



An Investigation of Intercultural Communicative Competence Among Master's Graduate Students of Non-English Major in the Context of Content-Based English Instruction

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Abstract. Intercultural communicative competence (ICC) is the ultimate goal of teaching and learning of English as a foreign language (EFL). Content-based English Instruction (CBEI) refers to the teaching of the content or materials of a field in English, enabling students to acquire English while learning specialized knowledge. This study tries to investigate the cultivation of ICC among Master's graduate students (MGS) in a cultural content-based English course. A questionnaire was distributed to 300 MGS for the survey before and after the CBEI course was conducted. And the results do reveal that CBEI course can increase students ICC in five dimensions, namely, language competence, intercultural knowledge, intercultural attitude, intercultural awareness and intercultural strategy. Classroom observation on the process of teaching was conducted to find out the way it improves the ICC of MGS.

Keywords: Intercultural communicative competence (ICC) · Content-Based English Instruction (CBEI) · Master's graduate students (MGS)

1 Introduction

Intercultural communicative competence (ICC) is the ultimate goal for teaching and learning of English as a foreign language (EFL). As English has become an international lingua franca for communication and been widely used around the world, all graduate students in China are required to study English, and English course is compulsory in China's graduate education. As early as 1992, the National Education Ministry has issued the Non-English Major Graduates English Instruction Syllabus, which claimed that the aim of graduate English teaching is to cultivate students' ability to use English as a tool to learn disciplinary knowledge, to do academic research and to cultivate their competence in international communication. Hence, colleges and universities have developed various curricula and syllabuses of graduate English course for improving students' international

communicative capability either in their academic study or in general interactions. However, the traditional language-driven model of graduate English teaching for cultivating students' English skills neglects the actual use of English in the international communicative context of the globalizing world. Moreover, as master graduate students (MGS), most of them have learned English for more than 14 years from primary school through their undergraduate education, and have accumulated vocabularies, acquired grammatical structures as well as language skills before they took graduate English course. As a result, in graduate English teaching context, content-based English instruction (CBEI) is much more accepted, and more suitable for the needs of students. In CBEI course, English is used as a tool to learn subject matter, with the learning and teaching happened in an authentic context. Such content-driven model integrating language learning into subject matter learning by using authentic materials in a certain field and creating real communicating context is a suitable way to develop students' ICC. This study attempts to investigate the correlation between graduate students' ICC improvement and the CBI model, and to find how this model improves MGS' ICC.

1.1 Content-Based English Instruction and Intercultural Communicative Competence

Content Based Instruction (CBI) refers to teaching of the content or materials of a field in the target language (mostly a second or foreign language), in which students acquire the language while learning specialized knowledge [1]. Language is the carrier of content, and the content reflects specific applications of language. This teaching concept advocates the teaching of a second language or foreign language by means of subject content, which is effective, authentic and combines the learning of language and content [2]. In CBI, learners acquire the second or foreign language while learning the contents in authentic language communicative context through which their language ability and ICC are improved, and such improvement makes it easier for them to learn subject knowledge. CBI language course is strongly discipline-oriented. It combines language learning with subject matter study, shifting the focus from language itself to the subject materials. And in Content-based English Instruction (CBEI), English is used in the teaching and learning of the content materials. This teaching mode is also function-oriented, in which students learn subject material in English through activities that can not only improves their English capacity, but also cultivates their ICC. CBEI emphasizes the learning of subject content, the authenticity of language materials, the novelty of information and the needs of students. Language teaching under this concept improves learners' English competence on the premise of fully meeting their learning needs and stimulating their learning enthusiasm. In this process, students learn professional knowledge, understand the latest trend of the discipline, and cultivate their ICC.

The concept of ICC is variously defined by scholars resulting from their different views on intercultural communication and conceptualization of competence. Spitzberg [3] state that intercultural communication competence, cross-cultural communication competence, and trans-cultural communication competence are interchangeable concepts referring to the ability to effectively and appropriately communicate with people who are from different countries, different regions and different communities with different cultural backgrounds. Samovar & Porter [4] declare that ICC is a kind of behavior

that individuals behave properly and appropriately who are able to successfully communicate with people from other cultural backgrounds. For TESL scholars, ICC refers to the ability which enables one to effectively and appropriately interact in a second or foreign language with others from different linguistic and cultural backgrounds [5]. As a result, developing learners ICC and helping them to successfully communicate with people from other cultures whose mother tongues are different becomes the goal of language education.

