AUSTRALIAN BLINDNESS FORUM

Submission to the Senate Employment, Workplace Relations and Education References Committee

Inquiry into the education of students with disabilities, including learning disabilities, throughout all levels and sectors of education

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ABOUT THE AUSTRALIAN BLINDNESS FORUM

The Australian Blindness Forum (ABF) was formed in 1992. It is an unincorporated body funded only through the contributions of its members, currently 21 agencies. Members are non-government organisations that provide supports to Australians who are blind or vision impaired, including the consumer group, Blind Citizens Australia. The primary purpose of the ABF is to facilitate interaction and communication between its members for the benefit of people who are blind or vision impaired, their families and the wider community. The ABF appoints Australian delegates to the World Blind Union.

The ABF is located in the office of the Royal Victorian Institute for the Blind in Melbourne, and funds the position of a Policy Officer (Blindness and Vision Impairment) within ACROD, the national industry association for disability services, in Canberra.

The ABF believes that:

- Students who are blind or vision impaired should have the same range of educational choices as sighted children.

- Students who are blind or are vision impaired should have access to quality educational programs including braille instruction as and when needed.

- Specialist services and supports must be resourced at a sufficient level to enable children who are blind or vision impaired to achieve their education outcomes and to exercise educational choices.

- Parents must get the support they need to help their children develop literacy and numeracy skills as other parents do with their sighted children.

BACKGROUND

Until the 1970s, most children who were deemed educationally blind or had deteriorating vision received quality education and braille instruction in special primary and secondary schools. Today, most of these children are integrated into mainstream schools, a development that is welcomed and supported by ABF members. However, children have paid an educational price for the benefits of social integration. There has been a serious decline in the value placed on and the priority given to students acquiring blindness specific skills. Students in mainstream schools today do not have the same intensive supports that previous generations had to acquire sound braille literacy and numeracy skills. They face difficult barriers that prevent them from achieving appropriate levels of literacy and numeracy at the same pace as their sighted peers. There is an absence of data for planning purposes about these students. There is currently, unlike developments overseas, no national agenda for these students or any attempt on the part of governments at coordinating one.

Children who are blind or vision impaired are a small group of students, not particularly visible in the school population. It is estimated that there are approximately 3000 children with vision impairment in Australia. Of these, an estimated 90% are in government schools and 10% in Catholic and independent schools. It is further estimated that there are approximately 300 students using braille nationally. This figure does not include those students who are currently not using braille but would benefit from doing so. It is difficult to present a clear estimate of the number of these children.

Braille is the primary source of literacy acquisition for children who are blind. As with all students, they need regular tuition to build reading and writing skills. The reality is that many have limited access to instruction in braille, some receiving only a few hours each week. Students with low and deteriorating vision are often discouraged from learning braille and directed to reading by listening to audio cassette or computer voice output, which inhibits the acquisition of adequate literacy and numeracy skills. Many students have inadequate access to an itinerant or visiting teacher and those in rural and remote communities have very limited access. When children do have access to braille instruction, the quality of that instruction is problematic. Teachers may have had training in braille, but the quality of training varies greatly and is often only a very small part of broader disability training, for example, training in ‘special education’ rather than ‘vision impairment’.

While particular schools may not be considered to have overall low levels of literacy, small, marginalised groups of students or individuals who are blind or vision impaired frequently have low levels of literacy within those school populations. Because of inadequate braille instruction and timely access to materials in alternative formats, the capacity of these particular students to achieve literacy and numeracy and develop the same competencies as sighted children is being wasted. This

disadvantages them in pursuing further education, functioning in a print-literate world, competing for educational places and jobs, becoming self-supporting in their adult life and educating their own children.

In September 1999, the ABF, in conjunction with ACROD, submitted a Background Paper[1] to the Department of Education, Training and Youth Affairs. This identified the ingredients for success in educating children who are blind or vision impaired as relying on a number of the right elements coming together: the school; teacher; family; environment; advocacy; access to materials; skills of support people; attitude to braille and expectations of the child's achievements.

