

“Enhancing Student Success”: Meeting the Unique Needs of University Students with Deaf-Blindness

Kate Chanock*

Humanities Academic Skills Unit, Faculty of Humanities and Social Sciences, La Trobe University, Bundoora, Victoria 3086, Australia

Abstract: This article discusses particular challenges that students face who are Deaf-blind at university, for whom it is not effective simply to combine strategies that help students who are blind with those that work for students who are Deaf. Innovative ways of working have been developed by a B.A. student with Deaf-blindness collaborating with an academic language and learning (ALL) adviser, leading to marked improvements in the student's academic work. First, through regular dialog about the content of her assignments, the student extends her understanding of the routines of enquiry in her discipline. Secondly, we have devised a simple, systematic method by which to offer feedback on her written work, which is easily recognizable to someone using a Braille display to read documents exchanged *via* email. While these methods were developed to meet the particular needs of a student with a dual sensory impairment, it is likely that the first – which draws on Vygotsky's insights into language learning, and Bakhtin's notion of social dialects – could also be helpful to students who are Deaf, while the second, by simplifying feedback and revision, could be helpful to students who are blind.

Keywords: Dual sensory impairment, essay feedback, dialogic learning, learning support.

1. INTRODUCTION

For tertiary students who are Deaf-blind and the staff and students who work with them, there is little published guidance available. Perhaps, indeed, little can be generalized, given the uniqueness of each student and the wide variety of institutional environments. Nonetheless, there are certainly considerations that can usefully guide students and staff in devising strategies and supports for students with a dual sensory impairment. In my capacity as academic language and learning (ALL) adviser in a Faculty of Humanities and Social Sciences, I have become part of a network of people working with a student who is Deaf-blind over several semesters, and we have learned much about what works well and what does not, which I would like to share with readers of this Special Issue. In particular, the student and I have established a routine of discussing her assignments in a way that helps her internalize her disciplines' habits of enquiry, and creating written summaries of these discussions for her reference. Secondly, finding that the technology normally used to offer feedback on written work is too elaborate to be helpful to someone in her situation, we have developed a simpler, clearer method of feedback compatible with her preference for reading electronic documents as Braille.

2. STUDYING AT UNIVERSITY WITH A DUAL SENSORY IMPAIRMENT

Most of the literature on studying with a dual sensory impairment is concerned with school-aged children (interested readers might begin with the website of the National Consortium on Deaf-Blindness at <http://www.natdb.org>). That there is so little dealing with postsecondary study is probably because few such students have attempted tertiary study [1-3]. This is understandable when we consider that 90% of people who are Deaf-blind have another disability as well, and for 66% of these, it is a cognitive disability [3]. Estimates vary, but the highest figure I have seen for the proportion attending university in the United States is 3.5%, and this includes people with multiple disabilities other than Deaf-blindness as well [4].

A second reason for the sparse coverage of tertiary study may be that each student's constellation of abilities and needs is likely to be different from another's. There are various causes of Deaf-blindness [5], of which the 10 most common are listed in Killoran [6]. Different etiologies result in differing combinations, severity, and trajectory of each kind of impairment [7-10]. Somebody whose impairments have developed gradually over the lifespan will likely have a wider repertoire of options for communication, including speech, than somebody who has been profoundly Deaf-blind from birth. People's experience of discussion and text will vary depending on how well they could see and/or hear, for how long. Moreover, each person's educational history is different, depending on what has been available to them in the way of special or mainstream schooling, more or less well-informed family and teachers, appropriate assistive technologies, and options for training and work. One important difference consists in whether a person has had access to a Deaf community, which can offer a cultural identification, a sense of empowerment, and opportunities to learn and/or use sign language with peers [11].

