative study of online and face-to-face learning contexts. *Computers in Human Behavior*, 95, 114–125.
- Wang, Y., Wang, Y., Li, Y., & Li, D. (2020). Countermeasures and suggestions for improving the quality of online education during epidemic prevention and control. *China Medical Education Technology*, 34, 119–124.
- Weber, W., & Ahn, J. (2021). Covid-19 conferences: Resident perceptions of online synchronous learning environments. Western Journal of Emergency Medicine, 22(1), 115–118.
- Xiong, W., Jiang, J., & Mok, K. H. (2020). Hong Kong university students' online learning experiences under the Covid-19 pandemic. *Higher Education Policy Institute*, Retrieved August 3, from: Hong Kong University students' online learning experiences under the Covid-19 pandemic - HEPI.
- Yandell, J. (2020). Learning under lockdown: English teaching in the time of Covid-19. *Changing English*, 27(3), 262–269.
- Yu, A. Y., Tian, S. W., Vogel, D., & Kwok, R. C. W. (2010). Can learning be virtually boosted? An investigation of online social networking impacts. *Computers & Education*, 55, 1494–1503.

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