


Measuring the Frequency of Critical Thinking in a Second Language Academic Discussion Course

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Abstract

As technology and globalization increase the chances of exposure to information, learners' Critical Thinking (CT) and researchers' ability to measure it will play an important role in developing modern educational experiences. This is particularly the case for English language learners who wish to enter tertiary education in English-speaking countries (Liaw, 2007; Wagner, 2010). Emphasis on such skills is increasingly a facet of language education in Japanese contexts. This can be seen in changes implemented by the Japan Ministry of Education, Culture, Sports, Science, and Technology which have encouraged a focus on CT in English language courses during recent years (MEXT, 2011). However, it can be difficult for second language (L2) learners to exhibit CT in an L2 (Bali, 2015; Luk & Lin, 2015). Measuring CT in learner output has also proven difficult, which can be an obstacle to further integrating CT in L2 pedagogy. Studies exploring ways of measuring CT in an L2 have largely focused on written work (e.g., Davidson & Dunham, 1997; Floyd, 2011; Stapleton, 2001), while analysis of CT in spoken L2 discourse has seen little attention. As a result, little advice can be found on practical steps for teachers to help learners display CT when speaking in an L2.

This chapter describes a study of arguments made during group discussions in an L2 English Discussion course at a Japanese university.

A corpus of spontaneous spoken discourse recorded during class was analyzed to measure the frequency of CT displayed in an academic setting where CT was not an explicit focus of the course. Arguments in the corpus were identified using Ramage et al.'s (2016) model of argument criteria, and a categorization system was developed in which discourse was classified as displaying either objective reasoning or subjective reasoning. Participants were found to have used approximately 72% objective and 28% subjective reasoning. However, further analysis revealed an important qualitative difference in arguments identified as incorporating objective reasoning. The results of the study suggest two areas that may help teachers promote an increase in student usage of CT: the importance of question prompts in orienting learners towards CT in their answers, and a specific focus on the role of pronoun usage in taking a subjective or objective stance.

Keywords: Higher-order thinking skills, pronoun usage, corpus linguistics, argumentation

Introduction

Critical thinking (CT) is fundamental to modern educational experiences. It is widely agreed CT should be a major, if not the ultimate, the aim of higher education (Davies, 2006; Ikuenobe, 2001; Moore, 2011). The ability to think critically is necessary for success in contemporary knowledge-based societies and for participation in the globalized economy. Modern educators have a responsibility to help learners with these skills, and as Liaw (2007) argues, this means EFL teachers have a responsibility not just to teach language, but to help their learners acquire CT skills. For educators to carry out this task, they need information regarding their learners' CT needs. As Floyd (2011) points out, if instruction on CT is to be successful, teachers need to understand not only what their learners' CT limitations maybe, but also the reason for them. Previous research measuring CT in an L2 is

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classes with CT as a goal should not underestimate the possible influences of pronouns as demonstrated in our data.

While our approach to identifying CT as objective or Subjective is broad, it helped highlight two influences on the display of CT which we believe could be easily addressed in the classroom. Awareness-raising of academic expectations and the effect of pronoun use are simple steps appropriate to almost all levels of learner. One extension of the present study would be a comparison between this corpus and a treatment group receiving CT instruction.

While challenges identifying arguments in spontaneous spoken learner discourse persist, this area of inquiry remains underexplored despite its possible contributions to understanding CT in academic discussions. We encourage other researchers to adapt and refine our coding system and add to this valuable field of inquiry.

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