With all these variations, the common theme emphasized in the literature on postsecondary study for people who are Deaf-blind is the need to eschew assumptions and approach each student as a unique individual [1, 8, 12]. However, there are at least two considerations which people can

*Address correspondence to this author at the Humanities Academic Skills Unit, Faculty of Humanities and Social Sciences, La Trobe University, Bundoora, Victoria 3086, Australia; Tel: +61 3 9479 2535; Fax: +61 3 9479 1700; E-mail: c.chanock@latrobe.edu.au

usefully keep in mind as they devise ways of supporting a student who is Deaf-blind. First, there is the risk that discussions will be ephemeral, as a person whose hands are occupied with signing cannot also make notes of what is said; it is essential, therefore, that a record be kept for the student to refer to later. Secondly, a vision impairment has implications beyond the obvious fact that texts must be made available in an alternate format suited to the student's reading preferences: large print, screenreader, and/or Braille, depending on the student's residual sight, hearing, and mastery of technology. We need also to remember that many study operations which sighted people (including those with hearing impairments) take for granted depend on being able to see: writing in the margins of photocopied articles; skimming a whole reading in one piece, moving quickly around the text, backwards and forwards; trying out different arrangements of material in a draft to work on the "flow"; surrounding oneself with books and papers, harvesting and combining bits from this, that and the other one. Meanwhile, common strategies used by students who are blind, such as listening to recorded books or screen-reading software, depend upon hearing. Megan Conway comments on her own experience as a postgraduate student with Deaf-blindness: "In my case, the answer to the question 'What do you need?' cannot be achieved simply by skimming down the list of what to provide for people who are blind and what to provide for people who are deaf.... vision loss plus hearing loss manifests itself differently for each individual" [8; cf. 7]. Some methods in common use by a person with a single impairment, such as Braille or signing, can be crucial, but not sufficient for a tertiary student's needs.

Having said all this, however, it is important also to stress that the intellectual process of working with a student who is Deaf-blind is the same as the process of working with any other student: the key is dialog. The aim of students working with an ALL adviser is to develop skills in using academic discourse, but as discourse is always *about* something, we work on the discourse by talking about whatever the student is trying to write about for the disciplines s/he is studying. The purpose of our work may be to improve a piece of writing, but this is rarely a matter of providing students with information about writing that they can apply mechanically to fix the problems in their text. As Garner reminds us, "communication is not ... a matter of *conveying* messages, but of [jointly] *constructing* them" [13], and this is done dialogically. It is by talking through their ideas, uncertainties, and confusions that students discover, clarify, qualify and finally structure what they want to say. For the most part, no records are kept of the joint construction of meaning achieved in sessions like these. This article, however, will afford a glimpse of this, *via* excerpts from my records of discussions with Elizabeth.

3. INSTITUTIONAL ACCOMMODATIONS

In Australia, as in North America and the United Kingdom, universities are required to make "reasonable accommodation" to support the efforts of students with disabilities [see, e.g., 14, 15; for typical accommodations, see 16]. As each student's needs are different, it is essential that students consult with the disabilities staff well in advance to establish how they prefer to access information and to produce assignments, and to allow for the time

required to convert texts into their preferred format(s). As Bhattacharyya acknowledges, "When first exposed to a post secondary environment, a deaf-blind student presents unique challenges for support services to meet his or her needs" [1]; but he emphasizes, like others [e.g., 9-10], that people who are Deaf-blind have the best understanding of their needs and that the student, therefore, should "be the central figure in the transition planning process" [9]. For this, they need to be well-informed about the kinds of assistance that may be on offer, and advice is available in print and on the web to help prospective students, their teachers and families, and university support and teaching staff, to plan a successful transition to university [e.g., 1, 2, 7, 10, 17, 18; for information about assistive technology in particular, see 9, 19, 20].

