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Critical thinking, questioning and student engagement in Korean university English courses[☆]



Scott A. DeWaelsche*,1

Department of English Language and Literature, University of Suwon, 17 Wauan-gil, Bongdam-eup, Hwaseong City, Gyeonggi-do 445-743, South Korea

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ABSTRACT

The paper explores the viability of higher-level questioning in student-centered activities to elevate critical thinking and increase student engagement among Korean university English majors. The author examines research that identifies limitations for Korean students associated with their reluctance to speak or share opinions in class due to sociocultural influences in the classroom. Participants in the study posed and responded to higher-level questions in structured, small-group conversation activities. Findings revealed that cultural and institutional factors, as well as limitations in English language proficiency, can impact participation in student-centered, critical thinking activities. The author argued, however, that the evidence demonstrates that Korean students will overcome sociocultural obstacles and successfully engage in group conversations with peers in critical dialog when they possess adequate English language skills and when they are challenged to do so in lessons.

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Introduction

Educators in South Korea (hereafter, Korea) are familiar with the challenges associated with implementing student-centered learning activities in Korean classrooms. Active learning approaches involving activities such as discussion or debate are often considered likely to fail in an East Asian context (Shin & Crookes, 2005). Korean students are generally uncomfortable with communicative tasks where they are expected to think critically and share original ideas with classmates and teachers in non-traditional classroom settings (Choi & Rhee, 2013; Lee, Fraser, & Fisher, 2003; Lee & Sriraman, 2013; Ramos, 2014b). Many see this as the result of several institutional and sociocultural factors, including an emphasis on rote learning for exam preparation, a tendency toward teacher-centered lessons, and a group-oriented, authority-reverent culture traditionally influenced by Confucian ideals (Cho, 2004; Kim, 2012; Lee et al., 2003; Ramos, 2014b; Seth, 2002).

In its 1998 review of the Korean education system, the Organization for Economic Cooperation and Development (OECD) identified traditional, receptive learning methods with exam-driven content as innate problems in Korean education. It noted, "School education is excessively geared toward preparation for college [entrance] examination with the result being that memorization of knowledge . . . [is] the rule rather than the exception" (OECD, 1998, p. 25). Beginning in the late 1990s,

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^{*} Tel.: +82 029018461.

E-mail address: scottadewaelsche@gmail.com

¹ He is now lecturing at the Department of General Education, Duksung Women's University, Chamirisakwan 120, 33 Samyang-ro 144-gil, Dobong-gu, Seoul 132-714, South Korea.

the Korean Ministry of Education (MOE) responded with efforts to overhaul the curriculum to emphasize problem-solving, creativity, higher-order thinking skills, and student-centered approaches (Chang, 2009; Kim, 2003). Despite these changes however, what the MOE calls for in theory rarely occurs in practice as teacher-dominated classrooms remain common in Korea (Byun, Schofer, & Kim, 2012; Campbell, Oh, Shin, & Zhang, 2010; Choi & Park, 2013; Lee & Sriraman, 2013). As McGuire (2007) explained, "There has been no serious or sustained effort to spread [critical thinking] pedagogy *across the curriculum* or throughout the education system in Korea" (p. 225). McGuire added that student-centered teaching approaches that promote critical thinking (CT) skills are rarely even present at the university level, where preparation for the entrance exam is obviously no longer a priority. Some recent studies involving Korean universities supported this claim, suggesting that through the use of receptive learning approaches, universities may not be fostering critical and creative learning despite a dedication to do so as articulated in their educational missions (Lee & Lee, 2012; Lee, Lee, Makara, Fishman, & Hong, 2014).

While this teacher-centered classroom dynamic exists in part due to a need to perform well on the university entrance exam, a great deal of the literature on Korean education acknowledges the existence of sociocultural factors that limit student engagement in the classroom. Scholars frequently connect this phenomenon to Korea's Confucian heritage. Kim (2012) indicated that "Korean students are not allowed to challenge the authority of schoolteachers under the Confucian tradition," which leads to "difficulties expressing their opinions" (p. 135). Ramos (2014b) stated that in traditional Korean classrooms, students passively listen and follow the directions of their teachers as a result of growing up in a Confucian society where they are discouraged from speaking up in the company of elders until they are asked to do so. Thus, by the time Korean students arrive at university they have been socialized to expect a passive learning environment, and they are noticeably uncomfortable when asked to take a more active role or demonstrate CT skills. This poses problems for university instructors who ask students to actively communicate, think critically, ask questions, share original ideas, and create new knowledge.

The purpose of this paper is not to critique the efficacy of receptive learning, or to advocate for one approach over another in all learning environments; rather it is to explore and ultimately endorse the viability of employing specific CT-based communicative tasks within a Korean context involving these sociocultural influences. Such influences have led some researchers to downplay the importance of communicative CT approaches in Korean and East Asian classrooms, including in EFL settings, suggesting they are "Western" approaches that may be inappropriate, or even problematic in that environment (Atkinson, 1997; Kim, 2002; McGuire, 2007; Park, 2013). Others have argued, however, that student-centered methods involving CT skills are applicable in East Asian classrooms despite these sociocultural implications (Crookes, 2010; Davidson & Dunham, 1997; Ennis, 1998; Kim, 2012; Lee et al., 2014; Rezaei, Derakhshan, & Bagherkazemi, 2011; Shin & Crookes, 2005; Shin, Lee, Ha, & Kim, 2006; Stapleton, 2001). This paper will align with the latter view, as it seeks to build upon the work of those scholars and to provide new evidence to support it.

Since culture and the sociocultural factors touched on above are integral to a discussion of the research in the present study, it is important to provide a definition of terms and to clarify the purpose for their use. In their report on intercultural language learning for the Australian Department of Education, Science and Training, Liddicoat, Papademetre, Scarino, and Kohler (2003) defined culture as "a complex system of concepts, attitudes, values, beliefs, conventions, behaviours, practices, rituals, and lifestyle of the people who make up a cultural group" (p. 45). Bodley (1994) referred to culture more simply as "what people think, make, and do" (p. 22). He saw culture as a socially transmitted, symbolic set of beliefs that serve as a model to guide human behavior in a society (Frank, 2013). What people think and do, in Korean and East Asian society as a whole as well as in Korean educational institutions and classrooms, can serve as a context for understanding culture as it pertains to the present study. Further, sociocultural influences contribute to what may be labeled "sociocultural transfer." For the purpose of this research, sociocultural transfer refers to the effect on student performance in student-centered, CT activities due to a presence of attitudes, values, beliefs, behaviors, or practices often associated with Confucian heritage culture (CHC) in East Asian classrooms. These include a tendency toward teacher-driven instruction, a desire to save face, a fear of making mistakes, a reluctance to speak out or challenge teachers, a reliance on rote learning and memorization, and an exam-focused curriculum. This paper does not aim to critique the Korean education system or its classroom norms, rather it acknowledges the very real existence of these cultural implications and recognizes their relevance to any credible discussion of CT in East Asian education, as will be evidenced by the literature. Finally, this study will seek to challenge the myth that CT pedagogy is inappropriate or fruitless in Korean or East Asian cultural settings.

As a teacher-researcher, the author of this paper conducted research in a Korean university English language and literature department that sought to explore whether the use of higher-order questions targeting the upper levels of Bloom's Revised Taxonomy (Krathwohl, 2002) during structured, small-group discussions could be effective in engaging Korean students in CT activities. The effectiveness of the intervention was evaluated using a rubric based on Bloom's Taxonomy adapted by the researcher to assess student responses during the discussions. All observations, data collection, and analyses were carried out by the researcher. The study was guided by the following research questions: (1) Will carefully crafted higher-order questions targeting the highest levels of Bloom's Taxonomy elicit improved CT from Korean students in group discussions? (2) Will such questions produce higher levels of engagement among students? (3) Will Korean students of English design effective higher-order questions that lead to increased engagement and improved CT? And, (4) Are meaningful results achieved using higher-order questioning in group discussions with students at all levels of English ability? Research methods, results and discussion, and conclusions and recommendations will be presented following a literature review of relevant theoretical and empirical research.

