A Book Review on *Fifty Strategies to Boost Cognitive Engagement*

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Abstract
Along with research-based and state-of-the-art reviews, book reviews can be found in language teacher periodicals. However, less attention has been given to reviews on academic books emphasizing on the issues of cognitive engagement. As such, this paper seeks to review the book entitled, *Fifty Strategies to Boost Engagement: Creating a Thinking Culture in the Classroom (50 Teaching Strategies to Support Cognitive Development)* by Rebecca Stobaugh. Generally, this book adds to our understanding of how an educator needs to improve on the skill of engagement particularly through the cognitive domain.

Keywords: Engagement, educator, cognitive domain, book reviews.

Introduction

Fifty Strategies to Boost Cognitive Engagement: Creating a Thinking Culture in the Classroom (50 Teaching Strategies to Support Cognitive Development) is an inside look from the perspective Rebecca Stobaugh, an associate professor at Western Kentucky University. Other contributors are Lauren Tanner and Alicia Wittmer, whom are experienced school teacher at Kentucky. The book which was published by Solution Tree Press in 2019, contains eight chapters that elaborated the strategies from the point of view of cognitive domain of the revised Bloom's Taxonomy by Anderson & Krathwohl (2001).

The first motivation of this book was based on the *Future of Jobs Report* (World Economic Forum, 2016) which outlined the top skills needed for employment. It has been clearly mentioned by Hart Research Associates from their survey that, 93% of employers agreed that a job candidate's would need to demonstrate the capacity to think critically, communicate clearly and solve complex problem–all of which would be more dominant compare to merely achieving good academic results.

The second motivation was based on a study conducted by Adobe Systems Incorporated (2018) whose findings revealed that 76% of educators did not have sufficient knowledge and training to design creative problem-solving activities. In addition, Ingvarson et al. (2008) highlighted the differences between those who had undergone proper academic teaching and those who had not undergone the process being the ability to plan the transition curriculum to produce deep learning outcome. Thus, this book guides educators on enhancing their competence to design high-cognitive activities.

The structure of the book consists of eight chapters as follows:

- Understanding Cognitive Engagement and the Thinking-Based Classroom.
- Applying a Taxonomy to the Thinking in Your Classroom.
- Developing Critical-Thinking Skills and Fostering Engagement.
- Implementing Strategies for Understanding-Level Thinking
- Implementing Strategies for Analyze-Level Thinking
- Implementing Strategies for Evaluate-Level Thinking
- Implementing Strategies for Create-Level Thinking
- Cementing a Culture of Thinking

Stobaugh summarizes each of the eight chapters (excluding the final chapter) by explaining the definition of each strategy, followed examples of the classroom activities, the steps to perform those strategies, modifications of implementation of the strategies, additional content-area of examples using the strategies and finally discussing what could be raised from the strategies and a list of actions for extra activities in the classroom using the strategies. The final chapter summarizes the suggestions and provides an overview of the entire skill. Also included in the final chapter is Stobaugh's proposal that the echo-system in education would not be able to work well without the development of a culture of thinking. As it deals with many hands-on strategies for the classroom activities, the book is suitable for educators who have basic theoretical knowledge on pedagogy.

Method

This review seeks to basically answer the following questions as recommended by Lee et al. (2010) and Lewis (2020): (1) What is the central issue the book addresses?; (2) What does the theoretical perspective

from the author work?; (3) How is the book organized and what major arguments does the book include?

As a prerequisite of learning, student engagement is a vital aspect in education. Theoretically, student engagement can be divided into behavioral, cognitive and emotional engagements Chiu (2021). Since the dominant keywords in the book title are cognitive engagement, hence our next discussion will be focusing on the cognitive issues. Research has indicated that those who have lack environment can influence an in-effective learning experience and suppressed the student cognitive and emotional engagement (Chiu, 2021).

