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ESP vs. CLIL: A COIN OF TWO SIDES OR A CONTINUUM OF TWO EXTREMES?

Abstract

Contributed to by the strong drivers of socio-economic globalisation, CLIL (Content and Language Integrated Learning) programmes with a dual-purpose of accommodating both language and content learning have increased at speed recently in Taiwan's tertiary education. However, compared to ESP (English for Specific Purposes), which also emphasises language learning as well as some content knowledge, and has received much attention in both research and practice, research on CLIL and comparisons of the two teaching approaches are still rather underrepresented in Taiwan. To bridge this gap, the present study aims to examine the actual practices of both approaches, looking at the status of language and content in individual classrooms. A total of 21 CLIL and ESP courses were observed, and teachers' viewpoints were collected to understand how teachers implemented the two approaches in the classroom. Moreover, variables of course type, teacher's first language and expertise were analysed to measure any possible significant differences. The results indicate that CLIL teachers spend much more time on content teaching but pay less attention to language teaching; in contrast ESP teachers normally attend to both learners' language development and disciplinary knowledge. Detailed discussion of the results and further suggestions are provided.

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Key words

CLIL, ESP, comparative study, Taiwan tertiary education.

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Sažetak

Pod snažnim uticajem društveno-ekonomske globalizacije u Tajvanu od skora ubrzano raste broj programa za integrisano učenje nastavnog sadržaja i stranog jezika (CLIL) u tercijarnom obrazovanju. Ipak, u poređenju sa engleskim jezikom struke (ESP), koji takođe podrazumeva učenje jezika i određeno znanje nastavnog sadržaja, i čija je teorija i praksa predmet brojnih studija, istraživanja integrisanog učenja nastavnog sadržaja i jezika, kao i poređenje dva navedena pristupa nastavi, još uvek su nedovoljni u Tajvanu. Kako bi premostila taj jaz, ova studija ima za cilj da istraži aktuelnu praksu oba pristupa i ispita status jezika i nastavnog sadržaja u pojedinačnim programima. U radu se analizira ukupno 21 kurs integrisanog učenja nastavnog sadržaja i jezika i engleskog jezika struke, te su prikupljena mišljenja nastavnika o primeni ta dva pristupa u učionici. Uz to, analizirane su varijable kao što su vrsta kursa, maternji jezik i stručnost nastavnika da bi se utvrdilo eventualno postojanje značajnih razlika. Rezultati pokazuju da nastavnici CLIL-a provode mnogo više vremena u predavanju nastavnog sadržaja a poklanjaju manje pažnje jezičkim instrukcijama; nasuprot tome, nastavnici engleskog jezika struke obično se podjednako bave jezičkim razvojem učenika i predmetnim znanjem. U radu se detaljno diskutuje o rezultatima i daju predlozi za buduća istraživanja.

Ključne reči

integrisano učenje nastavnog sadržaja i stranog jezika (CLIL), engleski jezik struke (ESP), komparativno istraživanje, tercijarno obrazovanje u Tajvanu.

1. INTRODUCTION

Content and Language Integrated Learning (CLIL) is an umbrella term, referring to an innovative educational approach by which a subject is taught in an additional language (Lasagabaster & Sierra, 2010). CLIL is always dual-focused, namely content and language. Its purpose is crucial for EFL contexts such as Taiwan where English is mainly used in the classroom rather than in the students' real lives, and where EFL learners are eagerly trying to advance their English proficiency, as described by Yang and Gosling (2014). Contributed to by the strong drivers of socio-economic globalisation, CLIL programmes have increased at speed in the last decade, and CLIL has also become a mainstream form of education in many European countries (Gefaell & Unterberger, 2010). In tertiary education in Taiwan, the establishment of CLIL programmes has been encouraged by the educational authorities to drive the goal of internationalised higher education forward (Yang & Gosling, 2014). However, apart from European contexts, investigations of

implementing and evaluating CLIL programmes on a large scale have been rarely documented in the literature (Perez-Canado, 2012), in particular in Asian EFL situations like Taiwan.

On the other hand, English for Specific Purposes (ESP) in Taiwan has received much more attention in both research and practice. A number of tertiary institutions, in particular polytechnic universities, have transformed many of the 4-skills-focused language courses into language-plus-content forms, and many of these courses are taught by departments of English and international interdisciplinary programmes. What differentiates ESP from CLIL is that the latter has dual focuses, i.e. both language and content, while the former places emphasis on providing learners with sufficient language skills to master content knowledge. Thus, ESP is one category of English Language Teaching (ELT), while CLIL is not. In fact, many other aspects of both approaches also differ greatly such as course materials, teaching strategies and teacher preparation. While the ultimate goal of the two approaches is largely similar, that is, providing learners with mobility and employability in the globalised society, there are questions regarding which is more effective in terms of helping Taiwanese learners compete with international professionals. In other words, can ESP and CLIL be integrated, and are they mutually supportive like the two sides of a coin, or are they two extremes of a continuum with contrasting aims accommodating different learners' needs?

Unfortunately, studies on their implementation and actual effects through a cross comparison are still underrepresented in the literature. The issue of how stakeholders such as students and practitioners view their CLIL and ESP education is generally overlooked. Thus, to bridge this gap, this study attempts to combine both qualitative and quantitative methods to investigate CLIL and ESP education considering the stakeholders' variables, and to triangulate the programme efficacy from various sources of data by comparing and contrasting a number of CLIL and ESP programmes in Taiwan. To be specific, the research focuses on the following questions (Arnó-Macià & Mancho-Barés, 2015: 65):

1. *What is the status of CLIL and ESP implementation in Taiwanese undergraduate degree-based programmes?*
2. *For the CLIL and ESP classes observed in Taiwan, are there any expected linguistic outcomes? How explicit is the teacher's focus on learners' language performance in the two types of classroom? To what extent are the learners' language proficiency and content achievements explicitly focused on in classroom interactions?*
3. *Do any of the above results show statistical significance by the different variables of course type, teacher's first language, and teacher's area of expertise?*

2. LITERATURE REVIEW

Although ESP and CLIL are traditionally viewed as two different teaching approaches with varying focuses, and discussion of the likely overlap or compatibility of these approaches in the literature is limited, some researchers have noticed that ESP and CLIL are not absolute opposites but may in fact share some similarities and complement each other. For instance, courses in English for academic purposes could be beneficial for CLIL beginners in terms of shortening their adaptation to the CLIL approach in Asian EFL settings (Yang, 2015a). The following sections compare and contrast the common features and the differentiations between ESP and CLIL.

