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Learning Strategies to Reflect and Deepen understanding of critical thinking

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In this rapidly changing society, there is a demand for human resources with logical thinking skills and communication skills centered on critical thinking not only with professional knowledge. Although logical thinking is a basis for appropriate critical thinking, it is not easy to teach a role of logical thinking to beginners. To think logically and critically, it is important to suppress the factors that hinder thinking logically and critically. A factor that hinders the understanding of logical thinking in critical thinking is your cognitive bias. Aware of the cognitive bias, by looking at things in a multilateral point of view, the attitude to understand the different values and perspectives is important. In designing educational methods for logical thinking in critical thinking, it is necessary to consider what is an obstacle to understanding and how to suppress that obstacle.

As mentioned above, critical thinking and logical thinking is a close relationship. However, it is not easy to guide beginners of critical thinking to appropriately understand the role of logical thinking. It is difficult to understand the relationship between logical thinking and hidden premises. When a learner has a bias, it is easy to confuse the bias with the hidden premise and confuse the inappropriate process of finding hidden premise with the appropriate process. In order to understand logical thinking in critical thinking, it is important to understand the relationship between logical

thinking and hidden premises. For learners to understand the relationship between logical thinking and hidden premises, it is important to have a learning strategy that ease reflection of their own understanding.

In this study, we aim to construct a learning strategies that promote reflection and deepening of learners' own understanding, focusing on the obstacles to understanding logical thinking in critical thinking. For that purpose, the strategies were constructed to promote appropriate understanding of the relationship between critical thinking, logical thinking, and hidden premises. Chapter 2 describes what is critical thinking and what is the role of logical thinking in critical thinking. After that, the difficulty of understanding the role of logical thinking in critical thinking and the learning strategy to overcome the difficulty as a previous study will be described.

Chapter 3 describes the factors that hinder the understanding of logical thinking in critical thinking, which is the educational working hypothesis of this study. And, describe learning strategies that suppress obstacles and deepen understanding by encouraging learners to reflect on whether their own understanding is appropriate.

Chapter 4 describes the design and implementation of strategy-based teaching methods and observed obstacles to understand the role of logical thinking

Chapter 5 describes how to implement the strategy more concretely as a learning educational method.

Chapter 6 describes the characteristics of learners who have successfully used the strategies by analyzing learners' description data in the educational program based on the learning strategies described in Chapter 5.

Chapter 7 describes the summary of this paper and future issues.