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Proving and Improving: Exploring the links between resilience, behaviour and academic outcomes

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Abstract

A growing body of international research explores the complex relationship between student wellbeing and academic achievement. An increasingly systematic focus on wellbeing is evident in educational policy, school programs, curriculum frameworks and professional standards. It is also reflected in several concepts within the research literature, such as Social and Emotional Learning (SEL) and resilience.

Despite some research limitations, there is evidence to suggest that teachers can improve behaviour and learning through a focus on social and emotional development. Schools also have a duty of care to identify and assist students at risk of harm or disengagement. It is therefore important to build the capacity of school staff to promote wellbeing and to respond to the support needs of students.

Educational researchers and teacher educators can play an important role in strengthening this capacity within the profession, through developing responsive teacher preparation programs and further investigating the links between wellbeing, behaviour and academic achievement. Much of the available research has been conducted overseas, so there is an opportunity and indeed a need to undertake quality research in the Australian context. This paper will provide an overview of selected research and a discussion of some relevant Australian initiatives.

Introduction

Modern educational systems place high expectations on schools and teachers to prepare students comprehensively for their roles in the community. It can be argued that the pressure on educators to focus on students' personal and moral development represents an undue additional burden on professionals who are accountable first and foremost for academic achievement.

Research, policy and practice, however, are converging on a view of student wellbeing and academic success as being highly interrelated and mutually supportive. Student wellbeing and the provision of supportive learning environments have become an integral part of quality teaching. Educators, health professionals, policy makers and researchers are increasingly using collaborative models that operate across multiple sectors, to work toward improved outcomes for children and for the community as a whole.

Partly because multiple professions and philosophical approaches have contributed to this area, there are several related terms that appear in the literature and there is much debate about how best to measure the outcomes of research initiatives and intervention programs. Relevant terms that are worth exploring here include mental health, resilience, social and emotional wellbeing and social and emotional learning.

Mental Health

Mental health has been defined by Australian health ministers as the capacity of individuals and groups to interact with one another and their environments in ways that promote wellbeing, optimal development and use of interpersonal and cognitive abilities, and the achievement of individual and collective goals consistent with justice (Department of Health and Aged Care, 2000). It is a positive capacity (not to be confused with mental illness) that encompasses our thoughts, feelings, behaviour and relationships. The practice of supporting positive mental health, through minimising risk factors and building protective factors, is known as *mental health promotion*.

The terms *mental health problem* and *mental illness* are used to indicate difficulties with mental health, which are often reflected in mood, observable behaviour or interaction with others. They may also be reflected by a decline in academic engagement or achievement. Diagnosis of a mental illness by a health professional is usually based on criteria outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM). In order to warrant an assessment and/or diagnosis, a child or young person must generally display quite marked and persistent symptoms that interfere with their relationships and activities in multiple settings (*eg,* home, school and community).

A mental health problem is a transient or less severe disruption of mental health and wellbeing that does not meet the criteria for an illness. This term recognises that a range of social, emotional, cultural, contextual and physical factors impact upon our wellbeing on a daily basis. A mental health problem is distinct from a mental illness; it can nonetheless cause significant distress if it is not resolved, or increase the risk of developing a disorder. People with a mental health problem may benefit from counselling and support from a professional, particularly when their situation or feelings are complex or persist for some time. Many children experience mental health difficulties that may not meet the diagnostic criteria for illness, but can cause a significant level of distress, challenging behaviour and difficulties for themselves and others.

The Child and Adolescent Component of the Australian National Survey of Mental Health and Wellbeing (Sawyer, Arney and Baghurst *et al*, 2001) estimated that approximately 14% of children aged 4-17 experience mental disorders or significant mental health difficulties. Many of these children will have problems with their peer relationships or learning, potentially displaying withdrawn or anxious behaviour, becoming aggressive, engaging in bullying, or being bullied.

Social and Emotional Wellbeing

The term mental health is closely related to, or for some people synonymous with, the phrase *social and emotional wellbeing*. This term has the advantage of being relatively free of the stigma sometimes associated with mental health, because many people associate mental health with pathology, mental illness and significant psychiatric disturbance.