Literature review

Korean education

This section will provide a brief overview of recent trends in Korean education, including English Education, followed by a discussion of classroom practices and sociocultural influences.

Education fever

Following the end of a 35-year period of Japanese rule in 1945, a rapid expansion of state-directed formal education began in Korea and continued into the 21st century (Seth, 2002). Seth noted a high correlation between the general level of education and the level of economic development, beyond that of other nations at a similar level of GNP per capita. He explained, "South Korea's educational system, with its stress on teacher authority and intense competitiveness ... produced a workforce that was highly literate and disciplined and a society ready for the competition characteristic of a capitalist industrial regime" (p. 3). Despite the success of rapid educational development in Korea, this period of growth was also characterized by frequent reforms initiated by the Ministry of Education (MOE) in response to problems associated with the Korean zeal for formal education, including private tutoring, or shadow education, and what Koreans refer to as "exam hell"

Koreans see education as "the most powerful means to achieve upward social mobility and economic prosperity" (Park, 2009, p. 50). Park explained that an intense competitiveness to achieve prosperity leads Korean parents to send their children to private "cram schools" (hakwon in Korean) to supplement their education and gain a competitive edge. These parents are focused on helping their children gain entry into prestigious schools and universities (Choi & Park, 2013; Seth, 2002). Byun et al. (2012) reported that this shadow education is intended to prepare students for high-stakes exams. These institutions, they indicated, "focus on helping students memorize large amounts of material for particular tests in a very short period of time, rather than fostering critical thinking" (p. 223). Thus, the exam-oriented system further encourages receptive learning while limiting the promotion of CT, even in shadow education.

Much of the literature on Korean education acknowledges this exam obsession in Korea, often citing it as a major reason for the continued use of receptive learning approaches and teacher-centered instruction (Byun et al., 2012; Cho, 2004; Choi & Park, 2013; Lee et al., 2003; Park, 2013; Seth, 2002). Choi and Park noted that students had to focus on memorizing knowledge to obtain a better score on the test, resulting in high school education "remaining in a distorted state because of its focus on rote learning" (p. 115). According to Seth, critics argued that college entrance exams were driving the entire educational system, reducing it to a constant preparation for multiple choice and short answer exams. "This stifled creativity, hindered the development of analytical reasoning, made schooling a process of rote memorization of meaningless facts, and drained the joy out of learning" (p. 170; see Seth, 2002 for an in-depth discussion of exam-driven education and shadow education, and the MOE reforms associated with these). Many of the reforms implemented by the MOE occurred during what Chang (2009) identified as the "national curriculum period," which began in the 1950s and culminated with the 7th National Curriculum in 1997. According to the Korea Institute of Curriculum and Evaluation (KICE, 1997), the 7th National Curriculum outlined educational goals that included a focus on problem solving and, at the high school level, critical and creative thinking. Kim (2003) reported that this curriculum, first implemented by the MOE in 2003, was student-centered and aimed to "facilitate students' autonomy and creativity" (p. 146). Researchers have questioned, however, whether the MOE's curricular changes have actually made their way to the classroom.

English fever

English education in Korea dates to the Chosun Dynasty in the late 19th century, where public institutes taught English for the purpose of diplomatic relations, and missionary schools taught English while introducing Christianity in Korea (Chang, 2009). Park (2009) identified a current English boom that has its roots in Korean education fever beginning after the Japanese occupation. According to Park, the Korean government played a critical role in creating this English boom by initiating changes to the English portion of the university entrance exams, and by a decision to teach English in all elementary schools by 1995. During the course of the national curriculum period, English education evolved from a reliance on the grammar-translation method to the implementation of the audio-lingual method, and finally to a focus on communicative approaches as outlined in the 7th national curriculum (Chang, 2009). This emphasis was reflected in the changes made to the college entrance exams, and added to Korea's "English fever" by prompting parents to seek any means necessary to help their children improve communicative competence in English. This includes paying for English hakwons and private tutors, and sending them abroad to study in English-speaking countries (Park, 2009). English fever was also motivated by a belief that English competency is crucial to international competitiveness for Korean firms in a globalized world (Byun & Kim, 2011; Chang, 2009; Seth, 2002). Despite the changes that came with the 7th national curriculum, Cho (2004) reported that due to the importance of grades for extremely exam-conscious students, English teachers still focus on exam-related skills, placing excessive emphasis on reading and grammar. He explained, "Pupils have scarcely any conversation sessions, despite having three or four classes per week" (p. 31). University students in Ramos' study involving English majors (as well as many in the present study) acknowledged that a grammar-focused approach in their previous English education led to difficulties when confronted with communicative tasks.

Classroom practices and cultural influences

The challenge to engage Korean students in active learning tasks and to encourage them to speak out, pose questions, solve problems, and share ideas is a principal issue at the core of the present study. The literature on Korean and East Asian education overwhelmingly identifies sociocultural influences in classrooms, and these can be seen as a key trigger for this challenge. Sociocultural transfer can manifest as student inhibition, and can hinder a teacher's efforts to create a communicative classroom atmosphere where students actively participate.

Classrooms in Korean and other East Asian cultures have traditionally been teacher-dominated, where the teachers hold the knowledge and disseminate it to students who are accustomed to a receptive learning dynamic (Byun et al., 2012; Campbell et al., 2010; Kim, 2012; Lee et al., 2003; Li, 1998; Ramos, 2014c). According to Li, students "have become accustomed to the traditional classroom structure, in which they sit motionless, take notes while the teacher lectures, and speak only when they are spoken to" (p. 691). This makes it difficult to get students to participate during class activities. Compounding this difficulty, Li pointed out, is a self-reported deficiency in oral English ability as well as a fear of "losing face" among Korean teachers. Studies reveal that despite MOE reforms to emphasize student-centered learning, Korean classrooms have generally remained teacher-dominated (Campbell et al., 2010; Choi & Park, 2013; Kim, 2003, 2012; Lee et al., 2003, 2014; Lee & Sriraman, 2013; Ramos, 2014b, 2014c). As Lee and Sriraman acknowledged in their study of mathematics instruction in Korean middle schools, "teachers are not following the educational reform requirement in place since the end of the 1990s in Korea, in which 'student-centeredness' is stressed as the most crucial aspect of teaching and learning" (p. 163). Lee et al. (2003) described the high school classrooms in their study as being reflective of "the general image of the youth-elder relationship in society of 'directing teachers and obeying students'" (p. 83).

There are several byproducts of a teacher-dominated educational environment, and they can be generally linked to Confucian tradition in East Asian cultures. One byproduct is a reluctance to speak out or question teachers. Kim (2012) acknowledged how cultural factors in East Asian countries influence student learning, noting that Korean students are not allowed to challenge teacher authority under Confucian tradition. "When this cultural framework is applied to Korean school context," Kim noted, "we can see that Confucian tradition has an influence on students' difficulties in expressing their opinions" (p. 135). In their study of critical thinking in two Korean universities, Lee et al. (2014) indicated that critiquing teachers in Korea is considered "morally immature," and they attributed this tendency to a respect for authority of teacher knowledge encouraged in Asian culture. According to the authors, "This may explain why Korean students hesitate to outwardly challenge their teachers, which in practice may obstruct developing critical and creative thinking, despite still having a high potential for such abilities" (p. 142). Another byproduct related to CHC is a student fear of making mistakes and losing face in front of classmates. Lee and Sriraman (2013) explained that teachers in their study felt that most Korean students are quite sensitive about making mistakes in public, that they are "seriously afraid of losing face in front of peers when answering the teacher's questions" (p. 163).