Bourquin stresses the importance of "the attitude of the institution and its willingness ..., not only to [adhere to] the 'letter of the law', but to go beyond statutory requirements" [22]. Indeed, Megan Conway tells us that "If the institutional atmosphere around service provision had been one of enhancing student success rather than one of providing no more than 'reasonable accommodations', I think I would have had greater opportunities for wider participation during my graduate studies, and my experience would have been much more positive" [8]. This brings us to the contribution of this article, in which I will not seek to go over the ground covered by others (above), but rather to discuss an additional line of support – or more properly, collaboration to develop a student's academic skills – which I have not seen discussed elsewhere. Orlando describes tutoring by subject specialists [21], but there is no such role in Australia, to my knowledge; here, as elsewhere, academic support for undergraduates is provided by ALL advisers. It is unlikely that ALL advisers (or, in the North American system, writing center staff) are involved in working with students who are Deaf-blind; however, they could take on this role, and in that event they may like to know what has worked in our case. I will begin by introducing Elizabeth, briefly sketching in the ways that her condition has shaped her educational history. This may help others to assess how similar their situations are to hers, and what they might adapt from her evolving strategies. Then we will look at the specific innovation canvassed here: my role as an ALL adviser in talking with Elizabeth about her ideas for assignments, providing notes of these discussions, and responding to her written drafts.

4. INTRODUCING ELIZABETH

Born in 1956, twelve weeks premature, Elizabeth's retinas were damaged and she has continued to lose her remaining vision over the course of her life. Hearing loss too began in early childhood, with chronic ear infections and a condition called cholesteatoma in which growths form in the ear. Elizabeth attended a school for the blind from the age of four until grade eight, and avoided reading and writing as far as possible, because (in her words) she "thought that was only for school", a setting associated with the misery of living away from home. With regard to her future, Elizabeth remembers, people's "expectations were very low. For example it was felt that I should go to RVIB [Royal Victorian Institute for the Blind] rehab services at the age of 16 years [and] then into the sheltered work shops for the blind. This proved to be a frustrating time because I knew I

could do a lot better for myself.” Fortunately, her family moved to England and Elizabeth was able to study music – her passion, despite her hearing loss – at the Royal National College for the Blind.

At the beginning of the 1990s, Elizabeth lost all of her remaining hearing and received a cochlear implant. At the same time, she undertook to learn Auslan to broaden her options for communication, and to enable her to work for the Deafblind Association as Community Liaison Officer. By the end of that decade, struggling to read large print, Elizabeth began to use Braille. In 2005 Elizabeth returned to study, beginning with a Tertiary and Further Education course online for (in her words) “Deaf and Hearing Impaired students to improve [their] English”. This enabled her to complete her secondary education at the same time as taking a Graduate Diploma in Deaf Studies and Languages to improve her Auslan. Following this, Elizabeth enrolled in a Bachelor of Arts course at La Trobe University, taking subjects in English, Sociology, Anthropology, Gender and Diversity Studies, and History. As her visual field is by now extremely limited, she has adopted tactile signing whereby she sits opposite her interpreter, with her hands cupped around the interpreter’s hands as she signs, so that Elizabeth apprehends the signs by touch rather than by sight.

5. TECHNICAL SUPPORT PROVIDED

The alternate format service provides Elizabeth with the readings she needs in accessible formats; note-takers provide a record of lectures and tutorials; and the interpreting service provides Australian Sign Language (Auslan) interpreters for classes where Elizabeth needs to follow real time discussions. All of this is coordinated by the Deaf and Disability Liaison Officer, who also liaises with teaching staff, advising them on how to accommodate Elizabeth’s needs, and arranges meetings for Elizabeth with teachers, the ALL adviser, or the technical staff.

With her sight and hearing loss increasing, Elizabeth’s reading preferences have changed from large print to Braille. She uses a refreshable Braille display, with which “the text that appears on the [computer] screen also appears on an additional display unit with a Braille output” [9], which is attached to the computer keyboard. “This Braille display has Braille cells that have pins the same size as typical Braille dots, and these pins move up and down [under the reader’s fingertips] to produce the Braille characters” [9]. In this way, Elizabeth can read materials that have been scanned into the computer as well as those that are already available in electronic form, on websites or as e-books.

