EDITORIAL

Wilf Rieger

What does it mean to be a Christian teacher in the modern world? This question remains as relevant for today’s educators, as when first framed six decades ago by famous theologian Dietrich Bonhoeffer.

Teachers are significant people in their students’ lives; as in the case of Helen Keller’s teacher, Anne Sullivan. Similarly, David Williamson’s teacher had a far-reaching influence on his life. The celebrated Australian playwright recalls:

The first seminal moment I can remember was way back in infants’ school, when I wrote my first essay and was praised for it by my teacher, Mrs Nettie … The story was a very simple affair, just a couple of sentences about a seagull… Eventually, the seagull in my original story reappeared in one of my plays, The Club.¹

In a private meeting with Jesus, Nicodemus paid him one of the finest tributes, when he called Jesus, ‘Rabbi … a teacher who has come from God’.² The essence of what makes Christian teachers different is expressed here. The ‘ground of their being’ is in God. They have a vision of hope, manifested in the grace and power of the Gospel that transforms contemporary lifestyles and enriches personal and community relationships. Jesus challenges them to be the ‘salt of education’; not to live off education but for it. Teachers who have this passion will walk the talk, narrowing “the gap between ‘what [they] believe in’ and ‘how [they] live’.”³ Vaclav Havel, poet and former president of the Czech Republic referred to this kind of authenticity as, ‘living in truth rather than living a lie’.⁴ For him, changing and transforming the social order begins with the moral revival of the individual.

Christian teachers can have a part in this transformation, in their privileged position of mentoring. In settings and circumstances that permit, they can open windows of opportunity for their students to catch a glimpse of God’s purposes; aware that students are most open to the Gospel when it touches them at points of relevance or need in their lives, which then become ‘lightning rods’ for the Holy Spirit.

At every level, ranging from early childhood education to university, teachers are constantly exhorted in education literature to be ‘professionals’. A distinguishing mark of Christian teachers is that they perceive teaching as more than a profession; they see it as a vocation, a calling, a servant-hood ministry.

Accepting the notion of ministry does not imply a devaluation of the contribution that knowledge, skills, expertise, ethical practice etc. make to the quality of professional work. Indeed, these have their proper place. Moreover, ministry acknowledges the importance of the motives, attitudes, and values system that individuals bring to their work. However, status, lucrative remuneration and especially power—characteristics that seem integral to the culture of professions, stand in stark contrast to the kingdom values of the New Testament. There is the ever-present temptation for Christian teachers to borrow uncritically from, and conform to the idealisation of successful and financially profitable models of a profession.

A ministry paradigm of teaching is significantly different from a secular professional paradigm. This inaugural issue of TEACH highlights teaching as ministry and presents the writers’ distinct perspectives. It is my sincere hope and prayer that forthcoming issues of the journal (published online at www.ministryofteaching.edu.au) will explore a wide range of relevant topics and issues in response to the probing question posed by Bonhoeffer.

Endnotes

³ John 3:2, NIV.
⁶ Christian teachers in secular schools or institutions, as described by David Stafford in his article, face a challenge quite different to those in Christian schools.
Introduction
Children’s personal experience, confidence and success (or otherwise) with books and reading, particularly at the initial stages, is directly related to their attitude towards reading (Wang, 2000).

Many of these attitudes are developed prior to school commencement and often are closely linked to early literacy experiences in the home. Economic conditions of the household may determine children’s exposure and access to quality reading materials in the home. Some low-income families find it extremely difficult to resource their children’s early literacy needs. While it appears that most families are aware of the importance of the home literacy environment and the need for reading resources, too many are without books or lack an adult who is willing to read to children.

With the realisation that family members can contribute positively to early literacy development, there has been a plethora of programs and initiatives in recent years designed to support and encourage family participation in children’s literacy education. Surprisingly, most current programs assume (often incorrectly) that parents/carers have sufficient available finances to resource the literacy needs of their children.

With the realisation that family members can contribute positively to early literacy development, there has been a plethora of programs and initiatives in recent years designed to support and encourage family participation in children’s literacy education. Surprisingly, most current programs assume (often incorrectly) that parents/carers have sufficient available finances to resource the literacy needs of their children.

RAPS’ origins
Margaret Gill is an experienced ‘early years teacher’ in Victoria. She has long been aware of the difficult economic conditions and financial constraints that impact many of the families in her school district. Hence she constantly tries to narrow the gap between the home literacy levels and early literacy needs of the children in her classroom. While visiting three New York schools in the USA, she saw an innovative early literacy reading program in action. It was a co-operative home-school venture. The excitement and enthusiasm exhibited by the children using this literacy program impressed her, and she was eager to adapt and trial a similar program in her own classroom. On returning to Australia, Margaret, with assistance from the writer, developed and trialled Reading Adventure Packs (RAPs), a literacy program that utilised packs of stimulus material (Fisher, Gill, & Greive, 2005). The program was an attempt to support and improve children’s attitudes to reading and involve members of the family in the children’s reading by supplying reading resource materials.

The RAP program involves the collection and organisation of literacy resources by the teacher into several themed backpacks. Students borrow the resources and take them home on a rotational basis. The resources in the packs (listed below) are intended to provide an enriching literacy experience for the children and contribute to their development of positive attitudes toward reading. In addition to focusing on resources facilitation, family participation and literacy enrichment, the program’s other main purpose is to complement a teacher’s existing literacy program in the classroom, rather than compete with it.

Typical weekly sequence
On Monday morning the names of all the children in the class are placed in a hat and five names are drawn out. A record of these is kept together with the corresponding name of the RAP taken home by each child. The randomly selected children are the first group to enjoy the literacy activities at home for four school days, thus giving the entire family access to all the activities available in each backpack.

At home the children may choose to read and complete all, or as many of the activities as they desire. The family/children select the activities and the time frame for their completion. Teachers are not required to check on how much or how little has been completed. An exercise book is provided to encourage the children to record something they learnt, discovered or enjoyed during the week from their particular literacy RAP. Children are able to read each other’s stories or comments when it is their turn to have the RAP. Prior to returning the RAP to school on Friday morning, parents/carers are expected to check the inventory to ensure that...
all the contents are returned in the backpack. At school, each Friday, special recognition is given to the children for their week’s participation in RAP. They may place the soft toy from the RAP backpack on their desks, for the day.

**The teacher’s role in the weekly program**

Once the program is set up, the teacher’s involvement in the program only requires the distribution of the backpacks on Mondays and their collection and checking on Fridays. After the RAP program has completed one rotation, the cycle commences again.

**RAP contents**

Each RAP is based on a specific theme. Examples are: Noah’s ark, ducks, sheep, dogs, dinosaurs, cooking, and music. The following make up each RAP:

- a soft toy indicating the theme
- a ‘Note of Explanation to Parents/Carers’
- an inventory listing the literacy activities
- an ‘Instruction Sheet’ for parents/carers on how to use the RAP and its many activities
- an exercise book for writing stories, comments, etc.
- a variety of literacy activities linked to the theme, catering for K-3 children. Activities include four or more story books and selected craft activities, jigsaw puzzles, colouring sheets, dot-to-dot pictures, games, videos, worksheets, puppets, CDs and writing books
- all associated materials needed for the completion of the activities in the RAP (e.g. a lead pencil for writing in the exercise book, scissors—both left and right handed for the craft activities, coloured pencils, pencil sharpener, eraser, etc.).

**Evaluating and learning from the program**

After trialling RAP for two consecutive school terms, parents/carers and children were given an opportunity to evaluate the program using a questionnaire.* The following is a representative selection of responses:

One parent/carer wrote: ‘I think that they are fantastic.’ Another noted: ‘We enjoyed having the packs.’ Yet another responded: ‘My child thoroughly enjoyed the reading pack.’

According to data from the questionnaires, parents/carers reported that girls, more often than boys, demonstrated a positive change in attitude toward reading as a result of using the RAP. Girls were more likely to initiate reading, read independently, and read more often than boys. Mothers were the parent/carer most involved in the literacy development of the children in the home. The data also indicated that time was a significant factor in parents/carers’ comments about assisting their children with reading. For example one parent/carer wrote: ‘I believe it is important. However it doesn’t get done every night.’ Another said: ‘I try when I can.’

Ideas for improvement were suggested. It was advocated designing each RAP with more self-correcting activities and games, thus lessening parent/carer supervision and intervention. It was also noted that some of the RAP components could be augmented to allow them to appeal more strongly to boys’ unique literary preferences and needs. With the incorporation of these changes into the RAP program, its developers believe it will assist parents/carers in providing their children with a richer home literacy environment. Hopefully the program will be another forward step in the literacy journey of children, in becoming competent, independent readers.

**Endnote**

* The questionnaire may be obtained from the author.

**References**


What is it about?
There is considerable preoccupation regarding the involvement of technology in the learning process, at all levels of education. Views range from excitement about the reality of the 'connected classroom' to a fear of computer tutors totally replacing the classroom teacher. Of concern is the sheer cost of technology that is often seen as a financial drain on schools. Talk of the 'black hole' aspect of computing costs is common.

Between the hype on one hand and the limits of applying technology to learning on the other, the real point in question, more commonly is 'To what do I allocate my few resources?'

One of the more recent developments has been that of the fully interactive digital whiteboard. Commonly referred to as Interactive Whiteboards (IWBs), these pieces of equipment are being increasingly appreciated for their versatility and learning enhancement potential.

A typical Interactive Whiteboard installation consists of a large format, touch-sensitive board (generally around 1 x 1.5 metres) connected to a video projector and a computer. A complete, installed system costs approximately $A5,000 - $A8,000 per classroom. Such a system allows the display and manipulation of a variety of interactive multimedia on a large-scale display, using familiar desktop layout controls. Despite the cost, what users have found is that adding an IWB to the classroom environment generates excitement, increases the engagement of both learner and teacher, and engenders change. The process is almost organic. This article describes and comments on the IWB implementation process in some ‘case study’ schools.

How did it start?
Initial investigation identified several sites, in Australia and overseas, as already having interactive whiteboard policies. In the present case studies, coordination and direction of integrating the IWBs into the learning environment of the selected schools was provided by an IWBNet representative with assistance from an academic advisor/analyst. Both individuals chaired site meetings held in schools. Much of the experience reflected in the current study is based around boards developed by ActivBoard, SMART Technologies and Promethean.

While the investigation concentrated on the effect of IWB take-up in the wider teaching and learning context, it is often difficult to isolate individual factors contributing to altered learning patterns. To assist with this aspect, responding schools were selected for a whole-school take-up of the new technology. Rather than look at implementations where only a minority of teaching areas were to receive IWBs, we chose to focus on schools whose intention was to have the equipment in every teaching space, but ones which did not necessarily commence their implementations with a specific aim to ‘re-equip’ the school. A traditional ‘before and after’ comparison provided a framework for evaluation. Thus the focus of the project was on schools that were willing to consider the potential teaching and learning value of IWBs and prepared to implement a wide-scale application of the technology.

What happened? What did we discover?
Leadership
All schools involved, thus far, typically included school administrations that were committed to ‘try out’ IWB implementation and devote the necessary resources to it.

We contend that strong leadership is critical for a successful IWB ‘takeoff’. It needs to be school-wide and definitive. Elsewhere we contend:

Unless it is patently obvious the school leadership is whole-heartedly behind the wise use of ICT in all facets of teaching and learning, and has very high expectations of the technology, the strategy has little chance of success.
In all the case study schools, the principal played a key role in facilitating the whole-school acceptance of IWBs. The nature of the role played, and the leadership style adopted differed, but in all instances the principal played a leading role in seeing through the implementation program.

**Project management**

A leadership style of devolved responsibility identified an active and respected teacher who had staff support, acquired some experience with IWBs, and displayed visionary capacities. These ‘project managers’ were then provided with back-up, and in some cases the time to lead the project, enthuse teachers, demonstrate possibilities and develop resources.

Every school selected a project manager who was a ‘doer’, a driving force, who coordinated the everyday implementation of the IWB take-up; at the same time engendering enthusiasm and pointing out resources (people or materials) that would be helpful. Their brief often included an aspect of ‘research’ regarding IWB use and improved pedagogy. Some participating schools split their coordination role two ways, appointing an e-learning leader from among their staff and then following with the appointment of an e-teaching leader.

In every school, individuals guiding the innovation worked closely with the principal and, in most cases, were given encouragement and support in taking charge of the change process. All of the program coordinators held a position of responsibility within the school (mostly at the deputy principal level). Those selected displayed change management skills and all were interested in using the IWBs to enhance teaching and learning. Appointing effective co-coordinators led to the rapid implementation of the IWBs, while achieving successful implementation, in part, was explained by team building efforts; unity of purpose thus became an important factor.

**Maximum take-up**

With funds to acquire a critical mass of IWBs, and expertise and school leadership to mount a whole-school implementation, it was possible to adopt a structured implementation program and achieve high teacher involvement.

Schools starting without the funds or IWB expertise were still able to achieve full teacher ICT usage within a relatively quick time. But, invariably, they commenced with less clarity of purpose and needed to acquire funds and shape their implementation program ‘on the run’. In schools where there was an attempt to move from paper-based operations to a digital operating environment, IWBs were assumed or expected to assist in this transition. Anecdotal data collected suggest that IWBs may play a part in reducing photocopying costs.

Most schools that shifted to full IWB implementation succeeded in convincing staff to take the technology innovation ‘on board’ in a relatively short time. By the close of the third year, all staff were using the boards. One public primary school with approximately 400 students, and the initial funds and expertise, achieved full staff take-up in only four months, while a secondary school of 700 students achieved it in eighteen months.

At yet another school, IWBs were in normal use in every classroom within 10 months of commencement of implementation; a fact noted and commented on in an inspection report. In one school where the implementation was still ‘a work in progress’, more teachers were using the technology and parents were requesting that their children be included in classes using IWBs; an interesting outcome.

**Classroom benefits**

The technology’s educational benefits are enhanced when clear expectations are outlined regarding its usage on a daily basis, in an integrated way. Boards, in all of the schools sampled, were used as a part of everyday teaching and not as lesson or task specific items. This was in line with relevant research findings. Thus IWBs are expected to be an integral part of curriculum delivery at all times. Further, the technology is seen as being utilised by staff and students, with neither group dominating the usage. Two schools involved parents as well as the staff and students in their whiteboard rollout; the technology was clearly regarded as an important aspect of the whole learning process and not as an end in itself. These observations ‘echo’ findings by a study in Kent (UK) schools. There, IWBs were used to support lessons across the curriculum and delivered a variety of learning benefits in the classroom. It was shown:

- They provide, electronically, all the familiar features of a traditional classroom chalkboard or roller whiteboard.
- Whereas the number of pupils that can practicably be accommodated around a standard computer set-up is limited, whole classes may comfortably participate in whiteboard presentations.
- Lessons can be enhanced by easily integrating video, animation, graphics, text and audio with the teacher’s spoken presentation.
- It is possible to highlight and annotate key points, using the marker pens. Anything on the screen can be saved as a ‘snapshot’, making it easy to review and summarise key teaching points.

The screen can be saved as a ‘snapshot’, making it easy to review and summarise key points.
Material can be displayed from a number of sources, including CD-ROMs, websites, DVDs, VHS tapes or television.

Notes, diagrams and entire lessons can be saved, archived and added to the school intranet or similar centralised teaching resource.\(^3\)

Using IWBs and recognising their facilitation of learning has been an experience common to schools studied to date. In a brief review of one of the early Australian whole-school applications of whiteboard technology, researchers summarised the findings at one school as follows:

...within two years it has achieved something that few other schools have done. [The ACT school] has successfully integrated a pedagogically different use of ICT in every facet of education from Kindergarten to Year 6. It has every staff member wanting to use the strategy and also caused the parents to embrace and actively support the strategy. The key has been integration, in particular integrating into the ‘whiteboard’ deployment a host of educational and administrative activities, while linking the whiteboard initiative with a range of other whole-school student development and teaching programs. It has achieved all this with no external assistance, and with no charts to show the way.

The potential implications of this development for ACT schooling are profound. [The school] would be the first to say the impact of the strategy needs to be better evaluated, but when the response from the children, the parents and the staff is so positive and when the small staff is so preoccupied with acquiring and making the most of the technology, the school has little time itself to devote to research.\(^4\)

At one school in NSW, teachers reported definite changes in teaching approaches, with less time preparing spectacular files and more time working with students. Some said they felt their teaching was ‘revitalised’.

What did we conclude?

Two clear and compelling conclusions may be drawn from our findings. In the first instance, strong administrative support that incorporates a delegated responsibility will ensure rapid and effective technological change, particularly relative to interactive whiteboard take-off.

Secondly, IWBs as a technology are highly suited to classroom practice. They have the potential to encourage adoption of, and confidence in, ways that other existing technologies don’t easily match. Beyond that, they offer some real advantages to classroom teaching practice, developing a higher level of learning generally, increased engagement, and greater collaboration.

In summary, it is our opinion that IWBs applied purposefully and strategically, make a significant contribution to utilising technology for stimulating, effective teaching and learning in schools. **TEACH**

**Endnotes**


---

**Food Challenges**

**New teachers’ resource**

The Sanitarium Nutrition Service has teamed up with the Victorian Home Economics and Textiles Teachers’ Association (VHETTA) to produce a new teachers’ resource. **Food Challenges** encourages students to appreciate great food, have a go at making it themselves, and—above all—take lifetime ownership of their own health.

Designed for upper primary and lower secondary students, it is an invaluable resource for the teaching of Home Economics, Food Technology, and Health.

Each chapter looks at a different situation or occasion and features hands-on food production, design challenges, nutrition investigations and case studies. From eating breakfast, to snacking after school, to attending a celebration, this resource challenges young people to be informed, aware and confident decision-makers and consumers.

To find out more about **Food Challenges**, view a chapter of the resource and download an order form, just visit our website

A ‘benevolent Trojan horse’: Sacred values in a secular setting

David Stafford
Fellow, Royal Australian Institute of Architects; Head, Discipline of Architecture and Deputy Head, School of Architecture and the Built Environment, The University of Newcastle, NSW

Introduction
Creative professionals, working in secular settings, can contribute in unique ways to the mission of the Christian Church. This includes the transmission of values and an understanding of the beliefs that underpin them, to those who would not normally be receptive. These creative professionals can take on a role similar to a Trojan horse that gets the Church’s message to places otherwise not accessible to it. This is not a Trojan horse that carries destruction in its belly, but one with benevolent intent that is unwittingly granted access. Not without some justification, the Church is sometimes very restrained in its recognition of those who are highly creative, and cautious in entrusting them with carrying out its mission. However, some examples will show the potential of professionals who are committed to the Church and working in secular settings, to transmit its values. A case study will demonstrate that the ‘benevolent Trojan horse’ model can be helpful in attempting to integrate the sacred and secular in daily practice.

The Church and creative professionals
The Seventh-day Adventist Church has a long history of privileging certain professions. The work of pastors, missionaries, evangelists, teachers, administrators, doctors, nurses, even media producers, publishers and musicians is routinely celebrated in Adventist literature. These professions tend to define the shape of the Church.

The Church, however, does not find it easy to acclaim or patronise the work of other creative professionals. Where are the great symphonies commissioned by the Church to celebrate significant events? How many acclaimed works of Adventist art or sculpture are to be found in the great galleries of the world? The number of serious award-winning, leading-edge works of Adventist architecture is miniscule; none are in the texts on architecture. It appears that the Church views these activities as merely secular at best, but more often, given the imminence of the Second Advent, as irresponsible diversions of time, money and talents from its core business.

Students of Adventist history will know of J. N. Loughborough, a pioneering Adventist preacher and administrator, but few will have studied the contribution to the early Church of his brother W. K. Loughborough, an Adventist architect who practised in Battle Creek and later built and managed Pacific Press in California. Little is known of William Sisley, planner and architect of several Adventist colleges (Union, Walla Walla and Keene, now Southern Adventist University, in the USA and Avondale College in Australia) as well as some significant buildings in Battle Creek, Michigan. Sisley was a close confidant of Ellen G. White; the one to whom she turned to manage her publishing business concerns during part of her seven-year stay in Australia.

Searching for ‘architecture’ in the live version of the Adventist yearbook produces zero results; the same search in the Adventist Directory achieves identical results. A search for ‘building’ is also rewarded with limited entries. Most of the links are to do with names of buildings or building up the Church. Only a few are concerned with the ministry of constructing buildings, none with designing them architecturally. Architects and architecture are clearly not in the foreground of Adventist thinking; they appear to have little to contribute to the Church’s perceived mission. The same is probably true of various other creative professionals. Must this be so?

The ‘benevolent Trojan horse’
The following examples illustrate the ability of creative professionals, like a benevolent Trojan horse, to penetrate areas that would otherwise be impenetrable to the Church’s message and messengers. In each case those concerned had
never heard of Seventh-day Adventists and would not be kindly disposed to the Church’s normal approaches. However, they were open to deep discussion on religious matters with a professional colleague; one who shared with them the same cultural and creative concerns.

