

# CLIL in Higher Education Practical Classroom --A Case Study of Cross-Border E-commerce Course

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## ABSTRACT

CLIL is a dual-focused educational approach that has been adopted worldwide in different classrooms since 1990s. It values the learning and teaching of both content and language. Few studies has been carried out with the CLIL approach to CBEC classrooms in higher education. CBEC is a typical practical course which is closely related to the social needs and future career development of college students. This study designed the CBEC practical course curriculum on the basis of CLIL and investigated its effects in classroom teaching. It has been found that the scaffolding of CLIL in CBEC course is generally acknowledged by most college students. Nevertheless, two problems with regard to communication in CLIL and cognitive challenging content were identified in the classroom. Corresponding suggestions were offered for better practice of CLIL in CBEC course. Hopefully this study could provide some empirical references for further investigation of CLIL in higher education classrooms.

**Keywords:** CLIL, CBEC, Higher education, Practical course

## 1. INTRODUCTION

With the boom of cross-border e-commerce (hereinafter as CBEC) in the 2010s, increasing colleges and universities in China shift their focuses to fostering qualified CBEC workforce. Relevant majors such as e-commerce, foreign languages and international trades involve CBEC course into their educational programs. The development of CBEC not only spurs the revolution of educational programs, but also poses challenges to classroom teaching and course design due to the fast-changing international situations and rules. For instance, since the pandemic of covid-19, expensive overseas shipping has been a huge barrier on the way of CBEC expansion. In July of 2021, the implement of IOSS in European Union increases the cost of sales in Europe, especially for those small-scaled sellers. As a consequence, college syllabus has to be updated in response to the changes in CBEC industry. Relevant studies are mainly around logistics strategies, consumer intention and trust. Some studies are in relation to CBEC talent training, but there are few studies concerning the CEBC classroom teaching in college, which is actually crucial for cultivating specialists and professionals. Thus, this study intends to explore the CBEC course provided by Foreign Languages Department of Guangzhou Xinhua

University so as to discuss the practical CLIL effects in CBEC classroom.

## 2. SCAFFOLDING CLIL IN CBEC CLASSROOM

Content and Language Integrated Learning (CLIL) was originally proposed in Europe in the 1990s [1]. Since then, it has been adopted worldwide as a practical pedagogy for foreign language teaching as well as a learning approach for language learners. CLIL is defined as a dual-focused educational approach in which an additional language is used for the learning and teaching of both the content and language. In this definition, an additional language is often a learner's foreign language but it may also be a second or some from of heritage or community language [2]. There are various studies with regard to CLIL in language teaching and learning [3][4][5][6]. Among them, Fazio, Isidori and Bartoll examined the practice of CLIL in Physical Education from a critical perspective [7]. Their study is quite similar to the present study since both the PE and CBEC classes share the similarities of technical-practical skills but they differ in that CBEC involves the socio-cultural context as well as critical thinking knowledge.

In CLIL classes, learners are encouraged to explore the connections between knowledge building and