Social and emotional wellbeing has a positive and holistic connotation and is a favoured term among many Indigenous communities, where it often sits alongside spiritual wellbeing and community wellbeing as being important to the wellness of individuals and groups. It is also the preferred term within many school communities, where it is seen as more inclusive of the full

range of human experiences without pathologising the challenges that all children experience from time to time.

Resilience

Resilience is now a widely-used term in education, although it originated from research into the risk factors associated with poor health and social outcomes, particularly substance use. The move toward resilience heralded a greater focus on strengths-based approaches and the promotion of wellbeing, to balance the predominantly deficit-based paradigm that existed at the time.

Following on from the above ideas of social and emotional wellbeing, resilience can be thought of as the ability to sustain or re-establish that wellbeing, in order to achieve positive outcomes, in the face of challenging circumstances (Luther, Cicchetti and Becker, 2000).

A person's capacity to do this depends in part upon the supports they are able to draw upon in their surrounding environment, as well their mastery of various social and emotional competencies. Benard and others emphasise the importance of caring and connectedness in the environment, communicating high expectations for students and helping them to achieve their goals, and fostering authentic participation of children in the classroom and school (Benard 2004). The term resilience has become a useful bridge between education and mental health promotion.

Social and Emotional Learning

The more recent but increasingly popular term *Social and Emotional Learning* – sometimes represented by the acronym SEL – can be thought of as the process of acquiring particular skills or competencies that contribute to social and emotional wellbeing, or to resilience. Such skills are ideally acquired during children's development through positive interactions in the family and broader community (Centre for Community Child Health, 2007).

However there is a growing body of research to suggest that such skills can also be fostered through explicit curriculum instruction and the use of pedagogies that promote collaboration and communication. This may be particularly beneficial for children who have had limited opportunities to develop such skills outside of the school environment, or who have experienced a disruption in their social and emotional development due to adverse circumstances. Systematic approaches that aim to enhance the development of social and emotional competencies may be referred to as SEL programs.

The Collaborative for Academic Social and Emotional Learning, based at the University of Illinois, has proposed five core social and emotional competencies in school students. These are outlined in the on-line document *Safe and Sound* (retrieved from www.casel.org July 2007) and other publications produced by this group. They can be expressed as:

> *Self-Awareness:* Knowing what we are feeling in the moment; having a realistic assessment of our own abilities and a well-grounded sense of self-confidence.
>
> *Social Awareness:* Understanding what others are feeling; being able to take their perspective; appreciating and interacting positively with diverse groups.
>
> *Self-Management:* Handling our emotions so they facilitate rather than interfere with the task at hand; being conscientious and delaying gratification to pursue goals; persevering in the face of setbacks and frustrations.

Relationship Skills: Handling emotions in relationships effectively; establishing and maintaining healthy and rewarding relationships based on cooperation, resistance to inappropriate social pressure, negotiating solutions to conflict, and seeking help when needed.

Responsible Decision Making: Making decisions based on an accurate consideration of all relevant factors and the likely consequences of alternative courses of action, respecting others and taking responsibility for one's decisions.

Examination of the above framework brings to mind a number of other terms from the health, psychology and educational literature, such as emotional literacy, emotional intelligence, social skills, problem-solving skills and values education. These have variously been linked to social or academic success or to resilience and wellbeing.

Supportive Environments

It should be noted, however, that all of these paradigms – mental health promotion and wellbeing, resilience, social and emotional learning – emphasise the importance of environmental factors in assisting young people to develop competencies, rather than relying solely on direct instruction regarding the above personal skills.

In mental health promotion, this is referred to as a whole school approach (ref stewart wells Barlow etc), on the basis of the health promoting schools model that has been found to support better outcomes in regard to other forms of health promotion (such as drug education). It is comprised of curriculum and learning, school ethos and environment, and connections with the community and ideally involves all members of the school community.