6. NON-TECHNICAL SUPPORT PROVIDED

6.1. How Elizabeth Works with Discipline Teaching Staff

Elizabeth has weekly meetings with her subject lecturers and her interpreter to clarify her approach to assignments they have set, and to negotiate appropriate modifications to number and length of assignments; for example, rather than writing two short assignments as other students are doing, she may write on one topic in more depth and at greater length, which reduces the range of sources she must focus on while developing comparable knowledge and skills. Here, too, her lecturers can help her to choose relevant readings and video segments, and can deal with any problems that

arise, such as when Elizabeth’s interpreter missed a lecture and the lecturer sent Elizabeth her own notes to help her catch up. I have asked two of Elizabeth’s lecturers what they have found difficult, and how they have addressed these challenges. The difficulties, they agree, have to do with finding ways to respond helpfully to Elizabeth’s written work (discussed further below); and with ensuring that students include Elizabeth in class discussions, and that the material in lectures is as fully accessible as possible. One lecturer got students to identify themselves when speaking in tutorials and repeated their comments so that the interpreter could keep pace. She sent her lectures to Elizabeth’s interpreters ahead of time, and included Elizabeth in her use of visual materials by describing these, or asking a student to describe them. While such adjustments may sound tedious, neither lecturer found them so: “working with people with disabilities takes a little bit of accommodation,” said one, “but ... it is absolutely worth it”.

6.2. Dialogic Learning with an ALL Adviser

Elizabeth spends a further hour each week with me and her interpreter, talking about her ideas for her written assignments, building on what she has read and heard in classes. To understand why these sessions are necessary, and how they work, we can refer to Vygotsky’s insights into the way that people learn language(s), which is always dialogic [23]. Either the person is listening to or participating in dialog, or, when thinking silently, is often articulating thoughts in anticipation of, or in response to, what others are likely to say [24]. It is through conversation that we get a sense of the needs of our audience, and how to meet them. When we write, moreover, we base our writing upon what dialog has taught us about communicating with an audience [25]. Although undergraduates may not be learning a whole new language, they are certainly learning new disciplinary discourses which, like the discourses that Bhaktin described as “dialects” of particular social groups [26], offer resources for the expression of ideas that are suffused with the values and the ways of thinking of those disciplines. At first these discourses are often alien and mysterious; their questions are not the students’ questions, and their ways of answering are not the students’ ways. This gap creates the need for students to, as Bartholomae has put it, “invent the university” [27] – to construct an understanding of what the disciplines are about, within which there is a place for the student as a member of the discipline community, with something to say.

As Elizabeth talks to me about her assignments, I can give her a sense of the questions an academic audience will bring to the reading of her work, and she is able to practice framing answers to these, and thinking about what kind of information she will need to elaborate on what she knows already. Through experiencing this process each week, she internalizes the habits of questioning that she needs in order to approach an essay topic (How does this topic relate to the overall concerns of the subject? to the theories we’ve discussed? to the reading we are doing? What do I need to find out about it?) Elizabeth has told me that she asks herself many more questions as she studies on her own, because she is used to me asking her so many (a useful counter-argument, perhaps, to those who worry that “directive” tutoring will render students overly dependent; for this debate, see [28]). Furthermore, as the discussion proceeds, I

am able to model academic ways of expressing the ideas she is constructing, by saying something like “A few minutes ago you said you thought that [and here, I may rephrase her idea, using the language of her discipline]; how do you see this in the text you're reading for this essay?” This sort of response probably goes beyond what a peer tutor could offer; but a writing center director, in the North American system, or an ALL adviser in Australia or New Zealand, is likely in a position to provide the experience of questioning, and the modeling of language, described here.

