THE WINSTON CHURCHILL MEMORIAL TRUST OF AUSTRALIA

Report by Dr. Nola Firth

2009 Churchill Fellow

To Assess Resilience Programs for Children who have Specific Learning Disabilities

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Signed Dated : 21/4/10

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INTRODUCTION

In my capacity as a secondary teacher and then a consultant with Learning Difficulties Australia, I have worked for many years with students who have specific learning disabilities, their parents, teachers, and other professionals. More recently I have undertaken doctoral and postdoctoral research into the development of school-based resilience programs for these young people. I am also a member of the National Dyslexia Work Party reporting to Honourable Bill Shorten, Parliamentary Secretary for Disabilities and Children's Affairs.

Children who have specific learning disabilities experience difficulty with reading, spelling and sometimes mathematics. Their difficulty originates in genetic and neurologically based processing problems that occur independently of general intellectual ability and in spite of exposure to best practice teaching. These children consequently experience the significant stress of on-going failure in crucial areas of school life and are at risk of school behaviour problems, school dropout, juvenile delinquency, unemployment, and mental health problems.

Fortunately recent research has indicated that attitude is a more powerful predictor of life success than extent of the specific learning disabilities. My research over the last ten years has therefore involved development and trial of resilience programs and implementation of supportive school environments for these students.

My Churchill Fellowship has given me the opportunity to liase with international researchers involved in similar research to see how other countries address the challenges involved in catering for these young people. In addition, this Fellowship has allowed me to investigate international programs and environments where resilience for these young people is being fostered, and to thus view the current situation in my own country from a wider and more informed perspective.

My Fellowship has been a very rich and insightful experience. I want to express my deep appreciation for this opportunity to the Churchill Trust. I would also like to acknowledge the many friends and colleagues who were clearly excited that I received the Fellowship and who have believed in and supported me in my endeavour to bring about effective and systematised support for those who have specific learning disabilities. I would

like especially to thank Associate Professor Erica Frydenberg and Professor Frank Oberklaid who undertook to be referees in support of my application for this Fellowship. I would also like to thank my husband, Barry, for his delight in my receiving the Fellowship and his help and support along the way.

Finally I would like to acknowledge the people who hosted and supported me during my travels. In each place I visited I was welcomed warmly and given extensive time and access to information. My hosts made sure I also had fun! In particular I would like to thank: the staff at The Frostig Center in Pasadena California, especially Research Director Dr. Olga Jerman; Professor Judith Weiner and colleagues of the Ontario Institute of Education at Toronto University; Mr. Paul Badali, director of the Mindfulness Martial Arts program at the Integra Foundation in Toronto, and Research Director, Dr. Karen Milligan; the staff at Ballinamallard and St Pauls Primary Schools in Fermanagh County Northern Ireland, especially principals Mr. John McCrea and Mrs. Shauna Cathcart; Dr. John Rack and Professor Margaret Morag of the Dyslexia-SPLD Trust; and the staff of the British Dyslexia Association, especially Research Director, Dr. Kate Saunders, and Chief Executive Officer, Ms. Judi Stewart.

EXECUTIVE SUMMARY

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Churchill Fellowship: To assess resilience programs for children who have specific learning disabilities

Highlights included visits and presentations:

- International Academy for Research into Learning Disabilities Conference, Miami
- Frostig Center and hosted visits to surrounding schools, Pasadena, California (8 days)
- Ontario Institute of Education and hosted school/program visits, Toronto (5 days)
- Ballinamallard, St Pauls 'Dyslexia Friendly' Primary Schools, Northern Ireland (4 days)
- British Dyslexia Association and Dyslexia-SPLD Trust (2 days)

Conclusions/recommendations:
Australia is being left behind in its response to the issue of dyslexia/specific learning disabilities (SLD). We urgently need to adopt the National Dyslexia Action Agenda recommendations presented in January 2010 to Honourable Bill Shorten. In particular:

1. Legal recognition of specific learning disabilities is essential. Such recognition makes widespread and significant positive change. The USA, Canada, and the UK all have explicit legal recognition of SLD (including dyslexia) as a disability. These countries have specifically targeted funding, programs, facilities, and environments that promote equal access and resilience for students and employees of all ages who have SLD. For example: in the USA and Canada individual education plans are mandatory, legally accountable documents for students diagnosed with SLD; there are highly resourced SLD dedicated schools that serve government funded students; and in the UK courses exist which assist employers to meet their legal dyslexia responsibilities and schools can achieve 'dyslexia friendly' accreditation.

2. Initial and ongoing SLD/dyslexia teacher education must be mandatory for all teachers and be provided at class and specialist teacher level. The USA , Canada, and the UK all have mandatory initial teacher SLD education and in the UK, following a recent government enquiry, 4000 more specialist dyslexia teachers are being trained. Such education is the precursor for 'dyslexia friendly' practices that need to be mandated in all of our schools. This includes: systematic, free diagnosis; explicit, written policy; best practice literacy teaching; provision of print free options; targeted use of text to speech, speech to text and predictive typing software.

3. Australia needs to fund research towards effective SLD resilience promoting programs and environments. Resilience is now known to be a stronger predictor of life success than extent of SLD.

Implementation and dissemination of these findings include: Presentations to community groups, professional bodies, and to parents; media publication; liaison with and dissemination of findings to the Hon Bill Shorten, the Dyslexia Forum, and other interested bodies.

PROGRAMME

14th - 16th January 2010

Conference of the International Academy of Research into Learning Disabilities.

Miami, Florida, USA.

Participant in symposium presentation entitled:

Promoting Resilience through Self-understanding, Self concept, and Executive Function Strategies: An International perspective.

19th - 27th January 2010

Visit to The Frostig Center and Frostig hosted visits to neighbouring schools.

Pasadena, California, USA.

1st - 5th February 2010

Visit to Ontario Institute of Education, University of Toronto, and neighbouring schools and to The Integra Foundation.

Toronto, Ontario, Canada.

9th - 12th February 2010

Visit to 'dyslexia friendly' schools in Fermanagh County, Northern Ireland.

Ballinamallard Primary School, Ballinamallard.

St Pauls Primary School, Irvinestown.

16th - 18th February, 2010

Meetings with dyslexia association personnel in the UK.

Meeting with Judi Stewart (CEO), Dr. Kate Saunders (Research Director) and other staff at The British Dyslexia Association, Bracknell (16th February).

Meeting with Dr John Rack and Professor Margaret Morag, Dyslexia-SPLD Trust London (18th February).

MAIN BODY

> When I was sixteen a cuppel of munths after quitting ninth gread I started to tuer with the Dead, and would be gon for weakes at a time. I was knowen as the nirce…. I never did a cingel drug on yuer I did not nead to, things were so out of hand arledey.
>
> A young adult who has specific learning disabilities[1] (p.90)

Specific learning disabilities is a neurologically based processing difficulty that results in lifelong difficulty with reading, spelling and sometimes numeracy. These genetic and neurologically based processing problems usually include difficulty with phonic analysis and occur independently of general intellectual ability and in spite of exposure to best practice teaching. Dyslexia is the term often also used to refer to the subset of specific learning disabilities that involves language. The recently released Australian National Dyslexia Agenda[2] defined dyslexia as follows:

> Dyslexia is a language-based learning disability of neurological origin. It primarily affects the skills involved in accurate and fluent word reading and spelling. It is frequently associated with difficulties in phonological processing. It occurs across the range of intellectual abilities with no distinct cut-off points. It is viewed as a lifelong disability that often does not respond as expected to best-practice, evidence-based classroom methods for teaching reading.