In September 2001, the final report[2] of a funded project, related to literacy and numeracy acquisition by students who are blind or vision impaired, was submitted to the Department of Education, Science and Technology (DEST) by the authors, Jolley William and Associates in conjunction with Renwick College of the Royal Institute for Deaf and Blind Children. This report resulted from the only national project to date that assessed the current situation and educational needs of students who are blind or vision impaired. **The ABF is concerned that DEST has failed to release the report or to address its recommendations.**

Recommendation
The Senate Committee should recommend to the Department of Education, Science and Technology that the report submitted in 2001, "Literacy and Numeracy Acquisition, Including the Role of Braille, for Students in Australia who are Blind or Vision Impaired", be released and its recommendations addressed.

The National Goals for Schooling in the Twenty-first Century were endorsed in 1999 by the Commonwealth and State and Territory education ministers at that time. The ministers stated their commitment to a system of national reporting on educational outcomes and agreed that the new National Goals would be used as the basis for reporting on six areas of schooling; the first two areas are literacy and numeracy. However, the ABF is concerned that the National Reports on Schooling in Australia for 1998 and 1999, published by the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA), significantly failed to address the outcomes for students with disabilities, including those with vision impairment. A report on numeracy acquisition[3], released in 2000, did not make a single reference to students with vision impairment and the barriers they face in acquiring numeracy.

Recommendation
The Senate Committee should recommend to MCEETYA that steps be taken to ensure the educational outcomes of students who are blind or vision impaired are

[1] ACROD and the Australian Blindness Forum (1999) *Braille Literacy: Getting Back on the Literacy Agenda*
[2] Jolley William and Associates (2001) *Literacy and Numeracy Acquisition, Including the Role of Braille, for Students in Australia who are Blind or Vision Impaired* (unpublished)
[3] Department of Education, Training and Youth Affairs (2000) *Numeracy, A Priority for All: Challenges for Australian Schools*

addressed throughout the reporting process so that they receive full coverage in the National Reports on Schooling.

In 2001, the OECD report on the PISA (Programme for International Student Assessment) 2000 Survey of Students' Reading, Mathematical and Scientific Literacy Skills[4] was published by the Australian Council for Educational Research (ACER). A representative sample of schools based on judgement rather than on random selection lead to 45 schools in NSW, Victoria and Queensland being approached to participate. The target population for the field trial was "all students born in 1983", with 35 students from each school randomly selected by ACER staff according to procedures specified in the international sampling manual. In the light of this statement, the ABF did not expect to find that students with severe sensory and other disabilities had been excluded from the survey. Part of the explanation given was, "these are also students with a sensory disability that would prevent them from performing in the PISA testing situation where, for budgetary reasons, accommodation strategies are not able to be implemented". The definition of "all" fails, yet again, to include students who are blind or vision impaired.

Recommendation
The Senate Committee should bring to the attention of ACER the unacceptability of excluding students with a sensory disability from the survey of Students' Reading, Mathematical and Scientific Literacy Skills, conducted on behalf of the OECD, so that future surveys do not explicitly exclude those students.

In February 2001, the Commonwealth Minister for Education, when announcing that $1.4 billion had been allocated to the Strategic Assistance for Improving Student Outcomes Program, stated: "All parents are entitled to expect that their child will be reading and writing successfully by the end of Year 3. State and territory ministers have already agreed that children entering school in 1998 would be reading and writing successfully within four years." And, to help schools achieve this, the Minister further stated: "Education authorities now have greater power to decide which students have the greatest need for support and to direct funds accordingly. Individual schools will be able to use this funding in innovative ways to address the specific needs of their students." For many students who are blind or vision impaired, this is not happening because of the lack of targeted, competent, individualised specialist support, access to appropriate equipment and materials provided in alternative formats at the same time as sighted students.

Recommendation
The Senate Committee should recommend to MCEETYA that the Commonwealth, together with state and territory governments, pays particular attention, in the context of recent resource allocations through the Commonwealth's Strategic Assistance for Improving Student Outcomes Program,

[4] OECD and ACER (2001) *15-Up and Counting, Reading, Writing, Reasoning … How literate are Australia's Students* Australian Council for Educational Research

to special literacy and numeracy acquisition resource needs of students who are blind or vision impaired.