As for component of ICC, Byram [6] holds that ICC should include linguistic competence, sociolinguistic competence and discourse competence, including elements such as attitudes, knowledge, skills of interpreting and relating, skills of discovery and interaction, and critical cultural awareness. Fantini [7] proposes a similar model which consists of knowledge, awareness, attitudes to different cultures, and language skills. Both of them emphasize the cultivation of intercultural as well as linguistic competence. Byram further [6] points out that the purpose of language education is to foster intercultural competences of language users, so as to help language users be open to views or ways differ from those of them, to be able to communicate with people speaking different languages from different cultures. Hence, integration intercultural knowledge into language education should be a feasible way to develop learners' ICC.

CBEI has been a significant approach for teaching English as a second or foreign language. And in most cases, the contents are cultural materials or subject knowledge. It aims to develop learners' English proficiency and subject matters in an authentic learning context. Stryker & Leaver [8] state that CBEI can be a "new paradigm" in second language education that centers on developing students' communicative competence—the ability of communicating with others from different cultures in real communication context.

1.2 Research Purposes

As a group of advanced English learners, MGS has urgent needs for ICC. CBEI integrates language learning into content learning which is widely used in second/foreign language settings. However, few studies research on ICC among graduate students in a CBEI course. As a result, this study is to explore whether the CBEI course can improve students' ICC, and how does it improve their ICC through investigating MGS' ICC before and after the take CBEI course.

2 Research Methods

2.1 Research Subjects

The investigation was done in a university in southwest of China. This is a typical provincial university which can trace back to 1938 when China was in Anti-Japanese War. In this university, the English course is compulsory for all non-English major MGS which has 108 credit hours with 4 credits lasting 2 semesters in the first year of their graduate education. From 2013, this university implemented content-based English instruction approach in the course of "American Culture". In 2017 academic year, the

university enrolled 1362 MGS among whom 1027 are full-time students, and 335 are part-time ones), ranging from liberal art, education to science and engineering. And among 1027 full-time MGS, 72 are English majors who are not required to take the graduate English course, for most of their course are full English ones. As a result, the total number of full-time MGS of non-English major is 955.

In this investigation, 300 MGS of 2017 were randomly chosen as research subjects, accounting for more than 3% of the total full-time non-English major MGS who take the graduate English course through 2017–2018 academic year.

They are first-year graduate students of 2017 and most of whom have learned English for about fourteen years. Among them, 167 graduate students are in liberal art, including literature, sociology, linguistics, philosophy and history, 133 graduate students are in science, majoring in mathematics, chemistry, physics, engineering, and biology. 176 subjects are female students, accounting for 59%, while 124 are male students accounting for 41% of the total (see Table 1).

Table 1. Demographic information of the research subjects.

	Major		Gender	
	Arts	Science	Male	Female
Number	167	133	124	176
Percent	56%	44%	41%	59%

Among them, only 42% and 14% students respectively have passed (CET4) (N = 127) and CET6 (N = 42) (see Table 2), which indicates that as graduate students, their English level is not good as we expected. [Note: CET4, the abbreviation of College English Test Band 4, is a national English proficiency test mostly for the first and second year college students, while CET6, the abbreviation of College English Test Band 6, is mostly for the third and fourth year ones.]

Table 2. English proficiency of the research subjects.

	You passed CET4		You passed CET6	
	Yes	No	Yes	No
Number	127	173	42	258
Percent	42%	58%	14%	86%

2.2 Research Methods

Questionnaires and classroom observation are used as the primary research methods in this study to analyze the status quo of graduate students' ICC and the effects of CBEI course on their ICC in the Chinese graduate English context. The statistical package for social science 18.0 (SPSS 18.0) and excel 2007 are applied to export results of the collecting data.

2.2.1 Questionnaire

This study utilizes one questionnaire with 5-Likert scale to investigate whether the CBEI has positive effects on students ICC improvement. "Questionnaire of Intercultural Communication Competence Inventory for Chinese MGS" was made by integrating Zhong et al.'s [9] scale "The Intercultural Communication Competence Self Report Scale (ICCSRS)" and Gao's [10] "Intercultural Communication Competence Inventory for Chinese College Students (ICCICCS)". This questionnaire includes two parts, first part is subjects' demographic information including major, gender and English proficiency (whether passed CET4 and CET6). Part two includes 42 items classified into five parts – language competence, intercultural knowledge, intercultural attitude, intercultural awareness and intercultural strategy (see Table 3).

Table 3. Structure of questionnaire one.

