

[Research Notes]

The importance of L1 ability: Influence on the thinking skills of Japanese university students

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Abstract

In Japan, insufficient mother tongue (L1) ability among university students has been recognized in recent years. To deal with this situation, many universities offer L1 education in their liberal arts curriculum. However, there seems to be a deficient understanding of the importance of L1 ability. In other words, educators should teach L1 more seriously, focusing on thinking skills, not just language itself. We need language skills, not only to communicate but also to solve problems and/or understand complicated matters and analyse/explain them. The purpose of this paper is to explore the relationship between language ability and thinking skills to demonstrate the importance of enhancing L1 ability among Japanese university students.

Keywords: language ability, critical thinking, mother tongue (L1), college/university, Japan

母国語教育の重要性：思考能力への影響

——日本の大学教育との関連性——

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Introduction

In Japan, insufficient ability in mother tongue (L1) among university students has been recognized in recent years. To deal with this situation, many universities offer L1 education in their liberal arts curriculum. However, there seems to be a deficient understanding of the importance of L1 ability. In other words, educators should teach L1 more seriously, focusing on thinking skills, not just language itself. We need language skills, not only to communicate but also to solve problems and/or understand complicated matters and analyse/explain them. Language ability or skills are crucial to surviving in society. However, relevant studies, such as those concerning the relationship between L1 ability and thinking skills are rare. In addition, such studies in the context of Japanese university education are hard to find. Therefore, there is a need for research. Thus, the present study focuses on the relationship between language and thinking skills to clarify why Japanese university students need to study their L1 more seriously.

This paper is organized as follows. The first section briefly discusses the definitions of critical thinking skills (CT) used in this paper. The second section examines the relationship between L1 ability and CT. The third section looks at students' CT in Japanese universities. The concluding section considers the need for further studies in the future.

It should be noted here that in Japan there are growing number of students whose L1 is not Japanese. These students have various linguistic backgrounds including semilingualism (see more details in section 2) and they should be considered from different perspectives. Therefore, the present study only focuses on students whose L1 is Japanese.

1. Definitions of critical thinking skills (CT)

Before discussing the relationship between L1 ability and CT, this section briefly discusses the definition of CT used in this paper to avoid confusion.

Many scholars proposed definitions of critical thinking. However, no consistent explicit interpretation exists (Wan, 2019; Hitchcock, 2021). According to Wan (2019), one of the reasons for this inconsistency is the vagueness of the word *critical* and the deepness and complexity of the term *critical thinking*. Oxford Advanced Learner's Dictionary (Hornby et al., 2015), for example, defines the term *critical* as “important”, “making fair, careful judgments about the good and bad qualities of sb/sth”.

Therefore, this paper needs to define the term critical thinking to ensure clarity. The present paper mainly utilizes a definition by Robert Ennis (1993: 180): “Critical thinking is reasonable reflective thinking focused on deciding what to believe or do.”

It should be noted here that this paper largely focuses on the relationship between L1 ability and

CT; to examine the relationship, levels of each element need to be distinguished in some cases but they are difficult to distinguish and identify. Therefore, CT in this paper includes extensive meanings, such as conceptual thinking and skills for problem-solving in a complicated situation. Regarding problem-solving, in particular, various researchers share the same view that it is the central idea of CT (Ouhiba, 2022).

2. The relationship between L1 ability and CT

This section considers the relationship between L1 ability and CT to show the importance of enhancing L1 ability. To understand the relationship, we need to see the difference in the levels of language ability, in particular, L1 ability. Language ability can be roughly divided into two levels: the lower and upper levels (lower-order/higher-order). Katada (2019) designates these levels as “the language of communication” and “the language of thought” (p. 383) respectively. Broadly speaking, the former is the level of casual conversation and the latter is that which involves complex thinking. She claims that the upper level requires continuous learning of L1 in formal education; in multilingual societies in general children have to switch from their L1 to the language of education in school and this can cause semilingualism. Similar claims have been made about many places in the world (e.g., Hernández Colón, 2012). Katada (2019) defines *semilingual* as “*linguistic competence insufficiently developed for complex conceptual thinking*” (p. 383).

Importantly, even if people in multilingual societies can speak several or many languages, they are “semilingual at the level of verbal thought” (Katada, 2019, p. 383). We need to understand the significance of language ability for thinking or thought because we need the ability to avoid or solve problems in our lives. The development of thought continues throughout our lives only when L1 is sufficiently and properly acquired (ibid.); “the access to verbal thought (conceptual thinking) through L2 (English) is indirect and thus weaker than it is through L1” (p. 385). This means a shortage of L1 ability may cause problems or barriers to sustaining or getting a secure position in a certain society or at a workplace.

In summary, the semilingual situation suggests a strong connection between the upper level of language ability and CT. In other words, people who have language ability without thinking skills may have a deficiency in dealing with complicated matters, such as solving problems, which may involve comprehending intricate issues, analysing/organizing them, and explaining them to or persuading other people. To put it another way, people with lower-order L1 ability may face more barriers or disadvantages to solving problems than those with higher-order L1 ability.

Contrastingly, in the field of developmental psychology, there are views that the ability to use oral language for communication and the ability to think or resolve problems are distinct functions; the process of problem-solving is not directly connected to language usage (Freeman, 1972). However,

Freeman (ibid.) acknowledges that the development of thinking is related to that of language. In other words, the developmental merging of the two elements indicates that language can be a medium for thinking and CT; the upper level of language ability and CT are related to each other.

