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Testing the Water: Implementing a Soft CLIL Approach for Future Global Engineers at a Japanese University

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1 Introduction

1.1 The Go Global Japan (GGJ) National Project and a New English Course for Undergraduate Engineering Students

This chapter reports a series of new English courses tailored to second, third, and fourth-year undergraduate engineering students, in an effort to find the best educational practice during the Ministry of Education, Culture, Science, Sports and Technology (MEXT) Go Global Japan (GGJ) national project from 2012 to 2017. The MEXT GGJ national

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project (formerly known as the Project for Promotion of Global Human Resources Development) was aimed at overcoming Japanese youngsters' "inward tendency" and developing professionals who can positively tackle challenges and prosper on the global stage as a springboard for enhancing Japanese global competitiveness and strengthening bonds between nations (MEXT, 2018). With this objective in mind, the courses were designed by three teachers with different backgrounds and nationalities at Yamaguchi University in Japan. Takashi Uemura is an associate professor in the Faculty of Engineering. Prior to his English language teaching career, he worked in the banking, auditing, and finance industries for approximately ten years. Graeme Gilmour is Associate Professor of English. He comes from Scotland and has taught English at a variety of levels in Japan from conversation schools to undergraduate students at the university level. Luis Costa studied Computer Science and Engineering at Instituto Superior Técnico in Portugal. Luis worked in industrial and research positions in Portugal and Norway, where he contributed to national and international projects.

Yamaguchi University's (2012) GGJ proposal to MEXT had the double aim of developing students as global professionals in STEM (Science, technology, engineering, and mathematics), especially in engineering in this course, and improving their English proficiency. The former is intended to develop professionals who understand different cultures and possess an awareness of working overseas through the university curricula. The latter is intended to produce students who hold TOEIC® Listening & Reading Test[1] 650, which is the proficiency level the university considers adequate for demonstrating students' ability to work in overseas branch offices or factories. Improvement of linguistic abilities also includes launching an instructional programme to develop academic writing, logical explanation, and discussion skills. In sum, a combination of challenges was encountered by the three teachers: (1) developing globally aware professionals, (2) improving

[1]TOEIC is a registered trademark of Educational Testing Service (ETS). This publication is not endorsed or approved by ETS.

TOEIC® Program[2] scores, (3) developing academic writing skills, and (4) improving logical explanation and discussion skills.

It was decided that a Content and Language Integrated Learning (CLIL) approach would fit our English as a Foreign Language (EFL) context due to its dual-focused educational approach to teaching and learning both content and language simultaneously by means of an additional language (Coyle, Hood, & Marsh, 2010). In other words, content will be the topics that inspire engineering students who wish to prosper as full-fledged global engineers, and language will be English for academic writing, and presentations and discussions, which is inevitably beneficial for students to achieve the target TOEIC® Program score.

1.2 Development of Technical Communication Courses

With the positive inspirations and potential of CLIL in mind, the three language practitioners introduced a series of English courses that are individually designed to cater for future global engineers. The courses are also carefully sequenced from the second to the third and fourth years of the engineering degree. Takashi Uemura is in charge of Basic Technical Communication (BTC) for second-year undergraduate students. Graeme Gilmour is responsible for Technical Communication I and II (TCI and II) for third- and fourth-year students, and Luis Costa is in charge of Advanced Technical Communication (ATC) for third- and fourth-year students (see Table 8.1).

BTC is a one-year practical English business communication course which is designed to teach business as content and business English as target language skills, simultaneously preparing for the TOEIC® Program. Both components are closely intertwined since business-oriented lexical items and context are frequently occurring in the TOEIC® Program. Thus, CLIL has enabled the "dual-focused educational approach" for effective learning for future engineers (Coyle et al., 2010, p. 1).

[2] The Test of English for International Communication® (TOEIC) is an English language test designed specifically to measure the everyday English skills of people working in an international environment.