INTRODUCTION

The elements essential for the successful education of students who are blind or vision impaired are that:

- Families from the earliest age of their child with vision impaired are visited by outreach and early intervention workers from specialist blindness agencies who have a knowledge or braille; families are helped to understand how literacy develops; children become enthusiastic about learning to read
- Parents are involved in the assessment of their children's needs
- Children who are blind or have low and deteriorating vision:
  - are introduced to learning braille as early as possible
  - as pre-schoolers, learn pre-braille skills that are tactile and fit in with a lot of pre-primary work done by sighted children
  - are encouraged to use a slate and stylus as early as possible
- Braille is presented positively as a valuable learning tool to children, families, teachers and other students
- Parents are encouraged to learn braille; they are provided with equipment on loan and given guidance and support
- Access to braille equipment is available as and when needed in the classroom and at home
- Access to computers and software programs that assist with screen reading and braille output is available as and when needed and complements developing literacy and technological skills
- Access to a range of materials in alternative formats, including braille, is available as and when needed for classroom work and for recreational and incidental purposes
- Students have access to an expanded core curriculum
- Students have easy access to itinerant / visiting teachers and classroom aides
- Itinerant / visiting teachers and classroom aides have appropriate skills and experience in teaching braille literacy and numeracy
- Classroom teachers and aides know how to support students appropriately without jeopardising their independence
- Teachers and staff expect students to achieve
- Schools collaborate with specialist educators for assistance in remediation
- Schools work in partnership with non-government specialist providers
- Assessments are conducted by professionals with training and experience in vision impairment, in collaboration with families and students
- National literacy assessments are adapted to take into account the student's ability to use print and / or braille
- Students who use braille get together for interaction and peer support and have access to adult braille-users as positive role models

The issues covered in this submission are based on input from people who are blind or vision impaired and their families, non-government organisations that provide specialist supports and services, and the education sector involved in supporting students who are blind or vision impaired.

The main focus is on compulsory education, with some reference to post-compulsory education, particularly in relation to access to educational materials. The issues covered are grouped under the following areas:

- Definition and assessment
- Early intervention
- Compulsory schooling
- Access to Materials
- Transition
- Teacher training and professional development
- Further investigation and research

The terms of reference under 1(a) and 1(b) are addressed.

1 (a) Whether current policies and programs for students with disabilities are adequate to meet their education needs

1 (b) What the proper role of the Commonwealth and states and territories should be in supporting the education of students with disabilities.

ISSUES

Definition and Assessment

The current policy trend of disregarding individual needs and differences in educational service provision, and the practice of defining 'disability' as an overarching generic condition, for purposes of simplified program design, administration and funding, constitute the major weaknesses of some inclusive literacy and numeracy acquisition models.

Much current overseas demographic data affirm that educators will increasingly have to address the needs of individuals with low vision. In Australia, the NSW Department of Education and Training (DET) has suggested that the ratio of students with low vision as opposed to students who are blind is in the region of 4:1. DET has identified the population of students with low vision as being most at risk of failure in literacy and numeracy.

There are significant differences in students who are blind and those who are vision impaired with regard to the strategies used to acquire literacy and numeracy. For students who are blind, braille literacy skills, listening, aural reading and technology-

related skills are highly important. For those students whose primary medium is print, visual skills, use of aural reading and technology-related skills are important.

Recommendation
The Senate Committee should recommend to Commonwealth, state and territory governments that the educational needs (curriculum and resource) of each student who is blind or vision impaired be addressed on an individual basis considering age, individual development, extent / nature of vision loss and circumstances.

Assessment is an important aspect of literacy and numeracy acquisition. Assessments can produce information on student progress, level of support required, and curriculum modifications.

Recommendation
The Senate Committee should recommend to Commonwealth, state and territory governments that initial and appropriate ongoing assessment of children who are blind or vision impaired be conducted by professionals, who have relevant training and experience, with sensitivity to individual needs and in collaboration with families and the student.

Limitations and impediments in the assessment of students who are blind or vision impaired in all Australian states and territories have prevented the establishment of benchmarks comparable to those established for literacy and numeracy acquisition by sighted students.

Recommendation
The Senate Committee should recommend that Commonwealth, state and territory governments auspice and coordinate a consultative group to develop benchmarks for the appropriate delivery of the expanded core curriculum to students who are blind or vision impaired. There should be an emphasis on literacy and numeracy acquisition and retention, consistent with Commonwealth, state and territory education policies, the Commonwealth Disability Discrimination Act 1992 and other legislation, regulations and policies.

Tertiary education

It is believed that many Disability Liaison Officers in tertiary institutions generally do not have the skills to assess the needs of students who are blind, and often fail to refer them to agencies where a thorough assessment can be undertaken.

Statistics relating to students who are blind or vision impaired are not always comparable from year to year across tertiary institutions. This could be attributed to the lack of an agreed definition of vision impairment.