2.1. Differences between ESP and CLIL

Most researchers believe that the differences are greater than the similarities between the two approaches, and have relatively negative attitudes regarding their compatibility. As argued by Fortanet-Gómez and Bellés-Fortuño (2008), ESP has the single main aim of teaching and learning a foreign language, while CLIL places importance on content matter as well as the status of the language, which also raises the issue of who is qualified to teach CLIL, language teachers or content teachers, and the issue of teacher identity while teaching ESP and CLIL. Torregrosa Benavent and Sánchez-Reyes Peñamaría (2011: 92) claimed that “connections between ESP and CLIL can easily be drawn for both are more closely related than is often realised. Even so, CLIL explicitly places a greater emphasis on the content than ESP because in this case teachers have joint content and language expertise that ESP practitioners commonly lack”. In addition, Cenoz, Genesee, and Gorter (2014) argued that, due to a broader concept of CLIL, many different language learning types of using English as the medium of instruction such as ESP turn CLIL into a rather narrow vision. Thus, they argue that any attempt to distinguish CLIL from other language approaches is always misguided. They examine the ambiguities and call for clarification of the definition of CLIL. Jendrych (2013) mainly discusses the complexity of ESP teaching today and attributes the emergence of CLIL to the development of ESP. She claims that the new developments of ESP have brought challenges for traditional ESP teachers as it requires higher qualifications such as content knowledge and transferable skills, and these new demands can cause difficulties, constraints and negative attitudes on the part of language teachers, which may prevent them from agreeing to teach CLIL courses.

Also, Bruton and Woźniak (2013) described their course using two approaches in a university, and discussed their interconnections, mutual influences and benefits as well as the problems they raised. They argued that courses combining the two new approaches are time consuming for both language

and content teachers. However, they also found that content teachers are becoming increasingly confident about using English in the classroom, while language teachers are becoming more confident about their grasp of content matter. Similarly, Gonzalez Ardeo (2013) examined the coexistence of ESP and CLIL courses in a Spanish university. Although CLIL seems to be preferred by students in the researched setting, both types of course can be compatible. Yet, both approaches also create some challenges for content teachers, language teachers and learners. Furthermore, in Brebera and Hlousková's (2012) discussion of how to apply principles of CLIL to ESP in higher education, they argue that providing a uniform CLIL guideline for carrying out its content and language teaching is nearly impossible in tertiary contexts, and thus call for more research at the local, national and international levels to help teachers cope with the demands of this new approach.

Other researchers believe that in spite of their greater differences, there are still possible similarities between ESP and CLIL, in particular, the theory of needs analysis (NA) in ESP. NA can be successfully applied to CLIL as well to define the programme and to establish the needs of teacher training, materials and specific means (Ruiz-Garrido & Fortanet-Gómez, 2009). Theoretically, it is clear that ESP is focused solely on language, while CLIL simultaneously accommodates both language and content subjects. Yet, some scholars argue that the distinction between the two is not clear. Both ESP and CLIL practitioners have to find a balance between the target language culture and professional subject matter in their instruction (Poręcka, 2011). Likewise, Liew and Khor (2014) argued that CLIL and ESP are indeed two separate approaches, but university learners expect to learn content knowledge in language courses, which moves ESP closer to CLIL. They define CLIL as an integrated ESP model and believe that integrated ESP has the potential to address some shortcomings of traditional ESP, and the transformation of ESP to CLIL is only possible when there is careful collaboration between discipline teachers and language teachers (Riley, 2013). As Lara-Garrido (2000) also argued, although the learning goals of the two differ to a certain extent, CLIL also has a close connection to the ESP movement. That is, both greatly emphasise learners' needs and interest in communication. CLIL can even be viewed as a new and interactive approach to teaching English.

2.2. Possible similarities between ESP and CLIL

Despite the aforementioned arguments, some researchers hold a relatively more positive attitude towards the similarities of the two approaches. First of all, Fernández (2009) claimed that CLIL can be a generic term, covering many different similar notions, even including ESP. The interpretation of different tracks of CLIL mainly lies in the ontological and epistemological beliefs. Some researchers believe that ESP and CLIL share similar principles in terms of theories. As claimed

by Tarnopolsky (2013), the most common feature of the two approaches is integrating language learning with content matter of non-linguistic disciplines where CLIL has a broader scope and ESP is usually posited as a language course. Also, Jendrych and Wisniewska (2010) consider that in some cases teaching ESP is similar to teaching CLIL as both approaches emphasise teaching language skills and professional skills.

Although similarities between ESP and CLIL are likely, an urgent call for collaboration between ESP and CLIL practitioners and balanced weighting between content and language teaching is greatly emphasised. For instance, Nashaat-Sobhy, Berzosa, and Crean (2013) proposed that collaboration between content teachers and language teaching in designing teaching materials is needed, and the schema theory, focusing on social constructivism, helps learners scaffold their language development and facilitate peer collaboration. They believe there are more areas of convergence than divergence between ESP and CLIL. Similarly, using a Russian university as the research context, Gavrilova and Trostina (2014) advocated that only an integrated interdisciplinary approach between language and subject matter can create the synergy needed to prepare highly-qualified specialists in a particular field of knowledge. Finally, Arnó-Macià and Mancho-Barés (2015) explored the importance of language learning in CLIL programmes and the implications derived for ESP. They proposed that the programmes engage in collaboration with content teachers to develop learners' English proficiency. This collaboration can occur both through integrating language in content courses and integrating content in ESP courses to make them more relevant to disciplines' communicative needs.

In general, most authors believe that there are distinct variations between CLIL and ESP. The major difference is the diverse emphases of the two approaches. However, there are also similarities between the two methods. For instance, needs analysis derived from ESP can be applied to CLIL, and teacher preparation for the two approaches can follow the same process as well. Moreover, both confront similar difficulties in implementation such as teacher training, teaching qualifications, peer collaboration, students' motivation and material design.