Table 8.1 The classes for the GGJ project

Lecturer	Students	Module name
Uemura	2nd year students	Basic Technical Communication (BTC)
Gilmour	3rd and 4th year students	Technical Communication I and II (TCI and II)
Costa	3rd and 4th year students	Advanced Technical Communication (ATC)

TCI is an academic writing course with a focus on engineering topics, while TCII is an ESP course devised specifically for undergraduate engineering students. Classes consist of students from a variety of international backgrounds. Although the majority of students are Japanese, there are also Malaysian, South Korean, and Chinese participants. The students' English language level ranges between B1 and B2 on the Common European Framework of Reference for Languages (CEFR) scale.

The ATC class was devised to support the development of essential English skills for engineers and researchers: oral presentations, academic writing, and technical discussions.

As the class is available to students studying different fields of engineering such as Civil, Electrical, or Chemical, a varied set of topics was selected to foster technical discussions. These topics are driverless cars, Japan's energy crisis, cloud computing, natural materials, genomics, and remote sensing. Last year, students were asked to choose an additional technical topic that they would like to discuss in class. The topic chosen was "Diversity", which is not strictly a technical topic. However, this topic was used in class since it was possible to find materials enabling the discussion of the relation between diversity and the development of technology.

2 Course Design

Due to space limitations, this section selects only one lesson plan of a unit from the BTC course regarding corporate structure and corporate profile research (see Appendix 1). Section 3, however, describes the classroom practices of all three courses.

2.1 Warmer

The initial activity is intended to activate what students know about business content and relevant English vocabulary and expressions. The teacher shows pictures of departments in a typical manufacturing company such as *production department*, *human resources (HR) department*, and *research and development (R&D) department* (see Appendix 2). Each picture contains an employee doing a specific task. The students are asked to answer what each employee is doing through the teacher's open-ended questions and multiple-choice questions. These activities are designed to prepare the students for TOEIC® Program listening comprehension tasks since similar tasks can be seen in the test. With students' knowledge of what is being done in each picture, the teacher introduces what each department is termed in English. This way, students' prior knowledge will be associated with their new learning.

2.2 Main Activities

Through the use of the audio materials originally developed by Uemura, the students have rich input and immersion into business conversations featuring both American and British accents (see Appendix 3). For example, in the recorded dialogue for this unit, an American HR staff member is taking a new British recruit on an office tour at a multinational company. Key terms include departments such as General Administration Department and Shipping Department, and business terms and expressions related to personnel, such as *supervisor, clerical work, incentive, quota*, and *climb the corporate ladder*. One of the main topics to be learned in this unit is corporate structure. Therefore, it is essential that the students understand the departments in a typical manufacturing company while inferring their functions from business genre-specific terms purposefully spread throughout the dialogue.

Multiple-choice questions catering for the TOEIC® Program are followed by peer and group discussions. That is, answers for the multiple-choice questions based on the audio dialogue are first discussed in pairs. Then, the students listen to the dialogue again and share their

understanding and expressions that they have picked up in groups of four to six. To consolidate the personnel-related content of the dialogue, the teacher gives a short lecture on meritocracy and the seniority system entirely in English. The students are then asked to demonstrate their understanding of the short lecture using their notes in pairs. This activity helps cement students' understanding before moving on to group discussion about the pros and cons of meritocracy or the seniority system. Group leaders are assigned to give a presentation to the whole class about the pros and cons using a whiteboard.

The other topic covered in the lesson is corporate profile research. The teacher selects two or three listed companies before class and shows their online annual reports to the whole class. This corporate profile research will also be helpful for students' future job-hunting and global career development. The students are asked to find designated information in groups using the annual reports such as strengths of the company and the company's philosophy (see Appendix 4). Since authentic materials like these often include a great deal of less frequent genre-specific vocabulary, the teacher's intervention is necessary to facilitate and encourage student group learning. This is done by guiding students to the parts they should skim-read or read for detail by collaboratively checking new vocabulary in the dictionary. Student groups need to compare, analyse, and evaluate the introduced companies after the corporate profile research. Finally, group leaders are assigned to give a presentation on designated information about each company and explain why they prefer one of the companies.