Throughout Chapter 1 until Chapter 7, Stobaugh offers on how to implement the strategies from Level 1 of the revised Bloom's Taxonomy by Anderson & Krathwohl (2001), for example, the first strategy in Chapter 4, describes the relationship between physical activity and students' memory across all age groups. The classroom example demonstrated for school-grade class learning ten vocabulary words; however, in variations section, Stobaugh suggests that this method can be modified by asking the students to create a video and learn the new term inside the video. Stobaugh was influenced by the original method proposed by education expert Eric Jensen (see p. 29) while developing the first strategy. In this strategy, Stobaugh also aims to highlight how significant hand-gesture approach and vocabulary can help students to improve their *remember* and *understand* domains.

Chapter 5 presents 18 instructional strategies at the *analyze* level of the revised Bloom's Taxonomy by Anderson & Krathwohl (2001). Some of these strategies also cover the students' domains of *remember*, *understand*, and *apply*, for example, in the seventh strategy known as concept attainment. In this strategy, students are required to apply a structured-inquiry process to determine the attributes of a group. Students will compare two ideas and sort out the information via classifying and performing the connections among the two ideas for further deep understanding. The educator gives students two pictures about one theme and after that, the students will be required to fill in the table of themes. Stobaugh brings together in this approach the existing body of current situation by applying the pictures and relates the situation with the concept the students learn in the classroom.

Chapter 6 exhibits the 19 instructional strategies at the *evaluate* level of the revised Bloom's Taxonomy by Anderson & Krathwohl (2001), for example, the 27th strategy known as questioning protocols in which Stobaugh draws conclusion from the quantitative research conducted by Fisher et al. (2018) which found that 58% of students sampled had felt comfortable when questions were being asked. Two simple questions that could be distributed to the students to boost their cognitive level are as follows: (1) What evidence support _____?; and, (2) What is another perspective on _____ ? Stobaugh also recommends in variations section modifying the strategy title as question continuum which is asking the students to refine the quality of their questions with the aim to trigger more challenging discussions and finally stimulate new ideas.

Chapter 7 suggests seven more instructional strategies which emphasize on learning at the *create* level of the revised Bloom's Taxonomy by Anderson & Krathwohl (2001), for example, the 47th strategy known as scamper which is an ordinary brainstorming technique that empowers students to produce alternative ideas via a seven process, namely: substitute, combine, adapt, modify or magnify, put to other uses, eliminate or minify and rearrange or reverse. In variations section, Stobaugh suggests that the process of scamper can be implemented one element at a time.

Lastly, in Chapter 8, Stobaugh ultimately stresses the highpoint that the strategies cannot be effectively absorbed if the culture of thinking is not developed. This is a significant characteristic to ensure that the students really benefit from the impact during the learning process and not just having fun participating in the activities. Additionally, a few stems or tables were provided for free in reproducible version for some of the strategies, for example, the 32nd strategy known as critiquing which consists of telling, asking, and giving (TAG) sentence stems, peer-review template, oral-presentation rubric and physical education self-assessment. By doing this, Stobaugh encourages readers to fully utilize her suggestions for operation purposes.

Findings and Discussion

We believe that Stobaugh's book has filled the gap in current experiential learning by providing a hands-on approach and contributed to a reliable body of knowledge. Contributions made in terms of the recommended strategies particularly relating to the cognitive level domain from the revised Bloom's Taxonomy by Anderson & Krathwohl (2001) can indeed inspire educators. As educators ourselves, we attempted an implementation of the 18th strategy in our Technical Reporting course as illustrated in Figure 1. This strategy helped our students define the source of their problems in e-learning study. Based on the suggestion in Stobaugh's book in variations section, students need to brainstorm additional problems in e-learning study in order to identify the possible cause(s) of the problems. As stated in the first step of this strategy:

> *Identify the materials that challenge students to determine the cause of a problem or issue. This might be by using a video, readings, scenario, or past student work that needs correction.*