There is an interesting study to show the significance of L1 ability in EFL writing among Japanese university students. Hirose and Sasaki (1994) investigated the relationship between the quality of students' English expository writing and some factors that might affect the quality of their writing. Nineteen Japanese students participated in the study and both quantitative and qualitative data were collected. From the quantitative data, they found that the participants' L1 writing ability was highly correlated with their English writing ability as well as their English proficiency. They pointed out the correlation meant that composing competence existed across languages and the competence appeared to be caused by the students' L1 ability at least partially.

Moreover, the qualitative findings of Hirose and Sasaki (ibid.) also suggested the participants' L1 composing competence influenced their English writing. According to their data analysis, the good EFL writers applied their good L1 writing strategies to their English writing. The strategies involved "planning content", "paying attention to content and overall organization while writing", and "revising at the discourse level" (p. 218). On the other hand, the poor writers rarely used the good writers' strategies in either their L1 or English writing. In addition, they were careless about mechanics and grammar as well as content. These differences between the good and poor writers suggested the importance of L1 composing competence for their English writing. In other words, the upper level of L1 ability is essential for good EFL writing.

The good L1 writing strategies above require complicated thinking skills similar to CT because the strategies include paying attention to intricate points and details while writing. Intriguingly, Hirose and Sasaki (1994) claim that their findings about the good writers' strategies correspond to those of Cumming (1989). He describes "writing expertise" as being the ability to pay "attention to complex aspects of writing while making decisions" (ibid., p. 119 cited in Hirose and Sasaki, 1994). This writing expertise overlaps or involves CT as well as the good L1 writing strategies. Namely, the upper level of L1 ability is connected to CT and thinking skills.

It is worth noting that the profound relationship between language and thinking skills is not a new concept. In the 18th century, the chemist Antoine Laurent Lavoisier argued that "we think only through the medium of words. ... The art of reasoning is nothing more than a language well arranged" (Lavoisier, 1799/1984 cited in Roberts and Billings, 2008).

Following Lavoisier's idea, Roberts and Billings (2008) emphasize the importance of the relationship between the two elements when developing a literacy instruction cycle to teach thinking skills. They claim that the key to teaching thinking is to "treat it as a fundamental literacy skill".

3. Students' CT in Japanese universities

In the previous section, we saw how language ability influences thinking skills or CT. This influence suggests a lack of CT among Japanese university students because of their insufficient L1 ability (see introduction for details). Therefore, this section looks at the students' CT.

Needless to say, there is a continuous demand to cultivate CT in higher education in the world (Saulius and Malinauskas, 2021; Zhou and Lin, 2019). In addition, CT is considered a key aspect of educational quality in many countries (Ouhiba, 2022). Some educators in Japan seem to notice the need for CT and try to improve students' CT at the university level; however, most students lack the skills (Tsuzuki and Shingaki, 2012; see Tatsumoto, 2023 for more details).

Apart from insufficient L1 ability, the lack of CT among Japanese students can be partly connected to the cultural principles in society. According to McKinley (2013), when students have to work on critical arguments in their EFL academic writing, they face cultural obstacles. Such obstacles result from the educational system and parental upbringing in Japan. Japanese students have been educated about group living and/or teamwork because of the cultural principles in society. Namely, criticizing others, within the same group or institution, in particular, is discouraged due to the importance of harmony or conformity with others. Many researchers have made this observation (e.g., Rohlen, 1998; Rohlen and LeTendre, 1998; Lewis, 1998).

In addition to the cultural issue above, lecturers and professors in Japanese universities typically do not require activities to learn or promote CT. For instance, formal essays or term papers involving CT are not usually assigned in undergraduate classes in Japan. Therefore, most Japanese university students do not know the necessity of CT and lack the skill.

Although Japanese students have cultural obstacles as described above, students with the upper level L1 ability (see previous section for details) should be able to learn CT quickly once they recognize its practicality and necessity. That is to say, higher-order L1 ability itself includes a certain level of thinking skills (even if not high-order CT), such as comprehending intricate matters, organizing things, and checking the flow of content in writing. The findings of Hirose and Sasaki (1994; see previous section for details) can be good support for this view.

However, considering that the majority of Japanese university students are deficient in CT, we need to recognize and emphasize the necessity of enhancing their L1 ability more seriously. The interconnection between language and CT is stronger than we feel or notice. Language can be a tool or medium to think critically; but without thinking skills, language ability may develop only to a level for casual communication or low-order tasks.

Conclusion

By examining the relationship between L1 ability and CT or thinking skills in the earlier section, we now have some understanding of the profound interconnection between the two elements. Educators in Japanese universities should recognize the significance of CT or thinking skills in enhancing students' L1 ability. Besides, they should be also aware of students' cultural obstacles when teaching CT.

There is a shortage of related studies, not only about the relationship between L1 and thinking skills, but also about the relationship between L1 and achievement. More research is also needed to develop integrated teaching methods of L1 and CT that are appropriate for the actual classroom environment or conditions in Japan, and students' cultural backgrounds. Therefore, these studies are needed, in particular, for educators in Japan and for researchers in related areas or fields.

Lastly, formal education of L1 in Japan starts from elementary school. Therefore, the educational consideration, concerning L1 ability at an early level, is desirable as well as more related studies in the future.

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