In London, a senior architect in one of the world’s largest practices confronts a young, Australian, Seventh-day Adventist architect. In the middle of an open-plan office he demands to know if and why the new recruit really believes in the Bible, a personal God, the Sabbath and more. The questions and answers continue for some time to the amusement of many, but some reflect seriously on what they have heard and continue the conversation privately. As winter approaches, the young architect, upon requesting permission to leave work prior to sunset, enjoys an extended discussion on his beliefs and values with the founder of the firm.

In another instance, the senior partner of the international firm of architects that won the design competition for Australia’s New Parliament House, with some interest, considers the Seventh-day Adventist architect’s reasons for declining to design the Members’ Bar.

A ‘benevolent Trojan horse’ case study
The possibilities, illustrated by these examples, of extending the Church’s mission in the secular setting are readily observed and occasionally acknowledged. However, they tend to be instances in which the proclamation or defence of beliefs and values is carried out in an overt fashion in response to ad hoc, infrequent opportunities. Perhaps the transmission of values can be better achieved through a less self-conscious, gentler way in which a religious framework, including practice, concepts and even vocabulary, is seamlessly and continuously integrated with everyday secular activities. Why lock up the potential riches of spiritual experience in a sacred-only box? Why pigeonhole the greatest ideas and themes in the universe for one-day per week use? Why not routinely apply intellectual and experiential spiritual-religious knowledge to all endeavours, sacred or secular?

A manifesto project for final year architecture students will serve to illustrate how the frames that define secular and sacred can be merged or overlapped to facilitate values transmission and discussion of the belief system that sustains them.

In the first two years, students are given the basic tools of design. But in reaching third year, aspects of the roles of architects and their values systems or ethical stances are introduced in the context of designing. Students are confronted with questions such as ‘would you be prepared to accept a lucrative commission to design a brothel, maybe a casino or an expensive house for a known drug lord?’ This ‘hardens up’ the discussions that link values and architectural design. In the fourth year students need to research the positions of leading architects and finally in their fifth year they are required to write their own manifesto. In this project students must articulate a comprehensive personal position with regard to the theory and practice of architecture; it must be supported by a values system or ethical stance. It is titled ‘manifesto’ because it is about making known or manifest while simultaneously being detailed and complete like a ship’s manifest. To foster a genuine and intense discussion of values, the manifesto project is not assessed. The values expressed in each manifesto belong to their authors and cannot be gainsaid. However, a number of sessions are scheduled in which the group is encouraged to vigorously test individual positions.

At the beginning of the project, the course coordinator makes a presentation of a personal manifesto. As a working model for students to observe, it provides an ideal vehicle to explore, with a captive audience, the integration of sacred values with the secular practice of architecture. Students are candidly informed that the manifesto is based on a position that has changed. Initially it was dogmatic, characterised by certainty and an intellectual approach to a limited range of concerns and by a master/servant attitude to teaching students how to do architecture. However the position has evolved and become non-deterministic, non-linear, non-reductivist, characterised by inclusivity and lack of certainty, more idiosyncratic than normative; a position that acknowledges the mutual benefits in the teacher/student relationship. It is a position that no longer defines intuition pejoratively as the knee-jerk actions of feeble intellects but affirms that architecture becomes transcendent when all God-given faculties, particularly intuitive and intellectual processes, are evident. This aligns with Yehudi Menuhin’s view that music can be created and appreciated intuitively or intellectually but can only be sublime when created and appreciated intuitively and intellectually.

Reference is made to Leon Battista Alberti, a famous 15th century Renaissance man well known to most students of architecture, who instructed architects to absorb whatever might supply a useful model to facilitate the process of conceptualising. Students are then invited to consider religious beliefs as providing such models. It is suggested that two useful models are related to the Genesis account of origins and an attempt is made to apply aspects of the sacred to contemporary architectural theory and practice.
It is proposed to students that creation and creativity are linked because the creation story, in the first chapters of the text, introduces, among other things, two issues of direct relevance to the production of architecture. First, a picture is painted of the omnipotent, omniscient, omnipresent and infinite One who brings order or cosmos out of chaos. This is particularly relevant given that the order versus chaos debate in architectural theory, begun almost five millennia ago, remains current and is linked to Coleman’s prerequisites of true aesthetic experience namely, transpractical appreciation, transmundane significance and transchaotic structure. Second, the supreme product, humankind, is invested with a duty of responsible stewardship in the care and nurture of creation.

The consequences of being a part of the creation of the infinite Creator are then discussed. Chaos theory, loosely appropriated in the service of a visual art, is introduced in this context because it emphasises the complexities of nature and the limitations of our observations. At close quarters nature appears totally chaotic. No two leaves of the billions that exist are the same even within the same species; similarly no two trees are the same. But at a distance a different kind of order becomes apparent. The order of leaves becomes an order of trees that becomes an order of forests, only becoming clear with increasing distance. The whole world dissolves into a single order from a distance. The classical Platonic fear of chaos, understood as lack of order, has been tamed by revealing a new homogeneity or unity evidenced by a ‘perfect’ randomness that produces regular samples. Beauty is now more clearly discerned in the chaos of nature and natural phenomena; and the simultaneous desire for regularity and irregularity, at different scales, is more readily understood. The ultimate order of the universe is only observable at the appropriate distance by the infinite, omnipresent Creator, but humankind is unable to be in creation and simultaneously sufficiently distant from it to fully comprehend its order. The essential quality then of human interventions may involve inspiration from nature but not a vain attempt to imitate it, as to do so would be both futile and maybe even blasphemous in its presumptuous challenge to the infinite Creator.

Students are asked to consider the idea that humanity, invested with an apparently chaotic individuality by the infinite Creator, will produce work which is also rich, beautiful and natural in its apparent randomness but which, from the correct distance, may reveal a special kind of order. This prevents any theoretical position from becoming dogma.

It is also proposed that a further consequence of being a creature, made by and in the image of the infinite Creator, is the realisation of a resultant moral obligation, firstly to the Creator and then, by extension, to all creation. In this model, humans are the accountable stewards of creation as opposed to being its masters. The difference is fundamental to the way architecture is approached and in the establishment of relationships with others. At a basic level, this means that architects will take seriously not only issues of environmental sustainability, but among other things, the need to work within the limits of clients’ budgets and, insofar as it is compatible with other aspects of their architectural and personal values, respect clients’ preferences and wishes.

Two subsidiary issues flowing from the Genesis account are canvassed. First, it is in the area of imagination that the image of the infinite Creator is discerned. Humanity is finite in all aspects of existence except for imagination; it is therefore probable that in the acts of creativity, imagination occupies the highest office. Second, reading of and attempts to understand the text lead to exegetical approaches rather than those that are more speculative or tacit. Further, the influence of theology is centrifugal; centre-seeking. However, much contemporary architectural theory appears centrifugal, centre-fleeing, although it is acknowledged that the margins might provide a realm in which creativity flourishes.

Faith is also discussed by reference to Kierkegaard who developed the notion of faith as a leap across the chasm at the limits of knowledge, or rationality resident somewhere in the subjective and absurd. However, it is proposed that almost 2000 years ago, faith was better defined as the substance of things not seen, based on those things and ideas which are knowable through rational, intellectual, experiential and intuitive processes. This provides a useful model because architecture is an act of faith in the ability to solve seemingly unsolvable problems; a forward projection of the seen to that which might be, at once objective and subjective. Faith in architecture then leads to a rejection of some recent nihilistic architectural positions.

The manifesto model presented to the students also includes a range of technical and process concerns and is concluded by reference to Sebastiano Serlio, a 16th century Italian architect. In his treatise, patterns and rules are extensively and prescriptively propounded while paradoxically he constantly returns to the notions of the architect’s discretion and licence and the necessity of regional variation. These concepts are linked to a summary of the manifesto, a position that seeks verities while simultaneously asserting individual discretion and
responsibility for actions.

**Conclusion**

In two decades of integrating sacred beliefs, values and vocabulary into teaching at secular institutions, attended by students of many beliefs, there have been no negative repercussions. On the contrary, Adventist values and beliefs, a little like the Trojan horse, have been welcomed behind some otherwise impenetrable walls. By this means, students have had their values, and the beliefs that give rise to them, challenged. They have also been encouraged to carefully consider that, contrary to popular opinion, Christianity provides an excellent foundation for personal values development. **TEACH**

---

**Dare to make a difference**

**Alexandra Marek**
Marketing and Public Relations Assistant, ADRA Australia

The *Dare to Make a Difference: Activity & Fundraising Kit*, prepared by ADRA Australia, is for youth who want to do something for others while having fun and learning about the world.

*Dare to Make a Difference: Activity & Fundraising Kit* draws attention to needs around the world and shows why young people’s help is essential. The kit provides ideas of events youth can join, volunteering opportunities and activities that youth can organise to help make a difference in their local community as well as communities around the world.

For a copy of the *Dare to Make a Difference: Activity & Fundraising Kit* visit [www.adra.org.au/getinvolved/Events_to_Join](http://www.adra.org.au/getinvolved/Events_to_Join) or call ADRA Australia on 1800 242 372.
Introduction
‘Where is early childhood education heading?’
I asked myself—the many changes it has undergone over the years evident from the books on my shelves.

I decided—with some regret I might add—that it was time to clean out my professional bookshelves at home, to make room for new books and resources. This task would take time. Before donating my precious and well-loved books to a worthy cause, close friends who might be interested in them, or consigning them to the garbage bin, I needed to scan the books’ contents. There was always the possibility of coming across old ‘hidden treasure’.

But after having sifted through my old ‘treasures’ I realised I’ve changed. My teaching practices, some of my values, and most importantly my view of our ‘little people’—who are yet to have a voice loud enough to be heard by the people that matter—have changed. I had moved to a new paradigm.

The education of children in their early childhood years has always been my ultimate mission in life, because the early years of a child are so important. Early experiences mould and shape the child mentally, physically, socially and spiritually. I believe a child’s processing of their experiences does not necessarily end with the early childhood years, but continues much longer, and hence, influences present and future relationships.

At Avondale Early Learning Centre, the staff and I help the children to form healthy relationships in a warm and friendly environment. In this context we encourage the children to communicate and express their feelings in appropriate ways and thus curtail feelings that sometimes give rise to ‘distorted’ behaviour. Such feelings—including frustration, hurt, injustice, fear, or isolation—often trigger anger and hence are displayed through certain behaviours.

As a Christian early childhood educator, I have the privilege of facilitating age appropriate play that assists with developing positive outcomes for children. The key features are the expansion of children’s cognitive processes and language development. As children acquire communication skills they also learn to use language to adjust their social behaviour; developing greater confidence and a sense of security. Children grow and develop to their full potential when they feel safe within their environment and, more so, when they trust the people within it. Furthermore, when young children are provided with the opportunity of developing a number of survival skills and strategies that work in their interactions with peers, these skills become automatic. Gradually, with encouragement from parents and teachers, children identify and own them as their strengths, and more so, they become part of their ‘self’. Identifying one’s ‘self’ allows children to derive meaning from their situation. This further enables them to make and explore other connections and relationships.

Children in their early childhood years learn without textbooks; they learn through observing and practising. Our challenge as educators is to provide the best opportunities we can for the children. On occasions, when in doubt, we share our thoughts with the parent/carer and fellow staff members. As we do this, we grow and gain a better understanding of ourselves and the children. Consequently, we also must be genuine and open to learn. Indeed, learning new understandings, skills and strategies is a continuous, life-long process.

Early childhood practices, no doubt will continue to advance, grow and change, just as I have! Yes, I’ve made room for more new books and journals on my bookshelves.
The gateway to learning

Jenny Gibbons
Principal, Mountain View Adventist College, Doonside, NSW

Introduction

In 2006, Mountain View Adventist College (MVAC) made a bold decision. It commenced a class for which students were not chosen by age or class year, but by their ability to work independently. These students were called the Gateway class.

The College Council felt that some students could benefit from a more flexible approach to learning by changing the ‘learning culture’ of conventional classrooms. There is no age, gender or economic barrier, but each student must be able to work independently, at their own individual pace.

The Gateway class has been designed to support students by recognising their potential, encouraging them to think creatively, develop their imagination, and strengthen their decision-making skills. The curriculum utilises a multi-sensory, integrated approach designed to emphasise academic success, organisational and social skills, and developing responsibility.

MVAC staff believe that Gateway ‘applicants’ should participate in deciding whether they go into the class or not. The selection, therefore, is made not only by the teachers but by the students themselves, including their peers. Each year, during the fourth term, students of years two, three and four are asked to write to the MVAC administration (in a very informal manner) and explain why they want to belong to the Gateway class and what they hope to contribute to it. Their peers also have a part in supporting the ‘application’; parental consent is an additional requisite.

As a principal, I’m ‘totally sold’ on running this kind of classroom. It’s a huge commitment for any teacher to take on, which means that, to begin with, one needs to find the right teacher to facilitate the distinctive learning environment.

When I walk into the Gateway classroom, there is busyness everywhere; some students are working on the computer, others are writing creative stories, while another group is making a material collage of their own design, on the story of creation. The teacher sets the tasks for the students, and encourages them to work on the project at their own pace. They are provided with resources to embark on these projects: Internet web sites, library time, books in class, or even a special visitor, with the expectation that the students, after being given the task, will manage it, under the direction of the teacher.

All the curriculum areas and outcomes are taught, employing an innovative and less structured
approach. The teacher creates rubrics for every outcome, so that students are familiar with the framework in which to complete their work. If they want to achieve an A, the students know, at a glance, what the assessment criteria are. If, ‘at the end of the day’, they only receive a D, the teacher can easily indicate which criteria were met, and which were not. This, in itself, is a huge incentive for the students to do well. They know what quality controls their work must pass to receive the top mark. In this learning environment, students have considerable control over the assessment of learning. It is less dependent on the teacher. This teaches students not only to achieve goals they set for themselves, but also to take responsibility for their learning. A further step in assessment may involve self and/or peer assessment.

There are days when Gateway students are so immersed in their learning, they don’t want to go out to recess. The students just want to continue with their work. They’ll tell you: ‘Learning is fun.’ Students are also encouraged to become involved in as many community projects as practicable to nurture not only their academic side, but also to develop a community spirit. It is becoming commonplace now to see a bus load of Gateway students heading off to the local reserve to support the council in tree planting or potting tube plants to help the nursery. They also spend a lot of time thinking of ways to beautify our school grounds and will even don their work clothes and gardening gloves for a day, to help move chip bark in the local ‘school forest.’

At the end of their Gateway journey – after the students have spent up to three years in the class, I would like to see our students having grown and matured in their ability to reason, solve problems, and in their interest in the local community. Furthermore, I would hope that they had learned how to achieve their goals, and the value not only of independence, but also inter-dependence.

I encourage all schools to trial their own Gateway class; for teachers or principals to go into the classroom every now-and-then to monitor progress and observe how some students can benefit from a different, but rich learning environment. TEACH

1 Communion
2 McDonalds trip
3 Wilderness adventure
4 Cooking

[Photography: Gateway]
Educational administrators: Leaders or managers?

Travis Manners
Associate Pastor, Springwood Seventh-day Adventist Church, Brisbane, Qld.

Peter Morey
Senior Lecturer, Post-graduate Studies Program, Avondale College, NSW

Introduction
The image is striking. A business man dressed in his suit is sitting on a wooden chair that has been placed on the pebbles very close to the water’s edge. He has his legs crossed, hands in his lap, shoulders back and with an air of authority he is staring out across the lake. In the background one can see the mountains on the other side of the lake, giving way to the expansive sky overhead. Words have been overprinted in the sky which simply read, ‘Now I invent instead of Predict. I am a Visionary’. Underneath the image the rest of the advertisement begins by proclaiming, ‘The Advanced Management Program—Creating Innovators.’

If we were to observe the activity where one had to say the first thing that comes to mind when one hears the words ‘Invent, Visionary and Innovators,’ we could almost guarantee that the first word would not be ‘manager;’ ‘Leader’, possibly; but ‘Manager’, extremely unlikely. Leadership literature often goes to great lengths to attempt to differentiate the roles and functions of a leader and a manager. This is exactly why the advertisement described above (from the Harvard Business Review, January 2007, p.11) is so intriguing.

This raises the question: What exactly is the distinction between leadership and management? Is it important to differentiate between the two? If there is a difference, does that difference truly affect the day-to-day workplace (Kotterman, 2006)? Or is this much like the ‘is a leader born or made debate’ which Warren Bennis (1996, p.156) labels as an ‘indulgent diversion from the urgent matter of how to best develop leadership (and one could add, management) ability’? In other words, does this debate simply distract leaders and managers from doing what they need to do most? Managing and leading!

The aim of this article, first, is to briefly outline the differences, often cited in literature, between leadership and management, because as Kotterman (2006, p.13) notes, ‘Virtually all organisations . . . are concerned about the difference and believe it is important’. We then look at the roles of leadership and management in the practice of administration.

Let us return to the distinction between leadership and management. However, before one gets very far on this ‘journey’, attempting to separate the differences between leaders and managers, one encounters a ‘speed hump’, and it is potentially a large one. This hump has to do with the very definition of the two terms. Leadership theorists have pointed out on many occasions that there are nearly as many definitions for leadership as attempts to characterise it (Kotterman, 2006). This gives rise to people like Warren Bennis stating that ‘leadership is both the most studied and least understood topic in all of social science’ (Bennis, 1989, cited in Krantz, 1990, p.50).

The dilemma then is immediately apparent, if there is disagreement in the definitions, how then is it possible to find agreement on what distinguishes the two? Added to this is the fact that the two terms are so often used interchangeably in the workplace that any differences that may exist have become blurred. It is not surprising then that Gordon and Yukl (2004, cited in Kotterman, 2006, p.13) declare, ‘The ongoing debate as to whether or not a clear distinction exists between leadership and management generally remains unresolved.’

Yet it is perhaps in attempting to differentiate between leaders and managers that ironically we can also come closer to understanding the role of those in leadership positions. The framework used in this article to further investigate this difference is to examine the literature in terms of leadership and management generally remains unresolved.

In terms of vision, Bennis and Nanus in their book Leaders: The strategies for taking charge, state:

‘To manage’ means ‘to bring about, to accomplish, to have charge of or responsibility for, to conduct.’
‘Leading’ is ‘influencing, guiding in direction, course, action, opinion’. The distinction is critical. Managers are people who do things right and leaders are people who do the right thing. The difference may be summarised as activities of vision and judgement—effectiveness versus activities of mastering routines—efficiency (Bennis and Nanus, 1985, p.21).

Maxwell (1993, p.iv), says ‘Management is the process of assuring that the program and objectives of the organisation are implemented. Leadership, on the other hand, has to do with casting vision and motivating people.’ Kotter (1990, p.104) expands on this by arguing that ‘managers ensure plan accomplishment by controlling and problem solving, but for leadership achieving a vision requires motivating and inspiring people’. It is claimed that leaders ‘chase vision’, while managers ‘chase goals’ (Boomer, 2007). Or in the words of Bennis, ‘The manager has his eye always on the bottom line; while the leader has his eye on the horizon’ (cited in Higginson, 1996, p.26).

Christians who are called to lead should always remember the biblical advice, ‘where there is no vision, the people perish’ (Proverbs 29:18, KJV). Further, vision is seen as ‘the commodity of leaders’ (Bennis & Nanus, 1985, p.18) and ‘it is what provides a steadying, stabilizing core for leadership’ (Dale, 1992, p.8).

Finally, Krantz (1990, p.59) concludes, ‘If the emerging literature is any guide, then the issues of vision, purpose, and meaning are pivotal for developing leadership capacity in modern enterprises.’

This leads to the second domain for investigation: Change. Kotter (1990) argues that leadership copes with change, while management brings order and consistency. He believes that part of the leadership function is to produce change, however in doing this the leader needs to be aware that the more change is initiated, the greater the demands on leadership will be. Therefore, in creating change ‘the leader must be able to generate highly energised behaviour to overcome inevitable barriers that will be associated with it’ (Kotter, 1990, p.107). While leaders can create this change, it often falls to the task of management to see through and implement these changes.

In summarising some of the recent findings in the leadership and management literature within the change domain Kotterman (2006, p.14) states: Managers have a narrow purpose and try to maintain order, stabilize work, and organize resources. Leaders seek to develop new goals and align organizations (Kotter, 1990; Zaleznik, 1998). Managers control and problem solve while leaders motivate and inspire. Finally, managers produce standards, consistency, predictability, and order. Leaders produce the potential for dramatic change, chaos, and even failure (Kotter, 1990).

Attention now focuses on the third and final domain, that of people. According to Waldron (1990, p.6), ‘Management tends to focus on things, when perhaps, through leadership, we need to focus on people’. On the other hand, Buckingham (2005, p.72), couldn’t disagree more. ‘Great managers,’ he says, ‘discover what is unique about each person and then capitalize on it.’ He goes so far as to define management as ‘the genius of understanding individual differences’ (Interview with Moorcroft, 2005, p.11).