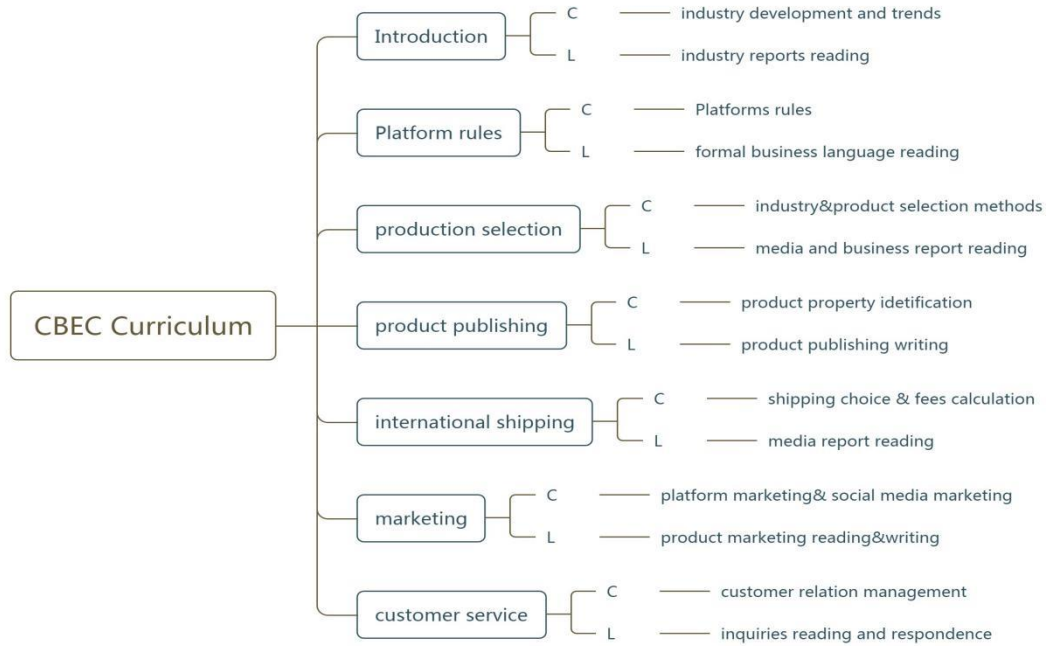


Figure 1 CBEC Curriculum Design Under the Guidance of CLIL

knowledge communication, that is, between content and language[8][9]. The content is centered around the basic operation and knowledge in e-commerce, especially for global customers. The language involves the choice of expressions for publication, the marketing language as well as the customer service language. Language is both the output of learners' CBEC knowledge and the communication between buyers and e-commerce "sellers" who are actually learners in CBEC classroom. The scaffolding of CLIL method in CBEC course is illustrated in Figure 1 above.

The language skills involved are mainly CBEC English reading and writing, which are actually advanced language skills compared to listening and speaking for any language learner. CBEC reports reading is the knowledge input, allowing students to access CBEC subject-specific vehicular language terminology. Uploading the product information and scheduling marketing languages for products in global online store is an active and motivated output process, which could positively enhance their cognition development of the CBEC content learning. This could enable better association of different concepts and help students to advance toward a more sophisticated level of learning [2].

In the end of the semester, a presentation is required for students to report their learning. This presentation is a roadshow for student's online global store and their content learning effect will be evaluated. The final presentations are actually another integration of language and content for English majors and Business English majors.

According to the scaffolding of CLIL in CBEC course curriculum, the following research questions are proposed for this study:

- 1)What are college students' general attitudes towards CBEC course with CLIL method?
- 2)What could be the problems in the teaching process? Are there any pedagogical implications?

### 3. CASE STUDY OF CLIL IN CBEC COURSE

As is reviewed in previous studies, quite a few studies have been carried out in relation to CLIL but so far there is no exploration of CBEC course in higher education. As a result, this study intends to carry out a case study in Guangzhou Xinhua University. Juniors from Foreign Languages Department were regarded as the research subjects. They entered the university in the Fall 2019 and received two years of fundamental English Major courses. English is their second language and most of them are basically proficient in their general English competence but lack the knowledge for subject-specific vehicular language terminology. Various subjects-specific soft science courses are arranged for their junior year study, including management, accounting, CBEC, business negotiation etc.

The teaching semester is Fall 2021, including 17 weeks classes in all. Since the CBEC course is only scheduled for one semester, the teaching of all the basic CBEC knowledge and skills has to be completed within

15 weeks. The last two weeks are for final evaluation by students' presentation for their CBEC store. In the end,

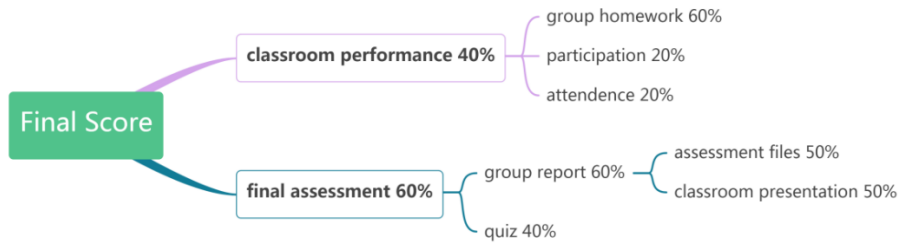


Figure 2 Final Score Components of CBEC Course in Fall 2021

a questionnaire survey was conducted randomly among the students for evaluation of their learning effect and feedback for curriculum and pedagogy in class. 7-point Likert Scale is employed for rating students' behavior in CBEC class. 1 means "not at all true of me" and 7 means "very true of me". The questionnaire was adapted from Pintrich & DeGroot for evaluating learning performance in classroom [10]. For CBEC course, different questions were altered for the research aim of this study. Cronbach  $\alpha$  is 0.87, which means the results are quite reliable.