2.3 Reflections

The students are instructed to close their textbooks and notebooks and should answer three or four comprehension questions in the distributed worksheet (e.g., (1) Write as many departments as possible of a typical manufacturing company. (2) Select three departments and write what the people in those departments generally do. (3) Why do you think annual reports are useful when looking for a job?). This reflection is followed by pair discussion and peer teaching. If time allows, teacher-student

assessment is conducted. The students are randomly chosen by the teacher, and they should answer the aforementioned questions without looking at their answers written in their report.

3 Implementation of the Course

3.1 BTC Course

The content is aimed at developing engineering students' mindset as future global engineers who can become successful in a highly competitive global labour market. For that purpose, topics include corporate structure (introducing what departments there are in a typical manufacturing company and what they do in daily operations) and corporate research (a small project to grasp the meaning of a corporate profile through the examination of annual reports) as described in the lesson plan in the previous section. These topics are closely intertwined with what students should know before attending future job interviews. Therefore, the content is practical and motivational for the learners.

As Coyle et al. (2010) state, communication in CLIL is synonymous with language which consists of three components: language *of* learning, language *for* learning, and language *through* learning. This section summarises each definition by Coyle et al. (2010) along with examples used in the BTC class that overlap with frequently occurring items in the TOEIC® Program. Language *of* learning is genre-specific language such as *research and development (R&D), human resources (HR), shipping*, and *general and administration* that collocate department (of companies). Language *for* learning is characterised as the kind of language necessary to access new knowledge or learning in a foreign language classroom setting. For example, BTC classes involve a lot of group discussions, where the students need to apply expressions for clarification (e.g., *Are you saying that* Company A has more advanced technology?), eliciting ideas from their classmates (e.g., *What do you all think?*), demonstrating agreement and disagreement in a polite fashion (e.g., *I'm afraid I don't agree.*). Finally, language *through* learning posits the principle that effective learning

cannot be realised without actively involving language and thinking amongst learners. Therefore, CLIL entails rich interactions in which learners' articulation of understanding leads to deeper learning. New linguistic items and associated meanings encountered in the CLIL classroom need to be captured, recycled, and strategically developed through teacher-student collaboration. Some examples are the aforementioned departments of a company and the terms appearing in annual reports such as *procurement, relocate, retail store*, and *headquarters*.

The BTC class involves three pedagogical strategies: (1) Performances of Understanding (PoUs) for facilitating learner cognitive development from lower-order thinking skills (LOTS) to higher-order thinking skills (HOTS) (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956), (2) comparison and analysis of two listed companies by means of examining their annual reports, and (3) presenting which company the learners want to work for in the future using their own words and ideas and pointing out the potentials of the company that are not explicitly stated in the annual reports. The cognitive facet of CLIL tends to focus on the importance of HOTS development. Nevertheless, there seem to be few pedagogical debates on how learners can effectively shift their LOTS to HOTS in a CLIL context. The first element of PoUs refers to the activities provided for the learners to demonstrate their understanding by applying the knowledge gained in the lecture or lesson materials in new and visible ways (Blythe, 1998). For example, CLIL lessons generally entail rich input. Thus, CLIL teachers are often concerned about whether their input has been understood correctly. Likewise, CLIL learners may also want to confirm that their understanding is accurate. It is proposed that the teacher's input be divided into several parts, and, at the end of each part, the students can choose to demonstrate their understanding by giving an oral or graphical presentation to their classmates and the teacher so that the input can be digestible for the learners and their understanding can be visibly demonstrated. PoUs will enable the learners to solidify and apply their understanding in their own fashion. Therefore, PoUs will help bridge learners' LOTS and HOTS. The sequence of strategies outlined above aims to gradually enable the learners to create new perspectives, which are deemed to be the highest level of HOTS.

Another aspect to be considered in the CLIL class is authenticity. Uemura (2013) points out that because of his previous international professional experiences in auditing, banking, and finance and accounting and his current position as a Japanese EFL teacher, he can be considered both a content and a language teacher. When the class encounters a complex business term, the teacher purposefully includes anecdotes associated with the term. Authenticity rests with the teacher narrative, which contributes to attracting the learners' attention, arouses their curiosity, and enhances their motivation in class. Furthermore, the students are instructed to access authentic annual reports of two designated listed companies online in class.