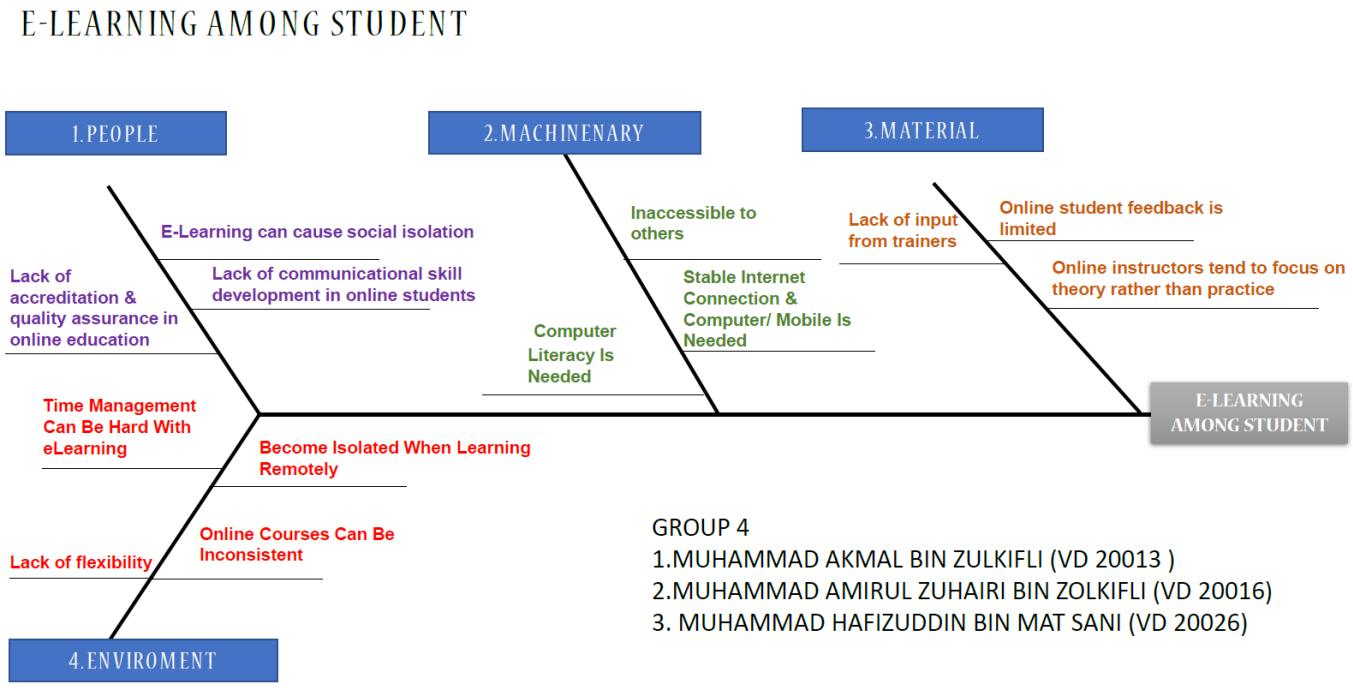

Figure 1. Sample Fishbone diagram for Technical Reporting Course

Because the students in this course were adult students many of whom were diploma holders and some of them had working experience, their prior knowledge in different learning environment and working experience made the discussion more valuable and meaningful.

Conclusion

This paper concludes that the book review has provided evidence of Stobaugh's *Fifty Strategies to Boost Cognitive Engagement* to be a suitable material for educators to boost their skill. The book emphasizes on the important quality of the cognitive domains from the *understand* level to the *create* level of the revised Bloom's Taxonomy. As suggested in the last chapter of this book, in order to attain the students' optimal potential, the eco-system of the thinking culture needs to be ready and provided by the institution. Hence, the process to embed this thinking culture into the students' mind begins with the educators' mind. This can be implemented by developing the thinking culture among educators.

During the current pandemic Covid-19, the cognitive strategies need to be adapted to the changes taking place based on the needs and requirements of the e-learning environment. This will involve more redevelopment and refinement of tasks and upskilling on the part of the educators especially ones that relates to computer literacy proficiency. It also demands the educators to be familiar with the devices and tools that will enhance their ability to manage the classroom and build the trust among the students. Educators' lack of skill to control devices and tools will negatively affect the students' perception and perspective on the educator's handling and delivery of teaching materials. It is hoped that Stobaugh will make room for improvement in her next edition.

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