2.3. Bridging the gap between ESP and CLIL in practice

As previously mentioned, most studies investigating the comparison of CLIL and ESP have been carried out in European contexts where CLIL programmes are increasing in number, but similar examinations in Asian EFL contexts are much less common. In Taiwan, both CLIL and ESP courses or programmes are increasing as the education authorities concerned and tertiary education providers assume that high levels of English proficiency and professional content knowledge contribute to graduates' mobility and employability in the globalised labour market (Yang, 2015b, 2015d). Research on Taiwan tertiary CLIL can be found

mainly in Yang's (2015a, 2015b, 2016) and Yang and Gosling's (2013, 2014) works. They have investigated undergraduate CLIL programmes and their learners, and concluded that, compared to non-CLIL learners, CLIL learners outperform their counterparts and make significant progress in terms of linguistic performance and content outcomes. In addition, their employment of English learning strategies is also different from that of their ESP peers. In contrast, studies on ESP issues in Taiwan are relatively extensive due to its widespread implementation. Most of them focus on the investigations of course development/evaluation, material design (courseware), stakeholders' perceptions or attitudes, needs analysis, teaching performance, and learning outcomes. The local research on ESP is comparatively more broad-focused, experience-based and effectiveness-oriented than the global interest in researching ESP (Yang, 2015c).

However, to the best of our knowledge, so far no study has compared their actual practices in the classroom in Taiwan. The present study hopes to bridge this gap in the literature and to offer suggestions for their further implementation.

3. RESEARCH METHODS

3.1. Context

The researched context is a national polytechnic university, located in southern Taiwan and well-known for its sandwich curriculum in which all the students are required to complete a full one-year placement in overseas or domestic hospitality or tourism industries in their third year. After the placement, they come back to the university to resume their final year of study. Having the placement abroad is encouraged by the University to not only broaden the students' global vision but also to apply what they have learnt in a globalised environment. Hence, equipping the students with a better command of English proficiency has become one of the major aims of the English courses in the University. Most ESP courses are offered only by the English department and language training institutes to prepare the students for learning, studying and working, in particular in countries where English is the first or official language, such as the UK, the US, Canada, Singapore, or New Zealand. These language courses are provided separately across various disciplines such as tourism, hospitality, MICE (meeting, incentives, convention and exhibition) or aviation.

Apart from ESP courses, the University also runs several CLIL course-based and two degree-based CLIL programmes, i.e. tourism management and culinary arts. To respond to the demands of internationalisation and globalisation, which require high mobility and employability of graduates, and to attract international students, the University decided to implement courses and programmes integrating both content and language learning with a dual focus on developing

learners' content knowledge via the instruction of the target language (mainly English). Course-based CLIL is always teacher-initiated, that is, those who are willing to teach a CLIL course can apply to teach one. On the other hand, degree-based CLIL programmes are policy-initiated, where all the courses are instructed according to a strong CLIL model, i.e. with extremely high English exposure. To increase teachers' motivation to teach CLIL courses, a subsidiary incentive is provided. The educational authorities in Taiwan also financially support the establishment of degree-based CLIL programmes in tertiary institutions to increase local students' English proficiency and to attract foreign students to study in Taiwan. In the researched context, in contrast to the provision of ESP courses, CLIL courses are offered across various disciplines in different academic departments.

3.2. Teachers

At present, all ESP courses in the university are instructed by language teachers, including both native and non-native English speakers, with the latter greatly outnumbering the former. However, nearly all of the CLIL courses are lectured by content teachers with the exception of a few language teachers who are equipped with the content expertise and who are certified to teach it. Normally, an ESP course is two hours per week while a CLIL course is three hours per week. In the present research, we observed 21 ESP and CLIL courses conducted by 21 teachers in the university. Table 1 shows the course type, teacher's first language and teacher's area of expertise.

COURSE TYPE		NUMBER OF COURSES	PER CENT
	ESP	10	47.6
	CLIL	11	52.4
	Total	21	100.0
TEACHER'S NATIVE LANGUAGE		NUMBER OF TEACHERS	PER CENT
	NNES	18	85.7
	NES	3	14.3
TEACHER'S AREA OF EXPERTISE		NUMBER OF TEACHERS	PER CENT
	Language	14	66.7
	Content	7	33.3
	Total	21	100.0

Table 1. Courses and teachers observed

3.3. Instruments and analysis

In total, we observed 21 courses after obtaining each teacher's permission. All the observations were conducted in the least intrusive way. That is, the observer sat at the back of the classroom and used a voice recorder to record the class with a self-developed observation sheet (see Appendix 1). Interaction between teachers and students in class was noted down by the observer. The main focus was on scrutinising how much the target language was used in class by both teachers and learners. The recordings were transcribed and the duration of English usage was calculated. For analysis purposes, the duration was converted to a scale of 0 to 10 based on the length of the class based on percentages. For example, an ESP class normally lasts for 100 minutes, so 55 to 64 minutes of English (55% to 64% of 100 minutes) use was recorded as 6. On the other hand, 60 minutes of English in a 150-minute CLIL class was indicated as 4. Native English-speaking teachers were all ranked as 10 since they only used English in class.

The same procedure was applied to gauge how much time was spent on the teacher's instruction of language or content, and on the learners' use of English. Due to the observer's expertise in English language teaching, it was not difficult to identify whether the teacher was teaching content or language. When the students were given time to dominate, i.e. to read, discuss, present, or write in class, this was counted as the students using English. In other words, in the present research, listening to lectures or asking the teacher for clarification was not considered as students using English productively, but rather the teacher using English. Question items 1, 2, 3 and 7 in Appendix 1 were used to record the time spent by teachers and learners in class.

Directly after the class observation, all of the teachers were individually interviewed for about 15 to 20 minutes. This short interview focused on examining to what extent they emphasised the learning of content or language in the course, how much they tolerated the students' use of their mother tongue in class, the ratio of evaluating students' content knowledge and language skills in their formal assessment, and how much progress students had made in terms of target language learning in the course. The interviewees were asked to rate their answers to these six questions on a scale of 1 to 10 based on their perceptions as shown in question items 4, 5, 6, 8, 9 and 10 on the observation sheet (see Appendix 1).

After collecting all the data from the teachers, their responses were analysed quantitatively. Each teacher's responses were marked on a numeric scale as shown in Appendix 1. Then, besides the descriptive analysis, SPSS t-tests were performed to study if different variables (i.e., course type, teacher's first language and area of expertise) resulted in any significant differences. Hence, the present study combined both qualitative and quantitative methods, following a QUAL → QUAN mixed model (Creswell, 2003). Following are the results and discussion of the findings.