In the BTC class, the students are guided to which sections they should skim-read or read carefully so that they can comfortably grasp the content of the authentic annual reports and recognise their novelty and usefulness for their future job-hunting. For example, before the project, the teacher asks several discussion questions that the groups of students need to answer through a collaborative project such as *What does the company do?*, *What are the strengths of the company?*, and *What is the company's philosophy?* First, the teacher demonstrates how annual reports are generally organised using the table of contents and corresponding pages. Then, the teacher has the students scan the headlines and skim-read the relevant summary to get the gist of where in the report they should focus on to answer the discussion questions. If the students have time and ability, they are guided to skim-read topic sentences of the passage they become interested in. Then, the teacher introduces frequently occurring vocabulary and expressions in the TOEIC® Program, which can also be seen in the annual reports. This teacher intervention often brings about new cultural discovery for the learners: the connection between authentic English annual reports and an English proficiency test. In other words, the students are invited into the broader global business world from a narrower context of classroom English learning exclusively for an English proficiency test. Finally, the students are instructed to read the summary and passages they are interested in to answer the discussion questions more precisely.

The following section moves on to discuss the compatibility of Technical Communication I and II with a CLIL approach.

3.2 TCI and TCII Courses

There is a lot of potential for CLIL in a Japanese university setting in general and in Yamaguchi University's faculty of engineering in particular. The much-touted flexibility of the approach is perhaps its greatest strength: Ioannou Georgiou (2012, p. 479) states that "the rapid and widespread adoption of CLIL as a practical solution has resulted in a range of models being developed to fit specific contexts". To exploit this apparent flexibility, TCI and TCII (both developed *without* using a CLIL framework) were examined closely in order to identify areas of possible overlap and compatibility. Throughout the course of the current semester, it has become increasingly apparent that aspects of all four of Coyle's components, content, communication, cognition, and culture, are touched upon regularly. Of the four essential elements, culture is perhaps the most prominent. According to Dale and Tanner (2012, p. 13), "CLIL learners learn about the 'culture' of a subject, and how to think, write and speak like specialists". These are essential skills for students looking to thrive as engineers in an increasingly globalised workplace. This aspect of culture is emphasised in the courses, particularly within academic writing, where a selection of essential genre structures relevant to science and engineering students are analysed during the courses. Content is delivered using the *Teaching Learning Cycle*: the *Teaching Learning Cycle* is a scaffolded approach which helps students to engage with and construct authentic texts. It is based largely on the work of Halliday and Painter, who characterised the essence of successful language learning as needing "guidance through interaction in the context of shared experience" (Martin & Rose, 2012, p. 58).

An example of this approach can be found in TCII (Gilmour, 2015) where students are asked to focus on the language used in engineering product descriptions. In this lesson, participants are required to use authentic text examples from an online shop selling construction equipment. They are shown examples of target texts and are directed towards common language features and similarities in the structure of the genre examples. In small groups, the students are then asked to jointly *deconstruct* one of the texts (step one of the *Teaching Learning Cycle*) and to

place the relevant parts into corresponding sections in a simple table in the TCII textbook (see Fig. 8.1). This part of the cycle is repeated with a number of similar texts. Once they have familiarised themselves with the genre features, they move on to *joint construction*, the next step of the *Teaching Learning Cycle*. Working in groups, they select a product relevant to their field of study and attempt to jointly construct a product description. They are again asked to focus on recurrent language patterns of the genre. Other language features such as common collocations and phrases used to highlight features and benefits are introduced at this point. Once their understanding of the genre structure is consolidated, they move on to the final part of the cycle; *independent construction*. This part is completed as a homework assignment in which students are

What it is	What it does/what was it invented for?
What it looks like/what parts it has	How it works

Fig. 8.1 TCII product description template

required to compose a product description of an imaginary new engineering product. The cycle is used regularly in both TCI and TCII.