Dimension	Name	Items
1	Language competence	From 1 to 6
2	Intercultural knowledge	From 7 to 18
3	Intercultural attitude	From 19 to 27
4	Intercultural awareness	From 28 to 33
5	Intercultural strategy	From 34 to 42

The questionnaire was distributed to the subjects before and after they took the CBEI course among the same subjects to survey whether CBEI course has improved their ICC, and how does it help in the improvement. Their CBEI course lasts two semesters.

2.2.2 Classroom Observations

Classroom observations are conducted among five CBEI teachers' class through two semesters. It was observed that the teaching in CBEI course is mostly student-centered and task-based, and students are frequently asked to do presentations, to discuss questions in groups assigned in the previous week. And the instructors mostly acted as guiders and controllers who designed class activities, controlled steps, inspired students' interests in the content and language, making some explanation on the language and some comparisons between American and Chinese cultures. Observation on students mainly includes their language choose in carrying the task, activity participation, confidence and

anxiety of L2 use. Observation on program is centering on linguistic appropriateness, content learning, and ICC developing.

2.3 Teaching Materials

CBEI integrates language learning into content learning and its teaching materials should be authentic subject matter information appropriate to specific needs.

The content of this CBEI course mainly focuses on learning subject matters (American culture) (see Table 4) which are authentic texts written by Russell Duncan & Joseph Goddard, an original version published by China's Renmin University Press. This graduate English course is open to all graduate students who are from different majors and different subjects, so their major is different. The main themes of this textbook are presented in Table 4.

Table 4. Structure of the textbook.

Lesson	Topics
Lesson 1	History (The Rise of Nation, The Rise of Power, From Isolation to Superpower, The Cold War, The 1990s)
Lesson 2	Land and People (The land, The People, Regions, Immigration)
Lesson 3	Government (The Constitution, The Federal System, The Branches of Government)
Lesson 4	The Political System (The 2004 Election, Political Parties, Politics)
Lesson 5	Society (The American Family, women, Race, Crime and Punishment)
Lesson 6	Education and Social Policy (Education, Social Services)
Lesson 7	Culture (Diversity, The Rise of American Culture, Leisure Time, Print Media, Mass Entertainment, Government Activities, The World Wide Web, Sports, The Arts, Popular Music)
Lesson 8	The Economy (The US Domestic Economy, Labor Unions, Business and Industry, The Global Marketplace, The Dollar and the Trade Deficit)
Lesson 9	Foreign Policy (Separation of Powers and Foreign Policy, The Administration of Foreign Policy, History of Foreign Policy, The Cold War, 1945—1991, The New World Order, The Bush Administration)
Lesson 10	Conclusion (The Home Front, Foreign Affairs)

In CBEI course of this study, graduate students' do not waste much time on studying grammar rules that they have learned before, but give much efforts to gain what they does not know or what they are unfamiliar with. Additionally, on account of students' task different, information gap will be emerged in this course, which creates good opportunities for students' exchanging information. That is to say this is a process of learning new information or gaining information gap rather than review what they have learned.

For appropriateness to specific needs, the teaching materials in CBEI course is not limited by the textbook, students are able to choose original materials that they really interested in around the given topic to share with their classmates.

3 Results and Discussion

3.1 Comparison of ICC in Pretest and Post-test

The questionnaire was done twice (pretest and post-test) among the 300 research subjects before and two semesters after they had the CBEI course. Table 5 and 6 demonstrate the results of the pretest and post-test of the questionnaire.

Table 5. Descriptive statistics of total means ICC in pretest and post-test.

	N	Min	Max	Means	SD
ICC in pretest	300	1.76	4.43	3.319	0.336
ICC in post-test	300	1.52	5.00	3.647	0.472

Table 5 shows a general description on students' ICC before and after they took the course. In pretest, the mean score of ICC among the 300 research subjects is 3.319, while in post-test, it has increased 3.364. After one-year CBEI course, students' ICC has improved in general.