4. RESULTS AND DISCUSSION

4.1. Descriptive results of both ESP and CLIL courses

Table 2 displays the overall statistical results of the ten items (see Appendices 2.1 to 2.10 for the descriptive results of each question item). First of all, a majority of teachers mainly used English to deliver the courses; in other words, students taught in both types of course are exposed to English to a relatively high degree. It is obvious that teachers would use English to teach ESP courses since they are defined as language courses. However, English exposure may vary greatly across different settings under the CLIL approach (Feng, 2010); according to these results, Taiwanese CLIL learners have relatively high English exposure in class (see Appendix 2.1), which may differ from other Chinese-speaking EFL contexts.

The results regarding how much time is allocated to training learners' English skills in the two approaches are divided (see Appendix 2.2); those at the high extreme are the ESP teachers who are expected to spend time training learners' language skills for specific purposes, while those at the lower end are CLIL teachers. They focus much more on instructing content knowledge, while spending less time catering to learners' linguistic development in class, although both language and content are claimed to be equally developed in CLIL courses. Nevertheless, this does not necessarily mean that content knowledge is not valued in ESP courses. On the contrary, content knowledge for specific disciplines or purposes is emphasised by most teachers (see Appendix 2.3). ESP teachers tend to combine language and content teaching with a more balanced time allocation, while in CLIL classes English is mainly used to deliver content knowledge without the explicit intention of integrating linguistic skills into content teaching. Thus, English is more like a medium of instruction in Taiwanese CLIL classes rather than a proficiency to be developed. These findings are in line with the results shown in Appendix 2.4. In ESP courses, students are given many more chances to use (mainly write, speak, and read) English. Following the principles of ELT methodology, in particular the communicative approach, teachers are more willing to allocate more time for students to practice English in class via different communicative activities such as group discussion, presentation, or information gap. Besides, it was also found that in the ESP courses, students are given chances to use English after class, mainly when completing reading and writing assignments, which was rarely found in the CLIL courses. In addition, most CLIL courses are delivered in a lecture-based way, so it is uncommon to observe students using English actively and productively in class. Yet, receptive skills such as listening or vocabulary are able to be developed.

	MINIMUM	MAX. VALUE	MEAN	STD. DEVIATION
1. Time of T* using English	3.00	10.00	8.0476	2.01187
2. Time training S English	1.00	10.00	5.5238	2.69479
3. Time teaching content	3.00	10.00	7.4762	2.40040
4. Tolerance of S using MT	1.00	10.00	4.9048	3.11295
5. Emphasising accuracy in S use of English	1.00	10.00	5.8095	2.37948
6. Emphasising S content acquisition	3.00	10.00	8.0476	2.15583
7. S use of English	1.00	9.00	6.1429	2.41424
8. T assessing S English	3.00	10.00	5.9524	2.06098
9. T assessing S content	3.00	10.00	7.3333	2.22111
10. S progress in English	3.00	10.00	6.6190	2.06098

*T: Teacher; S: Student; MT: Mother tongue; items 1, 2, 3 and 7 relate to the time spent as recorded in the class observations while the rest of the items relate to weighting the importance as recorded during the teacher interviews.

Table 2. Descriptive statistics of the questions (N=21)

The results of the short interviews with teachers conducted immediately after each class observation are presented in Appendices 2.5 to 2.10. Teachers’ attitudes towards learners’ use of their mother tongue in ESP or CLIL varied greatly. It was found that it is not the teacher’s first language (i.e., Mandarin Chinese or English) that decides their tolerance of students using their mother tongue but rather the courses they teach. In ESP courses, teachers show relatively lower tolerance as they argue that ESP is a language course and the main purpose is to use the target language in class, while they have more tolerant attitudes towards using the mother tongue in CLIL classrooms. The teachers argued that it might be too demanding for learners to use English all the time in class and they would pay more attention to their English instruction and learners’ content learning rather than which language the learners use to access the content learning. Using their mother tongue in CLIL classes is not strictly forbidden, but is in fact sometimes even encouraged in order to facilitate content and language learning.

It is interesting to note that teachers do not overly emphasise the accuracy of the target language use in either ESP or CLIL classes. Teachers of both courses believe that fluency comes before accuracy. Yet, accuracy is still far more frequently stressed in ESP than in CLIL courses. Comparatively, CLIL teachers showed a more tolerant attitude towards learners’ linguistic output in terms of erroneous production. However, they strongly emphasised the importance of learning content knowledge, as did the ESP teachers. Both ESP and CLIL teachers claimed that content knowledge plays a very important part in both types of course. Surprisingly, ESP teachers in the present study seemed to pay more attention to both language and content in their teaching, while the CLIL teachers treated the two elements in a very unbalanced manner. Hence, ESP courses here

have become more like real CLIL courses, while CLIL courses have become more like English taught courses. This finding is very similar to what is happening in European countries now; that is, CLIL is gradually replacing ESP courses (Arnó-Macià & Mancho-Barés, 2015). In Taiwan, ESP courses are transforming into a CLIL mode at present on the basis of what ESP teachers actually practice in class.

When it comes to assessment, both ESP and CLIL teachers expressed similar opinions as above. ESP teachers more frequently assessed learners' linguistic performance since using the target language is the main aim of ESP courses. As for the CLIL teachers, they showed less focus on assessing learners' language production. Some even remarked that they did not care much about whether students' language use was accurate or not in the course assessment; as long as their answers are understandable, then they get points. Yet, over two-thirds of all the teachers said they would assess learners' content knowledge. Content assessment has become essential in evaluating if students have learnt in either an ESP or a CLIL course.

Finally, over two-thirds of the teachers believed that learners' English proficiency had improved due to the course. However, it is interesting to find that nearly all of the CLIL teachers said that they *sensed* good progress in learners' linguistic performance even though they did not emphasise production or assess the students' language achievements. They naturally assumed that the learners' English would make progress in an all English-speaking environment, even if they did not have explicit evidence to prove so. Differing from CLIL teachers, ESP teachers who believed that students made progress can present solid evidence in the form of the students' test results. However, about one-third of the teachers said that their students did not make obvious progress, all of whom were ESP teachers. They showed a rather dubious attitude towards whether students can learn better in ESP courses compared to the traditional four skills English courses. They also expressed somewhat reluctant attitudes towards the trend of combining language teaching with specific purposes; some of them argued that ESP courses are better for those who have higher English proficiency, while for those with a lower level, traditional language training courses are more urgently needed.