In the resilience literature, Benard (2004) and others emphasise the importance of connectedness, high expectations and authentic participation in the broader school community. The Collaborative for Academic, Social and Emotional Learning also recommends a strong emphasis on creating supportive learning environments that are safe, well-managed, caring and participatory (Safe and Sound, retrieved from www.casel.org July 2007).

Evaluation has shown that programs that are comprehensive in nature – those that focus on instruction as well as the broader environment and involve most members of the school community – are more effective in fostering positive outcomes among students (Wells, Barlow and Stewart-Brown, 2003). The best evidence exists for programs that adopt a whole school approach, with multi-level components and multi-year delivery to students. Programs need to operate over two years or more to clearly show a shift in outcomes.

While acknowledging limitations in the number of replicated studies performed at this stage, Greenberg, Weissberg and O'Brien *et al* (2003) summarise effective programming as incorporating a) classroom instruction in SEL skills and opportunities for self-direction, participation and school or community service; b) fostering of respectful and supportive relationships between students, school staff and parents; and thirdly, c) supporting and rewarding behaviour through systematic school, family and community approaches.

Risk and Protective Factors

A number of risk and protective factors have been identified that relate to the development of mental health difficulties. However it is important to appreciate that there is not a simplistic cause-and-effect relationship between such factors and an individual's personal outcomes. A single risk factor on its own may not have a significant effect on a young child, but the interaction of multiple is likely to more strongly influence development (Centre for Community

Child Health, 2007). However these risks can also be offset to some degree by the presence of protective factors,

Risk factors include: extreme shyness, anxiety, fear, withdrawal and avoidance of new situations; irritability, aggression, non-compliance, novelty-seeking or risk-taking behaviour; experiencing adverse life events such as family breakdown, grief and loss; socio-economic disadvantage; difficult parenting styles, such as lack of supervision or over-control, rejecting or authoritarian parenting; and parents experiencing mental illness or substance abuse (Beitchman, Inglis and Schachter, 1992a; Beitchman, Inglis and Schachter, 1992b; Bernstein, Borchardt and Perwien, 1996; Burns, Andrews and Szabo, 2002; Donovan and Spence, 2000; Holmes, Slaughter and Kashani, 2001; Lagges and Dunn, 2003).

Protective factors include: secure, supportive attachments with family, peers and other adults; a sense of connectedness and belonging *eg* to school or community; a positive outlook in one's expectations of self; hope for the future; independence and autonomy. An individual's skills base is also important, including: communication skills; problem-solving skills; intelligence; positive social skills; and good self-regulation in regard to behaviour and emotions (Beitchman, Inglis and Schachter, 1992a; Beitchman, Inglis and Schachter, 1992b; Durlak and Wells, 1997; Howard and Johnson, 2000; Lynch, Geller and Schmidt, 2004).

External protective factors include having a positive climate (at home and school) with warmth, safety, security, and consistency (firm limits and boundaries). Other external factors include the opportunity to participate in a range of activities and at least one positive adult relationship (school, community, home). It can be seen that many of these protective factors are incorporated in or operationalised through programs based on the above models, such as the whole school approach, resilience and SEL.

Assessing the Evidence

This paper explores the evidence for the impact of social and emotional factors (such as wellbeing, resilience, social and emotional competencies) on students' behaviour, academic achievement and health outcomes. The aim of this publication is to provide an overview of relevant research and to promote dialogue between those from a variety of backgrounds who are interested in optimising outcomes for children and young people in Australia.

Evidence for the possible impact of social and emotional factors on students' behaviour and academic success can be obtained by looking for associations between particular traits or competencies and measures of behaviour or academic success. This provides us with some useful lines of evidence, but it can be difficult to control for a range of other factors that might also have an impact on student outcomes.

Another approach is to implement a specific program or intervention that has been shown to increase certain competencies or to foster more supportive school environments, then examine whether there is an observable change in students' behaviour or test scores. However caution is needed in interpreting the results, as it can be difficult to prove a firm cause-and-effect relationship.