Teacher-dominated classrooms can generally be characterized as focusing on receptive methods emphasizing rote learning and memorization. In studies of English majors and their expectations in a Korean university, Ramos (2014a, 2014c) reported that his observations revealed limited communicative competence among students due to a lack of exposure to conversation in middle and high school English classes that emphasized passive learning strategies. He pointed out that such classroom practices may be influenced by Confucianism and its emphasis on social hierarchy. Despite these observations, however, students indicated a desire for more active, student-centered activities. Ramos (2014a) stated that students in focus group discussions believed that there is a problem with the traditional Korean approach to English education. They criticized the audio-lingual and book-based approaches employed in their previous English classes, and they believed that foreign professors should provide them with more conversation opportunities. Similarly, Lee et al. (2014) reported that the students in their study felt that they did not get enough opportunities for CT. According to one respondent, "Most of the classes are [for receiving] knowledge that a professor delivers" (p. 136). Another respondent maintained about CT, "It's in me, but [there are] not enough opportunities that I can practice it" (p. 137). As will be discussed later, respondents in the present study echoed these sentiments.

There is a tendency by some to contend that significant recent changes have led to actual changes in the classroom. It has already been established, however, that the literature demonstrates that the changes established by the 7th National Curriculum have not, in practice, found their way into the classroom in any meaningful way. Sociocultural transfer continues to make student-centered learning a difficult prospect in Korean education. While many use the pejorative term "stereotype" in critique of others who acknowledge such cultural influences, the literature clearly shows that they are a reality. Another change that some suggest has impacted education in Korea is the rapidly increasing diversity of Korean culture due to an influx of foreign laborers. Although it is true that Korea has become more culturally diverse in recent years, it is barely reflected in the student population, especially at the middle and high school levels. According to MOE statistics reported by *The Korea Herald*, as of 2012 the multiethnic student population in Korean schools was only 0.7% of the total student population, with the majority of those students in elementary school (Oh, 2013). Thus, Korean classrooms have remained overwhelmingly homogenous, especially at the secondary level. In Korean universities, the number of international students

increased dramatically in the first decade of this century, yet Jon (2012) reported that the majority of these students come from other Asian (CHC) nations (p. 442).

Critical thinking

Many definitions of critical thinking exist, and most of these involve an ability related to assessing, judging, or evaluating a given problem or topic, as well as evaluating your own reasoning. Paul (1990) stressed that CT is "thinking about your thinking while you're thinking in order to make your thinking better" (p. 91). He also emphasized the importance of thinking that entails self improvement and the incorporation of standards for assessing thinking. Elder and Paul (2010) identified CT as "the process of analyzing and assessing thinking with a view to improving it" (p. 38). According to Siegal (2010), CT "involves two distinct components: both (a) skills or abilities of reason assessment and (b) the dispositions to engage in and be guided by such assessments" (p. 141). Ennis (1998) referred to CT as "thinking that is reasonable and reflective, and is focused on deciding what to believe and do" (p. 16). To achieve this, there should be a focus on meaningful learning in student-centered settings rather than on rote learning in the teacher-fronted classrooms. Mayer (2002) stated, "Meaningful learning occurs when students build the knowledge and cognitive processes needed for successful problem solving" (p. 227). Knowledge and cognitive processes are built not through deposits made by the teacher to the students, but by active student interaction (Freire, 1970; Mayer, 2002; Rezaei et al., 2011; Riasati & Mollaei, 2012).

Paulo Freire is the central figure within critical pedagogy (CP), a perspective that differs from CT in that it seeks to promote social justice through education with an emphasis on a call to action (see Burbules and Berk, 1999). The CP focus on social justice lies beyond the scope of the present study. However, although this research assessed student performance in CT tasks, social undertones often permeated the discussions. In many cases students in the present study were even asked to generate ideas for social change related to the topics, which may be understood as a social justice component. Further, CP involves critical thinking and problem solving in student-centered settings (Freire, 1970; Riasati & Mollaei, 2012). As Burbules and Berk explained, CT and CP share some common concerns. They stated that CT advocates hope that CT development could have a humanizing effect among people across the socioeconomic spectrum. By helping people to be more critical in thought and action, Burbules and Berk noted, authors from both traditions believed teachers could free learners to see the world as it is and increase freedom and human possibilities. Since there are some similarities between the two perspectives, and because critical thinking is a component of critical pedagogy, some CP literature is included here.

In his book *Pedagogy of the Oppressed*, Freire (1970) used banking as a metaphor to clarify his arguments about problems with traditional educational practices. With banking education, he insisted, education "becomes an act of depositing, in which the students are the depositories and the teacher is the depositor" (p. 72). Rather than communicating with students, teachers merely "deposit" information, and student action is limited to "receiving, filing, and storing the deposits" (p. 72). Freire condemned this model as one that contributes to continued human oppression and urged that it be replaced with what he called "problem-posing" education. Problem-posing education embodies communication and redefines the teacher-student relationship as one where the teacher is sometimes a student, and the students are often teachers, and all are engaged in dialog and inquiry. Freire explained, "The students—no longer docile listeners—are now critical co-investigators along with the teacher" (p. 81). Summarizing the differences between the two juxtaposed educational philosophies, Freire argued, "Banking education treats students as products of assistance; problem-posing education makes them critical thinkers" (p. 83).

In a study of large introductory science classes at the University of Massachusetts, Yuretich (2004) identified the value of activities that allow students time to "pause, reflect on, analyze, and discuss an issue," noting that they are key to CT education (in Rezaei et al., 2011, p. 773). Mazer, Hunt, and Kuznekoff (2008) reached similar conclusions in their study of CT instruction in university communication courses. An experimental group was asked to participate in higher-order thinking activities, including speech critiques to analyze evidence and recognize fallacies, and detailed peer and self evaluations. They reported that the experimental group exhibited significant improvement while the control group did not. They concluded, "Students must be encouraged to become active critical thinkers who ask questions, critique evidence, and most importantly, learn through the process" (Mazer et al., 2008, p. 194). The conclusions of both Yuretich and Mazer et al. advocate the development of curricula at the university level that emphasize critical thinking in student-centered approaches.

Some researchers suggest that CT is most effective when integrated with content or subject-based instruction as opposed to being taught separately. Abrami et al. (2008) observed, "The infusion of CT requires deep, thoughtful, and well-understood subject matter instruction in which students are encouraged to think critically in the subject" (p. 1106). They insisted that CT not only involves thinking about important problems in the disciplines, but it also includes thinking about the "social, political, and ethical challenges of everyday life" in an increasingly complicated world (p. 1102). Mazer et al. (2008) agreed that thinking skills developed in academia will translate successfully to everyday life, and noted that research shows that these skills are best taught within a content course. Citing research from several sources spanning decades, Beyer (2008) reported that students score higher on assessments of their thinking when subject-matter courses include direct instruction in CT skills, compared to students in similar courses that lack this instruction. He concluded, "Instruction in thinking skills in subject-matter courses improves subject-matter learning as well as the quality of student thinking" (p. 229).

Critical thinking and language education

As the merits of CT become more and more recognized in the educational community, educators naturally explore its viability as a teaching approach in the language classroom, and researchers often endorse it as being useful in language education (Ramos, 2014a; Shin & Crookes, 2005; Stapleton, 2001). "Communicative competence," noted Ramos, "implies the inclusion of critical thinking skills development, one of the capacities of language learning" (p. 164). Also underscoring the value of CT in a language classroom, Rezai et al. (2011) explained that part of the responsibility of an ESL/EFL teacher is to prepare students for the world beyond their own societies, which includes providing them critical thinking skills. Similarly, McGuire (2007) stated that CT pedagogy has "passed beyond L1 contexts into the realm of TESOL," and that many schools, universities, and education boards have sought to develop CT instruction (p. 224). Despite the endorsements, however, McGuire and others are cautious about the adaptability of CT to a language classroom in East Asia.