Another concern is that they felt that they had been forced to give up their language professionalism to acquire additional content subjects to teach ESP courses. This is rather different from their training as language teachers and why they were employed by the University. It is likely that the University's policy of encouraging the use of English for instruction seems unfair to them. Content teachers who are willing to teach CLIL courses are offered financial incentives, but language teachers who use English to teach ESP courses do not enjoy the same incentives. ESP teachers believed that ESP courses in the researched University are not very different from CLIL courses in that they also have to cover content and language teaching, which is very similar to what content teachers are doing in CLIL courses.

In short, in the present study, combining/integrating language and content seems to be more common in ESP than in CLIL courses. In addition, different factors, i.e. course type, teacher's first language and area of expertise, led to some significant differences in the responses to the researched questions. The following sections present these variations in detail.

4.2. Differences by course type

Figure 1 presents the descriptive results comparing the ESP and CLIL courses. Five question items were found to have significant differences between groups. Compared to ESP courses, content learning is much more highlighted in CLIL courses; hence, question 3 (instructing content knowledge, $t=-4.561$, $<.005$), question 6 (emphasising the acquisition of content knowledge, $t=-4.289$, $<.001$), and question 9 (assessing students' content knowledge, $t=-3.982$, $<.005$) revealed obvious variations between the two types of course. On the contrary, for students' actual use of English in class ($t=1.612$, $<.001$) and progress in learners' English skills ($t=.80$, $<.005$), ESP courses scored significantly higher than CLIL courses.

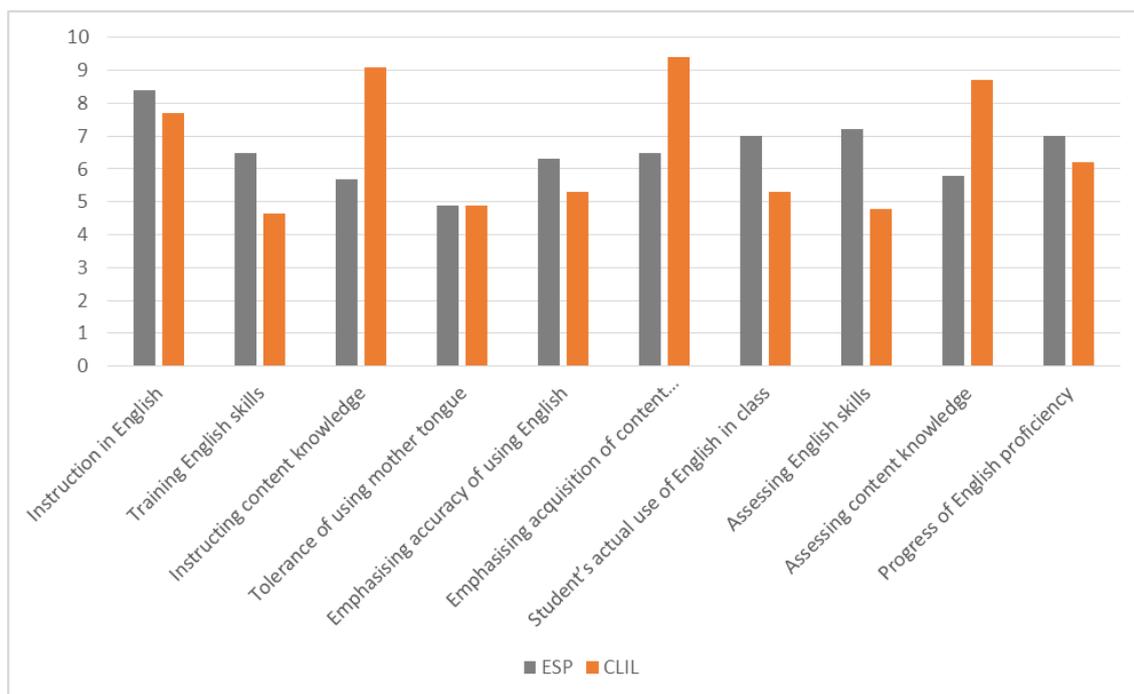


Figure 1. Descriptive statistics by course group

These divergences between groups indicate that firstly, content learning is overwhelmingly stressed in CLIL courses, which means that language learning receives less attention, thus violating the dual-focus of the CLIL approach where both

language and content are supposed to be developed within one course simultaneously. Furthermore, language skills are rarely assessed in CLIL classrooms, which seems to indicate that language is not one of the teaching targets and teachers may have no clear idea of how to assess learners' language skills in CLIL courses. This may be due to the fact that nearly all of the CLIL teachers in the researched context are content teachers who may lack training in language assessment. However, students in ESP courses have greater opportunities to use English in class. Accordingly, ESP students are believed to make better progress in their English skills.

The above results raise several concerns about the current CLIL practices in Taiwan. One major aim of establishing CLIL programmes by the Taiwanese educational authorities is to develop students' English proficiency via using the target language while learning content knowledge. Yet, CLIL courses now seem to have become immersion courses in which students are supposed to acquire the target language 'automatically' when they are immersed in it. Actually, there seems to be no environment for implementing English immersion programmes in Taiwan since English is mainly used in the classroom at present. The major problem may be that content teachers are not trained as CLIL teachers in Taiwan; thus, for them, CLIL courses are merely content instruction in the target language. They seem to use English just because they feel they have to. However, even if CLIL learners' English proficiency is not assessed in class, their command of English together with non-linguistic effects such as mobility and employability do improve significantly compared to non-CLIL students (English majors not included) (Yang, 2015a, 2015b). Hence, it can be concluded that both ESP and CLIL can have a positive effect on learners' language performance, but to a varying extent. A comparison study of both groups' actual language proficiency may be desirable in the near future.

4.3. Differences by teacher's first language

Figure 2 displays the differences in the descriptive results of the NES and NNES teachers. In this factor, there is no statistical significance between the two groups, although it should be noted that the numbers of NES and NNES are hugely divergent, i.e. 3 vs. 18, which may have led to these results. This indicates that no matter whether the target language is the teacher's first language or instructional language there should be no significant impact on how the ESP/CLIL course is practiced in class. This finding is, however, very different from what learners have been reported to perceive in previous studies (e.g., Yang & Gosling, 2013, 2014) where they believe CLIL courses should be instructed by NES because NNES tend to have difficulties using the target language to teach content knowledge; in particular, their accent, fluency and accuracy are questioned. This makes the learners insist that CLIL be instructed by native speakers in order to achieve its utmost benefit, i.e. improving English skills. Hence, it is interesting to find that in fact the expectations and perceptions of ESP/CLIL courses are not significantly

diverse. This exhibits the fact that NNES teachers clearly understand the dual focus of CLIL, but due to their limitations of English proficiency or lack of training in how to teach CLIL courses, they focus on content instruction while ignoring the development of the learners' language skills in class. These results, again, evidence the urgent need to provide CLIL teacher education in Taiwan.

