

Review of: "Operations of the Cognitive-Metacognitive System in Promoting Learning: a Brief Theoretical Analysis"

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Potential competing interests: No potential competing interests to declare.

Introduction

Paragraph 1 is very intriguing. I feel there must be more theoretical support for statements. Who is making these claims? Why should we believe them?: "Making use of this important tool in teaching and learning, nonetheless, depends on having a very clear and detailed understanding of it – which is unfortunately not the case. " if you did not do the research than how do you know? How credible are the sources you are using. Similarly, "In its three decades of existence, it can be argued that metacognition was not yet presented in a simple way to be easily and effortlessly understood and used by teachers and planners of instruction"

Why should I continue reading?

Paragraph 2: "...If metacognition is conceived as (knowledge of) a set of self-instructions for regulating task performance, then cognition is the vehicle of those self-instructions" (Veenman et al., 2006, p. 6). "Knowledge of a set of self-instructions for regulating task performance" is cognitive. It is, in fact, procedural cognitive knowledge (Krathwohl, 2002).

Could the above not be put into your own words in a more subject specific context?

It is not made clear at this point what is metacognition as considered by the author. Perhaps describe what is metacognition.

Paragraph 3 starts to describe the skills of metacognition in a very technical way by the explanation is not clear. Does the description of the meta-skills need to be discussed here. Perhaps focus on the definition of metacognition in the context of the article.

Paragraph 4: Metacognition could be domain specific. Do you this providing a general model is transferable to different subjects. Maybe more detail is required to explain the context of the work.

Metacognition and Its Components

Paragraph 1: "The most commonly held definition of metacognition is the knowledge (i.e., awareness) of one's cognitive processes and the efficient use of this self-awareness to self-regulate the cognitive processes (e.g., Shimamura, 2000; Brown, 1987)." Despite referencing this statement, is it true. Perhaps referring to Flavell's work on metacognition is a good start. Providing definitions from other experts and mentioning the author's interpretation of metacognition in terms of the

article. This is done towards the end of the paragraph, but many technical terms used without explaining them in context of the article. What is metacognitive knowledge and metacognitive regulation.

Paragraph 2: How is paragraph 2 relevant to the article. There is still no explanation of the statements. More critical approach is required. What's the context.

Paragraph 3: Many research articles are combined in one paragraph. What's the relevance and what the conclusions of the research.

Paragraph 4: Has a lot of examples of research in one paragraph. "Good use of metacognition ... context that would encourage learners employ appropriate metacognitive knowledge and strategies in learning." How do you know this?

Below paragraph 5

"complete description of the components of metacognition as follows"

The referencing may be done with the statements.

Despite the components of metacognition is described using an example, Table 1 is not a table but just points put within a table. Maybe a flow diagram may be a more creative way of summarising this information.

Control and Monitoring in Metacognition

Paragraph 1: Need more context to make it clear.

Paragraph 2: What are meta-models. What is the context to this article?

Overall paragraph is quite technical and may require examples to ensure the reader does not disengage. Perhaps differentiate between tacit and explicit metacognition.

Operations of the Cognitive-Metacognitive System

Provide clear reasons why teachers need to establish the "interplay". Are teachers aware of the metacognitive process? How does this apply to different domains?

How does the affective domain influence metacognition?

What are the types of meta-model?

A model is being developed. Perhaps a diagram of the model integrated with the example may make the model clearer. Is this model general or subject specific. The model seems to describe the cognitive and meta-process but lacks the fostering of the metacognitive process. The generalized framework of the cognitive-metacognitive operation system has 6 steps. What are the practical educational implications of these steps in the classroom?

Please have a look at this article. It may give you ideas about structure and format:

<https://journals.sagepub.com/doi/full/10.1177/00220574221104974>