Specific learning disabilities, including dyslexia, present a significant challenge to both individuals and society. Whilst estimates vary according to exact definition, researchers on the Australian Temperament Study found that approximately 10% of people are affected[3]. The more recent investigation into dyslexia in primary schools in the UK reported estimates

[1] Rodis, P., Garrod, A &. Boscardin, M. L. (2001). *Learning disabilities and life stories*. Needham Heights, MA: Allyn & Bacon.
[2] Dyslexia working party (2010) *Helping people with dyslexia: a national agenda.* Report to Hon Bill Shorten, Parliamentary Secretary for Disabilities and Children's Services. Retrieved March 23, 2010 from http://www.ldaustralia.org/dyslexia_action_agenda_1.doc
[3] Prior, M. (1996). *Understanding specific learning difficulties*. U.K.: Psychology Press.

between 6 % and 8%[4]. Those who experience specific learning disabilities attest to the significant stress of on-going failure in crucial areas of school and employment[5] and it is well established that specific learning disabilities carries the risk of school behaviour problems, school dropout, delinquency, depression, and unemployment[6]. Quite apart from the extensive social and individual suffering inherent in this situation, according to the Dusseldorf Skills Forum, failure to adequately support such at risk students is likely to cost the Australian national economy up to nine billion dollars by 2040[7].

Recent research indicates that resilience is a more powerful predictor of life success than extent of the specific learning disabilities[8,9]. However, rather than developing resilient and proactive responses, young people who have specific learning disabilities are currently at risk of passivity that manifests as giving up in the face of difficulty[10]. Many students who have specific learning disabilities do not have these adaptive psychological resources and are likely to need explicit assistance to develop them. Indeed they are asking for help to do so[11]. My research over the last ten years has therefore involved development and trial of resilience programs and implementation of supportive school environments that enable these students to experience success and build self-confidence.

My Churchill Fellowship also therefore focused, not on literacy or numeracy, but on programs and environments that build the coping resources and resilience that are known to be crucial to achieving school and life success for those who have specific learning disabilities. Specific learning disabilities in Australia is not legally recognized. Many students who have specific learning disabilities complete their school years without accurate diagnosis

[4] Rose, J. (2009) *Identifying and teaching children and young people with dyslexia and literacy difficulties.* London: Department of Children, Schools and Families.

[5] Rodis, P., Garrod, A., &. Boscardin, M. L. (2001). *Learning disabilities and life stories*. Needham Heights, MA: Allyn & Bacon.

[6] Prior, M. (1996). *Understanding specific learning difficulties*. U.K.: Psychology Press.

[7] Dusseldorf Skills Forum (2007). *It's crunch time: raising youth engagement and attainment.* Dusseldorf Skills Forum, Australian Industry Group.

[8] Raskind, M. H., Golberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: results from a twenty year study. *Learning Disabilities Research and Practice, 14*(1), 35-49.

[9] Margalit, M. (2003). Resilience model among individuals with learning disabilities: proximal and distal influences. *Learning Disabilities Research & Practice.*

[10] Lackaye, T., Margalit, M., Ziv, O., & Ziman, T. (2006). Comparisons of self-efficacy, mood, effort, and hope between students with learning disabilities and their non-LD-matched peers. *Learning Disabilities Research & Practice., 21*(2), 111-121.

[11] Raskind, M. H., Margalit, M., & Higgins, E. L. (2006). "My LD": Children's voices on the internet. *Learning Disabilities Quarterly, 29*(Fall), 253.

and informed resourced support. The United States of America, Canada, and the United Kingdom recognise specific learning disabilities and dyslexia as a disability that attracts individualised educational funding. My Fellowship visits to these countries have enabled me to view first hand well resourced resilience programs, the environments in which they are established, and the underpinning structures that facilitate such initiatives.

A brief outline follows of the history and current situation in Australia regarding specific learning disabilities. This will clarify the differences between the Australian responses to specific learning disabilities and dyslexia, and those of the countries I visited.

RESPONSE TO SPECIFIC LEARNING DISABILITIES IN AUSTRALIA

In 1976, in contrast to positions taken in the USA and UK, a national House of Representative inquiry in Australia argued against the existence of specific learning disabilities as a phenomenon intrinsic to the child[12]. Submissions to this inquiry lacked clarity regarding the phenomenon so the Committee decided on a position of a broad focus on changing the learning environment for all children with learning problems[13].

In the 30 years since that time longitudinal studies including Australian studies, brain imaging**,** genetic testing and other research, have established specific learning disabilities as a phenomenon intrinsic to the individual[14], [15]. The phenomenon was accepted in 1990 by the National Health and Medical Research Council under the terminology of 'learning disabilities'[16]. Despite this, specific learning disabilities has not been explicitly categorised as a disability in national law and is not a basis for individual funding at primary and secondary schools. A shared definition of specific learning disabilities is thus not a part of the educational language in schools. Instead, there remains widespread confusion amongst Australian teachers. In 2001 an Australian Commonwealth government commissioned enquiry[17] found that the terms "learning difficulties" and "learning disabilities" are used interchangeably to refer to disparate groups of students such as those who have intellectual disabilities, those who speak English as a second language, as well as those who have specific learning disabilities. Most teachers also do not know that specific learning

[12]Elkins, J. (2000). The Australian context. In W. Louden et al., *Mapping the territory: Primary students with learning difficulties: literacy and numeracy* (Vol. 1, pp. 29-39). Canberra: Department of Education, Training and Youth Affairs.

[13] Select Committee on Specific Learning Difficulties. (1976). *Learning difficulties in children and adults*. Canberra: Australian Government Publishing Service.

disabilities is an inheritable condition, that it is independent of intelligence so that children can also be gifted, and that it is often highly resistant even to skilled teaching, including synthetic phonics teaching.

Consequently, most Australian school teachers are not in a position to give informed, effective and targeted support to these children. They may instead feel they have failed students despite their best efforts, and students and the community, including the media, may blame teachers for poor teaching. There is little funding in Australian schools for programs specifically targeted for students with specific learning disabilities. These students mostly therefore attend mainstream classes in regular school from which they may be withdrawn with other students for supplementary literacy teaching. Additionally there are very few, if any, schools established specifically to cater for the needs of these students.

Similarly, the diagnosis of specific learning disabilities frequently remains the responsibility of Australian parents. In the state education systems the wait time for school psychologists is up to a year. Many parents access resources outside the school such as medical centres (e.g. The Royal Children's Hospital in Melbourne)[18], private psychologists, or associations that specialise in specific learning disabilities diagnosis and assistance (e.g. The Specific Learning Difficulties Association that has branches in each of the states of Australia).