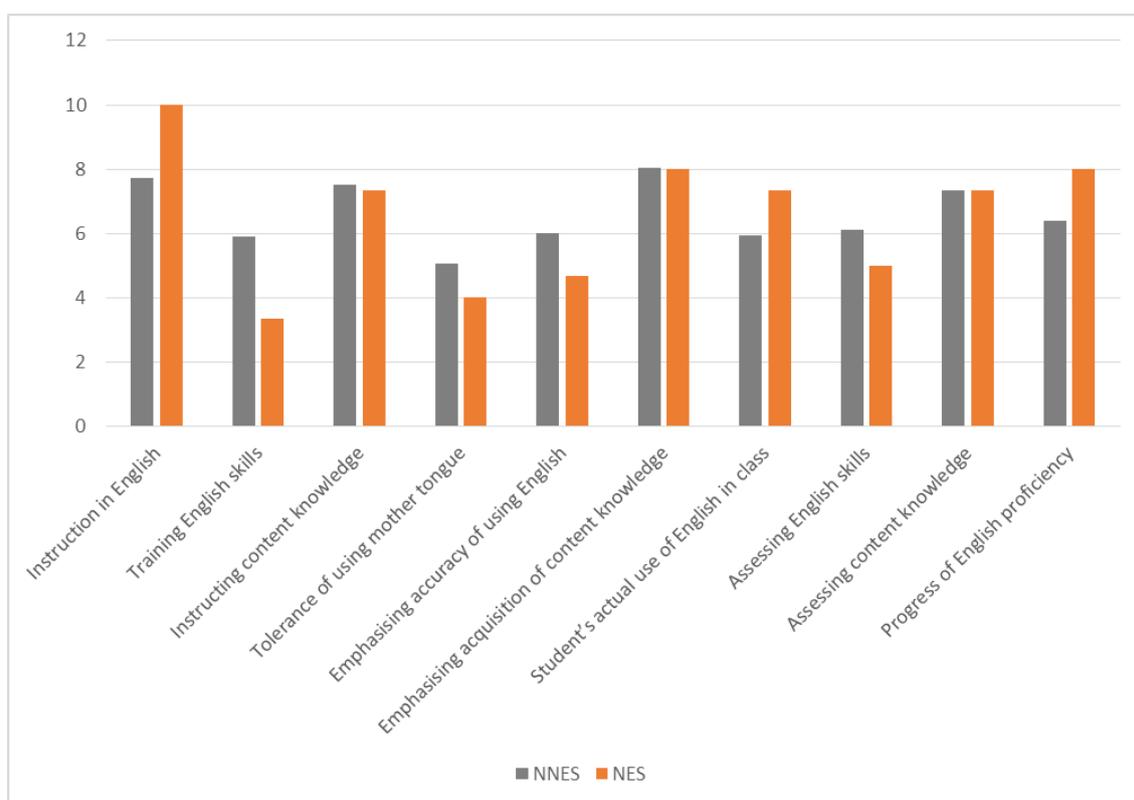


Figure 2. Descriptive statistics by teacher's native language (NNES: Non-native English speaker; NES: Native English speaker)

Although no statistical difference was identified, there are still some subtle but interesting differences between the NES and NNES teachers. For instance, the NNES teachers demand higher English accuracy from students than their NES counterparts do. It is assumed that this is based on their educational experience. At the time these teachers were learning English in Taiwan, it was mainly in preparation for tests, so accuracy was always the priority. This may have affected their perceptions of how English should be used by their students today.

Another slight difference was how much NES and NNES teachers view the progress of the learners' English skills. NES teachers seemed to believe that their students made better progress in English than the NNES teachers did. The reasons may be that learners' English is better trained and catered for by NES teachers as they are all language teachers (and some teach both ESP and CLIL courses) and clearly know ELT methodology to develop students' English proficiency, which

would help increase learners’ English skills naturally. Another reason might be the higher tolerance of NES teachers for learners’ linguistic errors. They may show higher tolerance or appreciation of students’ language performance and achievements than NNES teachers do, a phenomenon which has been extensively documented (e.g., Sheorey, 1986; Shi, 2001). In other words, the results of this section highlight several concerns regarding NNES teachers of ESP/CLIL courses, in particular, the lack of preparation of CLIL teachers, the insufficient command of or confidence in instructing courses via English, and the overemphasis on the accuracy of learners’ language output.

4.4. Differences by teacher’s area of expertise

The final variable tested was teachers’ self-identification as a language or a content teacher. Figure 3 shows the differences in the descriptive results of language and content teachers. Significant differences were found in the responses to the four question items: instructing content knowledge ($t=-2.842, <.05$), emphasising acquisition of content knowledge ($t=-2.284, <.005$), students’ actual use of English in class ($t=1.160, <.05$), and teachers’ assessment of content knowledge ($t=-2.199, <.005$). These significant items are very similar to the results in section 5.2.