Buckingham (2005) likens the role of a manager to that of an expert in the game of chess. In chess, each chess piece moves in a different way, and you can’t play if you don’t know how each piece moves. He believes that the ability to keep tweaking roles to capitalise on the uniqueness of each person is the essence of great management. He goes on to explain:

Great managers know and value the unique abilities and even the eccentricities of their employees, and they learn how best to integrate them into a coordinated plan of attack. This is the exact opposite of what great leaders do. Great leaders discover what is universal and capitalise on it. Their job is to rally people toward a better future (Buckingham, 2005, p.72).

Buckingham, in an interview with Moorcroft (2005, p.11) concludes by stating, ‘If you want to manage, start with the individual, if you want to lead, start with the future.’

In this brief survey of the leadership and management literature, three key areas of difference have emerged:

- A leader casts a vision, while a manager implements it.
- A leader creates change, while management see these changes through.
- A leader motivates and inspires people to action, while a manager discovers the gifts and talents of a person and puts them to good use.

In comparing the different roles of the leader and manager, it is easy to fall into the trap of thinking that one role is more important than the other. Zaleznik (1992, p.127) isn’t exactly complementary when he says, ‘A manager is a problem solver. . . it takes neither genius nor heroism to be a manager.’ Another famous example comes from the advertisement in the New York Times which began with the words, ‘People don’t want to be managed. They want to be lead. . . ’ (cited in Maxwell, 1993, p.iv). Harris Lee wisely warns of the dangers of thinking one role is more important than the other when he said:

To appreciate the roles of leadership one need not, however, embrace a negative attitude towards management. While it is helpful to distinguish
leadership from management, in actual practice the two activities are often integrated (Lee 2003, p.32).

Indeed, Waldron (1996, p.3) suggests ‘Leadership and management, as a practice, are not discrete—they are inextricably interwoven’. He goes on to say ‘One can persuasively argue that in the exercise of management one displays leadership and, on the other hand, in the exercise of leadership one displays management.’ Supporting this conclusion Vercoe (1994, p.65) asserts, ‘The essence of management is, from my point of view, something else that cannot be learned in a strict sense; it is leadership.’ It was Gardner (1990, cited in Kotterman, 2006, p.15) who noted that every time he had encountered a first-class manager, the manager turned out to possess a lot of leadership ability. Finally, Bass (1990, cited in Kotterman, 2006, p.15) would agree, concluding that ‘the vast amount of research into leadership versus management indicates that sometimes leaders manage and sometimes managers lead.’

Because of this, Hybels (2002, p.145) in what he recognises some will say is an oxymoron, believes that one valid leadership style is what he has termed the ‘managing leader’. Talking about this style he states, ‘I’m describing a leader who has the ability to organise people, processes, and resources to achieve a mission.’ He cites the biblical characters of both Joseph and Nehemiah as people who were excellent managing leaders.

So how does a ‘managing leader’ process these seemingly conflicting orientations? Particularly, when an emphasis on ‘Leadership’ with its focus on vision, change and motivation, from the management perspective, could be characterised as unguided opportunism where every new opportunity is pursued, ungrounded vision that lacks substance and is more akin to dreaming and wild fantasy, introducing the program of the week where something new is constantly being launched or tried, and premature responses to opportunities or ideas rather than performing appropriate due-diligence (Cameron, Quinn, DeGraff & Thakor, 2006, p.157).

And an emphasis on ‘Management’ with its focus on organising, matching and implementing, from the leadership perspective, could be characterised as micromanaging the work force so that they have little discretion, procedural rigidity that drives out independent thinking, over-regulation where outside controls make it impossible to do any thing but respond to rules, standards or procedures, and iron-bound tradition and the ‘not-invented-here syndrome’ where barriers exist to any suggestion for change or improvement (Cameron, Quinn, DeGraff & Thakor, 2006, p.158).

Indeed, can such divergent perspectives ever be united?

Further, and perhaps more importantly, much of educational administrators’ training, both formal and informal, has programmed them to first determine which of these orientations is ‘right’ and by elimination which is ‘wrong’. And in practice it is so much easier just to emphasise one role over the other.

So how can administrators deal with divergent, even conflicting perspectives? How can one possibly be a ‘managing leader’? Perhaps the answer lies in what Roger Martin (2007) has termed ‘integrative thinking’. Integrative thinkers, according to him have the predisposition and capacity to hold in their heads two opposing ideas at once. And then, without panicking or simply settling for one alternative or the other, they are able to creatively resolve the tension between those two ideas by generating a new one that contains elements of the others, but is superior to both (Martin, 2007, p.62).

Why not try integrative thinking. It may be the solution to some of your more difficult challenges.

REFERENCES

This research study investigated how principals in a national, Christian independent school system cope with stress. Using a double-phased, mixed-methods approach combining questionnaires and in-depth interviews, school principals’ stressors and their reactions to these stressors were examined. Coping strategies used by principals to reduce or manage their stress were also explored. Forty-seven principals participated in the study and of these, 23 indicated a serious level of stress. The study highlighted a preference for using stress managers (a secondary approach), rather than stress reducers (a primary approach). Specific grouping of stressors into ten clusters suggested particular areas to be targeted for professional development and systemic reform.

Introduction
Stress is part of people’s daily lives in our fast-paced and ever-changing environment in the Western world. Within the education scene, stress has become a serious issue in recent years as school principals attempt to cope with frequent change, increased demands from parents and employing authorities, and students from dysfunctional homes. Stress in the teaching profession is also a focus for teacher unions as they seek to support educators in their attempts to cope with work-related stress. In this context, a research study was conducted during 2005 and 2006 within Adventist Schools Australia (ASA) to determine stress and satisfaction levels of principals, causes of their stress, and preferred coping strategies.

Rationale for the study in the context of the literature
Gold and Roth describe stress as a condition of disequilibrium within the intellectual, emotional and physical state of the individual; it is generated by one’s perceptions of a situation, which result in physical and emotional reactions. It can be either positive or negative, depending on one’s interpretations (1993, p. 17).

Stress in the principalship is a serious issue in western education systems (Green et al., 2001). Important areas affected by the extent to which the principal of a school experiences work-related stress include health, welfare, financial and educational issues.

Both the health of the principal and the health of staff members may be negatively affected by a principal experiencing serious work-related stress. Westman and Etzion, (1999) in their study of 83 primary school principals and 340 of their teaching staff in Israel, found that work-related stress crossed over to teachers, from principals with whom they worked. The study also found that a ‘ping pong’ effect existed where the teachers’ stress then rebounded onto the principal, causing further stress. Lane (2000) noted that for stressed principals there was a negative correlation between stress and productivity, and that subjects experienced difficulty in using intellectual skills in management and in dealing with subordinates.

Principals’ stress is contributing to an enormous rise in indirect financial costs associated with education (Brown et al., 2002). This occurs on account of high levels of stress-related sick leave for the principal as well as affected staff members, premature resignation, and subsequent training of new staff. Further, the core business of schools is to facilitate good quality educational outcomes for students in a safe, secure learning environment (Victorian Dept of Education, 2005); unfortunately schools with seriously stressed principals and affected staff are less likely to maintain high educational standards and achieve quality outcomes (Alison, 1997, Lane, 2000).

There is a lack of data on stress and coping within the principalship of ASA, and it is unknown whether the findings of existing studies apply to them. Neither is it known whether similar coping mechanisms to those described by Allison in his 1997 Canadian-based study of school principals are used. Further, the ASA principals’ own perceptions of causes and possibilities of reducing stress have not been explored previously in any empirical research.
It is also important that employers in the education sector, such as ASA, have knowledge regarding the incidence, levels and causes of work-related stress experienced by principals, in order to provide meaningful support for them.

Stress literature makes a distinction between stress reducers and stress managers. Sadri (1997) and Allison (1997) highlighted the use of stress reducers (a primary approach), and stress managers (a secondary approach) in their studies. A stress reducer is a coping strategy that seeks to reduce the stress before it has a negative effect on the subject. Sadri points out:

Stressor reduction methods would include changes in organisation design, structure, enhanced communication levels, increased employee participation and employee empowerment (Sadri, 1997, p. 33).

By contrast, stress management methods include meditation, deep relaxation, exercise, better nutrition, and other preventative stress management techniques (Sadri, 1997, 33). In their study on administrator stress and burnout, Gmelch & Torelli (1994) found that principals tended to choose secondary (stress managers) rather than primary strategies to cope with their stress.

Research questions & methodology

Phase one—survey

A combination of questionnaire instruments and in-depth interviews was used to collect data in relation to:

- whether the ASA principals felt they experienced work-related stress (and if so);
- the nature and extent of the stress;
- how satisfied principals felt with their roles.

The Administrative Stress Index Questionnaire (Gmelch & Swent, 1982) was used to ascertain principals’ responses to a list of common stressors; respondents were invited to suggest any additional perceived stressors. Participants were also asked to rate a list of common coping strategies according to their perceived usefulness (Allison, 1997) and then describe any additional coping strategies they may have used. Links between the demographic variables (e.g. age, gender, experience, size of school etc) and particular stressors and coping strategies were examined. Participants were then asked to suggest any systemic support which would be helpful in coping with work-related stress.

Phase two—interview

Phase two consisted of individual in-depth interviews, beginning with an invitation for the interviewee to talk about their personal perspectives and to comment on their stress levels. The interviewee’s questionnaire responses were then discussed, in particular those that were predominantly ‘high’ or ‘low’; and also the perceived causes. Finally, interviewees were asked to comment on their perceptions of work-related stress in ASA principals and make suggestions for organisational change and professional development to address this need.

Findings

Demographic Results

Forty-seven from a possible 53 principals participated, covering a broad range of ages, experience, qualifications and types of schools as shown in Figure 1 and Table 1 & 2, as described below. Regarding ‘school type’, 29 (62%) were principals of primary schools, 2 (4%) were principals of ‘stand-alone’ secondary schools, while 16 (34%) were principals of K-10, or K-12; combined primary and secondary schools. Enrolments ranged from 20 schools (43%) with less than 100 enrolled students, to 15 schools (32%) with an enrolment between 100 and 199, to 7 schools (15%) with an enrolment of between 200 and 349, while 5 (10%) schools had an enrolment of over 350 students.

Stress and satisfaction results

Seventeen percent of the principals considered that they had a low level of stress by scoring 1 or 2 on a 5-point Likert Scale. By contrast 49% of the principals considered they had a high level of stress by scoring 4, 4.5, or 5 on the scale. An ‘intermediate group’ (34%) of principals scored 2.5, 3 or 3.5 for their perceived stress levels. The results show that a majority (83%) of principals reported experiencing moderate to high levels of stress (see Figure 2), yet 33 of the 47 principals (70%) reported that they had a high level of satisfaction and rated their satisfaction level at 4 or 5 (see Figure 5).

Stressors results

The sum of all principals’ rating scores (0-5) for each stressor in the Administrative Stress Index was calculated and then used to order the stressors by severity as shown in Table 3. ‘Feeling that I have too heavy a workload, one that I cannot possibly finish during the normal working day’ was considered to be the most severe stressor by the principals in the study. This result reflected the findings of related studies in the UK (Cooper & Kelly), USA (Brown, 1996) and in Victoria, Australia (O’Reilley, 2004).

It should be noted however, that there is very little difference between the rating totals for some of the other stressors, and therefore undue emphasis should not be placed on the exact order of many of the closely ranked individual stressors. The individual stressors were then grouped...
Research & Scholarship

according to conceptual similarity. These, at a later point, might provide guidance for professional development and indicate possible directions for systemic change. The stressor groupings are displayed in order of severity in Table 4, and again, ‘workload’ was the most serious issue.

Additional stressors results
A number of additional stressors were mentioned and two scored highly. First, responsibilities connected with the home, parenting (an addition to the principal’s role, mainly reported by women) were mentioned, and also transfers for promotion. Second, the issue of additional church responsibilities such as conducting Bible studies, preaching and organising students to present programs and musical items at services was raised.

Coping strategies results
The Coping Preference Scale (Allison, 1997) was used to examine this aspect of the principals’ reaction to stress. Table 5 displays the ten most preferred coping strategies in the current study.

Principals were also given the option of indicating the extent to which aspects of their Christian beliefs assisted them in managing stress. Five aspects were provided: Christian beliefs and world view (192), Prayer (192), Bible reading (169), Christian books or music (167) and Church Life (141). The bracketed numerals indicate the sum of scores for each ‘aspect’ on the 1-5 Likert Scale. The maximum possible score (if every principal had scored it at the maximum of 5) was 220. These results indicate that for the majority of respondents their Christian faith and perspective, as well as their prayer life were perceived as very valuable in helping them cope with stress. However their church life was perceived as not being of comparable benefit and this may be due to expectations by their local church community.

Eight of the principals registered low stress scores. Principals tended to explain these scores in terms of a conscious decision not to let their admittedly stressful role overwhelm their lives; and was linked to their Christian faith and world view. During the interviews, not one of the principals (under probing by the researcher) in this group

Table 1: Age of principals

<table>
<thead>
<tr>
<th>Age of participants, n = 47</th>
<th>Age</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20-30</td>
<td>3</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>13</td>
<td>27.7</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>21</td>
<td>44.7</td>
</tr>
<tr>
<td></td>
<td>51-60</td>
<td>10</td>
<td>21.3</td>
</tr>
<tr>
<td></td>
<td>61+</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 2: Principals’ qualifications

<table>
<thead>
<tr>
<th>Diploma of Teaching</th>
<th>Bachelor Degree</th>
<th>Masters Degree</th>
<th>Doctorate</th>
<th>Administrative Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Number</td>
<td>Gender</td>
<td>Number</td>
<td>Gender</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>6</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>9 (19%)</td>
<td>24 (51%)</td>
<td>10 (21%)</td>
<td>4 (8%)</td>
</tr>
</tbody>
</table>
perceived that they were 'placid by nature'. Instead, they spoke about their relationship with God and of their commitment in their lives to their schools and their Lord.

Suggestions for additional support included the facilitation of networks between the principals for information sharing and support, and a Principals' Handbook to provide information and guidance.

Stress reducers and stress managers
In the literature a distinction was made between stress reducers and stress managers. The data in the present study indicated that ASA principals primarily utilised stress managers rather than stress reducers (marked by an asterisk in Table 5). The former are less effective and rely on addressing the stress reaction rather than addressing the stress-causing mechanism first.

Links between demographics and stress categories
The workload issue was given the highest total stress rating by the principals in this study, and a higher percentage of women scored it at the highest level (56% of women as against 32% of men). Further, none of the women scored it at level 1 or 2, as did 6% of the men. In almost every category, women felt more stressed than their male counterparts. Further, young, inexperienced principals of smaller schools indicated a higher degree of stress than their colleagues in almost every category.

Conclusions and recommendations
There are some clear general conclusions that can be drawn from the findings of this study.

First, while on the one hand principals experienced a high level of job satisfaction, an even
larger majority experienced moderate or high levels of stress.

Second, ‘too heavy a workload’ was identified as the most significant work-related stress factor. Additional stressors included home and parenting responsibilities, particularly for women principals, and also church duties.

Third, principals listed ‘maintaining a sense of humour’ and their Christian beliefs and practices, among others, as effective strategies in managing stress. It is of interest that principals primarily utilised stress managers rather than stress reducers, an aspect that has implications for principals’ professional development.

Finally, it is important to note that two groups of principals were most vulnerable to work-related stress: women principals and young principals.

Twenty-eight separate recommendations were made as a result of the study. They included the following:

For principals
1. Develop and maintain good habits of nutrition, and a balanced lifestyle, including exercise.
2. Develop good habits of active and non-active leisure activities and recognise that these are legitimate and appropriate activities in the management of stress.
3. Become familiar with, use, and contribute to relevant education websites.

For conference education directors
4. Make regular visits to schools, show an interest and give support. Make phone calls and pray with principals regularly; provide pastoral care for all principals and mentors for beginning principals.
5. Support new principals in building up local networks, to provide the social support which acts as a vitally important buffer against the negative effects of stress in times of difficulty.

For the national system
6. Reduce the load for beginning principals by 10% in their first year.
7. Improve preparation of administrators (understanding of the principal’s role, likely conflicts, and skills in communication, conflict resolution, mediation and confrontation).
8. Provide training for principals in understanding stress, stress reducers and stress managers.
9. Provide workshops on assessment procedures, Church education policies, regulations and organisational change and collaborative decision making.

For Pacific Schools Australia—systems level
10. Facilitate the development of a partnership between educators and the pastoral ministry to promote the value of the Church’s Christian education system; including:
   a. A strengthening of relationships between principals and pastors with an increased understanding of, and support for, each other’s roles.
   b. Marketing the local church school.
   c. ‘Skilling’ and supporting rural pastors in their occasional role of mediator between the school and parents/church members.
   d. Regular, public, articulation of the value of the Church’s education system and affirmation of its leaders.

It is believed that implementing these recommendations should increase the likelihood of principals ‘lasting the distance’, reduce their work-related stress, and make for more effective leadership in ASA schools particularly and perhaps in the broader Christian schools community generally. TEACH

References
Preventing students from a different culture for examinations: A pastoral care investment with costs and benefits

Pauline Potter
Secondary teacher, Karalundi Aboriginal Education Centre, via Meekatharra, Western Australia*

Abstract
This study sought to address perceived student study skills needs, as part of a secondary school’s pastoral care program. Utilising a teacher action research approach, the inquiry focused on three main areas: investigating students’ prior study habits; the nature of existing, ineffective study habits that impaired performance; and ascertaining the impact of a study skills intervention program. Findings indicated that many students either were unaware of, or not employing, study skills. Ineffective time and self management impaired students’ study performance, possibly linked to a ‘cultural trace’. Perceived improvements in students’ study habits were reported, both by students and teachers. Three likely reasons were identified: The imminence of exams acting as a catalyst, the newly learned study skills, and encouragement by the teacher.

Introduction
Study skills programs have become a significant tool in improving student study habits. Researchers accept that academic achievement becomes more difficult if effective study skills are not learnt and practised (Hulick, 1989) and that some students, if left to themselves, tend to employ ineffective study habits (Trawick, 1995). Instrumentally, effective study skills are needed as important learning tools in preparing students for examinations – especially those that have career implications for the individual. This has particular relevance for students in developing countries of the South Pacific, where the cost of ‘squandering’ once-only educational opportunities can be far-reaching.

Study skills programs (SSP) are often ‘stand alone’ efforts. However, they may also be perceived as part of, or foundational to, a school’s proactive pastoral care program that is committed to meeting the personal, social and learning needs of students (cf. Best, et al. 1996), and to developmental and educational goals such as those proposed by UNESCO: Learning to know, to do, to live together and to be (Delors, 2000). Moreover, there is a growing recognition by education authorities (cf. LNCT Glasgow, 2007), schools and colleges (cf. Danebank, 2007; C.H.A. College, 2007; Koonung Secondary College, 2007), mental health institutes (Vincent and Hazel, 2005) and academics (Hornby, et al. 2003) that pastoral care in schools incorporates the intellectual needs of students; which includes the learning of effective study skills. This viewpoint maintains:

Pastoral care and academic progress are inextricably linked. Academic care involves promoting well-being through academic structures and processes which are sympathetic to adolescent needs. It is linked to pastoral care in its attention to positive learning and developmental outcomes including knowledge of self, self efficacy, healthy risk taking, goal setting, negotiation, reflection and empowerment (McLaughlin, 2001, p1).

Context
Betikama Adventist College (BAC) is located on the island of Guadalcanal on the outskirts of Honiara, the capital of the Solomon Islands. It is a multi-cultural, boarding secondary school operated by the Seventh-day Adventist (SDA) Church, with 25 teaching staff, whose qualifications range from certificate to master’s level. There is also 26 ancillary staff.

While numbers may vary somewhat from year to year, student enrolment at the time of the study was over 400, with boys slightly outnumbering girls. One half of the student body came from a village background, and about 20% belonged to a range of Christian denominations other than the SDA faith tradition. About 20% of students came from...
Guadalcanal, 30% from the large neighbouring island of Malaita, and the remainder from the length and breadth of the island nation. The student groups incorporate the three dominant cultures – Melanesian, Polynesian and Micronesian.

Students’ ages ranged from 12 to 21. Form 6 (F6) is the final year of secondary schooling; (F7 has since been added) culminating in a Pacific-wide examination which is organised by the South Pacific Board of Educational Assessment based in Suva, Fiji. Each year there are some disappointments and unfulfilled potential, with easily observed poor study habits a likely cause. F6 students are taught some general study skills in English, but this is limited; there is no monitoring, and it seems that the exercise has minimal impact on student performance. This should be a concern for many teachers.

BAC is different from other local schools. It runs a farm to grow food for the kitchen and a carving shop and copper works to sell artefacts to tourists. As part of the school’s philosophy of self-sufficiency and educating the whole person, students (boarding) are expected to help run the school program by working 12 hours per week during afternoons. This is the ‘workline’ program.

