

# Book Reviews

## **THINKING SKILLS ACROSS THE EARLY YEARS: A PRACTICAL APPROACH FOR CHILDREN AGED 4-7**

Belle Wallace, Nicola Beverley, Mike Carter,  
Lynne McClure and Dorothy Rickarby,

2002 UK: David Fulton Publishers Ltd.

Published in the United Kingdom, this publication comes at a time when the number of discourses on the indispensability of critical thinking in education are ever-increasing. Perceptions of the value of critical thinking skills in South Africa have changed drastically since 1994 and the subsequent introduction of an outcomes-based education system. This text covers the field of critical thinking fairly comprehensively, and provides an advanced, progressive approach to contemporaneous international trends in the field of education with regard to the notion of critical thinking skills and the demands posed by topical advances in the field of education. Dedicated to critical and theoretical rigour, the book has a great deal to offer practitioners in the field of education. This collection of information, a mixture of tried and tested classroom activities and compelling and thought-provoking ideas for project work across the Foundation Stage and Key Stage 1 for practitioners, was written by a group of experienced teachers, some of whom still teach in schools while others currently serve the field of education as curriculum advisors and education consultants. Collaboration

with nine schools took place and the information was published under the auspices of the National Association for Able Children in Education (NACE) (xiv).

The textbook draws on the experiences of five authors and follows the standard pattern of many introductory textbooks. The authors' personal application and novel approach add to the innovative appearance, and the book moves away from traditional, anachronistic views on thinking skills. The authors challenge convention, urging readers to face up to challenges and engage critically with them, suggesting that although many teachers work intuitively within a thinking paradigm, it is essential, especially for early years teachers, to consciously teach children to think in a critical and creative way while developing their literacy, numeracy and life skills. All education phases should strive to apply the same integrated, holistic approach as the early years teachers to enable the transfer of skills across the curriculum by children (learners) and to ensure that they become active, lifelong thinkers (25). The outcomes-based system in South Africa also emphasises the social development and self-concept of the child, and supports the 'universal request ... that schools should train children to be thinkers and problem solvers' (24).

The extract in the preface (viii-x) illustrates one of the major tenets of the book, namely the fact that children's own experience and knowledge are highly relevant in the teaching-learning situation, and that they are sometimes more knowledgeable about certain matters than the

teachers. The primary focus of the book is teaching problem-solving and thinking skills across the curriculum in the early years, focusing on the use of the TASC Wheel in developing children's writing skills, mathematical problem-solving and thinking skills in mathematics and science. The plan and way of presentation that characterises this book encourages (compels) readers to engage with relevant concepts in a critical way and challenges them to challenge in turn, to ask critical questions, to move 'out of the box' and to break new ground.

The important role of children's first teachers is emphasised in Chapter 1 (Belle Wallace), as the foundation for literacy, numeracy, and even the rudiments of Information and Communications Technology (ICT) are established during the early schooling years. The purpose of the chapter is to offer, through a well-researched framework for a systematic approach to thinking skills across the curriculum, ways in which teachers can extend and reinforce their work by using the TASC thinking skills framework and by elucidating, so that the children also become aware of the ways in which they themselves apply and master the thinking skills.

Chapter 2 (Mike Carter and Dorothy Rickarby) presents a case study in which the processes of introducing the TASC Problem-solving Wheel to Reception and Key Stage 1 and 2 children at Malvern Wells CE Primary School, are analysed. Since the aim was to improve the children's creative writing ability, the lessons provided include strategies from the National Literacy Strategy (49) and the activities involve generating alternative story themes and endings.

The purpose of Chapter 3 (Lynne McClure) is to explore how an explicit

thinking skills framework that is part of a whole-school approach can be used in mathematics. Teachers are encouraged to use the audit spiral (89) to reflect on the skills and strategies they use in their own practice in order to ensure that they do not merely deliver the prescribed National Numeracy Strategy (NNS) curriculum in an unimaginative way, but rather offer cognitive challenge in the mathematics classroom. This would require children to use higher order thinking skills while developing the social skills of discussion and collaboration (88). The first part of the TASC Problem-solving Wheel (93) provides for children to share their knowledge and to receive recognition, simultaneously supplying the teacher with information on the children's level of understanding. Teachers should capitalise on 'naturally occurring' activities during the early years and 'integrate them into more structured tasks' (91). Play, for example, could involve cooperative learning. Children's learning is generative, rather than sequential, therefore they do not need to learn all the parts of mathematics in a specific order, but will synthesise aspects of acquired knowledge during appropriate activities and discussions (91). Since talking about ideas clarifies one's thoughts, and because talk is important in regard to mathematics at all ages, teachers are entreated to create a classroom ethos where 'talking about their work, and listening to others doing the same, is expected and valued' (91). Since for the 'vast majority' of mathematics students, mathematics will be 'a tool for life', teachers are exhorted to use TASC to help produce 'the mathematicians of the future' (118).

Chapter 4 (Nicola Beverley) explores ways to enhance and extend children's learning in science through the TASC problem-solving Framework and by developing a range of essential Tools for

Effective Thinking. Teachers question their approaches to the teaching of science because of, among other things, the deluge of legislation and documentation in this regard. Key Stage 1 teachers are often frustrated by the 'limitations of both programmes of study and the DfEE/QCA Schemes of Work for Science' (120). Yet, despite time limitations, both documents highlight the importance of practical experience as a fundamental part of early science learning (120). The thinking involved in the KWL approach, i.e. What do we Know? What do we Want to find out? What have we Learned?, relates to a number of stages in the TASC Wheel and works especially well when children work collaboratively and share their thoughts and ideas throughout. Children could be grouped with 'thinking partners' and asked to discuss a question.

The text is well written and scholars, academics, teachers, and students should find the writing style accessible, user-friendly and easy to follow. The authors engage with research evidence critically, introducing readers to research and methodology and practice in the field of thinking skills. Furthermore the individual chapters have been integrated in a meaningful way, linking not only differing themes but also theory and practice.

In conclusion the authors have succeeded in compiling an excellent guide, relevant not only to teachers, teacher trainers, teaching assistants, student teachers and parents of Key Stage 1 children, but one which offers principles which can (and should) be applied across all education phases and subjects. A thinking culture will, among other things, empower children to carry out analytical, critical and creative thinking tasks successfully, allow them to develop, refine and practise their thinking

skills, teach them how to manage, organise and record data, encourage higher order thinking skills of analysis, synthesis and evaluation, and ultimately enable them to transfer skills to everyday situations, using them as tools for lifelong learning (118).

CAROL VAN DER WESTHUIZEN  
AND KOBUS MAREE

### ***THINKING SKILLS AND PROBLEM-SOLVING: AN INCLUSIVE APPROACH***

Belle Wallace, June Maker, Diana Cave and  
Simon Chandler,

2004 UK: London. David Fulton Publishers  
Ltd.

The introduction of outcomes-based education in South Africa changed the way in which learning facilitation is viewed and conducted in a number of ways. The emphasis at present is on assessing learners on an ongoing basis, instead of using exam-driven assessment, with a renewed emphasis on developing critical thinking, reasoning and reflection in the classroom. The emphasis is also on the application of content to real-life situations instead of textbook-bound situations. Learners are offered constant feedback in an attempt to motivate them to take responsibility for their own learning, thereby reaffirming their role in the learning process. This shift from educational inputs to learning outputs, from a narrow focus on classroom processes to learner achievements, and from educator actions to learner outcomes is common to first world and developing countries. It is within this context that the insights presented in this book should be evaluated.