Not all studies have set out primarily to measure academic success or behaviour. Some investigations are more concerned with evidence of social or emotional skill development, or students' connectedness to school as an indicator of wellbeing. Some are most concerned with minimising risk factors or early warning signs of mental health difficulties such as depression or anxiety. Sometimes observations of behaviour and improvement in academic outcomes emerge anecdotally, or are the subject of subsequent studies.

It should also be noted that comparison across such studies can be problematic, particularly as programs vary in the way they are implemented and evaluated. Some initiatives focus primarily

on student instruction, others on the learning environment. Some programs combine multiple domains by working on the curriculum and the environment, as well as links to the community (*eg* those based on the health promoting schools model). There is also a broad range of measures and sub-measures that have been used to examine personal traits or competencies, program impacts and longer-term student outcomes.

Despite these limitations, there is a growing body of international evidence to suggest that programs designed to promote the acquisition of social and emotional competencies within supportive learning environments have an association with improvements in students' behaviour, academic achievement and health outcomes. There is sufficient evidence in this area to suggest that a systematic focus on social and emotional wellbeing in schools is likely to have significant benefits in at least some settings or for certain populations.

Behaviour

Disruptive behaviours cause significant difficulties for children, parents, teachers and schools and increase the risk of a number of negative life outcomes such as a lack of school success, substance use, mental illness and adult anti-social behaviour (Centre for Community Child Health, 2007). Children who show marked shyness and inhibition are less likely to attract the notice of teachers and parents, as these children may be compliant and non-disruptive. However it should be remembered that they may also be at risk of adverse outcomes, particularly later anxiety and depressive disorders (Holmes, Slaughter and Kashani, 2001).

Definitions of and responses to difficult behaviour differ across the human services sector, as noted by Cowling et al (2005) and this issue can cause difficulty at the interface between health and education providers. Systems and regions may vary in how they define circumstances that warrant additional support or intervention, or in their capacity to respond to need even when such criteria are met.

In a mental health service, a presentation of significant mood or behavioural difficulties is usually associated with a diagnosis based on categories outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM). In other settings, including educational settings, these may come under the broader umbrella of Emotional and Behavioural Disorders (EBD), although this term tends to be used to indicate disruptive behaviours rather than depression or anxiety.

The majority of young children who show either withdrawn/anxious behaviour or disruptive behaviour will go on to achieve positive life outcomes (Centre for Community Child Health, 2007). However it can be difficult to distinguish between those who are likely to do well and those who will experience ongoing difficulties.

For teachers and schools, disruptive behaviour may contribute significantly to higher levels of staff stress (Pithers and Soden, 1998) and perhaps to difficulties in teacher retention. Greene, Beszterczey and Katzenstein *et al* (2002) investigated stress reported by staff when teaching primary school aged children with disruptive behaviour. Children with Attention Deficit / Hyperactivity Disorder (ADHD) were perceived as more stressful to teach than their classmates without ADHD. Of the children with ADHD, those whom teachers identified as having significant difficulties with social interaction, opposition and aggressive behaviour were reported as the most difficult to manage.

Many programs designed to promote social and emotional learning have been shown to improve students' competencies in these areas, and to reduce the incidence of disruptive behaviour (Durlak and Wells, 1997; Greenberg *et al*, 2003). A United States evaluation of twenty-five initiatives demonstrated that programs could produce improvements in a number of social and emotional competencies, including several that have been associated with resilience.

Significant changes were also seen in regard to a reduction in school misbehaviours, aggression, violence and truancy (Catalano, Berglund and Ryan *et al*, 2002).

Results can be sustained over the long term, when they involve a comprehensive approach that is delivered over time. An evaluation of the Providing Alternative Thinking Strategies (PATHS) program showed that positive changes were maintained two years after beginning the program, with lower rates of teacher-reported externalising behaviours (Kam, Greenberg and Kusche, 2004). Students participating in the Seattle Social Development Project (SSDP) – which provided training for parents and teachers as well as direct instruction for students – showed positive changes six years after the intervention. Those who had participated were less likely than their peers to be involved in anti-social behaviour at school, violence or substance use (Hawkins, Smith and Catalano, 2001).