4. DISCUSSION AND IMPLICATIONS

4.1. Analysis of Students' Performance

Students actively participated in CBEC course during the Fall semester 2021. The final evaluation was progressive, including their attendance, classroom participation, group assignment, group report, global store operation status, and final presentation. The proportion of each segment is shown in Figure 2.

The quiz was open for book, Internet and time with the goal of evaluating their mastery of CBEC contents and skills. Their classroom presentation was to report what they have learned and the assessment files were in relation to their global online store. One of the four classes was randomly chosen for analysis of their final score shown in Table 1.

Table 1 Final Grade Proportion of Sample Class in Fall 2021

Grade (100)	Number of Students	Proportion
A (Above 90)	29	80.56%
B ( 80-89 )	6	16.67%
C ( 70-79 )	1	2.78%
D ( 60-69 )	0	0%
F (Below 60)	0	0%
Total	36	100%

80.56% of the students in this class have attained Grade A, which indicates that a large majority of Sample

Class students are in favor of CLIL method in CBEC course. They are able to integrate the language learning into the course content. For other classes, the proportions of students above Grade B are all over 90%.

On the other hand, 12 items from the questionnaire were extracted for factor analysis of students' general attitudes towards CBEC course under the framework of CLIL. The survey results are shown in Table 2. KMO value of these items is 0.674, which indicates the data collected is generally valid for analysis.

As can be seen in Table 2, three factors were extracted from the collected data. Item 3, 4, 16, 18, 19 and 27 are prominent in the the first factor. Among them, the most prominent is Item 16, which confirms student' s positive recognition of CBEC course. The first factor can be summarized as knowledge recognition. For F2, the most prominent is Item 8, which emphasizes the wide applicability of CBEC course. This is actually relevant to the course curriculum design as is shown in Figure 1. The third factor is mostly prominent concerning Item 29. As Item 2, 3, 17 and 29 show, individual initiative is typical for F3. Thus, it can be summarized that knowledge recognition, course applicability and individual initiative are the three main factors underlying students' general attitudes towards the course.

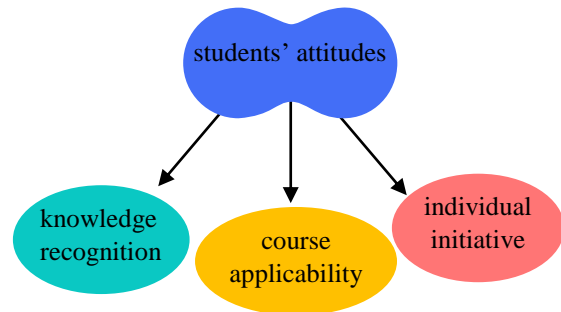


Figure 3 Model of Students' General Attitudes towards CBEC Course

This indicates that the CBEC curriculum content and the CLIL teaching methods are in general accepted by students. They approve that the knowledge learned in this

course is useful and applicable. Meanwhile, the teaching methods have motivated their learning activity as well.

Table 2 Factor Analysis of Student’s Attitudes towards CBEC Course  
(F\*=factor; Com\*=Communality; KMO\*=Kaiser-Meyer-Olkin)

