

## TRIBUTE TO LOUIS BRAILLE: HIS 200 YEAR LEGACY

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Louis Braille was born on January 4th, 1809 in Coupvray, near Paris in France to Monique and Simon Braille. At the age of three Louis lost his sight in an accident involving one of his father's sharp tools. Infection of the injury spread to the other eye, leaving him completely blind. Despite his unusual handicap, Braille propelled himself to the top of his elementary class. A creative and clever young boy, Louis soon adapted to life without sight.

At the age of 10, Louis Braille began his studies at the Royal Institution for Blind Youth in Paris. Here he was introduced to the raised-print system developed by the school's founder, Valentin Haüy. This system consisted of raised print letters. The school had only 14 books, with Haüy's large raised type for the students to trace with their fingers. The books were bulky, expensive and tedious to read. Louis became frustrated because so much knowledge seemed out of his reach.

Then, army captain Charles Barbier de la Serre visited the school to show his system of "night writing", a complex series of 12 raised dots used by French troops to send messages, and Louis was inspired. Shortly after, on holiday at home, 15-year-old Louis experimented with his father's awl, punching holes in paper. He soon came up with a system of six dots which could be arranged in different ways to form the letters of the alphabet. The braille system was born.

At the age of 15, Braille had developed the eponymous system that we know today, the familiar 6-dot cell based upon normal spelling. Like many geniuses at the time, Louis Braille's accomplishments became widespread only after his death. At the age of 43 he died a national hero. He had perfected the system in 1834, and published *Method of Writing Words, Music and Plain Song by Means of Dots, for Use by the Blind and Arranged by Them*. His invention is now standard throughout the world, helping millions of us to access the written word. The clever system of raised dots invented by Braille nearly 200 years ago still has the power to positively affect national educational policy today. This is perhaps Louis Braille's major legacy to us.

Louis Braille's legacy in Australia

I intend now to draw on the results of some research conducted in 2001 by Melbourne-based Jolley William and associates for the Commonwealth Minister for Education through the Department of Education, Training and Youth Affairs (DETYA), on the acquisition of literacy and numeracy skills by school students who are blind or vision impaired. The team who conducted

the research sought to identify issues, impediments and practical approaches to literacy and numeracy acquisition, with a particular focus on the current status and use of Braille in Australia.

## Research results

In 2001 there appeared to be few comprehensive Australian prevalence data on students who are blind or vision impaired as a group, so that until the Jolley William study, little was known about school-aged Braille-users. However, students who are blind or vision impaired in Australia attend all of the types of schools – government (public), Independent and Catholic (private) that are available to their sighted peers. Most attend publicly funded schools. Respondent estimates indicated that as of April 2001 there were approximately 4,500 students who are blind or vision impaired attending Australian public and private sector primary and secondary level systems or agency educational programs. This estimate should be treated with reservation. Of the 4,500 students reported, between 2,694 and 2,764 fell within the target group for the Jolley William study, i.e., they did not have an intellectual disability that precluded them from using print or braille to attain literacy and numeracy.

Estimated numbers by gender, of students in the target group who received their education in one or other of the services or agencies, indicated that of the 2,350 students nominated by respondents, 755 were female and 1,183 male. There was no information on the gender of 412 student participants.

## Status and use of Braille

Braille plays a critically important role in the acquisition of literacy. It can often be the most suitable and effective channel for written information for a child. The researchers told DETYA that the following conclusions related to its importance and status in 2001 and still so relate today. DETYA officers were told that like print, Braille can be used in many areas of everyday life. For example, in the reading and writing of educational, recreational and vocational material accessing the Internet in games such as cards Scrabble and Monopoly and around the home to label such everyday items as CD's and household items. Students who are unable to access the printed word because of their lack of vision must be provided with a medium that gives them independent access to written material. With regard to literacy and numeracy acquisition, for many students who are blind or vision impaired, Louis Braille's legacy seems to represent an opportunity for enhanced competence, independence, and equality.

## Is Braille in decline?

Response to the survey in 2001 did not indicate a marked decline in the use of Braille. Only three respondents to the questionnaire directly suggested the possibility of decline in its use. However, it was observed that teachers and students are sometimes wooed by technology. Further, the increase in the use of technology with speech output seems to provide simpler options for

class and homework but that these options often occur to the detriment and monitoring of good Braille writing, editing, formatting and reading habits.

Were students in 2001 getting the Braille they needed?

Respondents provided only limited information on the numbers of teachers in their system or agency that were proficient in the several Braille codes, so no national estimate was possible. However, a national survey of specialist teachers across Australia conducted by Gentle (2000) concluded that more Braille needed to be taught. It was noted that the training and maintenance of the specialist skills of teachers was considered to be of on-going concern and it was suggested that in order to raise the status of Braille, teacher and aides who are proficient in Braille should receive competency payment as recognition for their superior skills.