Bullying is a particular type of aggressive or anti-social behaviour that can also be addressed by promoting social and emotional learning and wellbeing. The Steps to Respect program is designed to enhance staff awareness and responses, as well as developing prosocial beliefs and skills among students. Evaluation included direct observations of playground behaviour, as well as teacher reporting. Positive changes were evident in terms of improved behaviour, more pro-social beliefs, more positive social interactions and less tolerance of bullying among bystanders (Frey et al, 2005).

Academic Outcomes

Children's learning is not undertaken in isolation, but occurs with and from their peers, in partnership with teachers and with the support of their families (Fleming and Bay, 2001). Some studies suggest a correlation between a positive and supportive learning environment and students' academic outcomes. Such findings may in part be mediated by other factors, such as a reduction of disruptive behaviour and improvements in student engagement (Safe and Sound, retrieved from www.casel.org July 2007).

Rothman and McMillan (2003) conducted an examination of school climate by collecting data from 27,000 Australian Year 9 students across 600 schools. Students completed the Quality of School Life (QSL) questionnaire, a reading comprehension test and a mathematics test. Schools with higher scores on questions suggesting connectedness and positive school climate (such as *my school is a place where I feel happy* and *my school is a place where I feel safe and secure)* also had higher average scores on tests of reading comprehension and mathematics. While it is difficult to confidently assess the impact of other variables – such as socioeconomic status, parenting practices and community culture – this suggests an association between supportive learning environments and academic outcomes.

Other research has focussed more closely on particular social or emotional competencies in students and their potential to impact upon academic success. In early childhood education, children's social and emotional development has long been seen as an integral aspect of academic readiness (Raver and Knitze 2002; Raver 2003). Raver and Knitze (2002) found that children who act in antisocial ways participate less frequently in classroom activities and do more poorly in early schooling than their more emotionally positive, prosocial counterparts.

Malecki and Elliot (2002) conducted a study of 139 students and their teachers, investigating the relationship between social skills and academic competence. Their findings suggested that well-developed social skills were positively correlated with school success. A combined emphasis on both academic achievement and social skills may be particularly helpful in promoting success among disadvantaged students (Becker and Luthar 2002).

There has also been research on the concept of emotional literacy or emotional intelligence, terms which are often used interchangeably in the literature. Some studies suggest a correlation between emotional intelligence and academic outcomes, while others have been

unable to reproduce such findings. The contradictory findings may relate in part to the use of different approaches to the measurement of emotional intelligence. Petrides *et al* (2005) examined correlations between various psychosocial variables and academic achievement among British secondary students. They found that emotional intelligence as a trait – pertaining to personality and disposition rather than to a demonstrated ability to use emotionally-laden information – did have some correlation with academic achievement. However it was primarily a factor among disadvantaged and vulnerable students, suggesting that academic achievement is determined by multiple factors.

Better evidence for a link between social and emotional learning and academic achievement comes from large scale studies in which specific programs have been associated with a change in quantitative measures of academic achievement, such as test scores and grade point averages. Caution must still be exercised when interpreting such data, but those that include comparison with a control group – children who were not exposed to the program – do support a stronger association.

Battistich, Schaps and Wilson (2004) conducted research on the implementation of the Child Development Project (CDP) in the United States. The program was found to have a positive impact on students' school-related attitudes and grade point averages, in comparison with students not participating in the program. This built on previous findings showing that the program strengthened students' sense of community at school, fostered academic motivation and engagement and reduced problem behaviour.

Zins, Bloodworth, Weissberg and Walberg (2004) provide an overview of the potential benefits of SEL programs in regard to academic performance and other positive outcomes. Weissberg and Durlak have recently conducted a meta-analysis of more than 700 programs designed to promote positive youth development, character education, or social and emotional development. One component of this study was the review of 270 school-based SEL interventions. On average, students who completed a SEL program had test scores that were 14% higher than those who had not been involved in a program (www.casel.org retrieved September 2007). Students who had received SEL programming also had significantly better attendance records, displayed less disruptive behaviour, liked school more and were less likely to be disciplined or suspended. Publications based on this analysis are currently being prepared.