Critical thinking in East Asian and Korean contexts

Debate exists in the literature concerning the incorporation of CT teaching approaches in East Asian classrooms. Critics often cite the sociocultural influences discussed above as factors when identifying such instruction as problematic, sometimes taking the extreme position that Asian students are too culturally different to engage it. Fox (1994) suggested that Asian students struggle when confronted with CT approaches because it is alien to them. She indicated that "because it is learned intuitively it is easy to recognize, like a face or a personality, but it is not so easily defined and is not at all simple to explain to someone who has been brought up differently" (Fox, 1994, p. 125). Atkinson (1997) referred to critical thinking as "cultural thinking," noting that "various cultural groups assume notions of the individual that are almost diametrically opposed to Western or at least mainstream U.S. assumptions" (p. 80). This led him to suggest that CT may only be appropriate in a cultural context where it is a socially valued norm. Noting that the social psychological differences of ancient China and ancient Greece persist, Nisbett, Peng, Choi, and Norenzayan (2001) suggested, "If all cultures possessed essentially the same basic cognitive processes as their tools, the tools of choice for the same problem may habitually be very different" (p. 306). According to the authors, this difference between East Asian and Western culture contributes to the differences in the ways students from those cultures think and behave in the classroom.

According to McGuire (2007), it would be a mistake to ignore the differences in attitudes toward individualism between East Asian cultures (specifically Korea), and those in the West. He stated, "One of the chief aims of CT pedagogy is to train one how to think for oneself and how to avoid blind conformity" (p. 229). For McGuire, this exemplifies a significant clash between the critical approach and group-oriented cultures. He argued that there are certain elements of Korean culture that limit the impact of CT on the Korean education system. Noting that CT pedagogy involves intellectual independence and individual autonomy, McGuire identified these qualities as being in direct conflict with Korean culture. He explained, "In nurturing the intellectual autonomy of students, CT pedagogy weans students away from the influence of some of the very things that Koreans are socialized to value, such as tradition, hierarchically based authority, and group-oriented conformity" (p. 231). McGuire thus concluded that there is a "cause for concern" about the promotion of CT pedagogy in Korean

In a thorough study of critical and creative thinking among Korean and Japanese students based on international problem-solving skills assessments, Park (2013) also questioned whether Asian learners should be measured using Western notions of creativity. He maintained, "The argument that U.S. education nurtures students' creativity, while Japanese and Korean education suffocates it may be simply based upon a very Western or, more specifically, U.S.-oriented conception of creativity" (p. 73). Park criticized what he called "dichotomous thinking" that assumes that standardized curricula in Korea and Japan necessarily harm student creativity. He provided as evidence comparisons of student results on the Program for International Student Assessment (PISA) exam between Korea and Japan, and the United States, Finland, Germany, and other OECD nations. Emphasis was placed on a PISA 2003 test measuring problem-solving skills, and Park's research identified a "high competency in creative problem solving" among Korean and Japanese students (p. 64). This is in line with research by Kim (2002) which questioned whether the assumption of equivalence of talking and thinking derives from Western sociocltural experiences that may not be applicable in other cultural settings. Kim noted, "Problems arise when certain cultural practices are imposed on people who do not share the cultural values behind the practices" (p. 839). Park's detailed analysis represents a hybrid between the viewpoints explored above and those that will be discussed below. Unlike some critics of CT in East Asian education, he rightfully acknowledged the evidence that Korean and Japanese students exhibit critical thinking skills, yet, like the others, he also questioned curricular changes incorporating "Western" CT approaches.

Park's (2013) effort should be applauded for providing strong evidence for the development of critical and creative thinking in Korean and Japanese education. Yet, as he acknowledged, it could be open to criticism since the 2003 PISA test was administered after the MOE reforms mentioned above had been implemented. Those reforms could be understood to be similar to the Western approaches he questioned, and could have influenced the results. Also, since the PISA test is still a traditional paper and pencil test, which Park also pointed out, it could be argued that it fails to motivate or assess student participation in active, real-world CT activities. It has already been established that Korean students struggle in these scenarios, and the present study seeks to demonstrate that these struggles can be overcome through teaching and practice to better equip students with the tools for success in real-world environments where critical and creative thinking are valuable.

As noted above, the Korean Ministry of Education has implemented a policy that called for a shift from traditional, teacher-centric classrooms to student-centered environments emphasizing 21st century approaches, including those that specifically develop CT skills. The Korean national curriculum was "designed to address the needs of a global knowledge-based economy, developing students' abilities to think originally, to create new knowledge, and to communicate that knowledge effectively to others" (Darling-Hammond, 2010, p. 178). Although some scholars have questioned the practicality of CT in Korean and East Asian classrooms, several others have argued and even successfully demonstrated that CT teaching approaches are applicable in these contexts. These studies will provide evidence supporting the viability of CT-based instruction in Korean and East Asian education.

Citing Fox (1994) and Atkinson (1997), Stapleton (2001) challenged the idea of a deficiency in CT skills among Asian learners. He questioned the conclusions reached by Fox because her study was conducted in an American context using American topics. Referencing Simmons (1985), Stapleton noted that "critical thinking performance can vary depending on the degree of familiarity the learner has with the cultural context of the task" (p. 510). His study of Japanese university writing students revealed that Asian learners manifest strong voices, which he indicated are closely associated with CT. Stapleton insisted that these results call into question the notion that Asian students possess limited CT skills. Davidson and Dunham (1997) reached similar conclusions following their study of CT skills among Japanese students as assessed by the Ennis-Weir Critical Thinking Essay Test. Their research involved a test group that was provided critical thinking training prior to taking the test, and those students performed better than the control group. Despite their admission that both groups shared tendencies indicating a general weakness in CT, and that this could be attributed to a lack of emphasis on debate or the critical evaluation of reasoning in Japanese education, the researchers determined that the differences in performance are likely related to the CT training given the test group. They concluded, "Critical thinking skills can apparently be taught to some extent along with English as a foreign language and can, therefore, enhance a content-based course of study" (Davidson & Dunham, 1997, p. 53).

Studies indicate that Korean students often succeed in active learning environments that emphasize CT skills. Shin and Crookes (2005) concluded that "there is enough room for critical dialogue in Korean EFL classrooms even with the existing institutional constraints" (p. 131). By employing unique aspects of Korean culture to stimulate conversation, the researchers found that students respond well to topics that they take an interest in. Aware of the image of Korean classrooms as teacherfronted environments focused on passive reception of information and rote learning, Shin and Crookes revealed that the middle school students in their study successfully participated in critical thinking activities. They stated, "We hope that this study calls into question the stereotype of East-Asian students as passive and non-autonomous and helps dispel the myth about East-Asian classrooms as rigidly hierarchical" (Shin & Crookes, 2005, p. 133). In an analysis of the Shin and Crookes study, Riasati and Mollaei (2012) acknowledged the significance of their findings. Since the results revealed that students were not resistant to materials that included critical topics, they cited the study as evidence of East Asian students successfully engaging in critical approaches.

Bloom's Taxonomy

Although the retention of knowledge is an important component of education, according to Bloom et al. (1956), the application of knowledge holds an even greater significance. In their *Taxonomy of Educational Objectives*, they insisted, "What is needed is some evidence that the students can do something with their knowledge, that is, that they can apply the information to new situations or problems" (p. 38). It is this application of knowledge that is at the core of what is known as Bloom's Taxonomy, and integral to educational approaches seeking to develop critical thinking skills. In "A Revision of Bloom's Taxonomy," Krathwohl (2002) updated the six categories and labeled them in verb form. The revised taxonomy includes the categories *Remember, Understand, Apply, Analyze, Evaluate*, and *Create*. Krathwohl explained that education often focuses on the knowledge level of the hierarchy, objectives requiring only recall of information. He insisted, however, that objectives that involve the use of knowledge, in the categories from *Understand* to *Create*, that are the most important educational goals. Bloom et al. (1956) explained that "this has been labeled 'critical thinking' by some, 'reflective thinking' by Dewey and others, and 'problem solving' by still others" (p. 38).