Fortunately, there has been some movement recently within Australia towards having a more informed response to specific learning disabilities. Many tertiary level colleges and universities include specific learning disabilities in their disability services. In 2003, a New South Wales inquiry found the phenomenon was indeed intrinsic to the child, that there was inadequate specific provision and resourcing for these students to realise their potential, and

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[14] Shaywitz, S. E., & Shaywitz, B.A. (2005). Dyslexia (Specific Reading Disability). *Biological Psychiatry, 57*, 1310-1309.
[15] Galaburda, A. M., LoTurca, J., Ramus, F., Fitch, R. H., & Rosen, G. D. (2006). From genes to behavior in developmental dyslexia. *Nature Neuroscience 9*(10), 1213 - 1217.
[16] National Health and Medical Research Council (1990). *Learning difficulties in children and adolescents*. Canberra:Australian Government Publishing Service.
[17] Louden, W., Chan, L., Elkins, J., Greaves, D., House, H., Milton et al. (2000). *Mapping the territory, primary students with learning difficulties: Literacy and numeracy*. Canberra: Department of Education, Training and Youth Affairs.
[18] Oberklaid, F. (2004). The new morbidity in education. *Journal of Paediatrics and Child Health, 24*, 5-9.

that support was the responsibility of the public education system[19]. Further, in 2007 'significant learning difficulties' was named in the NSW Education Act as a special educational need[20]. In 2009, The Honourable Bill Shorten, Parliamentary Secretary for Disabilities and Children's Affairs, initiated a National Dyslexia Forum. I was privileged to be invited to the forum and became a member of the National Dyslexia Working Party. Recommendations to the government from this body, entitled *Helping people with dyslexia: a national agenda*, were released in January 2010[21].

RESPONSE TO SPECIFIC LEARNING DISABILITIES IN THE USA

I spent two and half weeks in the USA, attending a learning disabilities conference and then visiting a specialist learning disabilities school and centre. In the USA specific learning disabilities is recognised in law as a disability. I believe this situation, especially in a society that uses litigation freely to claim individual rights, has led to the creation of structures and environments that enable people who have specific learning disabilities to experience equal access and success and thus to build resilience at school, college and in the workplace.

Legislation in the USA pertaining to Specific Learning Disabilities

The Americans with Disabilities Act (1990)[22] recognises and explicitly names specific learning disabilities as a disability among other disabilities such as hearing impairment. This is in contrast to Australian Commonwealth law where disability is defined in general terms but particular disabilities are not listed[23]. As stated above, 'significant learning difficulties' was recently included as a special educational need in the New South Wales Education Act but, at the time of writing, New South Wales is the only state where this has occurred.

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[19] New South Wales Parliamentary Legislative Council Standing Committee on Social Issues (2003). *Final report of the inquiry into early intervention for children with learning difficulties.* Sydney, New South Wales. Parliament. Legislative Council**:** 105.
[20] *New South Wales Education Act*. Retrieved March 23, 2010 from http://www.austlii.edu.au/au/legis/nsw/consol_act/ea1990104/s20.html
[21] Dyslexia working party (2010) *Helping people with dyslexia: a national agenda*. Report to Hon Bill Shorten, Parliamentary Secretary for Disabilities and Children's Services. Retrieved March 23, 2010 from http://www.ldaustralia.org/dyslexia_action_agenda_1.doc
[22] *Americans with Disabilities Act* (1990) Retrieved March 23, 2010 from http://www.ada.gov/pubs/adastatute08.htm#12102
[23] Disability Act 2006 Retrieved April 6, 2010 http://www.legislation.vic.gov.au/Domino/Web_Notes/LDMS/PubStatbook.nsf/f932b66241ecf1b7ca256e92000e23be/0B82C05270E27961CA25717000216104/$FILE/06-023a.doc

The Americans with Disabilities Act, underpinned by civil rights legislation, prohibits discrimination and exclusion on the basis of disability and there is an expectation of reasonable modifications in policies and practices to enable participation. The Individual with Disabilities Education Act (1990, reauthorised 2004)[24] is also federal legislation that requires students who have disabilities to be in receipt of free, appropriate public education regardless of their ability. Special education services must be individualised to meet the unique needs of students with disabilities and be provided in the least restrictive environment. This may entail small group instruction, teaching modification, assistive technology, transition support and specialist services such as speech therapy.

Policy and Structures consequent on the Legislation

Policy and structures have been established in the USA to fulfil the above described legislation. These include teacher education, individualised student support within mainstream schools, and specific learning disabilities dedicated schools.

Students who are eligible for special education, including those who have specific learning disabilities, are assigned a case manager and an Independent Education Plan (IEP) is drawn up. Students must be included in this process and have access to their records. Parents may call on experts or others to assist them at the IEP meeting before they sign agreement. The IEP documentation outlines the situation and needs of the child, including their transition needs as they leave school. It sets very specific goals, objectives, and accommodations, and records special requests. For example it may be decided that in order to have reasonable access to education a student needs to be learning within a small group or provided with text to speech software. Students are reassessed triennially by independent assessors. Importantly, those who undertake to implement an IEP are accountable in law to do so. An education consultant at the Frostig Center in Pasadena California told me that she took each IEP very seriously, carefully checked the requirements it contained, and she made sure she fulfilled them. In Australia, IEPs are completed for students in special education and sometimes for students who have specific learning disabilities. However, because teachers and other professionals have not been held legally accountable for their full implementation, these IEPs are not the rigorous, carefully focused documents of the USA.

[24] *The Individual with Disabilities Education Act* (1990, reauthorized 2004) Retrieved March 23, 2010 from http://idea.ed.gov/download/statute.html

Additional initiatives implemented in the USA as a result of the US legislation include the following: at least one course in Special Education is mandatory in initial teacher education, Special Education assessment must be completed in fifty days from the initial referral, and suspension from school for 10 cumulative days within a school year may invoke a Manifestation Determination to investigate a possible link between the child's behaviour and her/his disability. None of these requirements occur within Australia. While many Australian universities do have substantial support for students who have specific learning disabilities, in the USA there are also specific learning disabilities dedicated colleges (e.g. Landmark College, see http://www.landmark.edu/).

Well resourced specific learning disabilities dedicated schools also exist for students who cannot be adequately catered for in the mainstream education system at the standard required by law. Some of these schools are funded by the state and many non-profit or private schools are indirectly funded by government funded student fees. I was fortunate to visit the Frostig School, one of five such schools in the Los Angeles area. In Australia there are few, if any, specific learning disabilities dedicated schools for students and none are government funded.

The Day School at The Frostig Center

The day school at Frostig Center serves 120 students in Grades 1 to 12. Clientele are within the average range of intellectual potential and have specific learning disabilities "including dyslexia, non-verbal learning disabilities, ADHD and Aspergers syndrome" (see http://www.frostig.org/). The school does not accept students whose primary referral is behavioural issues and/or emotional disturbance. It is the smallest of several such Los Angeles schools and is unique in that it is part of a centre where research and teacher professional development also occur. Some students have dual enrolment in a mainstream school and the Frostig School, and there is a policy of returning students to the mainstream schools where possible.