### Purpose and significance of the study

The purpose of the study was to teach F6 students study skills that would help them to overcome ‘bad’ (ineffective) study habits, and to encourage them to apply new skills effectively in their study. The study also sought to explore the impact of the SSP on student study habits.

The action research was significant because the study skills program was not just aimed at helping current students to develop effective study habits (including the efficient use of time resources); it could also lead to the study skills program being included, in the future, as part of the regular curriculum to assist other students. The potential impact of such a move should not be under-rated, given the very limited availability of local career openings as well as higher education, and overseas tertiary scholarships. The study thus met basic criteria for significance ‘in terms of its potential for personal practice, institutional influence and (to some extent) the wider body of educational knowledge’ (McDermott, 2002, p 141).

### Research questions

The value of the study skills program was the central focus of the teacher action research. Three questions were investigated:

1. What study skills do F6 students already know and practise?
2. What ‘bad’ (ineffective) habits are impairing students’ present study performance?
3. What impact will the implementation of a study skills program have on students’ study habits and practices?

### Definitions and re/limitations

For the purpose of this study specific meanings were given to selected terms. Study skills were defined as a variety of intervention strategies that enable students to utilise study time effectively; while study habits was a loosely used term to include pre-existing behaviour patterns that BAC students exhibited during their study time. Action research was regarded as systematic inquiry by teachers in the teaching/learning environment to gather information with the goal of gaining understanding (through reflective practice) and bringing about positive changes in educational practices and individuals’ lives (see Mills, 2000, p 6).

It was felt that the large number of students (53) in the two F6 classes placed limitations on the available time resources. Also, it was decided to delimit the length of the study skills program to allow for maximum practice time before the scheduled examinations. The program was run with only the F6 ‘arts’ (humanities subjects) class and monitoring concentrated on boarding students because of ease of access. Although motivation was regarded as a key factor in the literature for the success of study skills programs, it was considered to be too broad an area for investigation and beyond the scope of this study.

### Review of the relevant literature

Current general literature (cf. Danebank, 2007; Vincent & Hazel, 2005; Carr-Gregg, 2004) effectively argues that pastoral care/student welfare includes caring for students’ intellectual and academic needs. More specifically, earlier research has shown that students may not develop good study skills unless they are helped (Trawick, 1995), particularly erratic students (Levine, 1988). If study skills are not taught, significant differences develop between students (Haynes, 1990) and by tertiary level it tends to be only high achievers who have learnt how to study (Oosterhuis-Geers, 1993). It is evident that teaching study skills can improve students’ study habits (Mussano, n.d.). Benefits of good study habits may include: Better grades (Thomas, 1993); fewer academic problems (Odell, 1996); increased ability to handle stress (Mussano, n.d.); reduced anxiety and increased perception of personal skills (Hulick, 1989); and enhanced self-regulation (Talbot, n.d.).

When should study skills be taught? Some proponents (Thomas, 1993) advocate developing them at every academic level. However, others (Tabberer, 1984) say senior high school (e.g. F6) is a particularly appropriate time because this is when students face new demands and have to work with...
greater independence, but tend not to use study time well unless they are taught the skills.

It was anticipated that if the literature proved to be a reliable guide, F6 study habits were likely to be generally weak before the study skills program commenced. Consequently the program would teach students skills which, if practised, should bring benefits. However, it has been pointed out that good study habits do not guarantee success (Biggs, 1978), and that getting students to practise them can be challenging (Rauch and Fillenworth, 1995). Finally, motivation was identified in the literature as a factor in successful study skills programs (Tuckman, 1996). Overall the literature provided information that ‘shed light’ on the problem, helped enlarge the frame of reference for the present study, and assisted in collecting appropriate data.

Rationale for the methodology
An action research approach was taken in this study because of the perceived ‘fit’ between this methodology and pastoral care. Some scholars see action research as a distinctly caring practice:

While action research might begin with the commitment of the individual ‘I’, this is an ‘I’ who recognises her or himself in relation to others; and this is a reciprocal commitment enacted collectively…. And we care enough to take the trouble to do something about our own personal practice for the benefit of each other. Such recognition of personal accountability is an act of devotion, a prayerful act of care (McNiff, 1999:51).

This ‘partnership’ between action research and pastoral care has been illustrated, in the U.K., by the ‘ARTE International Project,’ supported by the University of Cambridge and three participating secondary schools in East Anglia. The ongoing project has demonstrated how action research in teacher education (ARTE) is utilised to explore personal and social dimensions of teaching and learning – a direction followed in the present SSP study in which participants were committed to students developing appropriate study skills.

The present study was typical in that it followed accepted positions of action research by (among others):

- focusing on professional and workplace situations;
- involving reflection and action;
- requiring (self) evaluation;
- incorporating collaboration with colleagues;
- endeavouring to bring about improvement;
- addressing a real, relevant problem;
- having participants gather data themselves.

On the other hand, the study was atypical, in not prescriptively following any specific model(s) of action research (and also in not using a customary free-flowing, narrative genre in reporting the research, in preference to a more structured, stylised format).

Collection and analysis of data
Multiple complementary data collection procedures were employed to obtain various perspectives on the problem, and to increase the reliability of the findings. Table 1 outlines the sequence of data collection procedures. In many cases these were

<table>
<thead>
<tr>
<th>Table 1: Sequence of data collection procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General preliminary observations and reflection on F6 study habits.</td>
</tr>
<tr>
<td>2. Collegial dialogue with fellow F6 teachers about F6 study habits. (What are the perceptions and views of colleagues?)</td>
</tr>
<tr>
<td>3. Initial student survey of prior knowledge about study skills. (Students were required to make a list of study skills they knew or used.)</td>
</tr>
<tr>
<td>4. Student questionnaire/self-evaluation: 40 items, structured and open-ended, using a five-point Likert scale and covering four main areas:</td>
</tr>
<tr>
<td>• identification of personal effective study strategies</td>
</tr>
<tr>
<td>• ‘bad’ (ineffective) habits that spoil one’s study</td>
</tr>
<tr>
<td>• procrastination and failing to try</td>
</tr>
<tr>
<td>• perceived needs in studying more effectively.</td>
</tr>
<tr>
<td>5. Student brainstorming session regarding six issues:</td>
</tr>
<tr>
<td>• barriers to asking for teacher help</td>
</tr>
<tr>
<td>• affirmation of students</td>
</tr>
<tr>
<td>• the function of sanctions</td>
</tr>
<tr>
<td>• ‘workline’</td>
</tr>
<tr>
<td>• teachers monitoring study</td>
</tr>
<tr>
<td>• peer support groups.</td>
</tr>
<tr>
<td>6. Report to the staff (during a regular staff meeting) on student needs arising from the questionnaire and the brainstorming session.</td>
</tr>
<tr>
<td>7. Student Study Skills Program: Construction, implementation and application based on revealed need.</td>
</tr>
<tr>
<td>This was conducted over several sessions and included a ten-page booklet. Emphases were placed on:</td>
</tr>
<tr>
<td>• time – when?</td>
</tr>
<tr>
<td>• place – where?</td>
</tr>
<tr>
<td>• subject matter – what? / priorities</td>
</tr>
<tr>
<td>• strategies – how? how well?</td>
</tr>
<tr>
<td>• goal setting – why?</td>
</tr>
<tr>
<td>Students were encouraged to apply the strategies in their daily study.</td>
</tr>
<tr>
<td>8. Interim survey of student progress. Students were required to respond to two multiple choice questions regarding:</td>
</tr>
<tr>
<td>(a) observance of timetable schedules for study</td>
</tr>
<tr>
<td>(b) self evaluation of current study practices.</td>
</tr>
<tr>
<td>9. Monitoring of student study practices on an informal basis by teachers.</td>
</tr>
<tr>
<td>10. Follow-up student questionnaire Students were asked to respond to questions about their study habits in relation to:</td>
</tr>
<tr>
<td>• before the program</td>
</tr>
<tr>
<td>• at the commencement of the program</td>
</tr>
<tr>
<td>• after the program and continuing</td>
</tr>
<tr>
<td>• never having adopted study skills strategies.</td>
</tr>
<tr>
<td>11. Post-survey of teachers: A one-page form requesting feedback according to seven criteria on a 4-point Likert scale, and also inviting comments in an open-ended section.</td>
</tr>
</tbody>
</table>
not pre-determined but ‘grew’ from observations, discussion, earlier findings, brainstorming, and reflection. The initial observations and reflections (in phase 1) occurred over a five-month period, while the remaining phases (2-11, see Table 1) took up three months of intensive investigation.

Twenty-nine students participated in the study (N=29); twenty girls and nine boys, with seven girls being non-boarding students. Collaborative strategies involved the teaching staff as a whole, as well as specific groups of teachers.

The responses from surveys and questionnaires were tallied and totals were converted to percentages for analysis to reveal patterns or trends. Comments, observations and suggestions received from students and staff in response to open-ended questions were read, categorised according to common themes, summarised and reflected on.

**Ethical considerations**

BAC school administration and staff were consulted about the purpose of the action research, including the reason the program could not be extended to the Science class. This was explained to all F6 students. With anonymity for all student responses assured, and with no apparent sensitive issues involved, ethical criteria for the study were met.

**Findings**

Personal observation and reflection over two school terms identified a potential student need, while teaching colleagues showed a general interest in the area of study skills following a staff meeting. The **initial student survey** was very revealing. It showed that 36% of students were unable to name any study skills, and a further 32% could name only one. Thus two-thirds of the class knew almost no study skills while the remainder named very few. This highlighted a considerable need and concerned teachers. At the same time it raised the potentially sensitive question of what study skills (if any) these students had learned during junior or middle high school classes!

The **student questionnaire/self evaluation** findings disclosed much about student study habits. Students followed relatively few ‘good’ (effective) study habits on a regular basis. On the positive side, ‘taking notes and filing them’ appeared as one of the stronger habits (55%). Some ‘good’ habits the students did follow (e.g. ‘taking short breaks’) were open to abuse, such as time wasting. It was surprising to discover that students ‘usually’ or ‘always’ prayed about their study (59%); perhaps a ‘pious hope’ in light of their other actions (or lack of). Helpful habits like asking teachers for help were followed by very few students (4%). Students were much more likely to seek help from their peers (44%), which pointed to possible alternative bases for organising existing study groups. Furthermore, responses why students might not ask teachers for help with their studies indicated that girls were two or three times less likely to approach teachers for help than boys. The main reasons given by girls were shyness, fear, or lacking courage or skills to ask ‘properly.’ It is reasonable to conclude that these responses seem to point to deeply embedded cultural issues regarding the role of women in Solomon Islands society.

Several ‘good’ habits were conspicuous by their absence. The F6 class was almost unaware of self-motivational strategies (81%), and the majority had neither a list of study priorities (61%), nor an effective study timetable (70%).

The data indicated that ‘wasting time in study periods’ (45%) and staying up late (44%) ranked high on the ‘bad’ habits list. Procrastination was also a significant problem (79%), with perceived causes commonly centering on ineffective self-management and lack of self-confidence, two areas that study skills are claimed to address.

Of the various options of assistance offered, many students wanted all of them, with ‘teachers giving extra study help’ (93%), ‘teachers monitoring student study’ (78%), and ‘a study skills program’ (74%) being the most popular choices. The term ‘peer support group’ (one of the options) was not understood. This is ironic, given the Solomon Islands’ strong communal culture. This avenue of assistance was not pursued further.

The **student brainstorming session** yielded some useful ideas about student-teacher relations in the context of extra help, with emphasis on teachers making themselves more available for help and students taking greater responsibility for their actions.

A **report to the staff** on the findings of the student survey, questionnaire, and brainstorming made staff aware of how they could help, but they did not agree to students having extra study time. They insisted that students effectively utilise existing, available time resources; teachers first wanted to see some improvement in study habits. A request to re-instate ‘class devotional periods’ into the timetable was granted and this helped strengthen student-teacher bonds and also appeared to increase student motivation.

The **study skills program** was well received and very well attended. It was conducted over several sessions in out-of-class time. Participants appreciated the ten-page booklet which dealt with the effective planning and management/utilisation of:

- time;
- the study environment (physical and…
emotional); • goals and tasks; • strategies to learn subject content (understanding, recording, reviewing and memorising).

An interim survey of students’ progress, however, showed only limited improvement, initially. A majority (68%) of the class did not persist in monitoring their study time and 28% had not even started, while the desire to engage in personal monitoring was maintained by only one student. However, 60% claimed that their study habits had improved, but only ‘a little’. The remaining students admitted to no improvement. However, this admission stirred them into action.

As time passed, monitoring of student study practices showed that students’ study habits improved noticeably; students were quieter, they increasingly sought solitude for their study, and wasted far less time, presenting quite a contrast to the Science class (who were not part of the study). It was interesting to note that while the Science class members were given a copy of the study skills program for their notice board and were offered their own personal copies if they asked for them, they declined the challenge. Instead, they were observed frequently wasting time and making a lot of noise.

On reflection, there were three likely reasons for the observed improvements: The nearness of the approaching exams, the newly learned study skills, and encouragement from the teacher.

The follow-up questionnaire was administered just before the exams. Student responses, supported by teacher observations, showed that whilst some ‘bad’ habits persisted (e.g. procrastination, and late nights), many of them decreased or ceased. Also, many new ideas/techniques were tried and adopted, notably: Following priorities, setting goals, and dividing up big tasks. The only program suggestion shunned was asking teachers for help (a cultural problem), whereas devotional periods and prayer, note-taking, reading and memorising skills were deemed particularly helpful. On a 10-point scale, most students felt their study habits had improved 3-5 points, with six students feeling they had improved ‘10 points! This was probably an overstatement, but it certainly indicated a considerable improvement in confidence and coping skills. Reasons given by students for improvements centred on insights gained from the study skills program. The tiny minority, who improved little, admitted a lack of interest in achievement.

As part of the post-survey of teachers, five teachers (who were responsible for teaching six Humanities subjects) were surveyed about F6 study habits. All of the teachers noticed some improvement, the only exception being in Maths, a regular ‘bane’ of many Humanities students. There may be a logical explanation for this, however. For entry to tertiary education, the result in one subject (the lowest) is not counted. With Humanities students often struggling with Maths, it is usually the subject in which they ‘economise’ on effort.

In comparing teacher and student perceptions it was noteworthy that teachers’ perceptions of improvement were lower than students’ own estimates.

Conclusion and recommendations
The study dealt with three questions. These focused on investigating students’ prior study habits, the nature of existing ineffective study habits that impaired performance, and ascertaining the impact of a study skills intervention program.

The various data which were collected clearly showed that the majority of students (although in their final year of secondary schooling) seemed unaware of, and practised few, study skills. This highlighted a manifest deficiency and the need for students to acquire effective learning tools earlier on in their secondary schooling versus their final year. It also raised the question of a whole-school approach to learning, the need for clear communication between teachers of junior classes and senior classes, and the setting of common goals.

Ineffective time and self-management by students were revealed as being impairments to study performance. A case could be argued that these two impairments have a cultural trace. This should not be surprising as education always takes place in a cultural context (the family, classroom, school, and the wider community) and teachers with a Western background should not underestimate the strength of traditional Solomon Islands culture, in which using available time resources for social-community purposes competes with, or in many instances has priority over individual academic (study) considerations.

Furthermore, some data indicated that cultural factors appeared to work against female students. In a patriarchal society, cultural correctness does not encourage a younger person asking an older person a question, particularly in a learning/school context, where the flow of questions is usually expected to be in the opposite direction. The situation increases in cultural sensitivity when the questioner is an adolescent female student and the questioned an adult male teacher. It could be a mistake, however, to attribute too much importance to gender. Against a broader background of observation and teacher experience (beyond the immediate boundaries of

“There were three likely reasons for improvements: approaching exams, newly learned study skills, and encouragement from the teacher.”
this study), there would be general agreement that Solomon Islands village girls will not ask questions in school, but neither will village boys. On the other hand, some urban girls will ask questions of female and male teachers. It may be that reasons such as fear (seeming ‘stupid’, and ridicule from peers), lack of reasoning power (because the culture does not encourage a person to think critically), and lack of interest (many students appear not to care about the quality of their work – ‘rough enough is good enough’), are equally strong, or perhaps even stronger disincentives to ask questions, than gender. These considerations could well give rise to a new cycle of teacher action research to explore and understand the complexities of students’ learning, in the context of two powerful cultures colliding and competing in schools.

In ascertaining the impact of the study skills program, it should be conceded that, initially, it was limited, but increased with the imminence of final examinations, and as the value of the program became more obvious. Also, students were not averse to drawing on spiritual resources to complement their human efforts.

One specific recommendation resulting from the study was that the study skills program should become an integral part of BAC’s pastoral care program and that a SSP should be presented at the beginning of the F6 academic year. It was further recommended that a similar program be developed for F4 (an entry level for many students who come to BAC) when appropriate skills and self-discipline are required.

Finally, in retrospect, the program identified and supplied a need and delivered some of the benefits outlined in the literature. However, there were also costs. The adage: No pain; no gain, appropriately summed up the SSP (for both students and teachers) in terms of the considerable effort and time resources spent. To reap the benefits of the SSP called for patience, persistence, self-discipline, and a willingness to change priorities. It was evident that the program had a significant impact on some individuals, as evidenced by the encouraging comment of one male boarding student who had a chequered school career: ‘The program was a chance of a lifetime for me, because it has created a cornerstone for my future learning’.

Endnote

* At the time of conducting this action research, the writer taught Geography and Social Science at Betikama Adventist College, Honiara, in the Solomon Islands.
Factors that influence the desire to become teachers of Technology: An Australian study

Ronald Green
Design and Technology teacher, St. Joseph’s College, Katherine, NT

Cedric Greive
Senior lecturer, Faculty of Education, Avondale College, NSW

Abstract
In this study, 337 pre-service teachers enrolled in Technology Teacher Education Programs (TTEP), in eight tertiary institutions across Australia, responded to a questionnaire seeking information about those factors that influenced their decision to become teachers of Technical and Applied Studies (TAS). The study found: a majority of the respondents were male (71%); most came from urban areas (61%); just over half (51%) entered the course from the workforce and just over a third of the respondents entered the course direct from school. Of the 172 respondents who came from the workforce, a total of 93 (86 male) had prior trade experience. Factor analysis of attitudinal items set against a four-point Likert scale produced three factors related to their decision to become TAS teachers. These included encouragement from members of the community, the influence of experiences in technology at school, and a desire to teach. A three stage regression model was created with the scale ‘Desire to Teach’ as the ultimate dependent variable. Factors most strongly influencing ‘Desire to Teach’ included hobbies and interests prior to enrolment, encouragement from members of the community and the influence of experiences in technology at school. The authors propose a number of strategies for promoting technology teaching and increasing the TTEP student intake, based on their findings.

REVIEW OF THE LITERATURE
The nature of the problem
There has been a global shortage of teachers in the field of technology education in recent years (Ritz, 1999). In the United States of America (USA), for example, there have been difficulties in maintaining the supply of technology teachers to schools throughout the past decade and a half (Ndahi & Ritz, 2003; Weston, 1997). According to Wicklein (2004), teachers ranked ‘insufficient numbers of adequately qualified technology education teachers’ as the most critical problem faced by technology education in the United States. Furthermore, they considered the difficulties in recruiting student teachers into Technology Teacher Education Programs (TTEP) as the most critical current issue in technology education. In a review of teacher labour market conditions in Canada, Press, Galway and Barnes (2002) noted that the supply of technology teachers fell short of the demand. Technology education faced similar problems in the United Kingdom, where reported recruitment figures for initial technology teacher education showed a shortfall of 41% in teacher numbers over the 1999/2000 period (Banks, 2000).

In Australia, difficulties with the supply of sufficient numbers of teachers qualified to teach in the Technical and Applied Studies (TAS) subject areas have been experienced by all states over the past decade and a half (Australian Education Union, 2001; Baird 2001; Cornius-Randall, 2004; National Teacher Supply and Demand Working Party, 1998; National Teacher Supply and Demand Working Party, 2003; Teacher Supply and Demand Reference Group, 2006; Teacher Supply and Demand Working Party, 2006) and the request for Government action has become increasingly urgent (Australian Education Union – Victoria, 2007). Both the Australian Education Union (2001) and National Teacher Supply and Demand Working Party (2003) agree that staffing difficulties involving technology teachers exist in both rural and metropolitan schools across Australia.