The top levels of the scale, both original and revised, may be understood to represent "higher-order thinking" (Nordvall & Braxton, 1996), and can serve educators as an evaluative tool for critical thinking skills. According to Mayer (2002), the revised taxonomy is based on a vision of learning that includes acquiring knowledge as well as using it in a variety of new situations. Learning involves three scenarios he referred to as "no learning," "rote learning," and "meaningful learning." Meaningful learning, he suggested, "requires that instruction goes beyond simple presentation of *Factual Knowledge* and that assessment tasks require more of students than simply recalling or recognizing *Factual Knowledge*" (p. 227). According to Raths (2002):

It is not that remembering things is not important, it is that remembering things is not sufficient for being a truly educated person—a person who can use what he or she has learned previously to learn new things and to solve a variety of academic and nonacademic problems (p. 235).

Thus, the Bloom hierarchy is a valuable tool educators use to establish, evaluate, and create such learning opportunities in the classroom.

Higher-level questioning

Most education research related to CT emphasizes the importance of developing questioning skills in students. Rezaei et al. (2011) explained that deep questions force us to look beneath the surface and to deal with complexities. "One of the distinguishing features of critical thinkers," they maintained, "is to be able to raise questions and find pertinent answers for them on the basis of reliable evidence" (p. 775). Mazer et al. (2008) stressed the importance of instruction in academic courses that implements strategies that engage students in the act of learning, approaches that ask higher-order questions and require students to go beyond memorization toward a construction of their own understanding. They contended, "Students must be allowed to become critical thinkers who ask questions, take risks, and learn through the process" (p. 190). They suggested that this is part of the process of becoming an effective communicator, allowing for the development of a larger vocabulary and establishing a basis for analytical and critical skills. In his study of Korean university English literature and film students, Ramos (2014c) reported that a majority of student respondents found the use of good questions during lessons to be effective in stimulating their interest. According to his data, 73% of the respondents agreed or strongly agreed that they were more attentive when the teacher used challenging questions, while only 2% disagreed. The research suggests that higher-level questions contribute to the development of critical thinking skills, and may heighten student interest and engagement in lessons.

Student engagement

An obvious congruity exists between CT-based approaches and language teaching in that activities that promote critical thinking emphasize the student at the center of learning, which is also optimal in courses where the development of conversational English is a goal. In the context of English language classrooms in general, or university courses designed for second language learners specifically, student engagement is a necessary component of the bulk of instruction. Student engagement, as defined by Krause and Coates (2008), "focuses on the extent to which students are engaging in activities that higher education research has shown to be linked with high-quality learning outcomes" (p. 493). The literature indicates that communicative CT tasks provide these high quality outcomes. Hu and Kuh (2002) defined engagement as "the quality of effort students themselves devote to educationally purposeful activities that contribute directly to desired outcomes" (p. 555). Thus, students must put forth effort to be engaged. As Joyce, Weil, and Calhoun (2009) observed, "Interacting with one another produces cognitive as well as social complexity, creating more intellectual activity that increases learning when contrasted with solitary study" (p. 268). This interaction lies at the core of effective instruction in Korean second language classrooms that emphasize communicative approaches, and it is necessary to any teacher interested in incorporating the methods explored in this study.

There is a positive correlation between student interest in learning activities and student engagement in those activities. In their study of environmental science undergraduates at a Swedish university, Dahlgren and Oberg (2001) explained that "scenarios that were provocative or evoked emotional involvement . . . by containing a certain opinion or some kind of contrast or tension, were powerful triggers" (p. 278). This indicates that students are more interested when an emotional connection is made. Shin and Crookes (2005) echoed this point in their discussion of a Korean high school English culture class emphasizing critical approaches. The topics in the class were based on student-generated materials that reflected student interests, and included educational and social issues as well as unique aspects of Korean culture. This led to heightened student engagement during lessons. Shin and Crookes explained, "Student-generated materials based on their own experiences and concerns increased student ownership of their learning and facilitated the increasing use of English in different modes of the dialogical process" (p. 128). This experience, they added, helped EFL learners become more confident in their English communication abilities.

Research methods

Research design

Using the mixed-methods approach in this study, both quantitative and qualitative research was conducted and data from both forms of research were analyzed (Creswell, 2014). As Creswell explained, "Mixed methods is chosen because of its strength of drawing on both qualitative and quantitative research and minimizing the limitations of both approaches" (p. 218). The quantitative component in this study came in the form of student surveys and rubric-based assessments of recorded conversations, while the focus group discussion (FGD) and classroom observations represent qualitative strategies. The intent was to explore and interpret the observed data to gain a greater understanding of the issues at the center of this research identified in the research questions presented above.

Research environment

This study took place over the course of a semester in three topic-based courses for English majors at a university in South Korea. It comprised 42 students in Intermediate English Conversation, Advanced English Conversation, and American Culture courses; and it involved 15 sophomores, 12 juniors, and 15 seniors. The two conversation classes were based on topic-based

texts chosen by the professor, while the American culture course was based on a self-developed text incorporating the engagement strategies being studied. Where applicable, the instructor elicited topic preferences from students in an effort to maximize participation in the activities.

Research procedure

From the start of the semester, participants were made aware of the student-centered approach that would form the basis of each course. They were exposed to integral language they would encounter during the semester, including that related to critical thinking, higher-order questioning, and Bloom's Taxonomy. Through direct instruction the professor familiarized students with the six levels of the critical hierarchy, as well as with a collection of useful verbs and question stems that would facilitate success during the group discussion and question-generating phases of the lessons. The sessions that generated the data for this study occurred following lectures, class discussions, and activities related to the discussion topics. Both heterogeneous and homogenous cooperative grouping strategies were utilized, though for the purpose of promoting increased interaction the instructor settled on groups that were most conducive to universal participation. This meant that rather than assigning students randomly, or rigidly adhering to initial teacher-established homogenous or heterogeneous groups, students were encouraged to group themselves with classmates they were most comfortable with. Since Korean students are often more withdrawn with others outside their social circle, especially if they are older from a different cohort, it was useful to alleviate at least some of the anxiety associated with classroom dialog. This approach to grouping provided a more comfortable environment, often allowing for more active group dynamics involving all participants. To maintain continuity, all the activities were limited to three groups of three or four students in each class.

The first two sessions in each section used three teacher-created questions, while the third session was based on questions composed and selected by students. These final activities served as the culmination of a semester-long process to acquaint learners with questioning, all for the purpose of heightening participation and creativity in class discussions where Korean students often struggle. This was seen as a logical step in the process of encouraging students to take ownership of the production of ideas. Though there were only three class sessions devoted to observation and data collection, this was a semester-long project. The entire term was required to familiarize students with the language and methodology of the student-centered approach, as well as with the topical subject matter necessary for informed discussion, and then to carry out the collection of data.

There were nine group discussion lessons comprised of three groups of three to four students. A total of 27 questions were posed, yielding 81 observed conversations, most of which were saved as audio recordings. Each recorded conversation was transcribed and assessed by the researcher using a scoring rubric specifically created to evaluate student production in these activities according to how well responses aligned with Bloom's Revised Taxonomy. Student surveys and a focus group discussion (FGD) were conducted following the completion of the study to gauge the perceptions of the respondents, specifically in relation to the sociocultural implications and research questions identified above. A clear correlation with the literature was often evident in the responses, which are presented and interpreted in the results and discussion below. Appendix A contains the scoring rubric used in these assessments, and Appendix B contains the higher-level questions involved in the activities. Appendix C contains the questions from the student survey.

Results and discussion

Results for the evaluated group conversation activities are reported below arranged by course name. Survey results follow and they were gathered anonymously, reflect the opinions of all the participants, and thus are not course specific. The results and discussion for the survey and focus group discussion will be presented according to their correlated research objectives listed above.