Unlike my students who have sight and hearing, Elizabeth cannot take notes of our discussions as we go, so I do that, and send them to her by email within a day or two. These notes serve to remind her of what we have talked about, including both conceptual and practical matters (such as things she should arrange with other staff, or sources she should consult). A typical email, below, gives a sense of the discussion, and I have numbered the sentences so that, following the email, I can flag the various functions carried out by such a summary.

Dear Elizabeth,

These are the things we talked about when we met with Sally on Tuesday:

1. For your Australian History subject, you are thinking of writing your first assignment about Betty Steel, a convict on the Second Fleet, who was the first Deaf person to settle in Australia.
2. You need to write about how her history relates to the culture of Australia in the 21st century.
3. You are thinking that Deaf culture is part of the diversity of Australia, and that Steel was an important early influence on present-day Deaf culture because she brought British Sign Language and fingerspelling to Australia.
4. You see her as an outsider to her own society, as shown by the fact that she couldn't communicate at her trial, and you connect this with Deaf people being, to some extent, outsiders to present-day society because non-Deaf people don't understand sign language, so there is still that barrier to communication.
5. You are reading a book about Betty Steel from which you learned that, when her grave was excavated under the Town Hall in Sydney, a reporter for the *Sydney Morning Herald* failed to appreciate her importance, and thought she had led a “pathetic” little life.
6. This book describes itself as a subaltern history, and we talked about what that means -- that it is history “from below”, focusing on people who are not of high status, and have generally been considered unimportant for that reason.
7. In your history subject, you've heard that, contrary to what you had thought up till now, the convicts in Australia were in some ways more free than prisoners in England, and had opportunities that people of their class would not have had at home.
8. You are going to research whether this was true of Betty Steel.
9. What sort of interactions did she have with

other people, and how free was she? 10. Again, you need to think about how this aspect of convicts' opportunities relates to present-day Australian culture. Is Australia a country where people of lower class are less limited in their opportunities than elsewhere?

This email performs the following functions in sequence. Sentence 1 identifies Elizabeth's topic; sentence 2 connects this topic with the purpose of the assignment; sentence 3 notes how Elizabeth's topic is relevant to this purpose; and sentence 4 recalls the particular angle from which Elizabeth plans to approach it. Sentence 5 records support for this angle from Elizabeth's current reading. Sentence 6 brings in relevant theory, and sentence 7 brings in relevant class discussion. Sentence 8 reminds Elizabeth of what research she plans to do next, while sentence 9 breaks down the sub-questions she will want to explore. The remaining sentences again relate the specific example Elizabeth is looking at to the broader concerns of her subject, reiterating the purpose of the assignment. All of these are academic “moves” that are characteristic of thinking towards a piece of academic writing. The discussion they summarize was evidently one in which these moves were practiced, and the summary serves to reinforce these habits of enquiry.

6.3. Responding to Elizabeth's Written Work

As well as structuring face-to-face discussions in such a way that Elizabeth develops useful lines of questioning, I have worked with her also to develop methods by which I, and others concerned with her writing, can offer useful feedback. Her lecturers and I were obliged to set aside entrenched habits of responding to writing, in order to accommodate Elizabeth's ways of reading. One lecturer began by handwriting comments on Elizabeth's pages, as she did for all her other students; but these relied on vision, and could not be read electronically. Others, including myself, began by using the “track changes” tool in Microsoft Word, which enables electronic access to feedback, but is still of no use to Elizabeth because it flags in-text corrections in color, which she cannot see, and puts comments in the margins, where she cannot find them. It was necessary to create a systematic way of putting feedback of all kinds exactly where it applied – immediately following the word(s) to which it applied – and of making it highly “visible”, to a person reading it in Braille, by distinguishing it clearly from the writing around it. Elizabeth and I settled on a very few, consistent directions for her to make corrections: “add, delete, change, or replace”, and I put them in square brackets to flag their presence:

There are people who believe that certain [change certain to certain] groups have no right [add to equal treatment, then add full stop and start next word with capital letter F] for example some people believe that Gays are not material [change material to natural], some people discriminate towards [change towards to against] women, and people with disabilities.