The causes of the problem appear to be three-fold. Firstly, the numbers of pre-service teachers choosing to enter TTEP (National Teacher Supply and Demand Working Party, 1998) began to decline
Attitude does not arise in a vacuum; the beliefs and feelings that crystallize into the attitude are shaped by background factors

some two decades ago. Secondly, in a reaction to the financial situation created by falling numbers, tertiary institutions either cut TTEP, or restructured in order to modify the TTEP alternatives they offered (Fritz, 1998; Gibson & Barlow, 2000; Williams, 1996). Compounding this second situation is that educational institutions offering TAS courses are not evenly distributed around Australia (McGee, 1999). The majority of these institutions are located in New South Wales and, as of year end 2000, the Northern Territory did not have a TTEP of its own (Parliament of Australia: Senate Committee, 1998). The third reason for critical shortages of technology teachers across the Australian states relates to the ages of serving teachers. For example, almost a half of Victoria’s technology teachers are aged 50 years or older (Teacher Supply and Demand Reference Group, 2006) and these teachers are beginning to retire in appreciable numbers. While there appear to be modest increases in the numbers entering pre-service TTEP over the past five years (National Teacher Supply and Demand Working Party, 2003; Teacher Supply and Demand Reference Group, 2006), these may only be sufficient to hold the existing situation.

Government responses to this need have been directed at increasing the inflow of teachers and maintaining the numbers of existing teachers (Committee for the Review of Teaching and Teacher Education, 2003a). The Federal Government has moved to minimize the Higher Education Contribution Scheme (HECS) burden on pre-service technology teachers and monitored the entry-level remuneration and ongoing pay scales for teachers (Committee for the Review of Teaching and Teacher Education, 2003b). In addition, the main report of the Committee for the Review of Teaching and Teacher Education (2003b) discussed ways to prolong the teaching life of existing technology teachers by making their working environment professionally rewarding. Finally, attempts have been made to develop tertiary programs that enable technically skilled persons to retrain for careers in teaching (Hancock, 2001). A number of institutions have introduced delivery methods more suited to mature clients with existing technical skills. Charles Sturt University, for example, has developed an Accelerated Teacher Education Program in order to supply TAS teachers for rural areas (Cornius-Randall, 2004) and Avondale College has signed a memorandum of agreement with Newcastle University to enable students to earn academic credit by taking subjects on the Newcastle campus. However, the graduates of these new pathways have yet to make a real impact in the classroom.

There is one aspect, however, that all of the reports cited above appear to have overlooked, i.e. they have not seriously examined those factors that, within the Australian setting, influence an individual desire to become a teacher in the TAS area. If more people are to be encouraged to become teachers of technology, then these factors need to be identified.

Factors that influence a desire to become a technology teacher

In the USA, Wright and Custer (1998) adapted an instrument first used by Devier (1986) to examine those factors that influenced pre-service teachers to choose technology teaching as their career. The study distinguished between those factors that respondents indicated were most influential in their choice, and those factors most commonly reported in the study.

The three factors reported by the respondents in the USA study as being most influential in their decision were encouragement from:

- secondary school industrial arts/technology education (IA/TE) teachers;
- other community personnel;
- a college/university professor.

In order of rank, those factors most commonly noted by the respondents in the study included:

- personal interests or hobbies;
- taking a high school IA/TE course;
- admiration of a high school IA/TE teacher;
- extra-curricular IA/TE activities;
- encouragement by a high school IA/TE teacher.

Developing a model of influence

Factors that influence career decisions (such as the decision to become a technology teacher) revolve around motivation, planning and consistent behaviour. ‘Attitude’ is a construct that has been developed to explain consistency in human behaviour (Myers, 2007). Attitude is believed to involve two components: beliefs about the object of the attitude, and feelings toward the object of the attitude (Westen, Burton & Kowalski, 2006). It has been argued that individuals can hold attitudes long before they have the opportunity to indulge in the related behaviour (Fishbein and Ajzen, 1975 and later Ajzen, 1988; 2000). These authors propose that an ‘intention’ to behave can be a mediating variable between the attitude and the behaviour. They also argue that attitude does not arise in a vacuum. The beliefs and feelings that crystallize into the attitude are shaped by background factors that include social interactions, age and maturation and prior experience. This leads to a causal relationship in which the background factors shape a cohesive set of beliefs and feelings which in turn creates an intention to act that sets in motion behaviours that lead to the ultimate goal (see Figure 1). This model

![Figure 1](image-url)
will provide a structure that can be employed in an examination of career choices.

**RESEARCH**

**Questions and significance of the study**

The present study employed the above concepts to examine those factors that influenced pre-service teachers to choose to become TAS teachers in Australian schools. The study developed and tested a causal model of influence that identified and weighted those factors related to a ‘desire to become a teacher of technology’. Specifically, the following research questions guided the collection of data in this study:

1. What are the basic demographic characteristics of the Australian population of pre-service technology teachers?
2. What factors influence individuals to select, and enrol in technology teacher education programs?

These questions are significant, since the data gathered contribute to an educational knowledge base concerning the clients served by TAS teacher education. Further, by providing such a knowledge base, the study aimed to develop insights about the background of potential undergraduates and hence suggest directions for the marketing of technology teacher education. At a time of technology teacher shortage, the study appears both timely and relevant.

**Methodology**

Data were collected by a questionnaire that was forwarded to eight tertiary institutions for distribution to technology education students. All data were returned by mail. The questionnaire was based on an instrument employed by Wright and Custer (1998) in the USA. However, items were reworded to make them suitable to the Australian setting and some additional items were included. Section 1 of the questionnaire consisted of 28 attitudinal items set against a four-point Likert scale. These items probed the social influences that contributed to an individual’s decision to become a technology teacher. Section 2 of the questionnaire sought demographic information from the respondents.

The SPSS statistical package was used; employing cross-tabulations with chi-square (using a one-tailed test of significance), factor analysis, correlation, analysis of variance and finally multiple linear regression analysis to test the model of influence (Coakes & Steed, 2001). It was assumed that the causal model to be employed in this study (see Figure 1) was unidirectional, and the variables included were cumulative. As such, the model complied with Pedhazur’s (1982) criteria for the use of multiple linear regression analysis to weight the various dependencies of the postulated model.

The study was approved by the Avondale College Human Research Ethics Committee. Eight tertiary institutions (stretching from Perth to Brisbane) offering undergraduate degree programs in technology teacher education agreed to participate in the study. Their TTEP enrolments, at the time of the study, numbered 833 students.

**FINDINGS**

**Response rate**

In total, 824 questionnaires were distributed and of these 365 were completed and returned, giving a 44% return rate. A small number, 28 responses, was excluded because critical demographic data were missing. The remaining 337 respondents represented just over one third of the 833 pre-service teachers enrolled in the participating universities. The sample constituted an appreciable proportion of the total population of pre-service technology teachers across Australia and thus could be regarded as being a representative sample of those preparing to be secondary school TAS teachers.

**The respondents**

Of the 337 respondents, 240 were male and 97 were female. Their ages ranged from 17 to 53 years (see Table 1). More than half were aged 25 years or younger and older respondents tended to be male rather than female. Respondents in the first year of their course totaled 129; 100 were in the second year, 61 in the third year and 46 were in their final year of study. In addition, 133 respondents...
Table 1: Respondents grouped according to age, gender and year of course

<table>
<thead>
<tr>
<th>Age</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Gender Totals</th>
<th>Age Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>20 years or less</td>
<td>41</td>
<td>23</td>
<td>25</td>
<td>19</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>21-25</td>
<td>16</td>
<td>4</td>
<td>15</td>
<td>5</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>26-30</td>
<td>11</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>31-35</td>
<td>10</td>
<td>1</td>
<td>15</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>36-40</td>
<td>9</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>41-45</td>
<td>7</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>over 45</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Gender Totals</td>
<td>98</td>
<td>31</td>
<td>70</td>
<td>30</td>
<td>34</td>
<td>27</td>
</tr>
<tr>
<td>Year Totals</td>
<td>129</td>
<td>100</td>
<td>61</td>
<td>46</td>
<td>336*</td>
<td></td>
</tr>
</tbody>
</table>

* One female respondent in the 31-35 age group did not indicate a year of course.

Research & Scholarship

indicated that they came from rural backgrounds and 204 came from urban settings (Table 2). Males were more likely to come from rural areas than were females (c² = 6·6; p ≤ 0·05) and older male respondents were more likely to come from rural areas than were their younger counterparts (c² = 17·0; p ≤ 0·05). Given that 70% of Australia’s population lives in urban regions (Australian Bureau of Statistics, 2000), males coming from rural regions were over-represented in the study.

A closer examination of Table 2 reveals a pattern in frequencies and ages that indicates two ‘waves’ of entry into technology teacher education (see Figures 2a and 2b). The first wave comprised those who entered technology teaching courses directly from, or soon after, their high school years and who could be regarded as commencing their first career. The increase in the number of students at around age 30 indicates the onset of the second and smaller wave. This wave might represent those who were making a career change.

In total, four in every five respondents completed their final year of secondary school before entering a technology teacher education program (Table 3). However, the percentages of those who did not complete their final year of secondary school rose within each successive age group, until by 45 years or over, approximately two thirds of those undertaking the TTEP did not complete Year 12.

A total of 125 respondents (66 males and 59 females) entered their study programs directly from secondary school (Table 4). Tables 5 and 6 indicate that women were more likely than men: to be younger (c² = 26·6; p ≤ 0·05); to have completed year twelve (c² = 38·2; p ≤ 0·05); to have entered the course directly from school (c² = 32·7; p ≤ 0·05) and to have become interested in technology teaching while at school (c² = 22·4; p ≤ 0·05). On the other hand, men were more likely to have been in the workforce (c² = 26·77; p ≤ 0·05) and to have had experience in a technical trade (c² = 28·39; p ≤ 0·05).

Development of attitudinal scales

Data elicited by the twenty-eight attitudinal items

Table 2: Age, gender, and rural/urban origin of respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>Rural</th>
<th>Rural Totals</th>
<th>Urban</th>
<th>Urban Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>20 years or less</td>
<td>37</td>
<td>18</td>
<td>55</td>
<td>43</td>
</tr>
<tr>
<td>21-25</td>
<td>14</td>
<td>6</td>
<td>20</td>
<td>39</td>
</tr>
<tr>
<td>26-30</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>31-35</td>
<td>18</td>
<td>2</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>36-40</td>
<td>14</td>
<td>1</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>41-45</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>over 45</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>105</td>
<td>28</td>
<td>133</td>
<td>135</td>
</tr>
</tbody>
</table>
**Figure 2a: Age-gender frequencies of respondents**

**Figure 2b: Rural / urban origin of respondents**

**Table 3: Secondary school exit frequencies of respondents**

<table>
<thead>
<tr>
<th>Age</th>
<th>School Exit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yr 10 or Earlier</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Year 11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Completed Yr 12</td>
<td></td>
</tr>
<tr>
<td>20 years or less</td>
<td>134</td>
<td>135</td>
</tr>
<tr>
<td>21-25</td>
<td>71</td>
<td>79</td>
</tr>
<tr>
<td>26-30</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>31-35</td>
<td>32</td>
<td>45</td>
</tr>
<tr>
<td>36-40</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>41-45</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>over 45</td>
<td>12</td>
<td>273</td>
</tr>
<tr>
<td>Total</td>
<td>273</td>
<td>337</td>
</tr>
</tbody>
</table>

**Table 4: Experience of respondents prior to enrolling in Technology teacher education programs**

<table>
<thead>
<tr>
<th>School Exit</th>
<th>Direct from Secondary School</th>
<th>Through TAFE</th>
<th>Other University Courses</th>
<th>From the Workforce</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M F</td>
<td>M F</td>
<td>M F</td>
<td>M F</td>
<td>M F</td>
<td></td>
</tr>
<tr>
<td>Exited at or Before Year 10</td>
<td>0 0</td>
<td>2 0</td>
<td>0 0</td>
<td>44 2</td>
<td>0 0</td>
<td>48</td>
</tr>
<tr>
<td>Exited at Year 11</td>
<td>0 0</td>
<td>1 1</td>
<td>0 0</td>
<td>12 2</td>
<td>0 0</td>
<td>16</td>
</tr>
<tr>
<td>Completed Year 12</td>
<td>66 59</td>
<td>11 4</td>
<td>14 4</td>
<td>88 24</td>
<td>2 1</td>
<td>273</td>
</tr>
<tr>
<td>Gender Totals</td>
<td>66 59</td>
<td>14 5</td>
<td>14 4</td>
<td>144 28</td>
<td>2 1</td>
<td>337</td>
</tr>
<tr>
<td>Year Totals</td>
<td>125 19</td>
<td>18 3</td>
<td>172</td>
<td>152</td>
<td>3</td>
<td>337</td>
</tr>
</tbody>
</table>
Respondents perceived the effects of ‘School influence’ in varying ways.
were subjected to exploratory factor analysis. An
eigenvalue-factor plot (scree graph) indicated
the presence of three factors. In order to obtain
independent scales, principal component factor
analysis with varimax rotation was employed (Kline,
1994; Loehlin, 1998). Items with negative loadings
were recoded and the intent of each associated
statement was reversed. The independence of the
scales was strengthened by removing items with
loading values of less than 0.35 (Ewert & Sibthorp,
2000), and also by removing items that loaded onto
two or more factors with loading differences of less
that 0.20 (see Kerlinger, 1973). Item removal was
carried out individually and the values of coefficient
alpha for each scale were monitored to ensure that
the removal process did not unduly reduce factor
reliabilities.
Initially, the three factors accounted for 37% of
the variance that would have been obtained if all
28 items were treated as individual factors. After
pruning, the variance associated with the three
factors rose to 50% of the total variance. The final
item loadings on each of the three factors can be
seen in Table 7. The first factor included eight items
that collectively conveyed community support for a
respondent’s decision to enrol in technology teacher
education. This factor was labeled ‘Community
Influence’ and had a coefficient alpha of 0·77. The second factor included five items that collectively
conveyed the influence upon a respondent’s decision
to enrol in technology teacher education emanating
from their experience at school. This factor was
labeled ‘School Influence’ and had a coefficient
alpha of 0·76. The third and final factor comprised
four items that described the respondent’s interest in
becoming a teacher. This factor was labeled ‘Desire
to Teach’ and had a reliability of 0·74. Since each of
the coefficient alphas exceeded 0·7 they could be
deemed sufficiently reliable for the purposes of this
study (see Nunnally, 1978; p245).
The scores of the respondents on each of the
three scales were obtained by averaging their
declared Likert weightings across the items within
each scale. This meant that the scale score for
each respondent lay within the bounds of the Likert
weightings and thus the descriptors of the Likert
scale were employed to interpret the scale scores for
the respondents (see Figures 3a to 3c). In general,
the respondents perceived ‘Community Influence’
as having minimal impact upon their decision
to become a technology teacher. However, the scale
scores were strongly skewed, meaning that a small
number of respondents perceived ‘Community
Influence’ as playing an important part in their
decisions.
This situation was very different for the measures
obtained by the ‘School Influence’ scale. Here the
median (2·4) lay very close to the center of the Likert
range with some scores reaching to one or the other
extremity. This means that respondents perceived
the effects of ‘School Influence’ in varying ways.
For some it was influential, but an approximately
equal number viewed the influence of school as
of little effect on their decision to become a TAS
teacher. The nature of the scores on this scale are
better understood when the relationship between
the variables ‘Age Group’ and ‘School Influence’
is examined. Figure 4 presents the results of an
analysis of variance involving these two variables
and indicates that measures of ‘School Influence’
steadily decline with increasing age. This is to be
expected as the memories and the impact of school
fade and new experiences become more prominent.
The final scale, ‘Desire to Teach’ returned a
median of 3·3 indicating that a majority of
respondents were undertaking Technology Teacher
Education because they wanted to become a
teacher of technology. However the measures
elicited by the scale were negatively skewed
indicating that some respondents (likely to be only
a few) may have been undertaking the course for
reasons other than the desire to teach.
Relationships indicated by correlations: Consistency within the data
The correlation table (Table 8) includes a selection of
correlations whose magnitude exceeds 0·20. This
represents only 4% common variance and hence,
although correlations with smaller magnitude exceed
the 0·05 level of significance, they do not imply any
meaningful relationships. The correlations shown
in the table provide evidence of a certain level of
cohesion within the data, i.e. the data ‘hang together’
and are consistent with informed expectations.
For example, older respondents tended: to be male
(r = -0·25); to have grown up in working class homes
(r = -0·21); to have left school before year 12
(r = -0·54); to have been in the work force
immediately prior to enrolment (r = 0·63); to have
had trade experience (r = 0·49); to be retraining for
purposes of job security (r = 0·53); to have become
interested in technology teaching in the work place
(r = 0·54); and to have been minimally influenced
in their decision to take up technology teacher
education by their experience at school (r = -0·49).
On the other hand, women enrolled in technology
teacher education tended: to be younger (r = -0·25); to
have become interested in technology teacher
education in school or in another place of education
(r = -0·21); to have been studying immediately prior
to enrolment (r = -0·32); to have no experience in
a trade (r = 0·30) and to have indicated that their
Table 5: Respondents’ school exit against trade background/experience

<table>
<thead>
<tr>
<th>School Exit</th>
<th>Trade Background</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Prior Trade</td>
<td>Prior</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experience M</td>
<td>Experience F</td>
<td></td>
</tr>
<tr>
<td>Exit at or Before Year 10</td>
<td>15</td>
<td>31</td>
<td>48</td>
</tr>
<tr>
<td>Exit at Year 11</td>
<td>7</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Completed Year 12</td>
<td>132</td>
<td>89</td>
<td>273</td>
</tr>
<tr>
<td>Gender Total</td>
<td>154</td>
<td>86</td>
<td>337</td>
</tr>
<tr>
<td>Total</td>
<td>244</td>
<td>93</td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Respondents’ reported place of initial interest in Technology teacher education

<table>
<thead>
<tr>
<th>Gender</th>
<th>Location / Environment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>School</td>
<td>TAFE</td>
</tr>
<tr>
<td>Males</td>
<td>95</td>
<td>22</td>
</tr>
<tr>
<td>Females</td>
<td>66</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>161</td>
<td>27</td>
</tr>
</tbody>
</table>

Table 7: Item loadings on each factor as a result of factor analysis with varimax rotation

<table>
<thead>
<tr>
<th>Scales + Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>“Community Influence” (Alpha = 0.77)</td>
<td></td>
</tr>
<tr>
<td>17 Encouraged by other community personnel</td>
<td>0.70</td>
</tr>
<tr>
<td>16 Encouraged by a community professional</td>
<td>0.66</td>
</tr>
<tr>
<td>13 Encouraged by other university personnel</td>
<td>0.66</td>
</tr>
<tr>
<td>12 Encouraged by a university Technology education lecturer</td>
<td>0.64</td>
</tr>
<tr>
<td>15 Encouraged by university students</td>
<td>0.59</td>
</tr>
<tr>
<td>19 Encouraged by a youth leader</td>
<td>0.59</td>
</tr>
<tr>
<td>18 Encouraged by a church leader</td>
<td>0.54</td>
</tr>
<tr>
<td>“School influence” (Alpha = 0.76)</td>
<td></td>
</tr>
<tr>
<td>17 Encouraged by a high school Technology teacher</td>
<td>0.80</td>
</tr>
<tr>
<td>17 Admired a high school Technology teacher as a role model</td>
<td>0.77</td>
</tr>
<tr>
<td>17 Encouraged by parents</td>
<td>0.23</td>
</tr>
<tr>
<td>17 Enjoyed secondary school Technology courses</td>
<td>0.67</td>
</tr>
<tr>
<td>17 Encouraged by high school classmates</td>
<td>0.26</td>
</tr>
<tr>
<td>“Desire to Teach” (Alpha = 0.74)</td>
<td></td>
</tr>
<tr>
<td>17 Like working with high school students</td>
<td>0.79</td>
</tr>
<tr>
<td>17 Like teaching others special skills</td>
<td>0.76</td>
</tr>
<tr>
<td>17 Enjoy creating / assisting others to create</td>
<td>0.21</td>
</tr>
<tr>
<td>17 Wanted to be a teacher</td>
<td>0.68</td>
</tr>
</tbody>
</table>

Experience at school influenced their decision to enter technology teacher education ($r = 0.24$). Those claiming to be retraining for job security tended: to be male ($r = -0.20$); to be older ($r = 0.53$); to have left school before completing year 12 ($r = -0.40$); to be retraining for an increase
in the likelihood of employment ($r = 0.35$); to have been encouraged by personnel in industry ($r = 0.37$); to have become interested in technology teacher education in the work place ($r = 0.34$); to have come directly from the workforce into technology teacher education ($r = 0.50$); to have trade experience ($r = 0.52$); to have been minimally influenced in their decision to enter technology teacher education by their experience at school ($r = -0.27$) and to have been influenced in their decision to enrol in technology teacher education courses by members of their community ($r = 0.20$).

Finally, the desire to become a technology teacher was influenced: by interests and hobbies before enrolment ($r = 0.27$); by experiences at school ($r = 0.20$) and by persons within the respondent’s community ($0.24$).

**Determining the dependencies of the model of influence**

The path model to be tested is shown in Figure 5.

It includes a listing of the variables entered into the respective regression processes. The variables listed in this model include a single ultimate dependent variable, ‘Desire to Teach’, four mediating variables, ‘Increased Likelihood of Employment’, ‘Interests and Hobbies’, ‘School Influence’ and ‘Community Influence’ and five background variables, including ‘Rural/Urban Background’, ‘Gender’, ‘Age-Group’ and ‘Parental Employment’.