### Future of Louis Braille's legacy

There was, back in 2001 an international movement towards the adoption of the Unified Braille Code (UBC). Its adoption you might recall was a major implementation exercise in which we depended heavily on a small team led by Josie Howse PSM, manager of the NSW Department of Education and Training's Braille Unit. The code has resulted in significant long-term benefits for all stakeholders. Its adoption was minimally disruptive in the short-term, particularly to students, as well as to teachers; transcribers and adult braille readers who needed to learn amended and revised codes, as some technical Braille materials became obsolete. The needs of students were taken into account with the implementation of the new code. Teachers required training and the code had to be introduced with flexibility and the least disruption to students' learning. On a positive note, the new code provides consistency in resource materials for learning, teaching and producing Braille and various direct and indirect costs will gradually be reduced. Of most importance, the UBC now provides an all-around better set of Braille codes for students who are blind and their teachers.

### Implications

Several practical implications emerged from the Jolley William research project. Sixteen recommendations made to the Minister for Education follow. The Minister and his Department were told:

- 1 *There is need in Australia to train more specialised preparation personnel, proofreaders and teachers.*
- 2 *That educational authorities and agencies that are involved 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.*
- 3 *That government education departments should work collaboratively with a variety of public and private agencies and parents so that positive early education experiences are provided from the time of the child's birth.*

4 That the three levels of government consider auspicing and coordinating a consultative group to develop benchmarks for the appropriate delivery of the expanded core curriculum to students who are blind or vision impaired, with emphasis on literacy and numeracy acquisition and retention, consistent with Commonwealth, State and Territory education policies, the Commonwealth Disability Discrimination Act and other legislation, regulation and policies deemed appropriate by DETYA.

5 That students with vision impairments should receive the same curricula as that received by their sighted peers, and in addition, be afforded access to all areas of the expanded core curriculum. The three levels of government should give careful consideration to the initiation of researching methods that will facilitate this goal.

6 That educational authorities ensure an adequate provision of skilled and competent specialist staff, for example, managers, visiting and consulting teachers, orientation and mobility instructors along with technical support personnel, in schools. Therefore, the governments should consider coordinating discussions that would result in a more equitable spread of vision impairment specialists throughout districts, regions, states and territories within Australia, with particular attention to the needs of rural and remote areas.

7 That the governments should consider initiating formal investigation nationally into the literacy and numeracy abilities of students who are blind or vision impaired.

8 That the Commonwealth, together with State and Territory governments ensure that the education in literacy and numeracy of students who are blind or vision impaired be formally acknowledged as an integral part of the National Goals for Schooling in the Twenty-first Century and the National Literacy and Numeracy Plan.

9 That the governments, pay particular attention, in the context of recent resource allocations through the Commonwealth's Strategic Assistance for Improving Student Outcomes Program, to special literacy and numeracy acquisition resource needs of students who are blind or vision impaired, as outlined in this report.

10 That the governments actively encourage production agencies to collaborate on the standardisation of mutually acceptable guidelines for alternative format production.

11 That the governments fund the implementation costs of adopting the Unified Braille Code, considering the long-term benefits that will flow to a significant number of disadvantaged consumers.

12 That educational authorities, production agencies, publishers and advocates, that are major stakeholders in policy and program development, become appraised of recent moves towards passage of the Instructional

*Materials Accessibility Act of 2001 in the USA. These agencies should consider the feasibility, in Australia, of implementing similar national legislation, including the establishment of a national electronic repository of published documents that are typically used as text or reference materials in Australian schools*

*13 That educational authorities and agencies that are major stakeholders in policy and program development, or which are involved in direct service delivery to students who are blind or vision impaired should further investigate the need for greater professional preparation and professional development to enhance the literacy and numeracy acquisition of the students who are within their organisational purview.*

*14 That the governments should recommend 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 and in which there is a section on literacy and numeracy curricular adaptations for students who are blind or vision impaired.*

*15 Towards obtaining comprehensive national data for planning and more effective service delivery, educational authorities and agencies which are major stakeholders in policy and program development, or which are involved in direct service delivery to students who are blind or vision impaired, should plan the collection and dissemination of useful statistical information on a variety of matters affecting the literacy and numeracy acquisition for the students they serve. This information is to include, for example, results of an annual census of the number and disposition of Braille-using students nationally.*

*16 That DETYA should encourage closer cooperation between all major stakeholders in the process of developing mutually agreed principles, standards and service provision guidelines aimed at enhancing the literacy and numeracy acquisition of students who are blind or vision impaired. Further, while formal investigation of student ability currently takes place through statewide testing in some jurisdictions, DETYA should consider initiating formal investigation nationally of the literacy and numeracy abilities of students who are blind or vision impaired.*

#### Outcome of the Research Project

Some in this evening's audience will know that although DETYA received the research report they chose not to adopt any of its recommendations. Louis Braille's legacy, however, lives on, and it behoves such special interest groups as the Australian Braille Authority to consider what we should as a group do about promoting Braille, which is for a number of Australians, the only pathway to literacy.