Mental Health Outcomes

A number of school-based programs have now demonstrated the potential to improve mental health, as indicated through reductions in symptoms or behaviours indicative of depression, anxiety and substance abuse.

The Child Development Project focussed on cooperative learning and school disciplinary practices and was implemented in 12 United States schools over three years. A further 12 schools were used as control sites. Intervention schools were able to demonstrate reductions in the problematic use of marijuana and alcohol, when the program was implemented comprehensively throughout the school (Battistich, Schaps, Watson, Solomon, & Lewis, 2000).

The Aussie Optimism Program targets middle primary to lower secondary school students and focusses on optimistic thinking and social skills. This is a universal program that aims to promote mental health and wellbeing, while reducing the risk of anxiety and depression. After transition to high school, students who had received the program had fewer symptoms relating to depression and anxiety (by parent report) than a control group. There was also a lower incidence of clinical levels of depression and anxiety (Roberts, Kane and Bishop *et al*, as cited in Roberts, 2006).

The Cool Kids program is a targeted initiative rather than a universal program and aims to help children who report high levels of anxiousness or meet the diagnostic criteria for an anxiety

disorder. Mifsud and Rapee (2005) assessed the effectiveness of the Cool Kids program for anxious children from low socioeconomic backgrounds, using five intervention groups and four control groups. There were significant reductions in anxiety symptoms among those in the intervention groups, in comparison to controls.

Other school-based programs that appear to have been helpful in reducing the risk or occurrence of anxiety and depression in children include the Friends for Life Program (Lowry-Webster et al 2003), the Penn Prevention Program (Jaycox, Reivich, Gillham and Seligman, 1994) and the Coping Koala Program (Dadds, Holland and Laurens *et al,* 1999).

Longer term life outcomes

Few programs have been subjected to rigorous longitudinal evaluation to examine longer term life outcomes. The High Scope Perry Preschool Program commenced in 1962 in the United States, with follow-up data collected over a 35 year period.

This was a randomised controlled trial, in which schools within a disadvantaged area were randomly assigned to the intervention or control group. Teaching staff identified at-risk families within their school for inclusion in the program, which involved both curriculum instruction and home visits. The program was delivered over eight months. The classroom instruction involved play activities that were designed to encourage problem solving, decision making skills and social interaction.

At the age of 40, those who completed the Perry program in preschool showed significant improvements over those from the control sites. These included a higher level of schooling completed, a larger proportion attending university, higher employment rates and salary levels. These people had also had fewer teenage pregnancies, significantly less involvement in criminal behaviour and lower use of social services. Among males in the group, there was also a lower incidence of drug use in relation to marijuana, heroin and sedatives (Schweinhart and Weikart, 1998; Schweinhart, 2004).

It is somewhat uncertain whether such marked long-term results would have been noted if the program had not been working specifically with disadvantaged students. However the results of this initiative are promising and similar research on other populations would be enlightening.

The Roles of Educators

Educators and schools are well placed to help promote mental health and reduce mental health problems and mental illness, by reducing children's risk factors and helping to develop their protective factors and resilience. A number of authors support the idea that an education-based approach to enhancing the social, emotional and academic development of children should be in place for students from preschool through to high school (*eg,* Alvord and Grados, 2005; Farrell and Travers, 2005; Greenberg *et al, 2003;* Koller and Svoboda, 2002).

In order to achieve this, relevant concepts should be introduced in teachers' pre-service education, embedded in policies of systems and individual schools, supported by school leaders and reinforced by ongoing staff professional development.

Teachers can choose to consciously foster a positive school climate with warmth, safety, security and consistency. This can be integrated into classroom teaching approaches and demonstrated through positive, caring relationships in all school activities. A whole-school approach that reaches across school domains and involves staff, students, parents and the community is essential. Schools must also look to the wellbeing of their own staff if they hope to provide a supportive learning environment for students. To build sustainability, the principles of

staff and student wellbeing should be reflected in formal policies (*eg* student welfare and discipline policies) and supported in staff professional development opportunities.