The school's program was specifically designed to support students who had specific learning disabilities. It included The Success Attributes resilience program (see p.26 of this report) and a strong transition program. There were small student to teacher ratios, access to several computers, and comfortable physical surroundings including couches or cushions in each class room. Only teachers who knew the students worked with them and relief teachers

were never employed to cover teacher absences. Students at the school had access to seven in-house clinicians (some part-time) including speech therapists, psychologists, counsellors, and educational therapists. Software included predictive typing, text to speech, and speech to text and it was used routinely. The library was equipped with print-free resources such as ipod downloads as well as high interest, low reading level books. Students were regularly given the opportunity to use PowerPoint and video presentation but they were also expected to write and were given intensive teaching in reading and spelling. While there was no science laboratory the curriculum included physical education, art, music, and drama and there were well equipped, dedicated spaces for each of these areas. Each class had a maximum of twelve students and also had a teacher assistant. This gave the teachers the opportunity to know and individually support each student. There was a policy of setting clear expectations that were adhered to consistently such that students were accountable. Classes I observed were on task and engaged.

The school had an accredited diploma that gave students entrance to Community Colleges but not to university. The USA has federal law requiring a transition plan for students 16 years and over and the transition program was an integral part of the curriculum at the Frostig School. It involved one semester in Years 9 through 11, and two semesters in Year 12. Students received extensive and accessible information to ensure they understood their rights under the Individuals with Disabilities Education Act, the Americans with Disabilities Act and other relevant legislation. Each student developed an individual transition plan that required them to be able to articulate their strengths and needs. The program also included career interest inventories and choices, post secondary expectations, relationship building, resilience, leisure, and skills such as budgeting for independent living. Finally the program put high emphasis on reintegration into the mainstream where there is likely to be less such tailored support for these students.

Students left me in no doubt that they appreciated their opportunity to attend this school. One young student who had Aspergers syndrome told me how he much preferred this school to his previous school because it was quiet. One of the seniors told me that he had a voice at this school, that teachers listened to him, and that when there was a conflict the teachers made sure they had all sides of the story. Teachers and students used first names and some senior students told me that the teachers were their friends. Despite this I also heard

student comments that indicated that in this segregated situation they felt they were in a school for low achievers.

This school and its policies and curriculum, except for the drawback of segregation from the mainstream, appeared to provide ideal support for students who had specific learning disabilities. There is much that Australian mainstream schools could beneficially adopt from this model, especially the print-free resources, the transition and resilience programs, and the individualised support. There may also be a place in Australia for specific learning disabilities dedicated schools for students for whom such support cannot be provided in the mainstream.

RESPONSE TO SPECIFIC LEARNING DISABILITIES IN CANADA

In Canada, as in the USA, specific learning disabilities are recognised in law as a disability. Learning disabilities (as specific learning disabilities is usually referred to in Canada) is widely recognised in the educational community and services are provided for children with this 'exceptionality'.

Human rights legislation was named in the USA, Canada, and the UK as the precursor to the legislation for mandatory access for those with disabilities. This human rights legislation came into being in Canada in 1982[25] when power over the constitution was changed from British to Canadian. As in the USA, specific learning disabilities are specifically classified as a disability. In each province, legislation has come into being that supports this national legislation. For example, in Ontario where I was visiting, the *Accessibility for Ontarians with Disabilities Act (*2005)[26] requires that those who have a disability must have access to all services. People who have a learning disability must therefore be able to access employment without disadvantage. As in the USA, policy and structures have followed from this legislation that ensure compliance. Most of these do not exist, or exist in much weaker form, in Australia.

[25] *Canadian Charter of Human Rights*. Retrieved, March 24, 2010: http://laws.justice.gc.ca/en/charter/1.html#anchorbo-ga:l_I-gb:s_1

[26] *Accessibility for Ontarians with Disabilities Act* Retrieved, March 24, 2010: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_05a11_e.htm

Teacher training must, as in the USA, include time spent on specific learning disabilities. College teachers I spoke to commented that while some institutions focused strongly on this provision, some colleges devoted only two hours of lectures. However they felt that teachers in classrooms knew that the condition of specific learning disabilities existed and that they were expected to address it.

There were four government funded specific learning disabilities dedicated schools in Ontario to which teachers were seconded and they were expected to disseminate their specialist knowledge on return to their provincial board schools. There were also well resourced, private schools for students who had specific learning disabilities. I visited one of these: the YMCA Academy (see http://ymcaacademy.org/Home.html). Students who have been classified as having a learning disability must, as in the USA, have an IEP that has clearly delineated goals and objectives, and includes a transition plan. If a computer is deemed necessary (in the IEP) students will be given up to $1000. There are random government audits rather than independent assessment of progress and parents can appeal the outcomes of an IEP through a tribunal review system. Unlike in the USA students are not given participation rights in contributing to IEPs until they are 16 years old.

Finally, in both the USA and Canada, students who have specific learning disabilities in primary and secondary mainstream schools are likely to receive literacy or mathematics support in a small withdrawal class run by a special education or resource teacher. I visited several of these schools and was told students may also be receiving in-class support from this specialist teacher.

The legal and practical supports for those who have specific learning disabilities in USA and Canada indicate significant commitment to giving equal access, opportunity for success, and thus an environment that fosters resilience and life success for those who have specific learning disabilities. These supports would clearly benefit people who have specific learning disabilities in Australia.

Despite these supports, the systems in the USA and Canada are not perfect. Mainstream schools in the USA may serve up to 3000 students, and teachers and people in academia in both countries spoke of children ‘slipping through the cracks’. Teachers in Canada spoke of their concern regarding the length of wait times (sometimes over a year) for

diagnosis of students, and teachers in both countries commented that extent of implementation of IEP depended to some extent on availability of teacher time and student and parent assertiveness. There is also no equivalent of our Vocational Education and Training program that allows integration between workplaces and school for students who are not succeeding academically. Notwithstanding these caveats, I was struck by the amazement registered when I told an Elementary School principal and an Associate Professor who is a teacher educator at the University of Toronto, that in Australia we do not recognise specific learning disabilities as a disability. The surprise on their faces was memorable.

RESPONSE TO SPECIFIC LEARNING DISABILITIES IN THE UNITED KINGDOM

Specific learning disabilities and dyslexia are also well accepted in the UK. The phenomenon of dyslexia is officially accepted and included. For example in Scotland, Her Majesty's Inspectorate for Education has published a report *Education for Learners with Dyslexia*[27]. In England, The Department for Children, Schools and Families has published a DVD entitled: *Inclusion Development Programme Primary/Secondary: Dyslexia and Speech, Language and Communication Needs*[28]. Furthermore, legal outcomes interpreting disability discrimination legislation have now established in the UK that employers, especially large scale employers, are responsible for being dyslexia aware and responding to employee needs even if the employee is unaware they have dyslexia. Employers need to provide 'reasonable adjustments' that may include dyslexia awareness training for staff, 25% extra time for undertaking tests, and/or technological aids. It has been established that the dyslexia does not have to be severe but does need to impede the employee. There are also businesses established that specialise in supporting workplaces to cater for employees who have dyslexia. Dyslexia Solutions, for example, provides workplace assessments, support and training (see http://www.dyslexiasolutionsltd.co.uk/workplace/workplace.html).