All variables were entered into the regression process as z-scores. This ensured that the regression equations had zero constants, thus allowing the beta coefficients to directly indicate the proportions of variance within the dependent variable that were contributed by the respective independent variables (see Kerlinger, 1979; Loehlin, 1998; Pedhazur, 1982). Since ‘Desire to Teach’ was the ultimate dependent variable in the path model, it was made the first dependent variable in the multiple linear regression process. All other variables were entered as independent variables and the backward stepwise method employed. This method removed those variables which did not meet the 0·05 level of significance and which therefore contributed least to the variance of the dependent variable (Loehlin, 1998; Coakes & Steed, 2001). Each one of the four mediating variables was then successively made the independent variable for the backward stepwise process in which the background variables were the independent variables.

The results of these regression processes are found in Table 9 and have been set out in the path diagram in Figure 5. Only 15% of the variance of ‘Desire to Teach’ is explained by variables within the model, leaving 85% of its variance to be related to factors external to the model.
Implications of the model
The final path diagram is shown in Figure 6. ‘Interest and Hobbies before Enrolment’ is the strongest influence on a ‘Desire to Teach’ technology subjects (b = 0.27), ‘School Influence’ and ‘Community Influence’ contribute to a lesser degree (b = 0.17 and b = 0.17 respectively). The variable ‘Community Influence’ is unsupported by any of the background variables. In other words, support for the decision by members of the community is independent of the urban/rural background, sex, age or socio-economic status of the respondent. The model suggests that ‘School Influence’ is stronger if the respondent is younger (b = 0.47), generally female (b = 0.13) and generally from an urban setting (b = 0.10). To a lesser extent, ‘Interest and Hobbies before Enrolment’ was related to being female (b = 0.11) and having fathers with higher socio-economic status (b = 0.18). This latter factor may well be linked to disposable income that can allow children, and particularly daughters, to indulge in meaningful hobbies of a technical nature. While the influence of school experiences (b = 0.27) is considerably stronger in younger respondents, older respondents generally show a greater desire to become a technology teacher (b = 0.18).

There is a minor interplay between ‘Gender’, ‘Urban/Rural Origin’ and ‘Age-Group’. Firstly, there were two and a half times as many males in the sample as females, and while the males spanned the age-range, females tended to be younger, and in comparison to their male counterparts, appeared to be from urban settings. Since the younger respondents were more strongly influenced by their school experience, female respondents from urban settings appeared to predominate among those who related their choice of technology teaching to their school experience.

Conspicuous by its absence from the model, is the variable, ‘Retraining for Job Security’. This variable shows moderately strong correlations with an array of other variables and yet it is not linked to ‘Desire to Teach’. The implication is that while the need to retrain is important, it is not a distinct motivating factor related to entry into the profession of technology teaching.

Discussion, Conclusions and Recommendations
The 337 respondents came from eight different tertiary institutions across Australia. Because they comprised an appreciable proportion of the total number of pre-service teachers enrolled in TTEP, it can be assumed that they represented the larger population. Further, the pattern of correlations within the results is cohesive and logical, suggesting certain validity within the results themselves.

These results suggest that the undergraduate students enrolled in technology teacher education in Australia are a diverse group. Forty percent of them come from rural areas and this group is disproportionately male. Almost a third are over the age of 30 years and therefore can be considered to be making career changes. More than a quarter have trade backgrounds, while just over a third are entering technology teacher education directly from school. This of course is a general picture and differing bodies of pre-service technology teachers will exhibit differing demographic characteristics from university to university. This diversity among pre-service technology teachers suggests a variety of student needs and thus implies a need for special planning behind, and variety within, curriculum offerings. It suggests that there should be a variety of appropriate teaching and learning strategies as well as flexible delivery and assessment procedures.

Two factors related to a desire to become a technology teacher are: hobbies and pursuits of special interest, and the influences of school. This latter factor included items representing the presence of ‘admired teachers’, and the ‘encouragement by teachers’ for students even to dare entertain the idea of becoming a TAS teacher. This has real implications for the way innovative and caring teachers can use the curriculum and the classroom environment to shape the career prospects of their students. A disciplined, safe, and pleasant environment in which a teacher forges a relationship of trust and respect, and where a student can pursue projects of special interest that engage the mind and develop appropriate skills, can both fuel and prolong the desire on the part of a student to emulate the teacher’s role.

The data suggest there are three distinct groups within the population of pre-service technology teachers. The first group is retraining for a career change into technology teaching. This group is comprised, predominantly, of older males with trade experience and who also have a tendency to be from a rural background. They have chosen to enter TTEP for reasons related to increased job security and because they have a desire to become technology teachers. The second group is composed of young females from urban backgrounds who tend to enjoy interests and hobbies that are linked to technology. They have entered TTEP direct from school and have been influenced by their school experiences to become technology teachers. The third and final group are males aged in their twenties who were likely to have been influenced (generally, but not specifically) to become technology teachers by interests in hobbies and by the influence of their experiences with TAS at school.

These findings have implications for marketing
**Table 8:** Bivariate correlations of a selection of variables employed in the study

<table>
<thead>
<tr>
<th></th>
<th>i</th>
<th>ii</th>
<th>iii</th>
<th>iv</th>
<th>v</th>
<th>vi</th>
<th>vii</th>
<th>viii</th>
<th>ix</th>
<th>x</th>
<th>xi</th>
<th>xii</th>
<th>xiii</th>
<th>xiv</th>
</tr>
</thead>
<tbody>
<tr>
<td>i Interests / hobbies before enrolment</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii Encouragement by industry personnel</td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii Retraining for job security</td>
<td></td>
<td></td>
<td>0.37</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv Increased likelihood of employment</td>
<td></td>
<td></td>
<td></td>
<td>0.35</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v Employment of mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vi Employment of father</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.33</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vii Gender (male=1)</td>
<td>-0.20</td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>viii Age</td>
<td>0.53</td>
<td>-0.34</td>
<td>-0.21</td>
<td>-0.25</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ix Point of exit from school</td>
<td>-0.40</td>
<td></td>
<td>-0.54</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>x Place became interested (school=1)</td>
<td>0.34</td>
<td>-0.21</td>
<td>0.54</td>
<td>-0.30</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xi Place prior to enrolment (school=1)</td>
<td>0.24</td>
<td>0.50</td>
<td>-0.23</td>
<td>-0.32</td>
<td>0.63</td>
<td>-0.38</td>
<td>0.62</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xii Experience in the trade</td>
<td>0.22</td>
<td>0.52</td>
<td>0.30</td>
<td>0.49</td>
<td>-0.42</td>
<td>0.37</td>
<td>0.55</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xiii Desire to become a Technology teacher</td>
<td>0.27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xiv School influence</td>
<td>0.24</td>
<td>-0.27</td>
<td>0.24</td>
<td>-0.49</td>
<td>0.25</td>
<td>-0.50</td>
<td>-0.43</td>
<td>-0.32</td>
<td>0.20</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xv Community influence</td>
<td>0.31</td>
<td>0.20</td>
<td>0.24</td>
<td>-0.49</td>
<td>0.25</td>
<td>-0.50</td>
<td>-0.43</td>
<td>-0.32</td>
<td>0.20</td>
<td>0.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 5:** Variables as entered into the regression analysis

- Contributing variance due to factors external to the model
- Urban / rural origin
- Gender
- Age-group
- Employment of father
- Employment of mother
- Increased likelihood of employment
- Community influence
- School influence
- Interests / hobbies before enrolment
- Desire to teach

**Table 9:** Dependencies of the model of influence as they resulted from regression analysis

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Beta</th>
<th>Error</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Desire to teach’</td>
<td>School influence</td>
<td>0.17</td>
<td>0.11</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Community influence</td>
<td>0.17</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>0.18</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interests / hobbies before enrolment</td>
<td>0.27</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>‘School influence’</td>
<td>Rural / urban</td>
<td>-0.10</td>
<td>0.08</td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td>Age-group</td>
<td>-0.37</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>0.13</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>‘Community influence’</td>
<td>Interests / hobbies before enrolment</td>
<td>Gender</td>
<td>0.11</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Employment of father</td>
<td>0.18</td>
<td>0.09</td>
<td></td>
</tr>
</tbody>
</table>
campaigns geared to increase the number of TTEP entrants. Campaign strategies should target the three distinct groups of potential technology teachers and thought needs to be given to the delivery of focused messages. It might be extrapolated that the latter should be short, thoughtful and contemporary, and make use of all current means of communication to make an impact.

To the older, experienced and skilled males, TAS teaching should be represented as:
- a means of continuing the involvement with old and loved skills;
- a means by which these existing skills can be shared with young people, while contributing to their development;
- a secure, enjoyable, satisfying and respected occupation;
- a means of obtaining a comfortable living in a rural setting.

To reach young, urban females, marketing strategies should show-case TAS teaching as:
- appealing to the young, independent female;
- a great, enjoyable and respected career option;
- an exciting feature of city living;
- a means of emulating an admired teacher;
- continuing enjoyment of the technical subjects to which they were introduced at school;
- continuing the development of the skills of loved hobbies and past-times.

To have an impact on young males, messages should:
- deliberately target the young, but mature and free male image;
- represent technology teaching as a well-paid profession;
- represent technology teaching as a great, enjoyable and respected career option;
- feature both city teaching and the adventure of rural teaching;
- feature the continued enjoyment of technical subjects, to which they were introduced at school;
- place emphasis on continuing the development of the skills of loved hobbies and past-times.

The authors, having put forth some practical recommendations, propose an additional strategy: More secondary students would be attracted to technology teaching if the pool of students taking technology subjects in senior secondary school was to be increased. For this to occur, students must see a linkage between school subject offerings and general and viable career options through either TAFE or University. The strengthening of the TAFE-school link could be one means of increasing the number of secondary school students considering the TAS area as a serious career option.

To amplify the appeal of technology teaching as a career option, career advisers and teachers of technology in secondary schools need to unite their efforts to promote technology teaching as a secure, rewarding and appropriate career option. Perhaps safety should not be the only concept featured on posters in technology classrooms. Students, openly, should be made aware of the possibility that they, too, could become teachers of technology in a secondary school.

Within the model of influence, only 15% of the variance of the dependent variable ‘Desire to Teach’ related to endogenous factors. The remaining 85% of variance came from factors external to the model. Further, technology teaching covers a ‘wide’ field in
which technology subjects differ from state to state. No attempt was made by the study to examine the influence that individual technology subjects may play in determining a desire to become a technology teacher. Hence there is room for additional research, employing a greater number of respondents and a broader scope of questionnaire items.

In conclusion, it is the authors’ hope that the specific insights and understandings resulting from this study have added to the knowledge base about technology education, suggested directions for effective marketing and promotion and, perhaps, in a small way contributed to reversing the technology teacher shortage in Australia. **TEACH**

**References**


Christianity and a ‘good society’ in Australia: A first response to Stuart Piggin’s Murdoch Lecture

Arthur Patrick
Honorary Senior Research Fellow, Avondale College, NSW

Abstract
The article responds to a challenge to focus the values of Christianity toward making 21st century Australia a ‘good society’. The author charts the directions for a projected three-part series, framed by the typology of theologian H. Richard Niebuhr that examines the historic nature and current potential of Christianity in Australia.

Context
The efficient campaigns by Seventh-day Adventists (hereinafter abbreviated to Adventists) to influence Australia’s constitution and the religious stances of the emerging Commonwealth are better known since historian Richard Ely wrote Unto God and Caesar. Ely claimed: ‘For a church that so rigorously and with such determination believed in the separation of Church and State, the Adventists played politics very well’.1

On 10 July 2007, in the eleventh annual Murdoch Lecture at Avondale College, Dr Stuart Piggin challenged contemporary Adventists to invest thought and effort comparable to that of their forebears into shaping Australia as a ‘good society’.2 The lecture (delivered at the Adventists’ principal tertiary institution that, among other vocations and professions, equips teachers for schools in Australia and New Zealand) should alert Christian educators and others to both perceived needs and promising opportunities.

Piggin is a careful observer of Adventism, especially since 1985 when he attended an important Adventist History Symposium at Monash University.3 He is now, in essence, asking Adventists to consider whether their historic emphasis on the separation of church and state causes them to undervalue the roles of modern Josephs and Daniels in government and to miss opportunities to leaven society.

Adventists are for Christian values. They are against coercion in the political arena in reference to matters of faith. So high are the stakes in the contest between good and evil that every initiative for good must be intelligently embraced. Christians are entrusted with the responsibility to bear Good News ‘to every nation, tribe, language and people’ (cf. the Great Commission of Matthew 28:18-20 with Revelation 14:6, NIV), including every human being that dwells in Australia. Therefore, the church must ask itself, anew, if at present it is effectively demonstrating just how much it cares about Christian values, social justice and human wellbeing.

This article offers merely the first exchange of a projected three-phase response to Piggin’s substantive appeal. Piggin’s initiative invites a fresh dialogue, amongst Australians in general and Adventists in particular, about the potential of Christianity in our culture and how better to employ the faith nurtured by sixty-six ancient writings in the task of making modern Australia a ‘good society’.

While there are many faiths in Australia, Piggin is convinced that presently there is a ‘king tide’ of Christian opportunity in this nation. The first National Forum on Australia’s Christian Heritage (2006) is a concrete outgrowth of this conviction that is cherished by its participants and motivates Piggin’s urgent appeal that we do not miss the opportunity to take the present tide ‘at the flood’. His Murdoch Lecture is, therefore, a healthy challenge to examine again the historic relations between the religion of Jesus Christ and human culture, to understand the specific experience of religion in Australia, and to read as though for the first time all that the Scriptures say about the responsibilities of those who govern and those who are governed. This threefold endeavor will exhaust neither our opportunities nor our responsibilities; we can, however, expect it to orientate us better for our task of ‘being Christian, being Australian’.5

Presently there is a ‘king tide’ of Christian opportunity in this nation.
The ever-recurring question of how to live the Christian life within a given culture calls for an infinite dialogue in the Christian conscience and the Christian community.

The ever-recurring question of how to live the Christian life within a given culture calls for an infinite dialogue in the Christian conscience and the Christian community. Niebuhr’s lectures published as Christ and Culture have evoked doctoral dissertations, books and articles during the past six decades, indicating the substantial nature of his claim about ‘typical partial answers that recur so often in different eras and societies that they seem to be less the product of historical conditioning than of the nature of the problem itself and the meaning of its terms’.9

‘Christ and culture’: Five typical options

The relationship between Christianity and culture is, in Niebuhr’s terms, ‘the enduring problem’ that may be better understood in terms of five constructs. Three of the typical answers belong to ‘that median type in which both Christ and culture are distinguished and affirmed’, whereas the other two are polar opposites, emphasising...

religion in Australia.

Christianity in colonial Australia

Australia’s non-indigenous settlement, in the early stages, was a response to the incapacity of England’s gaols to accommodate the country’s rapidly increasing prison population. On a wider scale, it was a small part of a much larger movement of people; a result of the unprecedented expansion of the ‘Old World’ population that took place between the eighteenth century and 1930. During the first seven decades of white settlement in Australia, on average, the population doubled every eight years, mainly due to the high level of immigration.6 Since Australia was settled during eras of European expansion and imperialism, it was inevitable that Australian Christianity would reflect the religion of the Northern Hemisphere peoples who were transplanted into this antipodean land.

However, the colony’s geographical location and characteristics influenced its religious ethos. The alien nature of the Australian environment, from the viewpoint of the earliest European inhabitants, included far more than the strangeness of its existing Aboriginal culture. The unfamiliar aspect of its flora, fauna, climate and seasons was striking. It was prone to excessive summer heat, drought and bush-fire. The quality of its soil was often poor and, combined with climatic factors, unsuited to some of the best-loved plants of the British Isles. The impact of these geographical characteristics was exacerbated by the enormous problem of distance from other centres of Western civilisation, the separateness of its various colonies, the isolation of inland settlements, and the loneliness of many of its individual families. Covered by radically unfamiliar vegetation bathed in a mysterious light, the new country took a century to develop its ‘first truly Australian school of painting’. Many other aspects of colonial life would require a similar time period for the umbilical cords of dependence to be cut and for national independence to become evident. During its first century, Australia’s white inhabitants viewed it as a fatal shore or a promised land, and sometimes, ambivalently, as both, simultaneously. Therefore, the colonial period witnessed at best a struggle between competing loyalties. The nurture of the Christian religion was seldom a paramount consideration amongst the general population.

The last decade of the colonial period and the founding years of the Commonwealth of Australia are important as a reference era for Piggin’s Murdoch Lecture. Elsewhere I enumerate the major characteristics of Australian colonial Christianity, citing evidence that this particular transplanting of religion may be regarded as a remarkable success.8 We shall now focus on the concepts of Christianity and culture that European Australians were likely to bring with them as incidental or chosen ‘baggage’ as they came to the land of the Southern Cross.

The ‘double wrestle’ of Christianity

Christianity in colonial Australia mirrored the religious ethos of the Northern Hemisphere; specifically it was fragmented by a major cleavage between Roman Catholics and Protestants, who commonly evinced a competitive rather than a cooperative attitude toward each other. In addition, there were important divisions within such major denominations as the Anglicans, Presbyterians, Methodists and Baptists. Catherine L. Albanese identifies in Christianity a ‘counterpoint between manyness and oneness’. In nineteenth-century Australia the emphasis favoured denominationalism rather than commonality. Thus the churches spent much time establishing and maintaining the boundaries of religious acceptability, safeguarding their identity, specifying the nature of their mission, recalling the meaning of their heritage and clarifying their denominational relations with society and government. However, the adherents of a given denomination frequently shared a cluster of ideas that motivated or constrained their relations with society and all denominations related in identifiable ways with historic Christianity.

It is of decided value, therefore, to observe analyses of typical ways in which, since the founding of their religion, Christians have related to society. This task has engaged many minds from a wide variety of disciplines. For instance, H. Richard Niebuhr devoted much of his career to what he called the ‘confused’, ‘many-sided debate about the relations of Christianity and civilisation’. He came to believe that the ever-recurring question of how to live the Christian life within a given culture calls for ‘an infinite dialogue … in the Christian conscience and the Christian community’. Niebuhr’s lectures published as Christ and Culture have evoked doctoral dissertations, books and articles during the past six decades, indicating the substantial nature of his claim about ‘typical partial answers that recur so often in different eras and societies that they seem to be less the product of historical conditioning than of the nature of the problem itself and the meaning of its terms’.9

‘Christ and culture’: Five typical options

The relationship between Christianity and culture is, in Niebuhr’s terms, ‘the enduring problem’ that may be better understood in terms of five constructs. Three of the typical answers belong to ‘that median type in which both Christ and culture are distinguished and affirmed’, whereas the other two are polar opposites, emphasising...
either ‘the opposition between Christ and culture’ or ‘a fundamental agreement between Christ and culture’. We shall, at this point, summarise Niebuhr’s typologies and list some of the main examples that he cites, acknowledging that it is impossible to do so without employing much of his language in the next five paragraphs.

The first option
Niebuhr claims that history is well supplied with examples of anti-cultural, non-conforming, radical, exclusive Christianity. Clement of Rome and Tertullian are first century examples. Later ones include some early monastics, Protestant sects, Leo Tolstoy and many others. Mennonites and Jehovah’s Witnesses are two of the more visible examples of the twentieth century. Such groups emphasise portions of the Gospel of Matthew, the First Epistle of John and the Revelation of St John. They stress a long series of contrasts: Christ and Caesar, church and state, divine revelation and human reason, light and darkness, God’s will versus man’s will, the children of God and outside society, spiritual and material, eternal and temporal, Christian and secular, God’s work in Christ versus human work in culture, and soul-regeneration over against social reform. For such believers, history is the story of a rising church or Christian culture and a dying pagan civilisation. Their religion presents an inseparable relation between the three themes of love: God’s love for human beings, their love for God and their love for each other. Hence, the believer’s loyalty is directed entirely to the new order, the new society and its Lord, without concern for transitory culture. Niebuhr describes and illustrates this stance cogently in his chapter entitled ‘Christ against culture’.