It could be argued that a carefully scaffolded approach like genre analysis and the associated *Teaching Learning Cycle* are tailor made for CLIL. Indeed, the parallels and apparent compatibility are striking. The method incorporates not only the cultural aspect discussed at length above, but also content (authentic science and engineering texts are used throughout the course and are approached using the *Teaching Learning Cycle*), communication (students work in groups throughout the cycle to work towards jointly constructing coherent texts) and cognition (students are required to develop their higher-order thinking skills when researching and producing a variety of texts throughout the courses). Some relatively minor modifications to the *Teaching Learning Cycle* may be necessary in order to more closely mirror a truly CLIL approach. However, the incorporation of the approach into a more CLIL based curriculum going forward has the potential to bear fruit and merits further investigation.

3.3 ATC Course

The main purpose of the ATC class was to develop students' English skills, not teaching engineering. However, the heterogeneity of both students and topics also allows students to complement their knowledge of the engineering field that they are studying with knowledge of other engineering fields.

While designing materials for the ATC class, one of the main goals was authenticity; all the texts and videos used in the activities are either authentic materials (not specifically produced for language teaching) or based on authentic materials. We were aware that these materials could be challenging for the students, but as this class was intended for the students at Yamaguchi University possessing the best English skills, we were hoping that this difficulty could be overcome by the students' strong motivation and genuine interest in developing their skills. The materials developed for the ATC class were compiled in a textbook which is currently being used at Yamaguchi University (Hoysted & Costa, 2015) (see Appendix 5).

The ATC class includes activities based on authentic texts and videos about a selection of technical topics. To get a maximal benefit from the ATC class, students are expected to read the texts and watch the videos before the class. These activities are intended to introduce the students to vocabulary related to the topic and enable them to practise their listening and reading skills. The vocabulary exercises are based on words present in the texts and videos for which students may have greater difficulties. These are mainly technical words or words included in the Academic Word List (Coxhead, 2000).

Additionally, the ATC textbook also includes a number of pictures and illustrations to motivate the students for discussion around the technical topics. All these activities build into the discussion itself, which is further motivated by questions related to each topic.

The class was not designed specifically following a CLIL approach, but eventually it ended up including a good number of the features generally identified with CLIL. In different degrees, all the key features of Coyle's 4Cs framework are present in the ATC class. There is obviously content in the texts, videos, and illustrations used in the ATC textbook to foster the discussion about the different technical topics. Besides this content, students have the option to select an additional technical topic that they would like to discuss in class. They are also encouraged to suggest materials to be used in that class (texts, videos, etc.).

Communication in different forms (presentations, discussions and written) is fostered in the ATC class. The activities done in class (such as quizzes, vocabulary exercises, comprehension questions, paraphrase exercises, note-taking, and writing summaries) prepare students step by step to perform efficiently in each of these communication contexts.

Regarding cognition, some of the ATC class activities require students to use HOTS. For example, students are asked to create a presentation about a technical topic and to be able to do that they are required to learn enough about that topic to be able to explain it to their peers. The technical discussions also allow students to analyse different technical solutions and evaluate their advantages and disadvantages.

Students are exposed to different cultures both through the classroom environment and through the class materials. Yamaguchi University has a considerable some number of international students (mainly from

Asian countries such as China, Korea, Malaysia, Vietnam, and Indonesia). The participation of these students in the ATC class enriches the class experience. Having a heterogeneous group of students allows for exposure to different accents of English. The technical discussions enable the comparison of realities in the different countries. Technology is the main focus, but the discussions end up touching other areas such as society, the economy, politics, and history.

4 Outcomes and Implications

The number of students participating in TC courses increased significantly despite the fact that they are elective. First, the dramatic increase in BTC participants among second-year engineering students was striking (from 28 students in 2013 to 98 in 2016). This may have demonstrated learners' enhanced motivation towards English studies by incorporating a *soft CLIL* approach into the courses. *Soft CLIL* defined by Bentley (2010) is curricular topic teaching that can be partially seen within some language courses, while *hard CLIL* involves curricular teaching with more target language immersion nearing half of the curriculum. Second, the number of students participating in TCI and TCII and TCA courses culminated in the third year of the project at more than 30 in the former and about 20 in the latter, while, there were only 4 students in each class in the first year. To our knowledge, this kind of autonomous English learning through participating in official courses provided by the university among senior year students was not seen before the project.