As in Australia, specific categories of disability are not included in the disability discrimination legislation in the UK. However specific learning disabilities and dyslexia are specifically named in the Special Educational Needs Code of Practice which is issued under

[27] Her Majesty's Inspectorate for Education, *Education for learners with dyslexia* Retrieved, March 24, 2010: http://www.hmie.gov.uk/documents/publication/eflwd.html

[28] The Department for Children, Schools and Families, UK: *Inclusion development programme primary/secondary: Dyslexia and speech, language and communication needs*. 2008.Retrieved, March 24, 2010: http://nationalstrategies.standards.dcsf.gov.uk/node/175591?uc=force_uj

the Education Act 1993[29]. While not in as strong a legal position as in the USA or Canada, parents in the UK do therefore have some power to ensure their children's specific learning disabilities /dyslexia needs are catered for.

Assessment in the UK for formal statement of disability (referred to as statementing) is a process consisting of teacher register of initial concern leading to targeted support, then assessment by an educational psychologist, and finally recommendation for formal statutory assessment by the school Board. Students thus diagnosed have an Independent Education Plan which may result in individual assistance for the student concerned. Statemented children are entitled to 'reasonable adjustments' including differentiated instruction, appropriate materials, and increased time allowance. Teachers, overseen by a special education teacher, devise and implement the IEP which is reviewed regularly but not independently. As in the USA and Canada, the state pays fees for some of these students to attend dyslexia dedicated schools. A register of the many such schools can be found at The Council for Registration of Schools Teaching Dyslexic Pupils (see http://www.crested.org.uk/pages/criteria.htm). When I visited Northern Ireland however, government school referrals for such a 'statement" were limited according to school population at one per 50 students. Consequently few students in the schools I visited were diagnosed as having a specific learning difficulty (including dyslexia).

While there thus appears to be resistance to statementing students as having a disability, The Rose Report released in September last year recommended the training of 4000 new teachers in dyslexia such that all schools have access to a specialist dyslexia trained teacher. This is now being implemented. I met with Dr John Rack who, through the Dyslexia-SPLD Trust, is involved with this implementation. He commented that in the UK there has been a normalisation of dyslexia such that there is less focus on whether a student has dyslexia, and more on the extent to which they have it and whether they have co-occurring conditions such as speech problems. Compared to the situation here in Australia, there is thus acceptance of the phenomenon of specific learning disabilities and dyslexia in both schools and the workplace and, as in the USA and Canada, an environment has been created that allows inclusion and support.

[29] Department for Education and Skills, 2001. *Special educational needs code of practice*, 2008. Retrieved, March 24, 2010: http://www.teachernet.gov.uk/_doc/3724/SENCodeOfPractice.pdf

In this environment The British Dyslexia Association has successfully initiated an auditing process for 'dyslexia friendly' schools and other organisations. I visited The British Dyslexia Association and spent four days at two 'dyslexia friendly' schools in Northern Ireland. The UK appears to be particularly interested in supporting mainstream responses to dyslexia and I believe there is much to be learned in Australia from this approach. I found a wealth of such initiatives at The British Dyslexia Association.

The British Dyslexia Association and the 'Dyslexia Friendly' Quality Mark

The British Dyslexia Association (see http://www.bdadyslexia.org.uk/) provides many resources to support its vision of a society that enables people who have dyslexia to reach their full potential. They include: teacher professional development that is recognised by government schools; research projects (e.g. support for dyslexia in combination with learning English as a foreign language), an adult mentor scheme whereby people who have dyslexia support each other, hosting of an annual dyslexia awareness week, courses for employers to prepare them for their legal dyslexia awareness responsibility, and sale of dyslexia support resources. Examples of the latter include publication of an annual Employment and Dyslexia Handbook and publication of a guide for justice professionals. This booklet, *The Good Practice Guide for Justice Professionals*[30] gives background information about dyslexia and how to recognise it, the disability and human rights legislation that requires 'reasonable adjustments', and the specific effects in situations involving the court procedure and environment. It indicates the need for training and awareness of staff, and client support such as: assistance with form filling, optional access to an intermediary, access to use of written memory cues when speaking in court, early access to information, and use of text to speech technology.

'Dyslexia Friendly' Quality Mark

The British Dyslexia Association also provides 'dyslexia friendly' organisational accreditation for schools and other organisations For example 14 departments of the Liverpool Council have undertaken this training and accreditation. A representative of one business, McManus HDR, told me that for their accreditation they had: reduced and

[30] Jameson, M., British Dyslexia Association, 2009. *Good practice guide for justice professionals.* British Dyslexia Association and Developmental Adult Neuro-Diversity Association: Bracknell, UK.

simplified recruitment forms, trained staff for awareness and support for those with dyslexia, used coloured paper to reduce glare, given written information ahead of time and on the web, modified the web for clear fonts and easy text to speech conversion, and ensured staff were in teams where they combined to use their strengths and support each other's needs. Cost involved was reported as minimal.

'Dyslexia Friendly' Schools

The British Dyslexia Association 'Dyslexia Friendly' Quality Mark accreditation is also awarded to schools that have been audited by The British Dyslexia Association and found to have policy and practice that support students who have dyslexia. The accreditation is held in high regard including by UK government bodies. For example in the Fermanagh County in Northern Ireland participating schools were assisted by the Western Education and Library Board to prepare for their accreditation.

Meeting the needs of students who have dyslexia is integral to a 'dyslexia friendly' school (see the Dyslexia Friendly Quality Mark Schools Pack: http://www.bdadyslexia.org.uk/files/DFS%20pack%20English.pdf). Four areas are assessed in the accreditation process. These are leadership and management, quality of learning, climate for learning, and partnership with parents, school governors and other stakeholders. Senior management in the school are required to engage staff who have received specialist dyslexia training, ensure school-wide dyslexia awareness, systematic dyslexia diagnosis, and regular monitoring of these students. Class teachers are expected to be aware of the needs (including emotional needs) and strengths of these individual students, and to use flexible teaching mediums and methods that ensure inclusion and individual student achievement. Examples of specific requirements include evidence that students are made aware of the source of their difficulty and their strengths, and that procedures are in place for induction of new staff into 'dyslexia friendly' practice. The model allows for local adaptation around the core requirements and each school is expected to undertake a detailed action plan and monitoring system. Accreditation costs approximately one thousand pounds and re-accreditation every three years costs a little less. The model therefore is one of whole school

change and ensures commitment and involvement of senior personnel. Such a model is well supported in the literature on effective school change[31].