Where I was not asking for a correction, but wanted instead to make a comment or suggestion, to ask a question, or to model some aspect of academic discourse (for example, cohesive devices such as transitional phrases or topic

sentences), I would begin with “Elizabeth”, so that she could consider what came next. For example,

An example of direct discrimination is when a person with a psychiatric disability is refused accommodation due to their schizophrenia (2006: p. 12). It is also unlawful to discriminate ... However there are provisions in the Disability Discrimination Act where certain legislations are exempt, for example the Migrations Act (1958), (2006: p 36-7). [Elizabeth, why is this exempt? How is it allowed to discriminate?]

These conventions worked fairly well, but a further improvement came when Elizabeth asked me to put my interjections in capital letters, making them still easier to recognize. Around this time, it was Elizabeth's turn to have a story draft “workshopped” by her peers in a creative writing subject. This could have been a chaotic process, but to minimize problems Elizabeth and I agreed to circulate a note around all members of her class, and also to her lecturers, explaining the methods of feedback we had developed so that they could be put into use more widely.

Often, our work on drafts has involved moving paragraphs around, or moving material from one paragraph to another elsewhere in the text; this highlights one of the difficulties of drafting when one cannot see one's document as a whole. It is hard to keep track of where each part of one's intended content is located; whether it is arranged in the most logical order; whether there are any repetitions, or any gaps in content; and whether all transitions have been provided to make the writing “flow”. Arranging and re-arranging material, and repairing gaps thus created, is one of Elizabeth's most time-consuming challenges. A quick way of helping is to suggest a re-arrangement, and ask Elizabeth whether it fits with her intentions. However, as this is a skill that she needs to develop for herself, I have also suggested that she move through her drafts constructing a summary sentence for each paragraph; it may be dropped from the final draft, but meanwhile, it serves to keep her focused on what she has written so that she can recognize whether subsequent material is repetitive or out of order.

7. DEMONSTRATING THE EFFECTIVENESS OF BOTH THESE WAYS OF WORKING

Obviously, the processes recounted here do not lend themselves to formal evaluation; their effectiveness, nevertheless, is attested to by improvement in Elizabeth's grades, from low passes and Cs in the year before she began working with an ALL adviser, to include Bs since the routines described above have been established. More specifically, it is possible to demonstrate how this works by tracing the development of Elizabeth's assignments from the discussion stage, through early drafting, to the final written product. For reasons of space, I will show only the introductory paragraphs of Elizabeth's drafts for one assignment, and the most relevant records of discussion that preceded them.

In the same Australian History subject we have looked at already, a different assignment was given as follows:

Write a reflective piece on an aspect of Australian society or culture that you find interesting or that has touched you in some way. It can be an event you have participated in, a location you have visited, a person you have met or heard about, a cultural practice you have noticed, or an issue that is currently making news. Identify what the experience, event, practice or location reveals to you about Australians in the early 21st century – their diverse values and concerns, their cultural habits, how they negotiate and understand “Australian” identity, and the various factors and forces which are influencing them.

Below is a passage from my emailed notes of our discussion of Elizabeth's ideas about this assignment, before she began to write. Here again, Elizabeth's choice of topic is explicitly related to the purpose of the assignment; its complexity is noted; reading is flagged which she thinks will be helpful; and there is a practical reminder to go to the internet for the text of the primary source. (Reminders about reading that Elizabeth or her lecturers have identified as useful are quite important, because Elizabeth is not able to sit at her desk, surrounded by books and articles which are themselves visual reminders of the sources she wants to incorporate into her writing; as I have suggested, this is one aspect of low vision that needs to be considered when thinking about differences between a student with Deaf-blindness and others who can see).