Item	F*1	F*2	F*3	Com.
2. I like challenging homework so that I can learn something new.	-0.01	<b>0.7</b>	<b>0.56</b>	0.804
3. Compared with other students in my class, I expect to get a higher final	<b>0.68</b>	-0.01	<b>0.54</b>	0.748
4. The knowledge taught in this class is very important for me.	<b>0.74</b>	0.41	0.25	0.775
5. I like the content taught in this course.	0.42	<b>0.74</b>	0.26	0.786
7. I am sure I can understand the teaching principles and methods of this	0.41	<b>0.79</b>	0.21	0.835
8. I think the knowledge learned in this course is useful to other courses.	0.25	<b>0.85</b>	-0.22	0.834
16. I think what I have learned in this course is helpful to me.	<b>0.85</b>	0.22	-0.05	0.777
17. Compared with other students in my class, I have good learning skills.	0.46	0.16	<b>0.79</b>	0.853
18. I think the content of this course is interesting.	<b>0.73</b>	0.37	0.27	0.747
19. I pay attention to the feedback and comments from my teacher.	<b>0.81</b>	0.23	0.15	0.722
27. I always try to understand what the teacher has taught, even though I	<b>0.82</b>	0.21	0.12	0.73
29. I practice my skills on the CBEC platform by myself.	0.06	0.08	<b>0.93</b>	0.878

#### 4.2. Problems in CLIL Classroom

After an observation of the whole semester, the following problems were identified in the implementation of CLIL method in CBEC classroom.

The first problem concerns the communication in CLIL that is the reliance on translation tools, which actually reduces learners’ foreign language use. In this way, CBEC knowledge is their solely learning focus, overlooking the English language. To achieve the two-fold aims in CLIL, the non-language subject is not taught in a foreign language but with and through a foreign language [11]. The convergence of English as a foreign language and CBEC as the specific subject is not completed actually. During the open quiz, it was found that nearly 60% of the students in class directly utilized Google or Youdao translation tool for composing their advertising language or product information. Native language was firstly composed and then copied the translation version from Internet.

When grading their tests, it is easy to find Chinese expressions as Figure 4 shows. Closely following their advertising post, a corresponding Chinese version showed up. The test was required English-only and students’ Chinese version was definitely not for a bonus. Maybe before the test was over, the deletion of Chinese

versions was neglected. This actually was quite normal during the test according to their teacher’s classroom observation. According to the questionnaire survey, Item 31 and 34 are in relation to the use of translation tools.



Figure 4 Screenshot of Student’s Mid-test

For Item 31, the even score of 3.91 shows that most of the subjects surveyed tend to disagree with the description. Item 34 reveals that the majority think it is true of them and they do love using translation tools. Items 34 and 33 are opposites in evaluating students’

attitudes towards translation tools. On the basis of the figures in Table 3, the even score of student’s attitude towards reliance on translation tools is 4.27, which shows that 40% students are inclined to employ translation tools in this course. This is a little different from the classroom observation, but the questionnaire data does demonstrate some learners’ more focus on content than on language. For some students, maybe it is occasionally used.

Table 3 Students’ Feedback towards Translation Tools

Item	Even score
31. When writing product titles, I like to write by myself instead of using online translation	3.91
34. I like to use Youdao translation tools to help me write product titles and description	5.35

For Item 31, the even score of 3.91 shows that most of the subjects surveyed tend to disagree with the description. Question 34 reveals that the majority think it is true of them and they do love using translation tools. Items 34 and 33 are opposites in evaluating students’ attitudes towards translation tools.

With regard to cognition in CLIL, it is examined that students in CBEC classes tend to be inactive in their learning process, especially for the cognition challenging content. Learners in CBEC classroom are highly encouraged to do task-based learning in the form of a team. Our CBEC teachers do not advocate the “banking model” which centers on the transmission of knowledge from teachers to learners [12]. Instead, since CBEC involves a lot of practice of online global store, the social-constructivist method is preferred. Active student-centered learning is focused. Students are able to interact with “expert”, such as teachers, MOOC or teammates, to deal with the cognitive challenge in their learning process. This is in line with the pedagogic approach encouraged for CLIL classes, which is to develop cognitive engagement, problem solving and higher-order thinking as the learning content [2].

In the questionnaire survey, 7 Items are positively stated for exploring students’ attitudes towards learning content, especially the difficult and challenging part. The factor analysis results are shown in Table 4.