I was privileged to visit two 'dyslexia friendly' schools in Northern Ireland that had achieved 'dyslexia friendly' status in 2007. These were Ballinamallard Primary School, Ballinamallard and St Pauls Primary School in Irvinstone. They were village schools serving 150 and 250 students respectively. All staff, including principals at both schools, spoke highly of the initiative. One principal remarked 'it makes so much sense'. One of the teachers said the 'dyslexia friendly' model continued to be used after three years because 'it works'. Teachers confidently demonstrated their 'dyslexia friendly' teaching. They noted that it was initially challenging to learn, but felt it was now normal practice. I was told in one school that literacy results had increased since their 'dyslexia friendly' initiative and that these results were higher than the Northern Ireland average. Students also enthusiastically described the 'dyslexia friendly' supports they received in their school. In these whole class discussions students unselfconsciously identified themselves as having dyslexia.

Staff in these schools had received several days of 'dyslexia friendly' professional development provided by the Western Education and Library Board (WELB), followed by visits twice a term by a WELB facilitator. Based on my work in teacher professional development and school change, I believe that this model of substantial professional development and follow up support was likely to be integral to the success of the program.

In one school the dyslexia policy statement (a requirement of accreditation) explicitly required that students who have 'dyslexic tendencies' would: not be asked to read aloud, receive assessment that did not necessarily include spelling accuracy, and have access to alternative assessment methods and home work that took account of their situation. Dyslexia indicators and 'dyslexia friendly' practices were also included in the Staff Handbook of the school.

Parents were informed about dyslexia and 'dyslexia friendly' practice on dedicated parent evenings. They were encouraged to assist their child appropriately according to their

[31] Firth, N., Butler H., Drew S., Krelle, A., Sheffield, J., Patton, G., Tollit, M., Bond, L., and the *beyondblue* project management team (2008). Implementing multi-level programs and approaches that address student wellbeing and connectedness: factoring in the needs of the schools. *Advances in School Mental Health Promotion 1 (4*) 14 -24

individual needs (e.g. scribing or reading for their child). Parents were also encouraged to see that engagement with their children in activities such as listening to an oral mind map presentation was highly beneficial for their education, even though there was no writing involved.

According to the requirements for accreditation, teachers were expected to know which of their students had dyslexia. Given the above described limits per school on a formal statutory assessment, schools undertook internal assessment. For example in one of the schools students were assessed by the special education teacher on normed reading and phonic analysis. Teachers were thus alerted to any students who were found to have 'dyslexic tendencies'. Both schools used individualised, confidential pen portraits of the students either on separate sheets or amalgamated on the one class sheet for quick reference by teachers. These portraits included dyslexia or 'dyslexic tendencies' where applicable.

Literacy and numeracy were taught using several ability groups per class. For example, in one class during the numeracy session members of the class used one of two versions of a booklet depending on their level. There were also some withdrawal literacy and numeracy classes in years three and four, and some students who had specific learning disabilities received individual support for one hour per week. Keyword banks were also frequently used. For example one teacher told me that to accommodate a child who had 'dyslexic tendencies' in her class she had the day before assisted his group to generate keywords for a forthcoming poem. This enabled him to independently write the poem the next day. Commonly used words were also on the wall, usually with pictures, and there were individual sized laminated versions for students to collect and use at their tables.

Extensive use was made by teachers and students of charts, mindmaps and/or richly labelled pictures. Usually made by groups of students, these mindmaps and rich pictures were accompanied by verbal presentations to their class, to other classes or to their parents (as homework). Roles were assigned in the groups according to students' strengths or needs. Teachers spoke of students being more confident to speak to the whole class following the small group discussion work and use of the mindmap for speaking cues. An emphasis in the school was thus on the importance of verbal expression as evidence of knowledge gained and of process rather than written output.

Clear criteria were conveyed to the students regarding assessment. Correct spelling was not necessarily included in the criterion. There was also a positive feedback structure of two positives and one correction ("two stars and a wish").

Other 'dyslexia friendly' class practices that I had the opportunity to see included: building students' awareness of their use of a variety of learning modalities; use of pictures accompany writing (e.g. on wall charts); use by teachers and students of a variety of presentation formats (e.g. charts, role play, discussion, wall pictures, PowerPoint, or video); a word and picture summary of each day's work sequence and an overall mindmap of each unit of work; highlighting on the interactive white board and on handouts; and small individual whiteboards as a place for safe trial of spelling that could be immediately erased.

Peer support was also emphasised. It included extensive group work practice, mixed ability paired reading, and allocated 'Study Buddies', one of whom scribed or in other ways supported the other student. These partners were changed each term.

Resilience and self-esteem promotion (one of the accreditation requirements) was particularly evident in one of the schools where there was a dedicated 'Circle room" that was used to discuss issues such as dealing with difficult feelings (e.g. reading and then discussion of *The Huge Bag of Worries* story book[32]). All classes were timetabled to use the room at least once a week. Students also used placement of traffic light symbols to silently indicate they had understood or needed more help, and on the wall in one classroom there was a cellophane bubble where students could place their name if they wanted five minutes alone with their class teacher.

I did not have an opportunity to visit a 'dyslexia friendly' secondary school but British Dyslexia Association staff told me of some 'dyslexia friendly' initiatives used at these schools. They included student access to information prior to class to allow for pre reading and/or pre tutoring (e.g. on the school website), and use of equipment where written material could be photographed and immediately read aloud (currently on trial in several UK schools).

[32] Ironside, V. (2004) *The huge bag of worries.* Hodder Childrens Books, UK.

The ‘dyslexia friendly’ model thus catered for the learning styles of students who had specific learning disabilities, including dyslexia. However there also needed to be opportunity for more diagnosis and individualised support of students who had specific learning disabilities that was not limited by arbitrary numbers such as school population. The level of implementation of different aspects of the model also appeared to vary somewhat from school to school. Finally, some resources in these schools were not as plentiful as in Canada and the USA or indeed Australia. For example, there were two computers in each room, including the one used by the teacher, and this restricted use of software such as predictive spelling and text to speech.

I believe the ‘dyslexia friendly’ model could be very helpful in supporting students and adults who have dyslexia and specific learning disabilities in Australia. The model in both schools and businesses involves carefully focused policy and practice that accommodates the fact that some people will always have difficulty with print and that this should not limit their access to learning and participation in society. Many of the changes in the schools I visited were simple and relied only on teacher education. The ‘dyslexia friendly’ school model is also likely to be helpful for all students and I see no cultural or other reasons why these initiatives would not be transferrable to Australian schools. State education department expectation that the model be thoroughly implemented, as well as best practice teacher education and whole school implementation process, would be likely to be crucial in ensuring an effective uptake.

RESILIENCE PROGRAMS FOR CHILDREN WHO HAVE SPECIFIC LEARNING DISABILITIES

Initial Research in the Area

Environments that support inclusion and success are ideal for development of healthy resilience in the face of specific learning disabilities. However there is also an increasing realisation that young people who have specific learning disabilities also need explicit support to develop the skills of resilience that are associated with success[33]. There are few researchers working in this area and I was interested to find that, like my own research, most such work is in its initial stages. In Miami Florida I participated in a symposium where this

[33] Westwood, P. (2008). *What teachers need to know about learning difficulties.* Australian Council of Educational Research, Camberwell. Australia.

work was presented to the annual conference of the International Academy of Research into Learning Disabilities (see http://www.iarld.com/).