Recommendation
The Senate Committee should recommend that a standard assessment process be developed that measures the academic achievement of tertiary students, not their disabilities. Without the provision of reasonable assessment adjustments, it is inevitable that disabilities of students would be measured, not academic achievements.

Early intervention

Vision loss results in limited opportunities for children and young people to acquire information and knowledge casually and incidentally from their environment. This means that they need to acquire these educational experiences through instruction. A child who is properly instructed in braille and has access to braille materials, uses reading by braille in the same way as a sighted child uses reading by print to acquire knowledge, skills and literacy and numeracy.

Parents need to be involved in the assessment of their children's needs and, where identified as a key to learning, encouraged to learn braille, provided with equipment on loan, and given guidance and support.

Before starting school, most sighted children have absorbed some awareness of literacy. At school, all ages have access to a range of text, particularly text with illustrations. At every stage, all ages are exposed to many books, including picture books. From kindergarten, children are allocated time on computers, beginning with developing keyboard and mouse skills.

For children who are blind or have low and deteriorating vision, access to pre-school text is extremely limited in both quantity and variety.

- There is little or no access to the visual clues that help sighted children to recognise, say and spell the everyday words in advertisements, such as "Coke".
- There is little access to early experimentation in pre-reading and pre-writing.
- The age at which books are introduced is delayed.
- There are few pictures with tactile illustrations.
- There are a limited number of braille books available for children to share - often there is access to only one reader.

Without specialist early intervention, the skills of children who are blind or vision impaired are well below those of their sighted peers when they start primary school. For children in rural and remote areas access to early intervention is very patchy. The non-government specialist organisations that provide this service have difficulty in providing equity of access because of the low incidence in those areas and funding restraints. Additional funding resources would enable increased training to be provided to generic early intervention centres (that have to cover all types of disabilities), increased area visits, and the use of technological resources such as video conferencing.

Recommendation
The Senate Committee should recommend that Commonwealth, state and territory government education departments work collaboratively with a variety of public and non-government agencies and parents so that positive early education experiences are provided from the time of the child's birth, or from when the vision impairment is diagnosed or suspected, including those living in rural and remote areas.

Compulsory schooling

At present, the *National Goals for Schooling in the Twenty-first Century* do not refer specifically to the literacy and numeracy of students who are blind or vision impaired, They refer broadly (at *Goal 3 - Schooling should be socially just*) to:

"3.1 Students' outcomes from schooling are free from the effects of negative forms of discrimination based on … disability…
3.2 The learning outcomes of educationally disadvantaged students improve and, over time, match those of other students".

Recommendation
The Senate Committee should recommend that the Commonwealth, together with state and territory governments, take steps to ensure that the education in literacy and numeracy of students who are blind or vision impaired are formally acknowledged as an integral part of the "National Goals for Schooling in the Twenty-first Century" and the National Literacy and Numeracy Plan.

Keys to literacy and numeracy

There currently exists little coherent policy or planning that affects the teaching of literacy and numeracy to students who are blind or vision impaired in Australian schools nationwide. There is a need to coordinate planning at the national level for literacy and numeracy programs and to initiate research into the efficacy of the plans as existing programs are modified or new programs implemented.

Recommendation
The Senate Committee should recommend that the Commonwealth Government seek and be guided by information on the "National Agenda for the Education of Students who are Blind or Vision Impaired"[5], recently adopted in the United States.

In order for students who are blind or vision impaired to be able to access the school curriculum, general principles[6] must include:

[5] See National Agenda home page at www.tsbvi.edu/agenda
[6] South Pacific Educators in Vision Impairment *Draft Priinciples and Standards for the Education of Children and Youth with Vision Impairments, including those with Multiple Disabilities* January 2002

- adapting existing curriculum without changing the content or objectives, using different teaching strategies
- adapting content of curriculum as well as changing strategies
- delivering a disability specific expanded core curriculum[7]

Recommendation
Students who are blind or vision impaired should receive the same curriculum as their sighted peers and, in addition, be afforded access to all areas of the expanded core curriculum. The Senate Committee should recommend that Commonwealth, state and territory governments give careful consideration to the initiation of researching methods that will facilitate this goal

One of the major barriers to literacy and numeracy acquisition faced by both teachers and students is related to the need for additional time. Extra time is needed by students with restricted vision to participate adequately in almost every area of the school curriculum. They often take longer to complete tasks than do their sighted classmates. Many students who use braille and those with low vision who use a variety of low vision devices, for example, hand-held magnifiers and closed circuit televisions, have slower reading rates than their sighted peers. Students can be severely disadvantaged by the highly visual nature of much of their class work, substantially reducing their overall work speed. When compared with their sighted peers, many students with vision impairment generally require more concentration and energy and take longer to complete daily activities.