Intermediate English conversation data

Of the nine questions posed in the Intermediate English Conversation group discussions, three were determined to be *Analyze* questions according to Bloom's Revised Taxonomy, two were determined to be *Evaluate* questions, and four were determined to be *Create* questions. On the *Analyze* questions, eight responses were assessed for critical thinking as excellent/insightful (a score of 4), eight were assessed as adequate (a score of 3), nine were assessed as limited (a score of 2), and nine were assessed as poor (a score of 1). On the *Evaluate* questions, four responses were assessed as excellent/insightful, seven were assessed as adequate, two were assessed as limited, and four were assessed as poor. On the *Create* questions, three responses were assessed as excellent/insightful, eight were assessed as adequate, 15 were assessed as limited, and eight were assessed as poor. Thus, intermediate students struggled most with *Create* questions, with an average response score of only 2.2 on the rubric. Of the 85 total evaluated responses, 15 were assessed as excellent/insightful, 23 were assessed as adequate, 26 were assessed as limited, and 21 were assessed as poor. As revealed in Table 1, the average score for all responses was 2.4 on the four-point scale.

When assessed against the scoring rubric designed according to Bloom's Revised Taxonomy, the results were mixed. In a text-based unit on drinking culture in Korea, for example, student responses varied within and between groups, and scores

Table 1Intermediate English evaluated response scoring results (arranged by number of responses).

Question level	4	3	2	1	Mean score
Analyze (3)	8	8	9	9	2.4
Evaluate (2)	4	7	2	4	2.6
Create (4)	3	8	15	8	2.2
Total (9)	15	23	26	21	2.4

Rubric scoring: 4 – Excellent/Insightful; 3 – adequate; 2 – limited; 1 – poor.

Table 2Advanced English evaluated response scoring results (arranged by number of responses).

Question level	4	3	2	1	Mean score
Analyze (4)	7	7	2	3	2.9
Evaluate (3)	8	5	3	3	2.9
Create (2)	8	4	4	3	2.9
Total (9)	23	16	9	9	2.9

Rubric scoring: 4 – excellent/insightful; 3 – adequate; 2 – limited; 1 – poor.

ranged from one to four on the scale. As a response to the question "What are the pros and cons of drinking and socializing with coworkers?" one respondent noted:

I think drinking with your co-workers can help you with socializing with other workers. But you know if you drink alcohol, you make some mistakes and then after that you wake up and you realize you [did] something wrong and then it will make you awkward with your coworkers.

Later in the conversation the same respondent began posing new, thought-provoking questions to the group, asking peers if they believed it was okay to use a corporate credit card to purchase alcohol for these events. The question in this example was determined to be a level five evaluate question on the Bloom scale, and since this student was able to demonstrate an ability to take ideas further into new territory or to find hidden meanings and implications, a score of four was given for this response.

Advanced English conversation data

In Advanced English Conversation group discussions, four questions were evaluated as *Analyze* questions, three were evaluated as *Evaluate* questions, and two were evaluated as *Create* questions. On the *Analyze* questions, seven responses were assessed as excellent/insightful, seven were assessed as adequate, two were assessed as limited, and three were assessed as poor. On the *Evaluate* questions, eight responses were assessed as excellent/insightful, five were assessed as adequate, three were assessed as limited, and three were assessed as poor. On the *Create* questions, eight responses were assessed as excellent/insightful, four were assessed as adequate, four were assessed as limited, and three were assessed as poor. Questions assessed as excellent/insightful represented the highest number of responses for each question category in this group. There were a total of 23 responses assessed as excellent/insightful, 16 assessed as adequate, nine assessed as limited, and nine assessed as poor. Thus, there were more four-point responses than any other scoring category. The mean score for each category, and the total mean score for the group, was 2.9. Table 2 contains the scoring results for Advanced English Conversation.

The Advanced English Conversation class had the best overall performance in the lessons being studied here. The average combined score was just under three, which according to the scoring rubric means that the students in this class performed adequately in the activities. One example of a score of three is represented in the following student response to a level five evaluate question about workplace fraternization. The textbook scenario involved a female employee (Naomi) being approached by her boss to ask her out for a date. The student-generated question asked: "Would your opinion be different if the boss was attractive?" The student responded:

Attractiveness is related to first impressions of people so if my young, pretty lady boss asks to go out with me, at first maybe I don't say no. But love is a different matter. Love is a more difficult feeling so only attractiveness can not affect on feeling of love I think.

This response earned a score of three on the rubric because it demonstrated an *adequate* ability to make broader generalizations. In this example the student's analysis went beyond the attractiveness component in the question, leading to the creation of a broader generalization about love.

American culture data

The American Culture group was involved in group discussions that included four *Analyze* questions, three *Evaluate* questions, and two *Create* questions. On the *Analyze* questions, two responses were assessed as excellent/insightful, six

Table 3American culture evaluated response scoring results (arranged by number of responses).

Question level	4	3	2	1	Mean score	
Analyze (4)	2	6	8	7	2.1	
Evaluate (3)	5	3	7	2	2.6	
Create (2)	2	3	2	4	2.3	
Total (9)	9	12	17	13	2.3	

Rubric scoring: 4 – excellent/insightful; 3 – adequate; 2 – limited; 1 – poor.

Table 4Combined evaluated response scoring results (arranged by number of responses).

Question level	4	3	2	1	Mean score
Analyze (11)	17	21	19	19	2.5
Evaluate (8)	17	15	12	9	2.8
Create (8)	13	15	21	15	2.4
Total (27)	47	51	52	43	2.5

Rubric scoring: 4 - excellent/insightful; 3 - adequate; 2 - limited; 1 - poor.

were assessed as adequate, eight were assessed as limited, and seven were assessed as poor. On the *Evaluate* questions, five responses were assessed as excellent/insightful, three were assessed as adequate, seven were assessed as limited, and two were assessed as poor. On the *Create* questions, two responses were assessed as excellent/insightful, three were assessed as adequate, two were assessed as limited, and four were assessed as poor. Of the 51 total responses, only nine were scored as excellent (four points), the lowest total in the four scoring categories. Students in the American Culture course performed best on the *Evaluate* questions, registering a mean score of 2.6. The total mean score for all question categories for American Culture students was 2.3. Results for the American Culture course are represented in Table 3.

American Culture students may have only averaged a 2.3 on all responses in these activities, but they were often still very creative. There were many thoughtful answers that demonstrated an ability to think critically in response to higher-level questions. Unfortunately, there were also some examples of limited involvement by students in this group. At times participants were distracted during lessons, and sometimes appeared to not take the activities seriously. Some evidence of this can be found in a conversation related to a unit covering the American Civil Rights Movement. In the readings and lectures for the unit, students were introduced to the story of Jackie Robinson and his role in breaking baseball's color barrier, along with the many difficulties he faced. In the group discussions, students were asked what choice they would have made if they were faced with the same struggles. One student offered a playful, limited response to the question:

If I was Jackie Robinson, I would fight. I would hit their head with a bat.

This student said very little else during the dialog for this analyze question, and received a score of one for the response because it revealed an extremely limited ability to work with key information. In contrast, another student in the group received a four as a result of a very thoughtful response in this conversation, calling out the other student for presenting a poorly developed argument:

If you hit the other players it wouldn't help any, but it would have a really dangerous and bad effect to black society. Not only black society but also white people because at the time all black people were condemned without even any reason but if he had fought I think it would have been bad for the black people. Their reputation wouldn't have been improved dramatically. I think to say [you would fight] is such a [bad] opinion.

According the rubric's scoring criteria the second student received a score of four for demonstrating a confident ability to work with key information—applying or extending it to a wide variety of new problems or contexts. The "new problems" in this case are the implications and repercussions of Jackie Robinson acting out in anger and the impact it might have had on race relations in American society. In terms of the dialogic interaction in this conversation, this student's confidence and critical response to the previous weak answer elicited laughter from the group, yet more importantly prompted the other students to approach the question more seriously.

The data presented above, and contained in the combined results in Table 4, illustrate the difficulty some students experienced when trying to complete the lessons comprising this study. With 95 of the 193 total responses being evaluated as limited or poor (scoring a 2 or 1 on the rubric), it is clear that there were students that struggled with these activities. The evidence gathered through observations, surveys, and the FGD suggests that much of the difficulty is attributable to limited language proficiency as well as the sociocultural factors outlined previously.