For the last three years, students were asked to evaluate how interesting and difficult they found the content of the ATC class. The following scale from 1 to 5 was used: 1—not interesting/not difficult, 5—very interesting/very difficult. Fig. 8.2 shows students' feedback about the technical topics used for discussion in the ATC class. All the topics seem to be fairly interesting to the students, but the topics "driverless cars" and "remote sensing" were considered to be slightly more stimulating throughout the years. For these topics, interest seems to be independent of their difficulty.

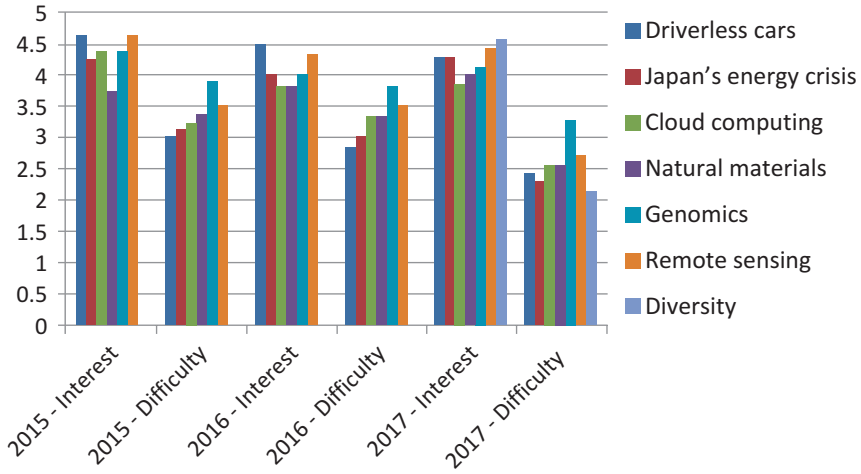

Fig. 8.2 Feedback about the technical topics used for discussion in the ATC class

Whereas "driverless cars" was one of the topics where students felt fewer difficulties, "remote sensing" was considered one of the most difficult topics. In all the studied years, "genomics" was considered to be the hardest topic. Perhaps not surprisingly, diversity, the topic chosen by the students, was considered the most interesting topic last year.

4.1 CLIL Workshop and Collaboration with Subject Teachers

In an effort to outline the benefits of adopting a CLIL approach in delivering course content in the Faculty of Engineering at Yamaguchi University, a three-hour-CLIL workshop was organised by the three language practitioners. Participants included content teachers from the departments of engineering, mathematics, and economics at Yamaguchi University as well as high school teachers from Yamaguchi Prefecture with an interest in CLIL. One of the purposes of holding the workshop was to encourage collaboration between content and language teachers. The workshop outlined the underlying principles of the approach and

underlined its relevance to content teachers. Although participant feedback was generally positive, additional events of this kind will be needed to further reinforce the importance of the pedagogy to content teachers.

4.2 Implications for the Future

For TCI and TCII it would be interesting to further explore and develop the apparent compatibility of CLIL with Genre Analysis and other aspects of English for Academic Purposes (EAP)/English for Specific Purposes (ESP) methodology over the course of future semesters. It would also be useful to foster further CLIL collaboration between content and language specialists. There has been recent cooperation of this kind with teachers from the department of mechanical engineering at Yamaguchi University (YU). Gilmour was invited to participate in the Summer Programme for Innovative Engineering Design (SPIED) at Kunsan National University in South Korea. SPIED is a two-week summer programme designed for fourth-year undergraduate and graduate engineering students from Japan, China, and South Korea. Participants work collaboratively in planning, designing, producing, and presenting a prototype product following set programme themes. The course content has been designed by content teachers from YU's mechanical engineering department and is delivered entirely in English.

The main purpose of attending the programme was to observe and provide formative and summative feedback to programme participants for collaborative presentations. Qualitative data was also collected in the form of field notes and video recordings with the intention of producing tailor-made teaching materials for future participants in the programme. From initial observations, however, the potential for a CLIL approach in developing both English teaching materials and an overall course curriculum with content specialists appeared obvious. From a language specialist perspective, attending the event provided a further opportunity to incorporate the *Teaching Learning Cycle* (in this instance for developing English

presentation skills). It also indicated that creating teaching materials that develop skills in product and process description, meetings and discussions, and describing data, and so on will be important for future programmes.