Recommendation
The Senate Committee should recommend to MCEETYA that, for students who are not achieving literacy and numeracy at the same pace as their sighted peers, principals, teachers and support staff collaborate with specialist educators for assistance in remediation[8].

Braille

The importance of braille cannot be over-emphasised for children whose vision is so poor as to make it difficult or impossible to read regular print for extended periods of time. Children who are legally blind have to rely on learning braille to acquire literacy and numeracy. Others with vision impairment benefit from being taught one or a combination of reading and writing methods: print; braille complemented by print; print complemented by braille.

Australia uses the British braille code for language and there are ancillary codes for maths, music, science, computer science and chemistry. The largest current project

[7] In addition to the generic curriculum, expanded core curricular areas for education, preparation for employment and leisure are an essential element of individualised service provision.
[8] Grimmond L, Freeman F, d'Apice T (2002) "Fast Track to Braille Literacy" *Journal of South Pacific Educators in Vision Impairment* Vol.2 No.1

of the International Council on English Braille (ICEB)[9] is the investigation of the feasibility of a single Unified English Braille Code (UEBC) for both literary and technical purposes throughout the English-speaking world. It is envisaged that the UEBC will have by far the greatest impact for the scientific codes, achieving their international convergence, while the impact on literacy braille readers will be modest. The final report, largely consisting of the transcribing rules book (code), is scheduled to be ready for the third ICEB General Assembly in March 2004.

There is widespread acceptance of the need for change to the braille system used in Australia as proposed by the ICEB.[10] To ensure the implementation of the UEBC does not fail, initial training in the new codes must be provided to all users (producers, teachers and consumers). More information on the scale of this project is available from the Australian Blindness Forum through ACROD.

Recommendation
The Senate Committee should recommend that Commonwealth, state and territory governments fund the implementation costs of adopting the Unified English Braille Code in Australia so that students, producers, teachers and aides are not disadvantaged.

Specialist supports and equipment

For students who are blind or vision impaired, access to competent, targeted individualised specialist support as and when required is essential throughout schooling. To achieve this, educational authorities must ensure an adequate provision of skilled and competent specialist staff, for example, managers, itinerant / visiting and consulting teachers, orientation and mobility instructors along with technical support personnel, in schools.

In NSW, the development of essential social skills and orientation and mobility[11] of students in their school settings is sometimes carried out by teachers or aides who are not specifically or sufficiently trained to do so. This has the potential to put the student's welfare at risk and the school at risk of litigation. In some instances, the government has failed to form partnerships with non-government specialist providers that would provide the most effective supports to students. There appears to be minimal cooperation and collaboration between government, independent and Catholic schools on this issue, which lead to specialist support being provided independently to each of those sectors to the detriment of efficiency.

In Victoria, non-government service providing organisations report that they are stretched to the limit in trying to provide educational resources when children are only

[9] International Council on English Braille web site www.iceb.org
[10] Braille 2000 Working Party (1999) *Braille 2000: Meeting the Challenges of a New Millenium* The Australian Braille Authority
[11] Orientation and mobility training provides the student with body and environmental awareness; spatial understanding; safe, independent, confident, socially acceptable movement; independent travel.

one part of their client group and they have to spread limited funds over a wide range of needs.

Recommendation
The Senate Committee should recommend that Commonwealth, state and territory governments coordinate discussions that would result in a more equitable spread of vision impairment specialists throughout districts, regions, states and territories within Australia.

Access to technological equipment, as well as understanding the use and maintenance of technical equipment, is essential for students who are blind or vision impaired. The specialised equipment most used are computers; braille writers and embossers; electronic braille note takers; slate and stylus; electronic dictionaries; audio cassette and such specialist equipment as screen readers, including low vision devices, closed circuit television, audio output devices and screen enlargement software.