My own research (with colleagues Associate Professor Erica Frydenberg at The Graduate School of Education, The University of Melbourne, and Dr. Lyndal Bond at the Medical Research Council in Glasgow) involves the trial of a coping program at Grade 6 level and designed for maximum access by students who have specific learning disabilities. The intervention comprises a withdrawal coping program for Grade 6 students who have specific learning disabilities, nested within a classroom coping program involving all Grade 6 students, which in turn nests within whole school specific learning disabilities professional development and change. The 10 session class coping program involves awareness of current coping strategies, use of positive thinking, assertion, goal setting and problem solving. The 10 (minimum) extra withdrawal sessions held for students with specific learning disabilities focuses the coping strategies onto specific learning disabilities-related situations and includes role modeling by successful adults who have specific learning disabilities. The presentation of this project was received with much interest. A minifilm about how to deal with specific learning disabilities (made by students who had specific learning disabilities and had received the program) was certainly enjoyed**.**

I was very interested to hear about the work of other researchers. Professor Lynn Meltzer from the Harvard School of Education and Research Institute for Learning and Development reported on a trial of peer tutoring by Grade 6 students who had specific learning disabilities with younger students who also had specific learning disabilities. With systematic support from teachers, *BrainCogs* software was used by the mentors to assist their mentees to learn strategies such as organising thoughts, checking and memorising. Although it was a small study, the results were promising in both academic and resilience measures. I learned also of other initiatives being undertaken by the Research Institute for Learning and Development. For example there are awards for students who demonstrated “exceptional effort, persistence, goal orientation and resilience” (see http://www.researchild.org/news.html).

Dr. Tami Katzir from the University of Israel presented studies that investigated the relationship between academic self concept and academic outcome. Reading comprehension level was found to be affected by reading self-concept and anxiety level independently of cognitive or decoding ability. Such results suggest that future literacy programs both in

Australia (and internationally) may benefit greatly from incorporating explicit teaching of strategies that support a resilient response.

Professor Judith Weiner also presented promising initial results of a study regarding the Mindfulness Martial Arts program for adolescents who have specific learning disabilities. I later visited this program (see p.27 of this report).

The presence of this symposium in the conference reflects a growing understanding of the importance of attitude in outcomes for those who have specific learning disabilities. An international special interest group was established at the conference to enable continued collaboration among those working in this field. I am a foundation member of the group.

Apart from these programs there are few, if any, resilience programs specially designed for young people who have specific learning disabilities. I was however fortunate to be able to visit the Mindfulness Martial Arts Program for adolescent boys (referred to above), and the Success Attributes Program at the Frostig Centre.

Success Attributes Program at the Frostig Center

Visiting The Frostig Centre in Pasadena California was a special delight for me. My own research work on resilience programs for students who had specific learning disabilities began over ten years ago when I saw an article about a 20-year longitudinal study the Frostig Centre had completed[34]. The study showed the exciting finding that it was attitude rather than extent of the specific learning disabilities that predicted life success for people in the study who had specific learning disabilities. This was a very positive finding because attitude is changeable, whereas specific learning disabilities appears to involve a lifelong, unchangeable processing difficulty.

Based on the above mentioned study, the Frostig Center has developed a 'Success Attributes' program that is used at the school and is also being adopted in some mainstream schools. The Success Attributes program aims to develop in students the characteristics associated with success by the people who had specific learning disabilities in the

[34] Raskind, M. H., Golberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: results from a twenty year study. *Learning Disabilities Research and Practice, 14*(1), 35-49.

longitudinal study. These characteristics were: goal setting, self awareness, perseverance, proactivity, helpful support systems, and emotional coping strategies.

The program is integrated within the school program where there is an aim, constantly reinforced by the senior staff, for 'success attributes' language and concepts to be integrated at all levels from explicit teaching to in-class reinforcement All classes have the 'success attributes' on their wall in some form. A social skills program is integrated into and explicitly taught within the framework of the 'success attributes' and the transition program that runs from Year 9 to Year 12 also includes revision of the attributes. Several students at junior and senior levels were able to articulate what the 'success attributes' meant to them and it was clear they understood the concepts. One student in Grade 2 told me it meant he should not just sit there if his pencil broke but that he should get up and sharpen it. A senior student said he asked for help now because, unlike in his previous school of three thousand students, he knew it was worth doing.

Research Director Dr. Olga Jerman has conducted initial, promising research on the goal setting and self awareness segments of the program. This will be published in the near future. A program manual has also recently been published entitled: *The Six Success Factors for Children with Learning Disabilities: Ready-to-Use Activities to Help Kids with LD Succeed in School and in Life*[35]. This program is explicitly based on the longitudinal research and I recommend that the manual be accessed and trialled in Australian mainstream schools.

The Mindfulness Martial Arts Program at The Integra Foundation

The Integra Foundation (see http://www.integra.on.ca/) in Toronto focuses solely on assisting young people and their families with social, emotional, and behavioural problems related to their specific learning disabilities. The foundation is a charity funded primarily by the Ontario Ministry of Children and Youth Services. It offers individual and family counselling, group programs (including a camp program), and pamphlets and workshops that aim to increase awareness about and support for the emotional needs of young people who have specific learning disabilities.

[35] Frostig Center. (2009). *The six success factors for children with learning disabilities: Ready-to-use activities to help kids with LD succeed in school and in life*. San Francisco: Jossey-Bass.

One group program is the Mindfulness Martial Arts Program for adolescents who have specific learning disabilities. Paul Badali[36], one of three teachers of the program, has designed and refined the program over a period of several years. It consists of 20 weekly 1.5 hour sessions in groups of eight or more students as well as brief individual meetings between the leader and participants. Some students also have ADHD or aspergers syndrome. The program aims to assist young people to develop skills in self awareness, control, and confidence, as well as social skills and coping skills such as self calming and problem solving. It is underpinned by Bushido, a Japanese tradition of the samurai warrior being imbued with self awareness and fearlessness through Zen meditation and honourable lifestyle. The teachers were experienced and competent martial arts and mindfulness meditation practitioners who also had social work experience and qualifications.

The program content includes meditation and mindfulness, martial arts training, yoga and other physical exercises, goal setting, problem solving, and cognitive based therapy activities (especially monitoring of negative self-talk). The meditation component includes focusing on breathing in the present and being aware of and accepting thoughts and feelings, including unpleasant ones and letting them pass. Process during the sessions includes direct teaching, storytelling, discussion, and role play. Students also set personal goals and take part in regular weekly individual sessions with the teacher and their parents. Progress is recorded in an individual log where students gain points towards martial arts belts. Examples of phrases that students learn are: “my best is good enough”, “it will pass”, “be”, “I’m going to make room for this”, “thoughts aren’t facts”, “let it go”, and “bend like a tree in the wind”. Positive encouragement is used frequently as well as clear and high expectations that are consistently applied.

