

January 2007

## Supporting Mathematical Thinking

John Watts

Follow this and additional works at: <https://research.avondale.edu.au/teach>



Part of the [Education Commons](#)

---

### Recommended Citation

Watts, John (2007) "Supporting Mathematical Thinking," *TEACH Journal of Christian Education*: Vol. 1 : Iss. 1 , Article 18.  
Available at: <https://research.avondale.edu.au/teach/vol1/iss1/18>

This Reflections, Impressions & Experiences is brought to you for free and open access by ResearchOnline@Avondale. It has been accepted for inclusion in TEACH Journal of Christian Education by an authorized editor of ResearchOnline@Avondale. For more information, please contact [alicia.starr@avondale.edu.au](mailto:alicia.starr@avondale.edu.au).

## BOOK REVIEWS

### Teachers behaving badly? Dilemmas for school leaders

Myers, K. et al. (2005). London: Routledge Falmer.

#### Marilyn Hansen

Associate Director of Education, Seventh-day Adventist Schools, NNSW Ltd

This book has particular value for school leaders and administrators. The authors have raised ethical 'dilemmas' because they believe the topic of sex and sexuality has implications for professional practice, and that this area has not been sufficiently addressed in leadership courses to resolve potentially critical issues in the educational workplace. By focusing on UK schools, the authors regrettably limit the book's value for an Australian audience. However, the reader may find the case studies and scenarios interesting.

Controversial sexual behaviours may be less common in faith-based schools, where there is a strong theological underpinning for 'right' and 'wrong' behaviours. Similar situations may, nevertheless, exist in faith-based schools given the diversity of beliefs, personal values, and life styles inherent in any school community.

The solutions offered by the authors tend to promote a traditional 'bureaucratic' approach to obtain external compliance in the hope of achieving internal control over behaviours. While strict compliance may act as a deterrent, greater vision is required to lead and guide staff and students in a school. The authors overlook the personal qualities and competencies that leaders need to manage such issues, and their emphasis on training and external controls misses the key point of inspirational leadership. Indeed, the complexity of issues raised and the nature of the general solutions proposed often leaves one with a sense of frustration.

Legislation covering child protection, anti-discrimination and equal opportunity can significantly impact on employment practices through consequences of non-compliance. Readers need to be aware of Australian legislation rather than that quoted for governance

of British schools. In particular, child protection legislation in Australia is very specific, and staff needs to be continually updated in this area for both preventative purposes and compliance.

The authors also mention the usefulness of codes of conduct. However these rarely cover all situations. When employer-determined, without staff consultation and negotiation, they either may be ignored, or become a source of staff frustration and union agitation.

Suggestions put forward for professional development aim to prevent controversial sexual relationships through implementation of various activities. The approaches canvassed may be useful to develop school-based policies and procedures, as demanded by state authorities for registration in Australia. Alternatively, they could be useful to reinforce values and create a school culture that makes sexual relationships between staff, or between staff and students unethical, unacceptable, or indictable.

While leaders might gain a greater awareness of potential issues and possible solutions from reading this book, it could be of more benefit to pre-service and beginning teachers on the potential consequences of sexual relationships in a school setting. The book's deficiency as a resource for Adventist teachers is its lack of a Christian perspective. Ultimately, the book's usefulness will be judged on the needs of the reader. [TEACH](#)

### Supporting mathematical thinking

Watson, A., Houssart, J., & Roaf, C. (Eds.). (2005). London: David Fulton.

#### John Watts

Senior Lecturer, Faculty of Education, Avondale College, NSW

The contributors to this book set out to promote mathematical thinking beyond arithmetical thinking, and to support inclusive practices in current mathematics classrooms.

Features of the text include:

- How low-attaining students can think mathematically
- Numeracy recovery
- Task refusal in primary mathematics

- Progression in written calculation strategies for division
- Using graphics calculators with low-attaining pupils
- Generalising arithmetic: an alternative to algebra
- Learning support assistants in mathematics lessons
- Inclusion and entitlement, equality of opportunity and quality of curriculum provision.

The authors' contributions are pertinent for both primary and secondary mathematics classrooms, across countries. One of the strengths of the book is the manner in which researchers and teachers, together, worked in equal partnership toward the development of mathematical thinking among pupils and students in the teachers' classrooms. A further strength is the recognition that different disciplines (or curriculum subject areas) have their own specific special needs, so that the highly abstract nature of mathematics cannot be treated in the same way as for less abstract discipline areas.

*Supporting mathematical thinking* is an informative, balanced, and evidence-based source for teaching mathematical thinking in the complexity of the classroom setting (e.g., knowledge of subject area, teaching skills, an understanding of each student as learner, the ability and time to efficaciously observe, to reflect, and to share insights with colleagues). More particularly, the authors address the challenges faced by those children who might be considered to be 'low-attaining' in mathematics. The book focuses on primary school (Years 1 to 7) classrooms, but I recommend it also to secondary teachers, since the contents are relevant to all mathematics classrooms. [TEACH](#)

## Teacher well-being

Holmes, E. (2005). London: Routledge Falmer.

### Lyn Daff

Lecturer, Faculty of Business and Information Technology, Avondale College, NSW

Stress—it's a part of modern life. The author examines the sources of stress, both the obvious and hidden, and suggests strategies for

managing it. Teachers' own stories and helpful insights are scattered throughout the book. Interesting research findings are discussed such as, 'age has been found to be a determining factor in teachers' workplace stress'; 'teachers, nurses, childminders and carers have the highest rates of turning up for work, when sick' and 'teachers average a thousand interpersonal contacts in a typical work day'. Unfortunately, the research sources are not fully referenced.

This book focuses on teachers thriving rather than coping. Its goal is enthusiasm about work and balancing physical and mental health. While teachers can be devoted to the well-being of their students, when it comes to nurturing each other the picture is not so positive. Teachers tell of their highs and lows, of things that worked well and of others that didn't. They speak plainly of stress illness and recovery. This aspect of teachers' personal reflections adds to the readability of the book. I am sure many readers will find stories to which they can personally relate. The author's UK focus, while strong, does not overly detract from the usefulness of the book for teachers world-wide.

'Worry does not empty tomorrow of sorrow, it empties today of strength' (Corry ten Boom) and 'Most folks are about as happy as they make up their minds to be', (Abraham Lincoln)', are just two of the many pithy sayings that add interest to the book.

This is clearly a 'self-help' book; without apologies. It seeks to differentiate itself from the common irritation of self-help books in the area of application and achieves this by providing lots of hints, tips and ideas. The book takes a holistic approach and addresses such topics as communication, health and career development. The final chapter provides a summary of key ideas, grouped under useful headings and a reading list is also given. I've spent more than 11 years in the teaching profession; reading this book provided a good opportunity for some self-reflection.

While not all of the book will appeal to every teacher, there is an interesting smorgasbord of topics on offer. It reminds us to take time-out and care for our own well-being. It is claimed that the teaching profession has a long-term attrition rate of 60%. If this book helps reduce that statistic, even minimally, it will have served a useful purpose. [TEACH](#)