Assessment of technology needs is an acute unmet need for compulsory and post-compulsory students alike. Often students are provided with the wrong equipment simply through ignorance of what is available. This problem is especially prevalent in rural and remote areas. Many students, when they are about to commence further education, discover they have not acquired the appropriate computer skills required to undertake tertiary courses.

Recommendation
The Senate Committee should recommend that educational authorities and agencies involved in policy and program development or in direct service delivery to students, provide, as a matter of high importance, infrastructure for access and use of the technologies necessary for literacy and numeracy acquisition by students who are blind or vision impaired.

Access to materials

In some states, it is reported that students routinely receive educational texts in alternative formats well after texts have been dealt with in class. The kinds of textbooks chosen for school lists are increasingly difficult to transcribe into alternative formats. In the past, graphs and figures supported text – more recently they are replacing text with flow charts and diagrams, with pullout texts becoming increasingly visual.

In many tertiary institutions, access to study materials in alternative formats is characterised by people who are blind or vision impaired as ‘shocking’. These institutions generally do not inform students what reading materials are required for a subject until the beginning of the semester, and consistently refuse requests from students for early access to this information. As it can take several months to transcribe textbooks into an alternative format, students do not have access to the

materials they need until very late in the semester, and sometimes not until after the end of semester examinations. The outcome is that students either defer or leave their courses. In Western Australia, for example, research into participation rates of students with vision impairment in the WA VET sector indicated rates of admissions / enrolments into courses appeared proportional to sighted students. However, retention or completion rates were substantially lower.

This situation has been exacerbated by the removal of the subsidy that the National Information and Library Service had provided to universities and TAFEs for its student transcription service. The consequence of introducing 'full cost recovery' fees for the production of alternative formats is substantial increases in transcription costs to tertiary institutions[12]. While there is no evidence that any institution is refusing to provide study materials in an alternative format in response to the recent increase in costs, most are only prepared to provide materials in the cheapest accessible formats. Students who have always learned from braille find they are now required to learn from audio, leading to an inevitable decrease in academic performance.

In most cases, publishing companies generally do not make their texts available in formats that are accessible to people who are blind, despite the fact that it would be relatively easy for them to be provided in electronic format.

Recommendation
For the immediate future, the Senate Committee should recommend that Commonwealth, state and territory governments address the current inadequate access to alternative formats by students who are blind or vision impaired by allocating sufficient funding to tertiary learning institutions to provide this essential service.

In contrast, in the United States, the American Foundation for the Blind (AFB) has established the "Textbooks and Instructional Materials Solutions Forum" [13], a collaborative effort of agencies and organisations involved in the production and distribution of textbooks and instructional materials. The AFB Solutions Forum currently addresses:

- Lack of standardisation of electronic file formats provided by textbook publishers
- Inaccessibility of multimedia textbooks, especially those delivered via the Internet and CD-ROM
- Variation in state textbook regulations regarding accessible instructional materials
- Expense of producing specialised materials and lack of fiscal incentives to develop new technologies
- Shortage of qualified braille transcribers and production resources
- Barriers to communication and collaboration, including duplication of efforts

[12] For further explanation on this initiative, see the submission to this Inquiry by National Information and Library Service
[13] See web site www.afb.org/info_document_view.asp?documentid=1331

An outcome of the AFB Solutions Forum's work is the legislation known as the *Instructional Materials Accessibility Act of 2002*, introduced into the US House of Representatives and the US Senate on 24 April 2002. This legislation will:

1. Require written statewide plans to ensure that students who are blind or have other print disabilities have access to instructional materials in accessible formats at the same time those materials are provided to students without such disabilities
2. Develop a uniform electronic format for instructional materials prepared by publishers
3. Require publishers to produce a copy of each textbook in the uniform electronic file format and furnish it to a National Instructional Materials Access Center for distribution to schools
4. Provide capacity-building grants to assist state and local educators in using the electronic files supplied by publishers

The work and goals of the AFB Solutions Forum provide a useful model for Australia.

In relation to the production of alternative formats, the ABF strongly supports the submission to this Inquiry by the National Information and Library Service including the following key issues.

- The production, availability and accessibility of the course texts and other material inadequately service students with a print disability attending post-compulsory educational institutions. Students have suffered because materials have been delivered after the semester has closed and the subject completed. Students have had to defer studies because of being so far behind, or have given up altogether because accessible materials were impossible to obtain. Now, in the post secondary sector, universities and colleges are seeking to limit their costs by not providing materials or providing materials in inappropriate formats.