The second option
An opposite answer is given by the ‘one-born’ and ‘healthy-minded’ harmonisers of Christ and culture. Cultural Protestantism accommodates Christ to culture while selecting from culture what conforms most readily to Christ. Such Christians interpret the New Testament as relevant to the there-and-then and to the here-and-now, in that it agrees with the interests and needs of the time. Judaizers, Nazarenes and Ebionites sought to maintain loyalty to Jesus Christ without abandoning any important part of current Jewish tradition, or giving up the special messianic hopes of Israel. The Christian Gnostics also exemplified this stance, as did Lactantius and others who sought to amalgamate Hellenistic culture and Christianity in the time of Constantine. Peter Abelard reduced the faith to what conformed to the best in his culture; John Locke stressed the reasonableness of Christianity. Gottfried Leibnitz and Immanuel Kant opted for religion within the limits of reason; Thomas Jefferson, Friedrich Schleiermacher, Albrecht Ritschl and Walter Rauschenbusch also stood within this stream. The harmonisers seek to reconcile the gospel with the science and philosophy of their time; they make Christianity a religious and philosophic system, emphasising Jesus as spiritual saviour rather than Lord of life, and the church as an association of the enlightened. They offer, rather than the exacting demands of certain biblical passages, kindly and liberal guidance for good people who want to do right. This answer assumes that the tension that exists between church and world is due to the church’s misunderstanding of Christ. The radical Christian charges this group with reducing the kingdom of Christ to a fellowship of human beings. Yet the ‘Christ of Culture’ position, to use Niebuhr’s third chapter title, claims that it is recommending Christianity to an unbelieving society and presenting reason as the ‘highway’ to God and salvation.

The third option
According to Niebuhr, the great majority of Christians have ‘refused to take either the position of the anti-cultural radicals or that of the accommodators of Christ and culture’. The majority movement in Christianity includes three principal strands: synthesists, dualists and conversionists. The synthesists adopt a ‘both-and’ rather than an ‘either-or’ stance, attempting to combine appreciation of culture with loyalty to Christ, while at the same time placing Christ above culture. Passages in the Gospel of Matthew and the Epistle of Paul the Apostle to the Romans are crucial to this answer which was articulated by the apologists of the second century and many others, such as Justin Martyr, Clement of Alexandria, Thomas Aquinas, Joseph Butler, and Pope Leo XIII. The synthesist’s understanding of Christ separates him from the cultural believer, whereas his appreciation of cultures distances him from the radical Christian. He believes that Christ is far above culture; indeed, there is a gulf between them, even though culture may be a preliminary training for the work of the Lord. Such a believer combines, without confusing, philosophy and theology, state and church, civic and Christian virtues, natural and divine laws. This ‘Christ above culture’ synthesis is not easily attained or maintained, being subject to obvious tensions.

The fourth option
Another ‘Christian of the centre’, the dualist, lives in conflict or tension between two magnetic poles, and in the presence of one great issue: the conflict between God and man due to the righteousness of
God and the unrighteousness of fallen humanity. The dualist believes that in the cross of Christ man’s work has been judged, and by Christ’s resurrection the new life has been introduced into history. Hence, man now lives between time and eternity, between wrath and mercy, between culture and Christ, with no solution to this dilemma before death. Niebuhr finds many examples of this stance: Paul the Apostle in the first century, Marcion in the second century, Augustine of Hippo, Martin Luther, Roger Williams, Soren Kierkegaard, Ernst Troeltsch, Reinhold Niebuhr and others. Yet the complexity of ‘the enduring problem’ is such that some of these individuals combine more than one option. Hence, for Augustine the conversionist note is more characteristic than the dualist stance; Troeltsch does not always hold a tension between Christ and culture. The dualist fixes his gaze on the depths and heights of wickedness and goodness as revealed in the cross of Christ. His theorising begins with the miracle of God’s grace, which forgives men without merit on their part. He believes grace is in God, sin is in man, and man is in sin. He affirms that before the holiness of God there are no significant differences, rather, everything that is creaturely is depraved. For the dualist, therefore, all culture is injected with that godlessness which is the essence of sin. He knows he belongs to a culture and cannot escape from it, yet he believes God sustains him in it and by it. Hence, adopting the ‘Christ and culture in paradox’ stance, the true dualist lives in the tension between wrath and mercy.

The fifth option

Niebuhr’s last answer is that given by the conversionists who find their chief biblical foundation in the Gospel of John. This stance may be illustrated by the Letter of Diognetus written late in the second century; Augustine’s City of God; John Calvin’s desire for the permeation of all life by the Gospel, with the state as God’s minister. There is also John Wesley’s emphasis upon Christ as the transformer of life and F. D. Maurice’s notion that Christ is Lord of mankind whether men believe this or not. Of these and others, Jonathan Edwards is ‘the most consistent conversionist’. The conversionist approach emphasises Christ as redeemer and takes a positive and hopeful attitude toward culture. It makes creation a major theme, declaring that man lives in a created order. It further declares that the fall has warped, twisted, and misdirected man’s good nature. Hence it stresses the redemptive work of God in the incarnation of the Son; affirms that God in Christ has entered a human culture that has never been without his ordering action and believes that history is a dramatic interaction between God and man. Therefore, the conversionist understanding asserts that all things are possible to God. It sees history as the story of God’s mighty deeds and man’s response to them, and it presents to the world ‘Christ the transformer of culture’.

Niebuhr’s description of the ‘many-sided debate’ that engages ‘historians and theologians, statesmen and churchmen, Catholics and Protestants, Christians and anti-Christians’ provides a useful framework within which to consider the historic role and potential influence of Christianity in Australia.

Conclusion

Twenty-first-century Australian Christians exemplify the variety aptly described by Niebuhr, and well explored by Philip Hughes and others. Stuart Piggion and his colleagues also recognise this diversity within the papers read at Australia’s first Christian Heritage National Forum. While the above exploration of the ‘confused’ and ‘many-sided debate about the relations of Christianity and civilization’ identifies problems that are likely to arise as Piggion’s ideal is implemented, it is also intended as a mirror for those Christians who want to see themselves in terms of historic Christianity. It must be emphasised, again, that this article is merely the first of three that are directed toward what it is hoped may become a lively, ongoing conversation. It is also expected that, in addition, educators will grasp the opportunity to discuss the dynamic impact that Christian education has exerted and can continue to exert upon Australian society. For this writer, the need remains to more adequately define the nature of Australian Christianity before asking how a biblical investigation may inform the ongoing dialogue.

Endnotes

2. Cf. Stuart Piggion, editor, Shaping the Good Society in Australia: Australia’s Christian Heritage: Its Importance in Our Past and its Relevance for our Future (Macquarie Centre: Australia’s Christian Heritage Forum, 2006). Associate Professor Stuart Piggion is Director of the Centre for the History of Christian Thought and Experience at Macquarie University.
3. The symposium was linked to the Church’s commemoration of its first hundred years in the South Pacific region and illustrates the vision of Walter R.L. Scrugg as a president ‘for whom history is more than a discipline’. The sixteen lectures were edited by Arthur J. Ferch and published as Symposium on Adventist History in the South Pacific, 1885-1918 (Wahroonga: South Pacific Division of Seventh-day Adventists, 1986). Subsequently, Ferch and Noel P. Clapham edited two related volumes.
4. Note the way in which this concept informed the publications that were stimulated by Australia’s bicentennial, such as Ian Gilman, Many Faiths One Nation: A Guide to the Major Faiths and Denominations in Australia (Sydney: Collins, 1988).
Christian, Being Australian; Contemporary Christianity Down Under (Homebush West, Sydney: Lancer, 1988).

6 It should be noted that population growth was not necessarily steady or uniform. During the gold rushes there were sudden and massive influxes of newcomers that skewed the ‘average’.

7 Patrick McCaughey, Australian Painters of the Heidelberg School: The Jack Manton Collection (Melbourne, 1979), 16.


Abstract
STORM Company is a short-term mission adventure. It is based on five foundations which present a radical example of Christianity in action. STORM Co teams are trained for service. They enter a community and ask for a place to stay and a job to do. Team members volunteer their own time and finance; they commit to strict discipline and hard work. Their goal is to live out the legacy of service modelled by Jesus Christ. By the Holy Spirit, but when they looked around they noticed that they were doing nothing practical to express their faith. Their chaplain felt the same. He called them ‘fat Christians; fed to the point of bursting with Christianity, but not ‘doing’ anything to make it real.

So together they came up with a simple concept—to go to a small town somewhere in the outback and see what they could do to help out, practically and spiritually. Over the phone the pastor, in Moree (NSW), offered a place to stay. So they saved up some money, prepared some games, drama and music, loaded up the cars and drove west, calling themselves the ‘SWAMP team’ (Students with a Mission and Purpose). The Swamp team spent ten busy days meeting adults and children, cooking, performing and helping people in whatever they could find to do. They camped

The story
In 1992, a group of senior high school students from Brisbane, Australia, spoke of ‘doing something’ with their faith. They didn’t have enough money or time to prepare for an overseas mission trip, but they wanted to do something adventurous for God. They were dedicated to serving Jesus and inspired by the Holy Spirit, but when they looked around they noticed that they were doing nothing practical to express their faith. Their chaplain felt the same. He called them ‘fat Christians; fed to the point of bursting with Christianity, but not ‘doing’ anything to make it real.

So together they came up with a simple concept—to go to a small town somewhere in the outback and see what they could do to help out, practically and spiritually. Over the phone the pastor, in Moree (NSW), offered a place to stay. So they saved up some money, prepared some games, drama and music, loaded up the cars and drove west, calling themselves the ‘SWAMP team’ (Students with a Mission and Purpose). The Swamp team spent ten busy days meeting adults and children, cooking, performing and helping people in whatever they could find to do. They camped

STORM Co: An introduction to adventure in service

Jerry Unser
Project Director, Adventist Development and Relief Agency; Counsellor, Emmanuel College, Gold Coast, Qld.

[Photo: Mark Craig]
The scriptural basis for the Adventist message is found in Revelation 14:6-12 (The messages of the three angels). The message of the first angel (14:6) is to take the Gospel to the world. This is the first work of Christendom, to proclaim the message of Jesus by living it. Jesus himself gave the illustration of service to others as the identifying feature of his Kingdom. (See Matthew 25:31-45)

Christians are called to evangelism, but there must be a planting before there is a harvest. STORM Co is the initiative of a church prepared to reach beyond the ‘castle walls’ in order to build bridges to those around. It is a ‘seed planting’ ministry. It is the building of relationships through which the very life of Jesus can be seen in action.

STORM Co will build bridges and plant seeds. The harvest can follow, but it will be the work of another. STORM Co must retain an attitude of service without agenda, expectation, or limits. It is the unconditional display of the gospel of Jesus in action.

Rain in the storm
The name ‘Storm’ was chosen as a symbol of that which brings relief to a parched land. Storm clouds carry rain that refreshes communities and produces new life. Everyone knows when a storm arrives.

It is the intention of the STORM Co team to be like a refreshing storm.

Scripturally, rain represents the Holy Spirit, which is God’s presence in people. God has rained down his love to all people and the act of the Christian is to be that rain to others (See Deut. 32:1-2, Isa. 45:8). God will use whatever it takes to communicate his word to this earth. STORM Co is to be used to plant the seed, and to bring refreshing rain that will allow it to grow (See Isa. 55:10-11).

When a trip fulfills the symbolism represented in the name ‘STORM’, the result is a true ‘Adventure in Service’.

Mission statement
STORM Co’s mission is to send teams of trained young people to work for, learn from, and encourage individual communities, sharing God’s love by building bridges to all peoples through an adventure, in service to others.

The fulfillment of the mission statement is dependent upon five foundations. Each foundation statement expresses a characteristic of a STORM Co team, which is essential to a STORM Co mission trip.

In isolation, each foundation is nothing new or surprising. These principles are found in many areas of service. However, combined together, they form a radical approach to mission which challenges traditional religious activity. Furthermore, these principles form the basis for a ‘servant’ model of...
Reflections, Impressions & Experiences

leadership, which is inherent in the development of STORM Co teams.

Foundations
1. No agenda—listen

   To listen, really listen to another person, is the foundation of a relationship. We begin to show real love when we can respect another enough to listen to who they are. Then, perhaps, we can offer something that they need.

   STORM Co teams enter a community with the express purpose of building a relationship with that community. A team will go first to listen, and then to serve.

   ‘Pre-trip’ contact and negotiation with the community to determine what they want and need is an essential part of a STORM Co trip. The concept of an adventure in discovering and meeting the needs of others embodies the essence of STORM Company. This means that there can be no ‘hidden agenda’. We cannot prescribe a program or a service project that will meet the needs of all people. Each community is different, as is each individual. A STORM Co team is committed to seek and understand the unique history, culture, and needs of a community. They then match the skills and resources of the team to the identified needs, in order to serve.

   This attitude is modelled after the ministry of Jesus who followed the guidance of His Heavenly Father. As he travelled, Jesus would arrive at a place and first meet the needs of the people, whatever they were.

   The Apostle John tells of two encounters—one with Nicodemus and one with the Woman at the Well (John 3; 4). He treated each person differently, because he knew each particular need.

   Because a team enters a community with this attitude of ‘no agenda’, and endeavours to reach all areas of the community, the STORM Co trip becomes an adventure. By its very nature, the trip cannot be predictable. This attitude of being receptive to the needs of the community and to the direction of God sets this adventure apart as a radical mission concept.

2. No expectations—serve

   STORM Co teams commit to service. They will work for a community and learn from them. Their goal is to serve without compensation. When a team serves the community, they show that they are serious about their mission. A STORM Co team will work for a community using whatever gifts and resources they have available.

   A STORM Co team will also seek to learn from the community. The cultural exchange and life experience that team members gain for themselves is a valuable part of the STORM Co trip. By learning to listen and serve, team members learn some of the most valuable secrets of life. Jesus turned the world upside down with His radical concept of servant leadership. The service of a STORM Co team in the community is an attempt to follow in His footsteps.

   ‘No expectations’ also means that teams do not seek to ‘convert’ or to gain repayment for any STORM Co activity. This radical concept sets STORM Co apart from many church or religious endeavours. The concept of ‘no expectations’ may seem difficult for us as Christians who have been given a commission to ‘go and make disciples of all nations, baptising them ...’ (Matt. 28:19-20).

   However, STORM Co teams live that commission.

   [Photography: Mark Craig]
by pointing people to Christian resources already available in their community.

In STORM Co, all evangelism is on a personal level. Team members are encouraged to share their testimony, and people who experience a conversion are guided toward a community church family of their choice—not the STORM Co team, or one specific denomination over another.

3. No walls—encourage
Jesus cautioned us about creating ‘walls’ by judging the experience of another follower of Christ. We must remain true to the message given to us, and at the same time support our brothers and sisters in faith.

‘Every kingdom divided against itself will be ruined, and every city or household divided against itself will not stand’ (Matthew 12:25).

STORM Co teams are committed to support Christianity above denominational barriers. They have a mandate to encourage others in their walk with God.

Also, because STORM Co is a bridge building ministry, a vital goal of the team is to support the work of all Christian groups within the community. It is the responsibility of the STORM Co team to visit these groups in order to encourage them in their ministry. STORM Co will seek to find common ground with all those who acknowledge the Lordship of Jesus Christ. There must be no ‘dividing walls’ for a STORM Co team that intends to be spiritual refreshment to the community it visits.

Encouragement to local Christians
This is perhaps one of the more ‘radical’ aspects of STORM Co. There will almost always be a group of Christians within a community, and often there are many denominations. The commitment to encourage local Christians has more value to the STORM Co trip than simply a ‘pat on the back’ for the local churches. The first question many in the community will ask (even if it is only in their minds) is: ‘What do they want?’ If STORM Co is identified with a particular local church, then regardless of the true intent of the team, the question will already be answered in many minds. It is important that a STORM Co team be committed to building bridges to the whole community. When the ‘unchurched’ members of the community see that the team can rise above the passionate boundaries of denomination, then respect is gained in the wider community.

When a STORM Co team enters a community, one of the significant impacts is that team members become ‘role models’ for the children and youth of the community. When team members are seen supporting and participating in the activities of local church groups, then the image of that church group tends to be raised in the minds of the children, and there is potential for more participation.

Just a note of caution about ‘imposing’ upon a church group: Remember that denominational barriers can be very sensitive issues. Ask permission before you visit a meeting, and treat any invitation to participate as a privilege. The worship of Christian groups must be treated with the utmost respect.

4. No limits—return
STORM Co teams maintain a relationship with the community. Their goal is to return and be an outgoing, positive influence in the community. A STORM Co trip is not a ‘once only’ mission. The long-term success of STORM Co comes when a community recognises that a team is interested in, and committed to service by returning for another program the following year. A STORM Co team will not put a ‘limit’ on the friendship they build with that town, or on the potential of the Holy Spirit to bring about change in that place.

No one can guarantee what will happen in the future, and it would be wrong to build expectations that a team may not be able to fulfill. But, it is important for each team to ‘build bridges’ to as many areas of the community as possible, and to seek to maintain those bridges in the future.

Return trips to the community
The goal of building a relationship will begin on the very first exploratory visit to the community, but it won’t end with the first trip. Often towns are ‘overwhelmed’ by the first STORM Co team visit, but it is on the return trips and the consistent, on-going service attitude toward the town, that real friendships begin to form. This is the real value of STORM Co. To ‘win’ an entire community through unconditional service and ‘love’ in the most practical sense—this is a noble ambition, and one, which can be achieved only with persistent determination.

Once relationships are built, the community will remember the team and the impression that they made. Each trip will build upon the previous one, and team members who return will be amazed at the difference that those short periods of time spent in a community will make.

I have been amazed at the response of children when we return to a community! The most vivid example for me was in an aboriginal community in western Queensland. After leading initial trips to this town, I had been away from the town for more than two years; a friend and I dropped in on the community for a brief visit. It was night-time, and I had a different car than before. We drove once...
Refl ections, Impressions & Experiences

Before we could get out of the car, there were half a dozen children waiting to ask us where the rest of the team was! They knew my name and wanted a STORM Co team back in town. I was astounded by their affection and the fond memories they had of previous teams’ visits.

5. No fear—worship
STORM Co teams are built through worship. They will not be afraid to stand for their God as they serve in the Community. ‘Therefore, I urge you, brothers, in view of God’s mercy, to offer your bodies as living sacrifices, holy and pleasing to God—this is your spiritual act of worship’ (Romans 12:1).

A STORM Co team is not afraid to declare its stand for the cause of Jesus Christ. The team will retain its focus through daily worship together—a time of dedication, commitment, team building and encouragement that provides the base for all that happens on a trip. When the foundation of a team is ‘established’ in worship, the action of the team becomes an extension of that relationship with God.

On every STORM Co trip, the Evil One will attack. Hardships, danger and conflict are to be expected. By its nature, the STORM Co trip will make contact with both the ‘best’ and the ‘worst’ areas of a community. This association exposes the team to every force found there. When those troublesome times come, the battle must be won by a team joined together in the worship of their God. There is no need to fear the trouble that Satan may cause. If God is for us, then who can be against us?

Team worship
STORM Co teams have their foundation and survival in group worship. It is often a powerful time when change takes place within the team. This time must not be compromised or rushed for any reason. The preparation of team worships should be thorough and taken as a privilege and serious responsibility. Evening worship is the opportunity for the team to be confronted with the reality of God’s power and presence for that particular time and place. It is crucial to team success.

In concluding this introduction to service adventure, here is some valuable parting advice: the success of STORM Co is not the ‘program’, or the technology, or the skills of the team. Success is embedded in an attitude; that radical attitude of Jesus that first seeks to understand a need, and then unselfishly gives in order to meet the need.

On a trip I took last year I heard a comment from a team member that impressed me. He said, ‘I can’t believe that these kids watch everything I do. Imagine what our lives would be like if we lived with this intensity every day!’

Endnote
* The Adventist Development and Relief Agency (ADRA) is an independent agency established for the specific purposes of individual and community development, as well as disaster relief in the developing world. As an internationally recognised non-government organisation, ADRA fulfills this primary directive of its charter without regard to ethnic, political, or religious association.

Postscript
Readers who wish to know more about STORM Co, and perhaps join in the service adventure, may read of the program’s impact on community and church, and learn how to plan, organise, and implement a STORM Co service adventure in the author’s book: Unser, K. (2001) STORM Co guide book—adventure in service. Wahroonga, NSW: South Pacific Division of the SDA Church.
From theory to the real thing
For years I’ve been a supporter of STORM Co—from the beginning, in fact. In my former life as a church editor I published many reports and believe the concept of encouraging young people to serve in selfless ways is brilliant. The glamour of going to out-of-the-way towns and communities simply adds to the appeal.

My support, though, has been based on theory, until now. For the first time, this July, I saw STORM Co in action, in northern NSW—at Moree, Gwabegar and Coonabarabran.

I returned more impressed with the actuality than the theory. Almost 100 left the Avondale College campus and church for six areas ranging from the aboriginal community at Goodooga, the other side of Lightning Ridge, to the Sydney suburb of Macquarie Fields. Most were Avondale College students, with a mix of others from the church and surrounding community. The Coonabarabran trip was organised by the College Church.

STORM Co began in 1993 and its founder, Jerry Unser, is still involved. He has seen it grow into a national and in several places a worldwide movement. A record 22 teams will be involved in northern NSW this year.

‘This year my big push is to tell teams to under-program and over-engage,’ he says. He wants the teams to do all the preparation before they leave, ‘and then engage with as many aspects of the community as they can. I think the key is to build bridges through relationships. A by-product is the team dynamics that develop when individuals have a purpose and are doing some practical Christianity.’

