Book review: Promoting Spontaneous Use of Learning and a Reasoning Strategies: Theory, Research and Practice for Effective Transfer.

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Conflict of interest statement

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest

Author contribution statement

Pat Strauss is the sole author.

Keywords

Learning Strategies, Thinking and reasoning, Self-regualted learning, Research-based teaching and learning, transfer of skills

Contribution to the field

The edited book under review highlights issues around the teaching of strategies and the succssful implemtation of these strategies by students at all levels of education. This review discusses the contribution made by the various authors. This under researched topic is of great interest and importance to the academic community.

Book review: *Promoting Spontaneous Use of Learning and Reasoning Strategies: Theory, Research and Practice for Effective Transfer*.

Promoting Spontaneous Use of Learning and a Reasoning Strategies: Theory, Research and Practice for Effective Transfer. Edited by Emanuel Manalo, Yuri Uesaka and Clark A. Chinn published by Routledge Taylor and Francis Group. London and New York 2018 ISBN: 978-1-138-68064-7 (pbk)

This edited book examines how the use of spontaneous learning strategies can be developed and encouraged in learners drawn from a wide range of educational contexts. In the teaching and learning environments of the 21st century, where the emphasis is not on retention of information, but on the appropriate selection and use of knowledge in different settings, it highlights the importance of equipping students with strategies that enable them to maximise their learning.

The book is divided into three sections:

- Theory

- Research

- Practice

Part 1 Theory

These five chapters allow the authors to explore and extend the current understanding of the field. The opening chapter by Kapur, Lee and Lee focus on getting students to spontaneously generate strategies for solving statistics problems. The second chapter by Oyama explores the importance of teaching questioning skills and provides suggestions for encouraging students to ask the kind of questions that will promote their own learning. Stadtler, Bromme and Rouet focus on the importance of teaching

students to evaluate sources and how to integrate these sources into a coherent argument. Uesaka and Manalo point out that students tend not to use appropriate learning strategies, even if they have been taught these strategies, and are aware of their benefits. The final chapter by Wecker and Hetmanek asks how educators can persuade students to abandon familiar strategies for others which will be of greater benefit.

Part 2 Research

These five chapters focus on factors that affect learners' spontaneous use of strategies. Manalo and Henning claim that students persist in using inefficient strategies because the more efficient strategies are cognitively more demanding. Then Tanaka argues that teachers need to make major changes to their teaching practices to encourage the use and transfer of strategies. Suzuki and Sun point out that students' perceptions of the value of tests have a greater influence on the adoption of strategies than learner motivation. Fukaya explores the dangers of inaccurate student self-evaluation, and how this can impede students' progress. Shinogaya discusses the effect of teaching behaviour on student strategies and argues that greater involvement leads to greater employment of efficient strategies. The final chapter by Lei and Chan explores the importance of self-regulation and co-regulation in group work.

Part 3 Practice

The final eight chapters look at putting these approaches into practice. In the Japanese context Ichikawa, Uesaka and Manalo suggest that three approaches should be adopted: cognitive counselling, incorporation of learning strategy instruction in the curriculum, and the thinking after instruction approach. Stump et al. suggest the use of the interactive- constructive- active- passive (ICAP) framework. Seo et al. elaborate on strategies designed to connect new knowledge to existing knowledge. Chinn, Duncan and Rinehart explain how groups of students can develop their own guidelines for good models, evidence and criteria. Samarapungavan, Wills and Bryan consider the way

transfer takes place with young children in school-based science classes. Hmelo-Silver et al. discuss the transfer of knowledge demonstrating the importance of students' own experiences in the environment. Webb et. al look at classroom conversations focusing on what happens when the teacher is not present. Finally, Reznitskaya, Wilkinson and Oyler examine dialogue that supports the development of students' argumentation skills, that in turn, promote deep understanding.

In the conclusion the editors argue that in order to counter students' inability or disinclination to strategies spontaneously, teachers must create environments that encourage their use.

This book has much to say to a wide range of educators. It stresses the importance of the teaching appropriate strategies at all levels but unfortunately research indicates that the spontaneous use of these strategies is problematic (Dunlosky, Rawson, Marsh, Nathan & Willingham, 2013; Karpicke, Butler & Roediger, 2009). Although this lack of the spontaneous use of strategies has been widely recognised, it appears that since the work done by Borkowski, Carr and Pressley (1987) and Garner (1990) little research has been undertaken into why students appear to be reluctant or unable to employ the strategies they have been taught. This book is, therefore, a timely addition to the literature in that it not only discusses the theory and research behind the use (and non-use) of strategies, but suggests practical ways in which educators can help their students to make better use of strategies. Ultimately, this book's value lies in its promotion of thinking skills, and through the outlining of various learning and reasoning strategies, the emphasis it places on helping students to think creatively about strategy development.

This book is not without its flaws. As a language teacher, I found some of the chapters that were primarily aimed at the teaching of maths a little difficult to follow. This was quite definitely not true of all the chapters contextualised in the maths learning classroom, however. Despite this minor reservation I found this book very useful. It has been intelligently structured and offers much both to readers who are familiar with the area and those who are newcomers.

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