As is illustrated in Table 4, the six items in the questionnaire were designed for evaluating their cognition towards learning content in CBEC. The KMO is 0.609 and the communalities are all above 0.7, which mean their results are consistent for validity. Factor 1 can be summarized as the attainment value factor and Factor 2 can attribute to the extrinsic utility value [13][14]. The attainment value is related to the personal importance of mastering a skill and doing well on a task, while the extrinsic utility value is the awareness of how well a task related to current and future goals and what role learning plays in making one a better person [15]. This can be seen from another survey result. Item 3 describes that “Compared to other classmates, I hope to get higher final score in this course”. This item reveals the highest even score 5.96, which means this statement is true of nearly all students. Their higher score is crucial to their present and future goals such as scholarship, higher credits, better work opportunity etc. This is in accordance with the course survey in the first week, students were randomly chosen for inquiring their attitudes towards this course. One of three would frankly admit the extrinsic utility value of this course.

In general, for students’ evaluation of CBEC course with CLIL method, the following model in Figure 3 can indicate that factors underlying students’ attitudes towards learning content involves two aspects: attainment and extrinsic utility values.

The contribution of two factors lead to the lack of intrinsic motivation. In other words, students are mostly externally motivated to deal with cognitively-challenging materials in the course. Their expectancy of attaining higher final score or better job opportunities in the future guide their learning process.

Table 4 Factor Analysis of Student’s Attitudes towards Learning Content

(F\*=factor; Com\*=Communality; KMO\*=Kaiser-Meyer-Olkin)

Item	F*1	F*2	Com*	KMO*
2. I like challenging work so that I can learn something new.	0.19	<b>0.83</b>	0.727	0.609
6. I like all the content in CBEC course.	<b>0.69</b>	0.53	0.759	
7. I am sure I can understand the teaching principles and methods of this course.	<b>0.64</b>	<b>0.68</b>	0.861	
26. When I have some trouble in learning, I refer to online courses for help.	-0.13	0.84	0.727	
27. I always try to understand what is taught by the teacher, even if it was confusing for me.	<b>0.88</b>	0.09	0.775	
30. When learning materials are dull, I insist on learning till I understand them.	<b>0.87</b>	-0.07	0.769	

The contribution of two factors lead to the lack of intrinsic motivation. In other words, students are mostly externally motivated to deal with cognitively-challenging materials in the course. Their expectancy of attaining higher final score or better job opportunities in the future guide their learning process.

### **4.3. Implications for CBEC Pedagogy**

With regard to the problems identified in the teaching processes of CBEC course, the following implications are suggested as solutions to better CLIL motivate students externally.

On the one hand, emphasis on language learning in this course has to be made in that language is relevant to culture and context and it is the foundation for better knowledge learning. Students' cross-cultural awareness is crucial in the teaching process. It is suggested that teachers could improve their pedagogy and better motivate students externally. Language tests can be invented to assess student's individual language learning situation. The course orientation can be adjusted for better language instruction.

On the other hand, optimizing teaching tasks with cognitive challenges is suggested for CBEC teachers. It has been found that in this semester, students focused more on their skill training, overlooking their cognition development. This is also in relation to students' learning strategies. It is suggested that teachers could guide students in challenging task so that they might better motivate themselves to learning more about the language and CBEC content.

## **5. CONCLUSIONS**

This study of CBEC course with a CLIL method has been carried out during the Fall 2021 semester in Guangzhou Xinhua University. The course was designed based on the framework of CLIL and focused on two aspects: CBEC-specific language and knowledge. It has been found that students' performances are generally within expectation. The survey results show that they are in favor of the teaching methods and content of this course. Nevertheless, problems were identified in relation to the students' overuse of translation tools and lack of confidence to deal with cognitively challenging tasks. Two corresponding solutions have been respectively proposed for future survey of CLIL method in CBEC course. However, with regard to the limitation of the present study, further studies can be carried out concerning comparative study and application of CLIL approach to other practical courses in colleges.

## **ACKNOWLEDGMENTS**

This study was supported by Guangdong Province Project Study on the Design and Application of CBEC

After-sales Service Communication Course for Undergraduate Business English Major (GD19WXZ13), Guangzhou Xinhua University CBEC Course Teaching Group (2021T001) and Guangzhou Xinhua University Key Major Project: Business English Major (2020ZDZY002).

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