There has also been successful collaboration with other departments within the faculty of engineering. Uemura (2017) was involved in task design and materials development for an experiential learning class with a civil engineering teacher. Unlike formal lectures, experiential learning classes generally allow flexibility in the syllabus and cater for solidifying and applying students' knowledge gained in the subject L1 lecture. Thus, it was suggested that CLIL in these kinds of classes could be practically implemented with a collaboration between subject and language specialist. Fostering further partnerships with content specialists from other disciplines will be essential when a CLIL approach is to gain a foothold in the faculty of engineering at YU. In order to do this, efforts must be made to emphasise the beneficial nature of the current joint effort with SPIED and similar projects.

Appendices

Appendix 1

BTC lesson plan for corporate structure and corporate profile research.

Topic: corporate structure and corporate profile research.

Lesson objectives:

- To develop learners' abilities to describe what each department of typical manufacturing companies does **(content)**
- To develop learners' abilities to understand and apply business terms and expressions used when indicating specific departments in spoken English **(communication)**
- To develop learners' abilities to identify target information from authentic annual reports **(culture)**
- To develop learners' abilities to compare a selection of annual reports and present the advantages of the company while explaining their reasons **(cognition)**

Level: Upper beginner to Lower intermediate

Time: 90 minutes.

Lesson procedure:

Warmer (10 mins.)	● Show pictures of departments in a typical manufacturing company (see appendix 2). ● Have the students discuss in pairs what each employee is doing in each department picture. ● The teacher should ask some open-ended questions such as "What is the man doing?" and also additional questions with multiple choice answers such as "What is the woman doing? … a. She is fixing a computer…. b. She is preparing some documents for her colleagues….c. She is thinking about tonight's dinner." Then, elicit answers.

	● After the students have grasped what the people in each picture are doing, the teacher should demonstrate the names of the departments and have them repeat these terms after the teacher.
Main activities (65 mins.)	**Pre-listening activity (2 mins.)** The teacher should show a picture or an illustration, which represents a job-interview. Then, elicit expressions such as job-hunting, interview, and career to provide the students with an opportunity to guess what the dialogue will be about in the following listening task. **Listening comprehension activity (12 mins.)** ● Play the audio dialogue and have the students get the gist of the content (see appendix 3). ● Have the students discuss the content of the dialogue in pairs, and ask some capable students what the dialogue is about and expressions that they have caught. ● Play the audio dialogue again, and have the students answer multiple choice questions. **Post-listening activity (12 mins.)** ● Have the students check their answers in groups of 4 to 6. ● Have the whole class answer the questions and check if their answers are correct. ● Get the students to open their transcript and check the content. ● The teacher should highlight the business terms that are considered to be frequently occurring in TOEIC® Program such as supervisor, clerical work, incentive, quota, meritocracy, and seniority system. **Short lecture and discussions (15 mins.)** ● In association with the personnel related content of the dialogue, the teacher should give a short lecture on what meritocracy and seniority systems are. ● The students should demonstrate their understanding of the short lecture using their notes in pairs.

	● Have the students form groups of 4 to 6 and have them discuss pros and cons of a meritocracy or seniority system. ● Group leaders are assigned to give a presentation about the pros and cons using a whiteboard to the whole class. **PBL (Project-based Learning) using an annual report (24 mins)** ● Ask the students what resource they might check before going to their future job interviews, and introduce an annual report as one of the resources helpful for learning about companies. ● The teacher should select two or three listed companies and show their online annual reports to the whole class. ● Show how annual reports are generally organised using the table of contents. ● Have the students find designated information in groups using the annual reports such as who the CEO or President is, strengths of the company and company's philosophy. Then, have them write their answers on the allocated whiteboard. ● Student groups should compare, analyse, and evaluate the companies after the corporate profile research and decide which company will be the best for each group. ● Group leaders should be assigned to give a presentation on designated information about each company and explain why they prefer one of the companies.
Reflections (12 mins.)	**Reflections (7 mins.)** ● Have students close all of their lesson materials. ● The teacher should show about three to four comprehension questions or classroom written assignment on the presentation slide (e.g. 1. Write as many departments as possible of a typical manufacturing company. 2. Select three departments, and write what the people in those departments generally do. 3. Why do you think annual reports will be useful in your future job-hunting?) and have the students write their answers in the classroom report.