The questionnaire surveys students ICC from five dimensions including language competence, intercultural knowledge, intercultural attitude, intercultural awareness and intercultural strategy. The statistics are illustrated in Table 6. Students' means scores of the five dimensions of ICC in post-test have increased a lot. Students mean score of language competence has increased 0.1473 from 3.3933 to 3.5406, and the maximum has increased from 4.67 to 5.00; the means of their intercultural knowledge is 0.4957 higher, from 2.9222 to 3.4169; the means of their intercultural attitude has been raised 0.2093, from 3.8281 to 4.0374; their intercultural awareness increases by 0.3578, from 3.2233 to 3.5811; their intercultural strategy raises by 0.3250, from 3.3544 to 3.6800. Their improvement can be described as intercultural knowledge > intercultural awareness > intercultural strategy > intercultural knowledge > English competence. Students have the lowest score ($M = 2.9211$) in pretest in intercultural knowledge, but improves most in post-test, which is the best example to illustrate the sharp contrast in the traditional English instruction and that of CBEI. In traditional instruction, the teaching materials are articles about different topics, and instructors mostly focus the teaching on language itself by explanation of words, sentence structures and the practice of them, neglecting the cultural knowledge the implied in the materials. While in CBEI course, the content is cultural materials of America, and in teaching process, the instructors frequently compare American culture with Chinese culture and extend into other cultures in the world. In such a way of teaching, in the comparison and study of culture, their cultural knowledge has greatly improved. And in this teaching process, their culture awareness

has also greatly improved. In both pretest and post-test, they have highest scores in culture attitude, revealing that China's MGS has a positive attitude to diversities cultures, and they are open to the differences among peoples in the world. However, the English competence is relatively low and the progress is narrow, which is only 0.1473. In the teaching, in order to express clearly sometimes the instructor speak Chinese, and in the discussion and question & answer part, in order to express complicated thoughts about cultures students may speak Chinese. Nevertheless, they do have made progress in the CBEI course.

Table 6. Descriptive analysis of ICC in pretest and post-test.

		N	Min	Max	Means	SD
In Pretest	Language competence	300	1.33	4.67	3.3933	0.52855
	Intercultural knowledge	300	1.00	5.00	2.9211	0.64986
	Intercultural attitude	300	1.78	5.00	3.8281	0.54858
	Intercultural awareness	300	1.50	4.67	3.2233	0.45264
	Intercultural strategy	300	1.44	4.56	3.3544	0.42157
In Post-test	Language competence	300	1.00	5.00	3.5406	0.6435
	Intercultural knowledge	300	1.00	5.00	3.4169	0.7441
	Intercultural attitude	300	1.00	5.00	4.0374	0.6908
	Intercultural awareness	300	1.33	5.00	3.5811	0.6089
	Intercultural strategy	300	1.44	5.00	3.6800	0.5358

As seen from Table 7, findings reveal that in pretest 254 students have the mean score higher than 3, which account for 84.6%, and only 4 are accounting for 1.3%. In post-test, the number increases to 284, accounting for 94.6%, a 10% growth in their ICC. For those who get the high score between 4 and 5 ($4 \leq M \leq 5$), the number has increased from 4 to 55. And number of students' means scores lower than 3 has decreased from 46 to 26, the percentage changes from 15.3% to 5.35. These results demonstrate that through studying CBEI course, students' ICC has apparently improved a lot, but developing students' ICC is a process of continuous learning and practicing in authentic context.

3.2 Teaching Mode of the Instructors Through Classroom Observation

This is a comprehensive graduate English course, which is required for all MGS. This university use materials of American culture as the content of instruction. The objectives of this course are as follows: (1) to require students have a comprehensive understanding of the history, politics, society and culture of the United States through the study; In the study, students should expand their knowledge from American culture to western culture and its origin. Furthermore, instructors should guide them to make comparison and explore the differences between Chinese culture and American culture, the oriental and

Table 7. Frequency analysis of students' ICC means scores between pretest and post-test.

	The range of the means scores	N	Percent	Valid percent	Cumulative percent
In Pretest	M < 2	1	0.3%	0.3%	0.3%
	2 <= M < 3	45	15%	15%	15.3%
	3 <= M < 4	250	83.3%	83.3%	98.7%
	4 <= M <= 5	4	1.3%	1.3%	100%
In Post-test	M < 2	3	1.0%	1.0%	1.0%
	2 <= M < 3	13	4.35	4.3%	5.3%
	3 <= M < 4	229	76.3%	76.3%	81.7%
	4 <= M <= 5	55	18.3%	18.3%	100%

Note: M < 2 means that the means score of ICC is lower than 2
 2 <= M < 3 represents the means score of ICC is 2 (M = 2) to 3 (M < 3)
 3 <= M < 4 refers to the means score of ICC is 3 (M = 3) to 4 (M < 4)
 4 <= M <= 5 is about the means score of ICC is 4 (M = 4) to 5 (M < 5)

western cultures, in the effort to cultivate their confidence and pride in Chinese culture, and to develop their awareness of cultural relativity. (2) to improve students' English language skills, and to cultivate intercultural communicative competence (Table 8).