- Alternative format producers operate independently, largely without the benefit of national standards, are grossly under-resourced and are unable to meet the current demands. The complexity of the production process, the range of formats offered, the range of hardware and software required both for production, delivery and access leads to unnecessary duplication and waste of scarce resources. The establishment of a national framework for the production of alternative format materials for students with a print disability would facilitate agreement on a range of standards for producers that will lead to economies in production as well as more timely delivery of material to students.

  Recommendation
  The Senate Committee should recommend that a national framework be developed, as a funded program of the Department of Education, Science and Technology, which can provide authority and guidance to alternative format producers. The program should aim at developing a recognised system in the

education infrastructure in which alternative format producers can operate; funding the production of materials for students with a print disability and requiring acquittal of that funding in volume, quality and ongoing availability of the materials produced.

The ultimate goal of a national framework should be the enactment of legislation similar to the Instructional Materials Accessibility Act 2002 currently before the US House of Representatives and US Senate. The legislation should facilitate the production of material in accessible formats by original publishers, the storage of that material in an accessible site and the provision of the necessary support and training for end users to access this material directly. Ultimately, alternative format producers should not be needed if students are able to access the material they require themselves without the need of an intermediary.

Transition

School to post-compulsory education

Across Australia, there is a lack of planning and coordination when students move from compulsory schooling to further education. School careers teachers are not well equipped to assist students who are blind or vision impaired to make career choices. Advice is often based on prejudice and ignorance that fails to recognise the capabilities of those students, given the right training and equipment, and leads students into choosing inappropriate courses and / or career paths.

The timeframe for acceptance into courses usually occurs too late for students and non-government specialist providers to adequately prepare for the students' needs.

The procedure of advising students of successful applications only a few weeks before the course begins does not "anticipate the requirements of the students who have a disability"[14], despite the efforts of students to make themselves and their requirements known to the educational institution in a timely manner.

Recommendation
The Senate Committee should recommend that education authorities and agencies collaborate with non-government agencies to ensure students receive careers counselling from those with experience and knowledge of the capabilities of people who are blind or vision impaired.

School to work

The Australian National Training Authority (ANTA)[15] has stated:

[14] O'Connor B, Watson R, Power D, Harley J (1998) *Students with disabilities: Code of practice for Australian Tertiary Institutions* QUT Publishing, Brisbane
[15] Australian National Training Authority (2000) *Bridging Pathways – National Strategy (Executive Summary)* and

"The positive relationship between access to vocational education, training and employment are well known. If people with a disability are not accessing vocational education and training, then they are less likely to become employed."

In many states, there is no systematic approach to the transition of students from school to work. The support students do receive often relies only on the interest and capacity of individual teachers. For example, in NSW, there is little coordination between the careers adviser, transition teacher or itinerant / visiting teachers; in Western Australia, there is a lack of access to mentors for students.

Recommendation
The Senate Committee should recommend that a national mentoring scheme that would provide access to a database of information on careers, industries and role models for students with disabilities, including those who are blind or vision impaired, be established. Such a scheme should take into consideration the pilot project previously conducted by Blind Citizens Australia, and the Careers and Technology Information Bank in the United States[16]*.*

Teacher training and professional development

Specialised teacher training in blindness and vision impairment is currently available only in Queensland, New South Wales and South Australia. People in other states have access to teacher training only via the emerging distance education options offered by tertiary institutions in those three states, or from overseas. Training is costly and funded cadetships are not widely available. The situation has resulted in limited numbers of trained teachers specialising in blindness or vision impairment nationwide. While this is an impediment in all states, it appears to be particularly the case in Queensland, Victoria, Western Australia, Tasmania and the Northern Territory.

Specialist teachers in vision impairment are, in most states, required by their employers to have attained a special education qualification with a major in vision impairment, or a related vision impairment qualification. There are, however, many instances throughout Australia where this level of requirement is not insisted on, or is considered 'desirable' rather than mandatory because of the scarcity of vision impairment training. In some instances, teachers with no vision impairment qualifications have been employed; in others, teachers of the deaf have had students with vision impairment added to their caseloads. In Queensland, for example, there is a dire shortage of qualified vision impairment teachers and some positions have not been filled at all.

