ABSTRACT
This study explores the development of critical thinking among undergraduate students in the context of an English as a Second Language course. A structured, online forum task demanding an increasing level of critical thinking was repeated four times during the year. Student’s use of critical thinking skills was evaluated in terms of the variety of critical thinking skills and the number of times each skill was repeated. Two groups were compared: low advantage students versus average to high advantage students. Students of both ability groups improved their critical thinking in the three more concrete tasks and showed a decrease in the fourth more abstract task. While low advantage students started at a significantly lower level than the rest of the students, they reached the same level by the second critical thinking activity. The pedagogical implications of these findings are discussed.

Keywords: ASY Forum, Critical Thinking, English as a Second Language, Higher Education

INTRODUCTION
Critical Thinking in the English as a Second Language Context

Critical thinking (CT) is an essential skill for individuals’ performance in academic environments and in the workplace (Johnson, Dweck, Chen, Stern, Ok & Barth, 2010). It is a mental activity of evaluating arguments and making judgments that can guide the development of beliefs and taking action (Astleitner, 2002). Pedagogical theories, grounded in the work of Dewey (1933), Mezirow (1981, 1991), and Schön (1983, 1987) consider CT to be a major task of education and an essential component of higher education (Perkins, 1995; Tishman et al, 1995). This has led to the development of many theoretical approaches to the definition and analysis of CT, including those of Ennis
These approaches all posit that CT consists of analysis and reasoning (Astleitner, 2002) and is integral to many aspects of learning, including language learning.

The connection between thinking and language (Tishman, Perkins & Jay, 1995) has paved the way for research exploring the connection between CT and foreign or second language learning (Yang, Chuang, & Tseng, 2013; Nikoopour, Armini & Nasiri, 2011; Thadphooton, 2005). The research in this area is underpinned by the theory of critical language awareness which explains the role of the learner’s cognitive and metacognitive domains in developing an awareness of a new language (Fairclough, 1999). Besides learning vocabulary and structure, foreign language learning requires the evaluation of information, register, and cultural values in order to achieve understanding (Chang, 2012; Shamim, 2011). Thus, in order to successfully navigate the literacy demands of a language, language learners need to develop CT skills (Hassani, Rahmany, & Babaei, 2013; Mohammadi, Heidari, & Niry, 2012). Rejecting the view that the teacher of English as a second language (ESL) can only teach language, Arno-Macia and Rueda-Ramos (2011, p. 19) propose that ESL instruction “…focus not only on language and communication needs, but also on developing critical thinking.”

While the importance of CT in second language learning is recognized, its application in ESL instruction is a new area of investigation (Alnofaie, 2013; Yang, Chuang, & Tseng, 2013). Foreign language instruction, even at a relatively high level, involves a large component of knowledge building, that is, learning vocabulary and grammatical patterns (Snow, Met, & Genesee, 1989; Snow, & Brinton, 1988). The majority of tasks for this purpose are not CT tasks (Franson, 1999). Even reading text often involves only lower level thinking. In adapting Bloom’s taxonomy to the process of understanding text in a foreign language, Day and Park (2005) categorize the literal understanding of many reading comprehension activities as the lowest level of thinking, and show five higher levels of thinking.

At the high school level there is some evidence supporting the value of incorporating CT into foreign language instruction. The UK National Curriculum (DfEE, 1999), introduced thinking skills into Modern Foreign Language classrooms. Research following this initiative found that teaching students to apply thinking skills in their foreign language classes can help them to communicate and to demonstrate creativity in using the new language. Thinking skills were also found to facilitate foreign language learning when students draw inferences from unfamiliar language items and reflect on links between languages (DfEE, 1999; Lin & Mackay, 2004). Such incorporation of thinking skills could also enhance learners’ awareness of their progress and their language autonomy (Lin & Mackay, 2004).

Critical Thinking in Online Tasks for ESL Learning

A growing trend in higher education is the use of online technology (Akyüz & Samsa, 2009; Allen & Seaman, 2011). The use of technology including various online learning activities has become the norm rather than the exception for many of today’s students (Sun, 2013; Bax, 2011; Akyüz, & Samsa, 2009; Heubeck, 2008). Like many other disciplines, foreign language instruction has incorporated a wide range of technology, from e-books to online courses (Zou, Xing, Xiang, Wang, & Sun, 2013; Chang, 2012). Online activities promote student engagement and multiply opportunities for participation (Arends, 2009). An important question with respect to ESL instruction in higher education is whether online activities can promote the development of CT.

Computers are known to facilitate lower levels of learning, such as rote memorization, however, the use of online activities poses challenges in those aspects of learning that require higher-level thinking (Saadé & Bahli, 2005; Saadé & Galloway, 2005). One may ask whether the outcomes of online activities for CT
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