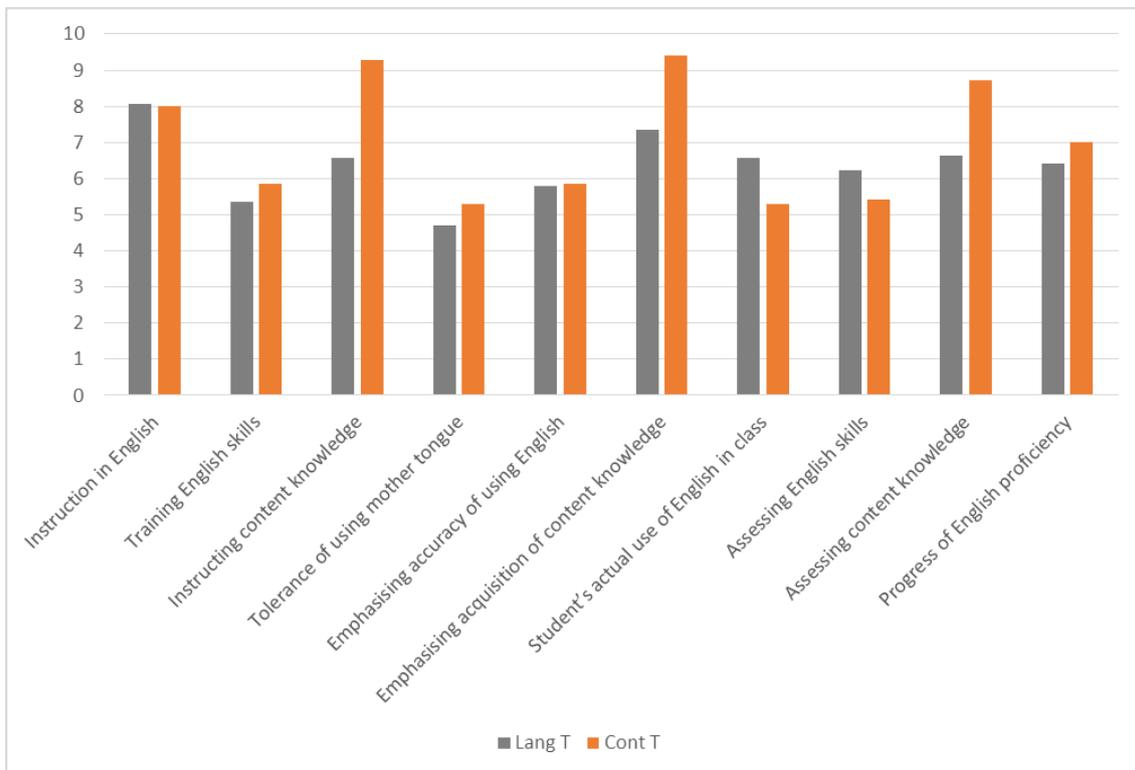


Figure 3. Descriptive statistics for language teacher (Lang T) vs. content teacher (Cont T)

The results indicate that there is a crystal-clear line between language and content teachers. That is, once positioned as content teachers, they naturally place content teaching as their top priority. This would not be a problem if content teachers taught content courses via the learners' mother tongue; however, the CLIL approach involves not only content knowledge but also language development. It is likely that CLIL courses are viewed simply as content courses instructed via the target language. Thus, using the target language for content instruction is what content teachers are chiefly concerned about rather than attending to the development of the learners' language skills. In other words, content teachers may misplace the focus of CLIL courses, considering them as English taught courses. This tendency might explain why English is less frequently used by learners in CLIL classes. Content teachers overemphasise the instruction, learning and assessment of the content knowledge, and pay much less attention to developing the learners' language skills.

However, an interesting point worth discussing is that content teachers believe their students make better progress than language teachers do, although the difference is not statistically significant. The reasons are unclear since content teachers also reported that they seldom assess learners' language skills in CLIL courses. Hence, how they are convinced that CLIL learners make progress in linguistic skills is not clear. They may assume that learners' English develops naturally in an English-instruction learning environment. On the contrary, language teachers see less progress in ESP learners' English performance even though they believe that these students are provided with more opportunities to use the target language. A likely reason may be that language teachers demand more progress from learners in an ESP course so their higher expectations may lower their judgement of learners' actual progress in English. In short, due to the fact that most CLIL courses are still taught by content teachers who are not well prepared to teach CLIL courses, they exercise similar practices in teaching CLIL courses as they do teaching content courses in Mandarin. The only difference is the language used for instruction. Thus, the overemphasis on content knowledge and lack of focus on linguistic skills form a peculiar CLIL mode in the Taiwanese context.

5. CONCLUSION AND SUGGESTIONS

5.1. Conclusion

The present research investigated the similarities and differences of two types of course, namely, ESP and CLIL. In total, 10 ESP and 11 CLIL courses in one national polytechnic university were observed, and follow-up interviews with the teachers were also conducted. The results revealed that, in general, CLIL teachers spent much more time on content teaching but unfortunately less on language teaching,

which makes them mainly assess learners' content knowledge and not their linguistic achievements. Contrarily, ESP teachers normally attend to learners' language development as well as to their disciplinary knowledge. This divergence affects the opportunities students are given to use the target language in class, with ESP learners having more chances to use English than their counterparts do. However, CLIL teachers show more positive attitudes towards learners' linguistic achievements than ESP teachers do. The descriptive results indicate that CLIL courses in Taiwan are more like English taught courses, while ESP courses are delivered using a CLIL-oriented approach.

The t-test results concluded that, firstly, content teaching greatly overrides language teaching in CLIL courses, but both ESP and CLIL can have positive effects on learners' linguistic performance, although they vary to some extent. Secondly, no significant difference was found for the variable of teacher's first language, suggesting that the teacher's native language does not affect how ESP or CLIL courses are presented. Yet, the findings also suggest the urgent need for CLIL teacher education. Finally, teacher's expertise in language or disciplinary subject also significantly affected how ESP and CLIL courses were conducted. Language teachers seemingly demand more in terms of learners' linguistic production and have lower satisfaction with their achievements; contrarily, subject teachers overwhelmingly stress the instruction of disciplinary knowledge, and believe learners made better progress on their language skills even if they did not assess their linguistic production at all in class. It was found that for content teachers the target language of CLIL courses, i.e. English, is more like a medium of teaching and not an aim for students to achieve.

5.2. Suggestions for tertiary education providers and course practitioners

It is suggested that universities which provide CLIL courses, in particular degree-based programmes, offer supports to teachers, students and other stakeholders, preparing them well for the new educational approach. In addition to the incentives given to those teachers who would like to deliver CLIL courses, what teachers particularly need is appropriate training to become qualified CLIL teachers. Universities have to consider the possibilities of co-teaching between language and content teachers in an ESP or a CLIL course, providing suitable CLIL training including language teaching methodology and strategies of language assessment, and also appraising CLIL and ESP teachers' teaching performance in class to offer timely support and advice.

In addition, supports are needed for learners as well. The CLIL learners in many settings may come from a relatively less favourable background like the students studying in polytechnic universities in Taiwan. Thus, to bridge this gap, CLIL has to be implemented at an adjunct level (Räsänen, 2011) in the beginning

whereby teachers create and promote more supporting and scaffolding activities enabling learners to learn the content while also having the expected exposure to the target language.

Also, communication with other stakeholders such as students' parents, who usually intervene in their children's decision to choose an undergraduate degree or programme, and the public is also needed in Taiwan. Similar communication has to be made to the public. Universities have to clearly explain why more is spent on CLIL programmes and students compared to others, and most importantly have to address the concerns of why English is increasingly dominating other languages, including the learners' mother tongues, and why teaching CLIL has become manifest in higher education. Several other Asian contexts such as Japan, the Philippines, Malaysia and Hong Kong have already confronted such doubts when implementing the CLIL approach, as argued by Yang (2015b).