Recommendation
The Senate Committee should recommend that educational authorities and agencies involved in policy and program development or in direct service delivery

[16] See www.afb.org/info_documents.asp?kitid=91&collectionid=7

to students who are blind or vision impaired, further investigate the need for greater professional preparation and development to enhance the literacy and numeracy acquisition of those students.

At the compulsory schooling level, knowledge of and competence in both the literacy and mathematics braille codes is a major issue. The training and maintenance of the specialist skills of teachers is an ongoing concern. According to the Australian Braille Authority[17], less than 40% of itinerant / visiting teachers possess basic Grade 2 literary braille skills. Braille skills in mathematics and music are exceedingly rare.

Recommendation
The Senate Committee should recommend that national standards for core competencies be introduced for itinerant / visiting teachers. Foremost must be a requirement that all itinerant / visiting teachers possess Grade 2 literary and maths braille skills. This means that teachers need opportunities to acquire these skills in the teacher training system.

As teacher preparation programs have not placed a great emphasis on assistive technology skills, a significant proportion of vision impairment teachers has little expertise in this area[18]. This is urgent as educators are poised on the edge of technological changes that will dramatically alter the way information is provided, accessed and produced by students who are blind or vision impaired.

Recommendation
The Senate Committee should recommend that Commonwealth, state and territory governments address the lack of teacher expertise in assistive technology with some urgency.

Resources for teaching tactile graphics are difficult to obtain. There is currently a great need within the school system for training of specialised preparation personnel, proofreaders and teachers.

Recommendation
The Senate Committee should recommend that the Commonwealth, together with state and territory governments, initiate research into the area of tactile graphics, particularly reviewing that of skills acquisition.

In Victoria, what little personal development occurs is entirely provided by non-government agencies or by the Statewide Vision Resource Centre. However, this is more about personal development for existing teachers than ensuring the training of new teachers in vision impairment.

[17] Identified at Blind Citizens Australia Education Focus Group, Melbourne, April 2002
[18] Connell T (2002) "Assistive Technology and Braille Literacy: Too Many Choices, Too Little Time" *Journal of the South Pacific Educators in Vision Impairment* Vol.2 No.1

In NSW, the job description for teachers and aides in schools is very broad and attempts to cover a wide range of skills: orientation and mobility; activities of daily living[19], specialist support; adaptive technology. Many are untrained in vision impairment issues. Others do not have up to date competencies in particular areas.

Teachers and other education staff should receive appropriate information about the nature of blindness and vision impairment to assist them to support students appropriately without jeopardising their independence. This is important for the students concerned as well as their peers.

Recommendation
The Senate Committee should recommend that Commonwealth, state and territory governments ensure that all generic classroom teachers be required to have at least one subject in their pre-service degree that relates to teaching children with special needs. This should include a section on literacy and numeracy curricular adaptations for students who are blind or vision impaired.

Recommendation
The Senate Committee should recommend to MCEETYA that professional development for existing principals, teachers and other education staff include direct input from parents of children with a disability as well as the children themselves.

Further investigation and research

There is little Australian research relating to students who are blind or vision impaired or developmental work and research into the literacy and numeracy of those from within the Australian multicultural context.

The Commonwealth Government should seek and be guided by information on the National Agenda for the Education of Students who are Blind or Vision Impaired, recently adopted in the United States[20]. Commonwealth, state and territory governments should collaborate on the development of a coordinated National Agenda for students who are blind or vision impaired.

It is vital that competent empirical longitudinal evaluation studies are conducted of literacy and numeracy programs used with students who are blind or vision impaired, including those from non-English speaking backgrounds, in Australian public and independent or private schools.

Until the June 2001 report, *Literacy and Numeracy Acquisition, Including the Role of Braille, for Students in Australia who are Blind or Vision Impaired* (unpublished), little comprehensive and consistent Australian prevalence data on students who are blind

[19] Activities of daily living cover: reasons for interacting; desire to interact; socially acceptable behaviour; self-esteem, self-confidence, self-advocacy.
[20] see National Agenda home page at www.tsbvi.edu/agenda

or vision impaired has been collected. Comprehensive national data for planning and more effective service delivery must become publicly available.

Recommendation

The Senate Committee should recommend that educational authorities and agencies involved in policy and program development or in direct service delivery to students who are blind or vision impaired plan the collection and dissemination of useful statistical information on a variety of matters affecting the literacy and numeracy acquisition for those students. This information should include, for example, results of an annual census of the number and disposition of braille-using students nationally.

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