	Peer-to-peer assessment and teaching (5 mins.) ● Have the students turn over the report and pair up with a classmate. ● One student should read the comprehension questions and the classroom written assignment shown on the presentation slide. Then, the other student should orally answer the questions. ● If the student struggles to answer, his or her partner should help while checking the report and lesson materials (if necessary).

Appendix 2

Excerpts from Uemura (2015a, p. 46) : Pictures of departments in a typical manufacturing company

Appendix 3

TRANSCRIPTS

Unit 1

A: Good morning, Greg. I'm Sophia from the HR Department. I'll take you on an office tour this morning.
B: Thank you for taking the time, Sophia.
A: It's my pleasure, Greg. Please follow me. I heard that you are majoring in commerce. Which type of work environment do you prefer, a seniority system or a meritocracy?
B: I prefer the latter. The more achievements I make, the more incentives I'd like to earn.
A: Alright. Then, you'll have a lot of opportunities to climb the corporate ladder if you are hired as a full-timer after you successfully complete your apprenticeship.
B: That's exciting. I'll give it my all. May I ask what my responsibilities are?
A: That's a good question. Mainly, you will be dedicated to clerical work. Because of our business expansion, everybody has been hectic and the backlog has been growing. So, we would like you to assist with paperwork. You will not be assigned to Sales, so please be assured that you won't have any quota. However, it is sedentary work, so I suggest you regularly take a break and stretch.
B: Thank you. I will. Could I have a chance to talk with my supervisor today?
A: I'm afraid he is tied up in a business meeting. Probably tomorrow. Oh, when you show up tomorrow morning, be sure to punch in and punch out when you leave the office.
B: Sure.
A: Look. This is the General Affairs Department. If you need office supplies, such as whiteout, a stapler, and cardboard boxes, just fill out the request form and email it to this department. You can collect the requested items here usually in 2 days.
B: OK. By the way, I wonder where I can make photocopies.
A: Oh, if you go down the corridor, you'll find the copier on your left. Please bear in mind that you need to refill the copier's paper tray and fix any paper jams by yourself.

Excerpt from Uemura's (2015b, p. 17) BTC classroom audio transcript

Appendix 4

Speaking frame

I would like to work in the field of _____.

or

I hope that I can be successful in the field of _____.

In fact, one of the strengths of your company is _____.

or

Actually, the major strength of your company is _____.

So, I strongly feel that I will be able to realize my career goals by working for _____.

Speaking frame for eliciting and practicing the information about strengths of the companies used in the classroom

Appendix 5

B *Match the computer specifications on the left with their respective values on the right.*

1.	____	Storage capacity	a.	1366 × 768
2.	____	Weight	b.	20 hours
3.	____	Screen size	c.	750 GB
4.	____	Battery life	d.	2.3 GHz
5.	____	Screen resolution	e.	15.6"
6.	____	Processor speed	f.	3 kg

Activity designed to activate prior knowledge about the technical topic cloud computing (Hoysted & Costa, 2015, p. 17)

C *Match the underlined words in the previous text with the following synonyms.*

combined	_____
precise	_____
remarkable	_____
means	_____
possible	_____
payment	_____
use	_____
manufacture	_____

D *Read the text 'An Overview of Cloud Computing' and answer the following questions.*

a) According to the text, what is cloud computing?

b) Which companies are using cloud computing?

c) Why is it now possible to build powerful systems from inexpensive components?

E *Discussion*

a) Which of the following cloud computing services do you use? Why? / Why not? How do you use them?

i) E-mail
ii) Office suites
iii) Photo and video sharing
iv) Backup
v) Social networks

b) Do you have concerns about any of the following aspects of cloud computing? Why? / Why not?

i) Efficiency
ii) Reliability
iii) Privacy
iv) Cost

Main activities and reflection activities related to the technical topic cloud computing (Hoysted & Costa, 2015, p. 19)

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