Finally, teachers are the most influential factor deciding the success or failure of an educational change. Traditionally, teachers defined themselves as language teachers or content teachers, but their roles may be becoming increasingly blurred as both ESP and CLIL courses grow in number. Thus, inevitably more teachers in Taiwan are required to teach ESP or CLIL courses no matter which area of expertise they may have. Arguably, being able to deliver a content course in English or teach a language course with content knowledge, i.e. catering to the focuses of content and language in a course, will soon become a university teacher's required skills. Therefore, it is advised that teachers adjust their beliefs and attitudes towards their profession.

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Appendices

Appendix 1. Observation sheet of language and content teaching in ESP and CLIL courses

<input type="checkbox"/> ESP course	<input type="checkbox"/> CLIL course
<input type="checkbox"/> Taiwanese teacher	<input type="checkbox"/> Native English-speaking teacher
<input type="checkbox"/> Language teacher	<input type="checkbox"/> Content teacher
Course title: _____	
Please identify the rating of each observed question and circle the number where 1 point = 10% of the total class time (10: the highest rating)	
1. Time spent using English to instruct the course	
----- ----- ----- ----- ----- ----- ----- ----- ----- -----	
0 1 2 3 4 5 6 7 8 9 10	
2. Time spent training students' English skills in the course	
----- ----- ----- ----- ----- ----- ----- ----- ----- -----	
0 1 2 3 4 5 6 7 8 9 10	
3. Time spent instructing content knowledge in the course	
----- ----- ----- ----- ----- ----- ----- ----- ----- -----	
0 1 2 3 4 5 6 7 8 9 10	
4. Degree of tolerating students' use of their mother tongue in class	
----- ----- ----- ----- ----- ----- ----- ----- ----- -----	
0 1 2 3 4 5 6 7 8 9 10	
5. Degree of emphasising the accuracy of students' English use in class	
----- ----- ----- ----- ----- ----- ----- ----- ----- -----	
0 1 2 3 4 5 6 7 8 9 10	
6. Degree of emphasising the acquisition of content knowledge in class	
----- ----- ----- ----- ----- ----- ----- ----- ----- -----	
0 1 2 3 4 5 6 7 8 9 10	
7. Actual use of English by students in class	
----- ----- ----- ----- ----- ----- ----- ----- ----- -----	
0 1 2 3 4 5 6 7 8 9 10	
8. Assessment of students' language abilities	
----- ----- ----- ----- ----- ----- ----- ----- ----- -----	
0 1 2 3 4 5 6 7 8 9 10	
9. Assessment of students' content knowledge	
----- ----- ----- ----- ----- ----- ----- ----- ----- -----	
0 1 2 3 4 5 6 7 8 9 10	
10. The degree of students' progress in English in the course	
----- ----- ----- ----- ----- ----- ----- ----- ----- -----	
0 1 2 3 4 5 6 7 8 9 10	

Appendix 2. (Note: Appendix number does not correspond to the question order in Appendix 1)

Appendix 2.1. English usage in course instruction

		Frequency	Per cent
Valid	3.00	2	9.5
	6.00	1	4.8
	7.00	2	9.5
	8.00	6	28.6
	9.00	5	23.8
	10.00	5	23.8
	Total	21	100.0

Appendix 2.2. Training of students' English skills

		Frequency	Per cent
Valid	1.00	1	4.8
	2.00	2	9.5
	3.00	5	23.8
	5.00	1	4.8
	6.00	2	9.5
	7.00	5	23.8
	8.00	2	9.5
	9.00	2	9.5
	10.00	1	4.8
	Total	21	100.0

Appendix 2.3. Instructing content knowledge

		Frequency	Per cent
Valid	3.00	2	9.5
	4.00	2	9.5
	5.00	1	4.8
	6.00	1	4.8
	7.00	3	14.3
	8.00	1	4.8
	9.00	7	33.3
	10.00	4	19.0
	Total	21	100.0

Appendix 2.4. Students' English use

		Frequency	Per cent
Valid	1.00	1	4.8
	2.00	2	9.5
	3.00	1	4.8
	4.00	1	4.8
	5.00	2	9.5
	7.00	7	33.3
	8.00	5	23.8
	9.00	2	9.5
	Total	21	100.0

Appendix 2.5. Toleration of students' use of their mother tongue in class

		Frequency	Per cent
Valid	1.00	4	19.0
	2.00	2	9.5
	3.00	3	14.3
	4.00	2	9.5
	6.00	2	9.5
	7.00	3	14.3
	8.00	2	9.5
	9.00	1	4.8
	10.00	2	9.5
	Total	21	100.0

Appendix 2.6. Emphasis on the accuracy of students' English use in class

		Frequency	Per cent
Valid	1.00	1	4.8
	3.00	3	14.3
	4.00	1	4.8
	5.00	6	28.6
	6.00	2	9.5
	7.00	3	14.3
	8.00	2	9.5
	9.00	1	4.8
	10.00	2	9.5
	Total	21	100.0

Appendix 2.7. Emphasis on the acquisition of content knowledge in class

		Frequency	Per cent
Valid	3.00	1	4.8
	4.00	1	4.8
	5.00	2	9.5
	6.00	1	4.8
	8.00	4	19.0
	9.00	6	28.6
	10.00	6	28.6
	Total	21	100.0

Appendix 2.8. Assessment of students' language abilities

		Frequency	Per cent
Valid	3.00	4	19.0
	4.00	1	4.8
	5.00	4	19.0
	6.00	3	14.3
	7.00	4	19.0
	8.00	3	14.3
	9.00	1	4.8
	10.00	1	4.8
	Total	21	100.0

Appendix 2.9. Assessment of students' content knowledge

		Frequency	Per cent
Valid	3.00	2	9.5
	4.00	1	4.8
	5.00	3	14.3
	7.00	1	4.8
	8.00	6	28.6
	9.00	6	28.6
	10.00	2	9.5
	Total	21	100.0

Appendix 2.10. Students' English language progress

		Frequency	Per cent
Valid	3.00	3	14.3
	5.00	3	14.3
	6.00	3	14.3
	7.00	4	19.0
	8.00	4	19.0
	9.00	3	14.3
	10.00	1	4.8
	Total	21	100.0