More importantly, however, the data also indicates that many students flourished, successfully demonstrating an ability to engage in meaningful, real-world conversations, think critically, and create knowledge. More than half of all responses were evaluated as at least adequately demonstrating critical thinking skills, and of the four scoring categories, there were fewer "poor" responses (a score of 1 on the rubric) than any other category. What is encouraging here is that a majority of participants successfully engaged in student-centered activities requiring them to respond to higher-level questions and

think critically, a result that contradicts the suggestion that such activities are incompatible with East Asian education due to cultural and institutional obstacles.

Survey and focus group discussion

Following their participation in the present study, a survey was conducted at the end of the semester involving 39 of the participants. It consisted of ten questions addressing the impact of the higher-level questioning activities on critical thinking and student engagement. In addition, a focus group discussion (FGD) composed of members from each class was held to further assess the approaches used in the study. The purpose of both the survey and FGD was to gauge student perceptions of the effectiveness of the methods under investigation, and to determine their attitudes toward the activities used during the lessons.

Critical thinking

Regarding the relationship between higher-order questions and critical thinking, 41% agreed and 38% strongly agreed that the use of higher-level questions helped students improve critical thinking during group discussions. Only 3% disagreed and none strongly disagreed, while 18% were undecided on this question. On the creation of higher-level questions, 49% agreed and 26% strongly agreed that students could create effective higher-level questions for use in group discussions. In response to this question, 8% of the respondents disagreed, none strongly disagreed, and 18% were undecided. On the impact of student creation of questions on critical thinking, 59% agreed and 23% strongly agreed that creating their own questions helped them to think critically during group discussions. None of the respondents disagreed, and 18% were undecided.

These findings are reflected in the written responses as well as in the opinions shared during the FGD. In the written survey comments, several respondents stated that questioning helped students to think critically. The following response exemplifies this point of view:

It was really useful in improving speaking and critical thinking by being questioned many times.

Another respondent insisted that the process of creating higher-level thinking questions stimulated student thinking:

I think creating higher-level questions was harder than answering them. It's a totally different thing to understand the given topic and think about it, analyze it and make a relevant question; as answering them, you just need to give your opinions. I think it was helpful, letting me put my head even more in the game.

Participants in the FGD agreed that creating higher-level questions, though difficult, was constructive. This is evident in the following excerpted dialog:

Student C: That was the hard part. Like answering is something that you just come up with, but to make the questions is a bit different. We need to think more about it.

Student F: And we need to organize our sentences and then compact them into one sentence; it is the hardest thing to do.

Student C: By talking to each other we could eventually solve the problem because we got a lot of ideas, but making a new question that is relevant to the topic is [difficult].

Instructor: Did it create better conversations because you . . . created the questions?

Student A: It works. It really works.

Instructor: Better than the [questions] I gave you?

Student F: Our [questions] were better because we developed questions from simple ones to critical ones. And you are just one person and we have four . . . it's kind of a mixture of four people's thinking. It kind of encouraged us to deeper thinking.

Student C: I think the good part is that when we saw the other group's ideas, and they were really good, and we just wondered, "Why didn't we think of that?"

In this conversation students admit to the difficulty involved in creating questions, but also that they found this activity to be the most stimulating and engaging of the tasks throughout the process. In several instances here, the opinions revealed that the participants believed this activity stimulated critical thinking in their groups, and classroom observation in the three class sections confirmed these opinions.

While these responses reveal that students generally believed that the methods in this study were useful to the development of critical thinking skills, some opinions expressed in the survey and focus group indicate that English ability greatly limited student contributions. One survey respondent noted that though the discussion questions were difficult and often a challenge to respond to in English, they helped students to think critically. The point made in this response was a common one among student responses in both the survey and FGD, and it was clear throughout the observations that students with limited English ability struggled to participate despite efforts by their peers and the instructor to involve them. Yet, participants in the focus group discussion explained that students often demonstrated critical thinking skills when responding in Korean to the questions, despite being unable to articulate their ideas in English. This is problematic in that it was difficult for the researcher to discern whether these students were responding critically to the activity, but it is encouraging to learn that students may have been using CT skills even when they appeared to be uninvolved.

Despite some limitations, these survey results and FGD responses align with the research discussed above that insists CT can be successful in an East Asian context (Davidson & Dunham, 1997; Riasati & Mollaei, 2012; Shin & Crookes, 2005; Stapleton, 2001). More importantly, these results challenge the notion that CT instruction is inappropriate in this environment, as suggested by Atkinson (1997), McGuire (2007), and Park (2013). Student responses as well as classroom observations indicate that Korean university students successfully exhibit CT in classroom discussions when challenged to do so. These findings closely resemble those of Shin and Crookes (2005) outlined above. In a discussion of their observations of student achievement regarding critical dialog, they explained, "My co-teachers and I were able to engage students in sophisticated dialogue using discussion and writing as a vehicle for thinking" (p. 123). The students in the present study exhibited a similar aptitude for CT in student-centered discussions. They were observed engaging in critical dialog, and they reported that the activities helped foster this dialog. Also, as in the Shin and Crookes study, both discussion and writing were vehicles for thinking, as the survey respondents indicated that creating questions (writing) led to improved thinking.

Student engagement

Concerning the impact of higher-order questions on student engagement, 46% of survey respondents agreed, and 23% strongly agreed that they were motivated to be more active in group discussions. None of the respondents disagreed, while 31% were undecided. On the creation of higher-level questions, 41% agreed and 23% strongly agreed that they led students to be more active in group discussions. Only 5% disagreed and none strongly disagreed, while 31% were undecided. Regarding group discussions focused on higher level questions, 51% agreed and 28% strongly agreed that they led to more interesting and creative conversations. On this question, only 3% disagreed and none strongly disagreed, while 18% were undecided.

The survey results suggest that participants were interested and engaged in the lessons, yet some written comments, FGD responses, and class observations revealed examples of inactive students. Though students were often observed to participate in the discussion activities, some students remained silent and disengaged at times in lessons. Several students reported an interest in the lessons, but others suggested that student engagement was limited due to difficulty in engaging the material. The responses below serve as examples of this opinion:

A good point was that [the professor] always made students try to get involved in discussions, but students didn't. The reason personally might be some questions were too difficult to think [about] right away.

Sometimes I felt uncomfortable when there were too difficult topics I didn't know. I needed more time to learn and think about them, but there was [little] time to do it. So these hardships made it hard for me to participate in group conversation.

I think it's hard to participate because critical thinking questions make people shut up. So you have to shut up and think for a moment because you have to brainstorm and some people are slower at that process.

Despite the survey feedback suggesting that these methods motivated students to engage in the lessons, these student comments demonstrate that some participants found the questions to be too difficult, thus limiting engagement. This was confirmed during classroom observations. Students at times required clarification on questions despite previous lectures, readings, and discussions on the related topics. This suggests that more pre-teaching of materials and methods as well as more checks for understanding may be necessary to ensure student familiarity prior to the structured discussion activities.

In their candid analysis of the classroom activities that made up the present study, students in the FGD frequently specified sociocultural factors that influence their reluctance to participate in communicative tasks:

I don't think it's just us, but it's generally a Korean thing. People are afraid to stick out and they are afraid to say something stupid after a question.

I think we are accustomed to being lectured, not participating to become part of the class material. Because of not [being] familiar with that, people will respond to class material reluctantly.

The average education period for Koreans is twelve years, and we actually just get lectured. We don't participate during class. We have no chance to question, or we need to remember everything the teacher says. It's hard to think about things because you just accept things [as being correct].

We were raised as studying and memorizing machines, so we are not individual. In this discussion we can actually become individual and share our opinions with others [and think critically].

[In] Korean lectures, they show an example of a perfect answer and they want you to just follow that example.