So, this is STORM Co
A typical STORM Co involves a Kids Club in the mornings and community service activities in the afternoon. The Kids Club is aimed mainly at primary school aged children, but I noticed that some older children also attended, often with younger brothers or sisters.

The service activities vary with the location and, depending on input from the local community and council, can change year by year. Usually it will involve cleaning up public parks, helping elderly people with their yards, or services the councils direct them in—last year in Bourke that included painting a mural.

The Kids Clubs involve games and crafts. There’s usually face painting and group activities. A ‘learning time’ tends to be about character development, often with puppets. And there’s singing; that’s the strongest Christian element of the program.

No attempt is made to hide the Christian underpinnings of STORM Co, but it’s muted and presented in such a way that there have been no complaints from communities, at least none that I hear about. I’m told that, at first, any community is suspicious about what it’s all about, but in the end, the overall service emphasis for kids and the community wins out. Timing STORM Co programs to coincide with school holidays also proves helpful to parents.

The children really enjoy the Kids Clubs. Excitement fills the halls where they meet and there’s lots of noise during activities. But it quiets down for instructions, the next activity or for a presentation—with a little help from some of the STORM Co team, of course.

Bonds that grow between the team members (usually aged about 17 to 25 years) and the children become very evident. In one place I discovered a girl with the name of her favourite team member face-painted on her forehead. She wanted to be her friend. At Coonabarabran one team member was described as always having ‘twenty kids hanging off her.’

What I see is evidence of admiration and even respect from the children for these older but still young people. It may only be a few days but there’s a sense that the impact is going to last long after the STORM Co program is finished. Some of the kids want to be a part of STORM Co ‘when they grow up.’

As for the team members, I find them in a state of semi-exhaustion after a few days. The basic accommodation—that’s usually mattresses strewn on a church hall floor, doesn’t help. However, there’s a sense of excitement. The conversation readily turns to the children they’re working with—the problems they face, the joys they’ve discovered and the frustrations. There’s talk about a problem child, an incident, or the sense of satisfaction in helping out an elderly couple. There’s a focus on what is happening.

Being together in something that’s bigger than them is a bonding influence. There are open signs of team members supporting each other. And there’s

“The key is to build bridges through relationships”
Reflections, Impressions & Experiences

always something different happening. Trying to find a television set for the State of Origin game that week, was on the minds of several. I sensed that teams were gaining more from the experience than they were giving. Actually several told me they were hooked on STORM Co programs for that reason.

What’s impressive is that STORM Co leadership from the college and church is made up from among the team members. There is no experienced senior person telling them what to do. There is training before they leave home base, but that tends to be in things like clowning, puppetry, craft and developing practical skills for the tasks they may be involved in. Even the bus drivers were found among the groups I visited. For those leaving from the Avondale campus there’s usually a couple asked to upgrade their driver’s license so they can drive the bus for their group.

Some impacts of STORM Co
I spent most of my time with the teams, but I did talk to a few people from the communities I visited. They were positive about what was happening. I met Kevin at Gwabegar (pronounced with a silent ‘G’). The town itself is small with maybe 150 residents. Kevin is probably in his 60s and he’s an open STORM Co enthusiast. In fact, he’s extended his house, installed bedding for the teams that visit and helps provide food. The Gwabegar STORM Co team has the most comfortable accommodation and perhaps the strongest local support of any of the teams. A couple of years ago Kevin received an Australia Day honour for community services. I’m told he was so impressed with what the first STORM Co teams did that he felt he could do something in his community as well. He reckons that the annual STORM Co visit is the best thing that happens in Gwabegar. This is the eighth year STORM Co has come to town and the day after my visit a community barbecue was held.

‘The only time the community gets together as a whole is when STORM Co visits,’ says Kevin. ‘This is such a good thing for our town.’ Loreena Butcher is a veteran STORM Co participant. I met her on the job at Coonabarabran. This is her sixth STORM Co. She’s also been on short-term mission trips to India and Thailand. Her passion, though, is for STORM Co.

‘When you go to those overseas kinds of places, it’s big, grand, and awesome with huge returns and rewards,’ she says. ‘It’s easy to fly overseas and it’s unreal. On the other hand, when you go to a small town in Australia, it’s almost as if there is less reward. But it’s greater, because it’s at home. It can be harder at home, though.’

She describes the satisfaction in these terms: ‘You come back from a week of STORM Co absolutely trashed, tired and grumpy, but you’ve developed such a close relationship with those you worked with. You’ve seen them do things they’ve never done before. It’s cool to see them step up when things have to be done.’

Then there’s the association with the children. That’s a reward in itself.

‘In fact, we get a greater reward than our impact on them. You see school kids who you think are complete morons. Then you see them step up. It’s great!’

‘There’s also the spiritual aspect, where we go into a community and help the kids to understand a little about Jesus. And we end up having them sing songs about Jesus to us. In the way they catch on to this, they teach us a whole lot about God.’

To those who are thinking of trying STORM Co she has this message: ‘Do it! Do it now!’

‘So many people I know say, ‘It isn’t my thing.’ But they won’t know until they’ve tried it. Everyone I know who has done it has enjoyed it.’

In case you missed the message, she says it again, ‘Do it! Do it now!’

Be warned, though. Loreena’s story shows that STORM Co can be addictive.

---

SPD travel
Specialising in biblical and archaeological tours that can be tailored to suit your special interest needs.

We can assist you with all your personal, educational, and church travel requirements including Steps of Paul Cruises, airfares, insurance, car hire, accommodation, and school group travel.

Call us for brochures or information on all your local and overseas needs.

| t  | 1300 309 831 |
| f  | 02 9847 3202 |
| e  | spdtravel@adventist.org.au |
| w  | www.adventist.org.au/travel |
Teens tank up with spiritual ‘fuel’

Elia Krevar
Chaplain, Central Coast Adventist School, Erina, NSW

‘It’s not about the numbers; it’s about spending this time together to connect with God. Make it your small group, make it your community. Seek God and you will find Him tonight.’

As the band gets up to play the context has already been set. This isn’t a show. It’s not about the lights, the PA, the food or even the girls. There’s something deeper; something worth searching for.

Three and a half years ago, the staff at Central Coast Adventist School (CCAS) had a dream to provide something extra for the school students that would give them a chance to connect with God. Friday nights are known for their parties on the NSW Central Coast, as is the case in most parts of Australia. The Central Coast however, seems particularly prone to the effects of binge drinking, underage sex and teenagers who generally have little parental input into how they spend their time on weekends. It was within this context that the dream was cast to provide an alternative for teens who didn’t want to get caught up in the whole party scene but, instead, wanted to seek an encounter with God.

The surprising thing to note about the FUEL programs that run at CCAS is that the majority of students who attend do not come from strong Christian homes. These students have made their own decision, without any prompting from their parents, to step away from the scene their friends are caught up in and spend their Friday nights at FUEL.

There is little difference between the actual program format for FUEL and that of many other church programs. There’s a welcome, praise and worship music, a talk, and maybe a video.

But what does set the program apart is that it’s run by teens for teens. The setting up and packing up of equipment, the music, and often even the talk all happen because of the teens that help out. The ‘older’ staff, usually in their mid-twenties to early thirties, believe strongly in the idea of mentoring these teenagers to be leaders amongst their peers. The philosophy is that a friend, used by the Holy Spirit, may lead you into a relationship with Christ even more powerfully than perhaps an adult.

Although the numbers may not be ‘going through the roof’ and finances mightn’t be ‘flowing over’, FUEL is definitely developing its own spiritual culture. And for the teens who make FUEL their ‘church,’ they wouldn’t go without it. This isn’t the church of tomorrow making a stand for the future; it’s the church of today making a stand for the teens of today. TEACH
Reflections, Impressions & Experiences

‘You walk away each day feeling content’

Melissa Petersen
Primary Teacher, Parkside Christian SDA School, Napier, NZ

Introduction

Three and a half years ago I decided to leave the beautiful land ‘Down Under’ to experience the ‘Land of the Long White Cloud’, otherwise known as New Zealand. I had previously visited the beautiful South Island (for prac-teaching) and had fallen in love with the country, but my appointment was to the North Island and I had no idea what to expect as I headed to Napier.

I arrived in New Zealand together with Hayden, my husband of only two days. We’d bought a van from friends before arriving and honeymooned around New Zealand for a couple of weeks, before heading to Napier. When we arrived, flats were in short supply. So we lived in our van for awhile waiting for God to provide. And He did. A landlord chose us above many other prospective tenants because I was working in a Christian school. God has provided many times since. After only six months our van broke down beyond repair. You can imagine our surprise when a Christian teacher I’d met from another school came around with her husband and said, ‘We’ve been impressed to give you guys a car, as we have two’. So, we now have a 1995 Nissan Pulsar that God provided. He has also helped us find a home to purchase and has answered so many other prayers.

It’s not easy leaving your comfort zone and venturing into a job you’ve never done before, and in another country. But there’s also nothing more wonderful than watching God take you under his wing and show you his loving care and protection. Over the years God has opened my eyes and helped me see that teaching is not just a job; it’s an opportunity to share Jesus with His precious little children. When you go into class with that outlook you walk away each day feeling content with what your children are learning. That’s the beauty of teaching in an Adventist school.

If you haven’t guessed already, my passion is for God and for seeing his children receive the best Christian education they possibly can. When I go to school each day I want to know that my children are going to enjoy learning about Jesus and will want to know Him more and more. I like to teach my Bible lessons in an exciting place that the students will enjoy; a place that provides for a special time which they can spend with their Heavenly Father. This year that place is our ‘Prayer Castle’. We all go inside for worship each morning. The castle pulls out from the wall for worship time and is then pushed back up against the wall so we can carry on with other learning activities of the day. The children know that place is special, and more importantly they are learning that our time with God is special.

The last few years have been a huge learning curve for me. I have been blessed with real Christ-like people who have stood beside me and uplifted me as a teacher, even when I felt I was making some mistakes. I’ve learned that if you’re willing to let God use you, He will truly bless you and change your life forever. In turn, you’ll change the lives of those you teach, and many more. I’m learning and experiencing the truth of Proverbs 3:5-6:

‘Trust in the Lord with all your heart and lean not on your own understanding; in all your ways acknowledge Him and He will make your paths straight.’

Now we have a 1995 Nissan Pulsar that God provided.

1 Mrs Petersen and her class.

[Photography: Petersen collection]
From: Janita Bond & Michelle Long [mailto:janitamisha@hotmail.com]
Sent: Wednesday, 10 January 2007, 2:35 PM
Subject: Arrived

Dear All,

This is just a little message to say, yes, we have finally started our Thailand adventure! Both Janita and I arrived safely in Bangkok on Sunday night. We will be picking up our visas and then travel on to Mae Sot, where Helen Hall will pick us up and take us to our new home in Mae Ramat.

If all works out OK, we will possibly start teaching on Monday! It’s all so very soon, but it will be good to get started.

Note: Above is our new email address.

We hope that your new year has started well; a prayer for you all.

Love,
Janita and Michelle

From: Janita Bond & Michelle Long [mailto:janitamisha@hotmail.com]
Sent: Sunday, 18 February 2007, 2:05 PM
Subject: Tak visit

Dear Everyone,

It feels like ages since we last wrote. We’ve been busy with school, and travelling. We were fortunate to have a long weekend off, and took the opportunity to travel to Tak province. We stayed in Mae Sot for the night, before hiring a motorbike on Sunday and heading for two beautiful national parks, visiting many waterfalls and enduring steep climbs. By Monday afternoon, we were exhausted!!!

On Tuesday we took it easy, walking through Mae Sot and the border markets (between Thailand and Burma—approx 8km from Mae Sot). There, we purchased some bed rolls (so that we can sleep on the verandah when it gets really hot) and 1kg of cashews. We ate the nuts in four days!!! Carrying the bed rolls on the motorbike was an interesting experience and made us feel like true locals. I think you could see more bedroll than person!!

And hiring the motorbike was a real blessing. It allowed us to travel much further than having to rely on local transport. One day, we were riding along a dirt road to what felt like the middle of nowhere (just jungle), in search for the elusive ‘Natural Rock Bridge’. We ended up not finding it, but had fun trying to get there. The road was quite steep and rutted in one spot, resulting in us stacking the bike. We thought we hadn’t done any damage to the bike, but when Janita returned the bike to the hire company they managed to find enough damage to ask for 500 baht repair costs. This was more than what we had paid for the three days’ hire!! (All ended well though.)

While searching for the Bridge, we walked along a logging track and saw a sight that made our skin crawl! On hearing some rustling on the road-bank, we looked closer to discover thousands of ‘swarming’ spiders (looked like daddy-long legs). They were so thick and crawling over each other that the ground seemed to move. After taking some photos, we gladly continued walking.

Graduation is coming up next weekend, so this week is guaranteed to be busy. We are looking forward to a house full of visitors.

Best wishes, if you who are starting College this year. Make sure you make the most of your time at Avondale. It’s a place for growing and creating wonderful memories.

Praying for you all, and wishing you God’s blessing.

Janita and Michelle

From: Janita Bond & Michelle Long [mailto:janitamisha@hotmail.com]
Sent: Friday 20 April 2007, 6:03 PM
Subject: Chiang Mai Holiday

Dear Everyone,

Howya! It’s about time we emailed an update, as promised. We hope you all had an enjoyable Easter with lots of rest, including chocolate and family time.

We’ve just come back from a one-week holiday in the north of Thailand, enjoying the water festival (Songkran) in Chiang Mai. We were lucky to have K’ Yeh Htoo, one of the girls who help Helen, come with us. To get around we caught local songthaews (taxis), motorbikes, and orange buses. In Thailand,
orange buses rank as the lowest and cheapest way to travel. This means that the condition of the bus can be pretty bad! It also means that the seating capacity of a bus is only limited by the number of passengers that can be squeezed in!! At one stage of the journey to Pai, our 29-seater orange bus carried over 50 people. There were even people hanging out of the bus doors!!

It was great to see different parts of the country. As we travelled further north, the villages became more isolated (some hidden in the valleys below), the roads more winding (one beautiful section follows the Moe river which divides Thailand and Burma), and the hills higher, while traveling 100km took five hours! It’s the dry season now; how beautiful the rainforest must be during the wet season.

Our travels took us to towns and villages, a large cave, and temples with lots of stairs. Because it was Songkran, we got absolutely drenched by people throwing buckets of water, as we travelled past in the open-windowed songthaews. And we laughed our heads off!!

During Songkran, Chiang Mai streets were crowded: Vehicles piled with people and buckets of water; street vendors selling food and blocks of ice; and kids fetching water from the old city moat. Our hope of shopping quickly evaporated, as many of the shops were closed over the festival weekend.

All that excitement is over now, and it’s nice to be home again. There are three more weeks of teaching before the exams, and school equipment has to be organised for the new school year, starting in May.

Until next time,
Janita and Michelle

From: Janita Bond & Michelle Long
[mailto:janitamisha@hotmail.com]
Sent: Friday, 8 June 2007, 6:05 PM
Subject: Thailand update...teaching!!

Dear Everyone,

It has been over a month since we last wrote (oops!!). So much has happened. We’ve been here for five months, officially. The wet season has begun. This means lots of water, mud, humidity, sweat, and mosquitoes. We have started a new fashion! Our school attire includes gumboots, umbrella, and a minimum of two school bags each.

Some students at the local ‘Sevvie’ Thai school have just caught P.F. malaria (the bad one that can go to the brain). Luckily there are many clinics that can detect and treat the different forms of malaria. But unfortunately people still die, particularly in remote mountain villages. Don’t worry, Mae Ramat is not in a bad ‘mozzie’ area and Helen always reminds us to cover up. School started three weeks ago, even though it feels like yesterday. The students have been very excited about having foreign teachers. We are waiting for the novelty to wear off and students’ real personalities to ‘shine’ through.

The school in the refugee camp is so different to what we are used to. Wide age spans exist in classes, as in grade 10. Some students are aged 15 years, while others are 22 years old. There are no programs; bell times are random (whenever the students feel like the period should finish); classes are often without teachers; and when it rains heavily young children can be seen dancing naked under the run-off from the roof. The classroom roof leaks and all teachers need a compulsory degree in yelling to be heard over nearby classes, noisy children, squealing pigs, and the rain. Even though, it’s enjoyable and adds to the overall experience.

We have just started an English youth Sabbath School lesson, and we are praying that a lot of students will attend. Also, we’ve been asked to do a special item for the Sabbath School preliminaries every week.

Rueben Tierney, a new volunteer teacher has joined us from Australia. He wanted to get some experience before going to Avondale to study BSc/BTch. It’s been great having another Aussie around. He is able to connect really well with the boys. They play soccer with the students at Helen’s each Sunday, but we haven’t any girls playing, yet (apart from two). It’s very rare for girls to play sport here. Possibly, participation is more common in the cities than up here in the ‘jungle’.

There are few happenings, apart from school, but we’re excited about the soon arrival of Brad Watson and students from Avondale College. Other visitors’ names are also marked in our diaries for the next months ahead. Anybody is welcome to visit us, at anytime. We love visitors!!

We hope all is well with you. Thanks to those who have emailed and prayed for us, and also Dr Rogers’ phone up-link promoting mission work. Thank you Kerrilyn McPhee, for sending all the yummy, delicacies. We appreciate these little thoughts so much!!! Stay safe and take care.

Love Janita and Michelle

P.S. Sorry for any errors, the keyboard is not working well!! TEACH
BOOK REVIEWS

Teachers behaving badly? Dilemmas for school leaders

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 regretfully 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.

Supporting mathematical thinking

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
Reflections, Impressions & Experiences

- 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.

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.

Teacher well-being

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.
Different people want different things out of life but one of the things that most people want is to be happy.

This, however, can be an elusive thing. In his recent book, *Authentic happiness*, Martin Seligman explores what it takes to really make us happy. He explains that happiness comes in three kinds. At the lowest level is ‘the pleasant life’, where you experience positive emotions. Then there is ‘the engaged life’, which consists of using your greatest character strengths as frequently as possible to obtain gratification in your life. Finally, there is ‘the meaningful life’, in which you use your character strengths in the service of some cause larger than you are. True happiness only occurs when people experience satisfaction at all three levels.

Seligman’s theories easily translate to the workplace. Psychologists have distinguished between three kinds of work: a job, a career and a calling. A job is something you do for nothing other than the pay cheque at the end of the week. A career involves a deeper personal investment in work; you mark your achievements through money and advancement with each promotion bringing you higher prestige. A calling or vocation, on the other hand, is a passionate commitment to work for its own sake, and you find the work fulfilling in its own right. ‘Individuals with a calling see their work as contributing to the greater good, to something larger than they are’, says Seligman.

So how do you find a calling? Seligman suggests that you need to identify your signature strengths, choose work that lets you use them every day, and choose a career in which you are making a substantial contribution to forces greater than yourself.

So how do I do all of that? For some people, choosing teaching as a profession is the answer. Research into why people choose to become teachers has identified that teaching is perceived as a good job with satisfactory pay scales, holidays etc…. Teaching is also seen as a good career. Teachers enjoy working with children and have a feeling that teaching brings high job satisfaction. But there is more to teaching than this. Teachers wish to sustain, share and use their knowledge and they have a profound wish to improve students’ life chances. They see teaching as more than a job, more than a career—it is a calling. Christian teachers see the profession of teaching as a ministry. It is an act of serving young people as they move toward the realization of their mental, physical, emotional, and spiritual potentials.

Over the years, people have chosen teaching as their life’s work because they genuinely believed that they could make a difference to the lives of children and adolescents. As the Christian education sector expands in Australia and throughout the world, there is a great need for more people to enter the Ministry of Teaching. Students in classrooms across the world are waiting for teachers to come and impact their lives.

Are you a senior high school student who is passionate about making a difference in this world but unclear about what direction you should take after school? Do you feel unfulfilled in your present job? Are you looking for something more satisfying than just a job, career or salary? Do you want to follow your heart and live out your purpose? Do you want to take a completely new direction in your life?

If you feel that you fit into one of these categories, you should stop and ask if God is calling you to the Ministry of Teaching.

In recognition of this ministry, Avondale College has created a special website to profile the Ministry of Teaching. It contains the reflections of practising teachers along with information about pathways into the Ministry.

The Ministry of Teaching website is also designed to serve those already working in the Teaching Ministry. An exciting section of the website is the new online journal of Christian education called *TEACH*. The journal contains recent research findings in education, and articles on administration and teaching & professional practice. There are also general interest items including: initiatives such as Storm Co, chaplaincy programs, book reviews, and personal experiences of Christian teachers. Teachers can visit the site to be affirmed in their ministry and to be informed about aspects of their professional practice.

So happiness and life satisfaction may be elusive for some, but teachers’ lives are filled with pleasure, engagement and meaning. Is God calling you to the Ministry of Teaching?

Visit the *Ministry of Teaching* website at [www.ministryofteaching.edu.au](http://www.ministryofteaching.edu.au) **TEACH**