I enjoyed watching the students participate in this program, especially seeing young people who had ADHD sit reasonably still in meditation for a considerable period of time. I was told that there have been only four people who have dropped out of this program since it began in 2002. It is gaining in popularity and is now run for three groups per term. Paul Badali told me he is expecting to publish the manual and is working to find ways to effectively to disseminate the program while preserving its integrity. Again, I believe such a program would also work well in Australia. It has process elements that are known to be

[36] Badalai, P. *The Mindfulness martial arts program* (Unpublished manual)

especially important for students who have specific learning disabilities. These include: motivation, intensive duration, repetition of basic concepts and mental cues, and opportunity for generalisation of the skills to students' individual lives[37]. Initial research on the efficacy of the program is promising[38] and research is continuing.

All these programs have multiple elements. Researching their efficacy is complex and large randomised controlled trials are needed to firmly establish their efficacy. However I was encouraged by the existence of each of these programs and it was certainly a delight to witness young people taking part and enjoying them.

ASSISTIVE TECHNOLOGY AND RESILIENCE

Finally, assistive technology is relevant in regard to creating environments where people who have specific learning disabilities/dyslexia can experience equal access and success despite their difficulty with print. Technologies such as speech to text, text to speech software and predictive typing have great potential in this regard[39],[40].

During the course of my Fellowship I heard of new technologies including *WordQ SpeakQ*, which is specifically tailored for those who find conventional speech to text and text to speech software too complicated to use. This tool is made to be simple to use and includes phrase prediction, combined with discrete (rather than continuous) dictation speech to text, speech feedback, and ease of training (see http://www.wordq.com/). I also heard of schools trialling new equipment where written material was photographed on the spot and immediately translated into spoken word. Further, in the USA the website entitled *Sparktop* (see http://*www.sparktop.com/*) has been established. It is carefully designed to attract 7 to 12 year olds, is specific learning disabilities dedicated, but open to all young people. This website has games and activities that assumes high level abilities and also informs users about specific learning disabilities. It has teenage online mentors who can respond to queries

[37] Firth, N., Frydenberg, E. & Greaves, D. (2008) Perceived Control And Adaptive Coping: Programs For Adolescent Students Who Have Learning Disabilities. *Learning Disabilities Quarterly, 31* (3), 151-165.
[38] Haydicky, J. (2009). *Mindfulness training for adolescents with learning disability*. Unpublished master's thesis, University of Toronto. Toronto, Canada
[39] Lange, A. A., McPhillips, M., et al. (2006). Assistive software tools for secondary students with literacy difficulties. *Journal of Special Education 21*(3): 13-23.
[40] Lewis, C. K. (2007). *Technology for learning disabilities project: 2005-2007 evaluation report*. Portland, OR: RMC Research Corporation.

about understanding and coping with specific learning disabilities and there is a chat page where children can talk with others who have specific learning disabilities.

Australia has a commendable policy of computers for every child in every school. This places us potentially at the forefront of developing such systems for students who have specific learning disabilities and/or dyslexia in the mainstream classroom. For this to be successful, teachers would need to have an opportunity to gain expertise so they can in turn teach their students to regularly use ICT systems to access print and to express themselves in print. Despite this, in Australia there are few, if any, schools systematically using this technology to support students who have specific learning disabilities. It is for this reason that such assistive technology and supporting structural systems, such as targeted teacher education, have been strongly recommended in the recently released *Helping People With Dyslexia: National Action Agenda*[41] .

[41] Dyslexia working party (2010) *Helping people with dyslexia: a national agenda*. Report to Honourable Bill Shorten, Parliamentary Secretary for Disabilities and Children's Services. Retrieved March 23, 2010 from http://www.ldaustralia.org/dyslexia_action_agenda_1.doc

CONCLUSIONS

My Churchill Fellowship travel enabled me to see clearly that explicit legal recognition of dyslexia and specific learning disabilities leads to an environment of understanding, awareness and support for those in the community who have specific learning disabilities, and to a far greater extent than is currently the case in Australia. I have also had the opportunity to see schools that are effectively implementing 'dyslexia friendly' practices. This has confirmed my long held belief that such support is entirely possible. Finally I realise I am at the forefront of important research regarding resilience programs for young people who have specific learning disabilities. My fellowship has enabled me to establish support networks around the world that will help and encourage this endeavour. Finally, my Fellowship has also been an exhilarating personal opportunity, and one that I believe will enable me to contribute significantly to the current impetus to improving outcomes for those in Australia who have specific learning disabilities.

RECOMMENDATIONS

Australia is being left behind in its response to the issue of dyslexia/specific learning disabilities (SLD). We urgently need to adopt the National Dyslexia Action Agenda recommendations presented in January 2010 to Honourable Bill Shorten. I have now seen most of these recommendations successfully implemented overseas. In particular we need to implement:

- Legal recognition of specific learning disabilities (including dyslexia)
- Mandatory initial SLD/dyslexia teacher education
- Access to specialist SLD teachers in all schools
- Access to early, systematic, free SLD assessment and ongoing support comparable to that available to parents of children with other disabilities
- 'Dyslexia friendly' practices in all of our schools. This includes: explicit, written policy; best practice literacy teaching; inclusion of resilience as a crucial component of SLD support; and provision of print-free options
- SLD targeted use of text to speech, speech to text, and predictive typing software, and teacher education that supports this
- Funding and support of research to find effective SLD resilience promoting programs and environments
- A national program for supporting and recognising 'dyslexia-friendly' workplace and community organisations (including development of operational guidelines and establishment of 'dyslexia friendly' practices in the public service)
- Government incentives for private and philanthropic sector initiatives such as SLD dedicated websites
- The NAPLAN test to become 'dyslexia friendly' by offering oral reading of the language component instructions and an oral comprehension measure in addition to the current (reading) comprehension measure
- National government support to develop community awareness and understanding of dyslexia. e.g. establishment of Dyslexia Week, funding a Dyslexia help line and a mentor system by successful people who have dyslexia

My contribution to realisation of these recommendations includes:

1. Dissemination of these findings including
    a. Presentation of this report for consideration by the Honourable Bill Shorten, Parliamentary Secretary for Disabilities and Children's Affairs
    b. Presentations to philanthropic, educational, health, juvenile justice, learning disabilities and research bodies, and to parent groups
    c. Publication of media articles
    d. Dissemination of this report to politicians and State and Federal education departments, to the Dyslexia Forum and other interested bodies (see item b above)
2. Continued liaison in the capacity of a member of the Dyslexia Work Party with the Honourable Bill Shorten, Parliamentary Secretary for Disabilities and Children's Affairs, in the development and implementation of a national agenda for people who have dyslexia/specific learning disabilities
3. Liaison with those developing the next version of the NAPLAN (see above recommended NAPLAN change)
4. Building networks in the community, including the business community and especially with those who have SLD, to gather support for positive change for those who have SLD
5. Developing grant applications (government and philanthropic) for research funding to trial effective SLD resilience promoting programs and environments for use in Australia
6. Continuing to conduct research in this area of SLD resilience promoting programs and environments for use in Australia
7. Personal assistance and support to organisation and individuals endeavouring to undertake the above reforms