It would be okay to have conversations with [people in the same group] like friends, but it is more difficult to have conversations with authoritative people like professors. You know in Western culture you can [question] or even criticize the professor, but in Korea you cannot.

These comments align with much of the literature, reinforcing the reality of teacher dominated Korean classrooms (Campbell et al., 2010; Choi & Park, 2013; Kim, 2003, 2012; Lee et al., 2003, 2014; Lee & Sriraman, 2013; Ramos, 2014b, 2014c). It is difficult to ignore the similarity between these student reports and the findings of many of those studies, especially as detailed in student testimonials like those reported by Lee et al. (2014). Observations in the present study identified some of the attitudes or behaviors described by the student respondents, but they were not pervasive among participants. As the respondents pointed out, some students were uncomfortable and withdrawn for many of the reasons listed, yet many were able to overcome these challenges and contribute in group discussions.

In most cases, however, the student groups were engaged and participating in the activities. Efforts were made to keep students interested by providing topic choices when possible, and allowing students the flexibility to adjust topics to make them culturally relevant. Students were encouraged to make connections to Korean culture when applicable, and they often made connections to their specific environment at their university and in their community. As Dahlgren and Oberg (2001) indicated, such connections were powerful triggers. When they understood the material and possessed sufficient English language skills to participate, they were motivated and involved in the activities.

English ability

In terms of English ability, 62% of respondents agreed, and 21% strongly agreed that higher-level questions helped students improve conversational English. None of the respondents disagreed, 3% strongly disagreed, and 15% were undecided on this question. On whether students of all levels of English ability were able to participate in discussions using higher-level questions, 46% agreed and 15% strongly agreed. While 20% of the respondents were undecided, 15% disagreed and 3% strongly disagreed on this question.

Participants in the FGD reiterated the importance of higher-level questions in the development of English conversation skills, as illustrated by the following responses:

I took this English discussion class last semester, but that class was just a writing and reading class. In this class we are talking in groups, small groups. I think that is a good way to improve our English.

I think it also makes you develop your own English skills. When you have to create a new sentence [about] what you're thinking, you have to think about your vocabulary.

These comments indicate that students considered the activities to be beneficial to English conversation skills.

Although survey results and observations demonstrate that higher-level questions often encouraged meaningful, real-world conversation in English, they also reveal that students with limited English language ability struggled significantly with these activities. The respondents emphasized this challenge in the following survey and FGD responses:

Making higher-level questions is great for us. However, we could not discuss the questions because a few students had high-level English skill [but] others did not.

It depends on the level of their English skills. You know, in intermediate class, I think [their skills] are [good] enough to join the conversation class but they are afraid to speak in English. They think people are going to criticize their English skills so they usually hold back their opinions.

Some of our group members . . . really had great ideas but they didn't get a chance to say them themselves because they didn't know how to put it in English words. They were really stressed because they knew what to say but they didn't know how to say it.

One friend could not speak at all so she had a hard time to speak or say something. She had creative ideas, our creative ideas all [came] from her, but she [couldn't] speak in English so she always [spoke] Korean and we translated in English....

They have very good ideas but sometimes we don't have enough English skills so we feel [it is] hard to [answer] the higher level questions.

The evidence indicates that group discussions utilizing higher-level questions pose challenges for students with limited English ability. The three course sections in this study were composed of students with a wide range of English proficiency. Regardless of the course title, intermediate to advanced students participated in each activity, and less proficient students experienced difficulty responding to the questions and contributing in the conversations. As the student responses and classroom observations revealed, the struggles were the result of several factors. In addition to language limitations and sociocultural implications, another factor was that some conversations were dominated by advanced students, some of whom may have lived and studied in English-speaking countries for extended periods of time and were more comfortable using English in conversation.

Conclusions and recommendations

The present study focused on a specific communicative instructional method—higher-level questioning—for use in Korean university topic-based English courses, yet it more broadly explored the implementation of student-centered approaches to increase engagement and enhance critical thinking skills in Korean classrooms. As discussed at length above, language instructors in Korea are tasked with many challenges when attempting to engage students in such lessons. While most researchers recognize the value of incorporating critical thinking in 21st century educational curricula, not all agree that it is currently appropriate in a Korean or East Asian context. A traditional classroom dynamic still exists where teachers supply students with information in a receptive learning environment. This has cultivated a student resistance to classroom participation, a reality that led Li (1998) to argue that the fundamental approach to education in Korea must change before communicative language teaching can be successful (p. 696).

The results of the study were mixed regarding the cultural and institutional challenges outlined above. While there were instances of limited student participation, in many of these cases it was the result of a limitation in language ability or a difficulty understanding the material. Although questioning can be an effective tool for any level of language learner, the

higher-level questioning and critical thinking activities that made up this study are not recommended for students below the intermediate level. Considering that some participants reported a lack of understanding regarding the lesson materials, it is also recommended that more emphasis be placed on the presentation and study of topic materials to ensure all students have a firm grasp of the subject. As some participants suggested, it may be helpful to direct students to carry out research outside of the classroom so that they may be better prepared in group discussions. Instructors should be careful, however, that students do not arrive with a conversation script to read from during the activities. To prevent this, it is recommended that the final discussion questions are withheld until the day of the lesson. In an attempt to further motivate students and generate greater interest, an instructor may choose to incorporate varied activities that accommodate the methods in the present study. As one FGD respondent noted, higher-level questioning and critical thinking can occur in alternate activities, such as debates, panel discussions, and mock courts, among others.

Considerable attention has been given to the traditional Korean classroom and a Confucian cultural influence that has produced passive students who are more comfortable taking direction and receiving information than they are asking questions and solving problems using critical thinking skills. Despite MOE reforms in the 1990s to infuse the curriculum with student-centered CT approaches, many scholars have reported that the traditional classroom remains the norm, even at the university level. As Lee et al. (2014) suggested, "Higher educational institutions may be better at developing compliant transmitters for knowledge maintenance, rather than pioneering leaders who are transformers for innovation" (p. 144). The findings in this study confirm that obstacles associated with sociocultural transfer do, in fact, exist. While debate persists over the viability of CT in Korean classrooms, one thing is evident: Korean university students excel in these activities when challenged to do so. There were many examples of quality, critical responses to higher-level questions; there were many examples of students actively engaged in student-centered learning activities; and there were many examples of student success. Although some students struggled in the present study for the variety of reasons discussed above, the majority of participants succeeded, and many of those excelled.

Shin and Crookes (2005) noted that lessons emphasizing critical thinking on relevant topical issues allow students to learn to make decisions in and out of the classroom. In a global community where employers covet the ability to generate and share ideas, where both individuality and teamwork are highly valued, and where asking good questions to reach good solutions is paramount, this could prove to be integral to Korean success in the global workplace. Ramos (2014a) reported that Korean university students study English to improve their employment opportunities following graduation. Just as English ability is important in the workplace in today's globalized world, so too are the skills central to this research. As Ramos indicated, Korean students want to see a shift to more active learning activities that involve critical thinking in the classroom. As this study has demonstrated, Korean students are ready for such an approach. Due to the demands of globalization, they may need it to compete in the 21st century workplace. They may need to, as Freire (1970) insisted, "Abandon the educational goal of deposit-making and replace it with the posing of the problems of human beings in their relations with the world" (p. 79).

Rather than stressing the ways culture stifles creativity among Korean students, limiting their ability to ask questions, think critically, and create new knowledge, educators in Korea might instead choose to emphasize the ways the future makes these skills practical and necessary. Rather than conceding that Korean students are uncomfortable with communicative activities involving questioning and critical thinking and thus should not be exposed to them because of traditional precedence, teachers in Korea should promote such activities, challenging students to overcome the perceived associated discomfort. If teachers embrace the opportunity to make the uncomfortable comfortable for Korean students, they may enjoy watching them thrive as they develop invaluable 21st century skills for the globalized workplace.

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at http://dx.doi.org/10.1016/j.linged.2015.10.003.

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