This is a design of one hour's class. The teaching and learning are carried out mostly in cooperative study in groups, and classroom discussion, while the instructor makes the general explanation and supervise students to involve in classroom interactions. The instructor assigns students to learn the material before the class. And the assignments are in the form of question. In the chapter of American Civil war, the questions concerns about the reasons and causes, the details, and what the American chose by and from the war, the significance of the war. One question is about the comparison between the civil war between the Kuomintang and Communist Party in 1945–1949 which led to the complete victory of Communist Party in China. In the classroom, the instruction carries out in discussion around these questions in class. After the discussion, the instructor analyzes the chapter and makes conclusion of the chapter.

Such mode of teaching is mostly student-centered. They need to study the content of text book and consult relevant materials in order to answer the questions assigned by the instructor. And in classroom, they need to participate in class activities of discussion, make presentation, and other group activities. After class, in addition to finishing some written assignments, they have to prepare for the new chapter for next week. In this model of teaching and learning, students learn intercultural knowledge, and in this process of learning, they develop intercultural awareness, learn intercultural strategy, cultivate a positive intercultural attitude, and acquire English competence.

Table 8. One class period of the instruction: American civil war.

Task: reading the chapter of the Civil War in the text book and preparing for the questions given by the instructor by consulting relevant materials	Reasons	Significance	Comparison	Cooperative learning
	Northern development road Southern development road Causes of civil war 1. States' rights vs. federal rights 2. Social contradictions 3. Economic benefits	Safeguarding national unity; Abolition of slavery; Solving the land problems; Developing Capitalism...	1945–1949 civil war between China's Kuomintang and Communist Party	Group cooperation to complete tasks, and to participate in class discussions
	Details	Choices		
	Capitalism vs. slavery Lincoln Road for development the Western states Major battles of the civil war Gettysburg The Emancipation Proclamation. Homestead Act	The right of the union over the right of the states, The United States is well on its way to liberal capitalism, Freedom, equality, no slavery		
Intercultural communicative competence				

4 Conclusion

Through surveying and analyzing, we have found that after participating in CBI English course for one year, most students' ICC has improved, and a few have made great progress, indicating that the CBI English course is an effective and feasible way to enhance students' ICC. The CBI English course can promote students' ICC development in all dimensions, and their intercultural knowledge can be greatly improved.

This study is of immense significance to promote the potential shift of traditional graduate English teaching to CBI course in the upsurge of current foreign language education reform in China. Specifically, it differs from traditional language teaching for integration of language learning into content learning and it is able to simultaneously

enhance students' ICC, academic knowledge and language proficiency rather than merely emphasize language skills acquisition.

References

1. Snow, M., Brinton, D.: *Content-Based Classroom*. Longman, New York (1997)
2. Stoller, F.: Content-based instruction: perspectives on curriculum planning. *Ann. Rev. Appl. Linguist.* **24**, 261–283 (2004)
3. Spitzberg, B.H.: A model of intercultural communication competence. In: Samovar, L.A., Porter, R.E. (eds.) *Intercultural Communication: A Reader*, 9th edn. Wadsworth Publishing Company, Belmont (2000)
4. Samovar, L.A., Porter, R.E.: *Communication Between Cultures*, 7th edn. Beijing University Press, Beijing (2012)
5. Tran, T.Q., Duong, T.M.: The effectiveness of the intercultural language communicative teaching model for EFL learners. *Asian-Pacific J. Second Foreign Lang. Educ.* **3**(1), 1–17 (2018). <https://doi.org/10.1186/s40862-018-0048-0>
6. Byram, M.: *Teaching and Assessing Intercultural Communicative Competence*. Multilingual Matters, Philadelphia (1997)
7. Fantini, A.E.: A central concern: developing intercultural competence. *SIT Occas. Pap. Ser. Addressing Intercult. Educ. Train. Serv.* **1**, 25–42 (2000)
8. Stryker, B., Leaver, L.: Content-based instruction: some lessons and implications. In: Stryker, B., Leaver, L. (eds.) *Content-Based Instruction in Foreign Language Education: Models and Methods* 282–310. Georgetown University Press, Washington, D.C. (1997)
9. Zhong, H., Bai, Q.H., Fan, W.W.: Study on the intercultural communication competence self report scale among China's college students. *Foreign Lang. Circle* **2**, 47–56 (2013)
10. Gao, Y.C.: Investigation and analysis on the current situation of intercultural communication competence of Chinese college students. *Foreign Lang. Foreign Lang. Teach.* **2**, 71–78 (2016)