Schools can also provide opportunities for children to participate and experience success by offering a broad range of curriculum opportunities and extracurricular activities. Furthermore, actively consulting with students and giving them responsibility for events and decisions within the school and activities that reach beyond the school will foster authentic participation and links with the community. All school staff can make a commitment to these principles, regardless of the learning area in which they teach or the developmental stage of their students.

Educators also have an opportunity to contribute to wellbeing by integrating activities into their teaching that will promote the development of social skills, emotional literacy, cooperation, problem-solving and communication. The use of a broad range of pedagogical techniques is consistent with high quality teaching and recognises children's diverse perspectives and learning styles. While these principles can be integrated into any learning area, there will be additional opportunities for teachers to explore these issues more explicitly in health, personal development, home-room or pastoral care lessons.

Programs and Resources in Australia

There are now a number of school-based programs available that promote SEL, wellbeing or resilience in Australia. The national MindMatters and KidsMatter initiatives are based on a whole-school approach and accompanied by extensive professional development. Evaluation of MindMatters has shown it can be a powerful catalyst for positive change in schools. KidsMatter operates on a slightly different model and is currently being trialled in 101 schools. Further information on MindMatters and KidsMatter is available from www.curriculum.edu.au/mindmatters.

Several programs and resources have also been designed to reduce the risk of mental health difficulties, to promote resilience through classroom discussion, or as targeted initiatives to assist those children or young people who are already showing early signs of behavioural difficulties or mental disorder. Several of these have been mentioned above but there are also a number of other Australian materials being made available.

Complementing these school-based approaches is the Response Ability initiative, focussing on the pre-service education of teachers in Australia (www.responseability.org). This is implemented by the Hunter Institute of Mental Health in collaboration with universities throughout Australia, with funding from the Australian Government Department of Health and Ageing. The Response Ability team provides free multi-media resources and support to universities to help them integrate mental health and wellbeing more systematically and explicitly into teacher education programs.

A Call to Action

Given the expanding body of evidence that supports the potential for benefits in health, behaviour and academic outcomes – and given the growing availability of quality resources and whole-school programs in Australia – teacher educators need to ensure that their students are well-prepared for their potential involvement in social and emotional wellbeing within school communities.

Key messages for pre-service teachers should include promoting resilience and wellbeing in all students, identifying students experiencing difficulties and helping them to access appropriate counselling or support options, and safeguarding the wellbeing of themselves and colleagues. The Response Ability team is available to provide support for teacher educators wishing to integrate such issues into their current programs.

There is also a need for further research in Australia surrounding these issues, and further collaboration between educators and health professionals. This provides a fertile area of potential research for higher degree candidates and early career researchers in education. A number of education researchers are already engaging actively in this area (eg Graham, 2007; Knight 2007) but there is room for further work to be conducted that takes into account the Australian context and culture.

Several Australian initiatives have been evaluated for their potential to improve school connectedness or reduce mental health difficulties, but there is a need for further examination of these and other programs to see whether they can be rolled out on a broader scale and whether they also support academic improvement. There are a small number of initiatives focussed on SEL programs in the early childhood sector in Australia (eg Farrell and Travers 2005) but there is room for more vigorous consultation and research in this sector.

Research is also required into ways in which schools can support the social and emotional wellbeing of socio-cultural groups in Australia that may have particular needs, such as Indigenous students, children with learning difficulties, gifted and talented students, those with disabilities, students in rural and remote settings, immigrants and refugees.

Teacher educators and researchers are urged to consider ways in which social and emotional wellbeing might be linked with other program elements or research interests. To pick up on the theme of this conference – proving or improving – we must do both with regard to social and emotional wellbeing. We need further evidence in order to understand the links between resilience, behaviour and academic success. We must also seek to continually improve practice in the human services as a means of promoting positive outcomes for children and young people in Australia.

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