You want to focus on Rudd's apology to Indigenous people, and what it shows about Australia's culture and identity today. You think it shows, partly, that Australian society has grown up and accepted the need for an apology, which it had not been willing to give until now. White Australia has taken some form of responsibility for its past. However, you also notice that, although many people thought the apology would fix many of the problems of Aboriginal people, we still hear that they have a much lower standard of living than white Australians. This suggests that the new beginning that we hoped the apology signalled is not in fact happening. It may be that the apology was shallow, and there is still a lot of hidden discrimination in Australian culture. The question asks you to think critically about issues of national identity, and although the apology suggests that Australian identity includes Aboriginal identity, the failure to improve the situation of Aboriginal people suggests that they are not included. The reality may not be simply one way or the other, but both at once. You have done reading in previous subjects about the history of Aboriginal and white relations in Australia, which you can refer to in order to compare the situation now with what it was like in the past. You may also want to get the text of the apology off the internet so that you can comment on the content and language that it used.

Next, we can see Elizabeth's first pass at an introduction, with my guidance as to what should be included to satisfy the needs of her audience and the conventions of essay structure:

Essay 1 Draft 1: Kevin Rudd's Apology 'Sorry' to the nation.

Intro: Fourteen months after the apology [ELIZABETH, YOU ARE INTRODUCING THIS HERE, SO YOU NEED TO SAY WHAT APOLOGY] how far down the track are we? Have things really improved for the Aboriginals or was the apology a huge PR exercise. [CHANGE FULL STOP TO QUESTION MARK] [ELIZABETH, IF YOU HAVE AN OVERALL IDEA ABOUT WHAT IT TELLS US ABOUT AUSTRALIA – BOTH THE APOLOGY ITSELF, AND THE RELATIVE LACK OF FOLLOW-UP – THIS IS A GOOD PLACE TO TELL US THAT IDEA. THEN YOU WILL UNPACK IT AS YOU DEVELOP THE BODY OF THE ESSAY.]

The change, from the first pass, above, to Elizabeth's final draft, shows her shift to addressing a reader other than herself, and her attention to the functions of an introduction in identifying the topic; contextualising it within the larger issue it pertains to; problematizing it; and signposting the broad lines of the discussion that will follow.

'Kevin Rudd's Apology to the Indigenous People; on behalf of the nation.'

This essay will reflect on the nation's apology to the Indigenous peoples of Australia. It is important to keep in mind that the apology tells us about Australia's culture and identity in the 21st century. What then, led this nation, that otherwise could be seen as a 'sorry-proof' nation', to overturn long held attitudes? I argue that in the 21st century our nation was mature enough to right the wrongs of the past. Our hopes and dreams were heightened when Prime Minister Rudd's speech was delivered to the nation. It is also important however to look in more detail how far down the track we have come in just over fourteen months since the apology was offered to the nation in Parliament on 13th February 2008. I believe it is important to reflect on the question, how has the apology improved the lives of Aborigines? Was the apology a huge Public Relations exercise for the new Rudd Labour government? We will see later an example how for one Western Australian community the living standards are still far behind mainstream Australia.

8. CONCLUSION

Although the suggestions for practice here are based upon experience with a single student, I think that they may usefully inform support for students with Deaf-blindness generally. In working with Elizabeth, I have become aware

of the effects of limited vision and hearing in more detail than I have seen discussed elsewhere; and in collaborating with her on her approach to studying for assignments, and to drafting written work, I have become aware of habits that I, as well as her discipline lecturers, needed to unlearn in order to be of help to a student with Deaf-blindness. The methods that we have evolved together go well beyond the provision of "reasonable accommodations" in the form of assistive technology and appropriate conditions for the completion of work for assessment, necessary though these are. I have foregrounded, in particular, the use of discussion notes and specific routines for feedback on written work as, even where the literature mentions "tutors" as part of the assistance that may be available to students with disabilities, I have seen little indication of the kind of work they do, and it may be that tutors elsewhere will find these methods helpful. The value of dialogic discussion in helping students to frame their thinking along academic lines of enquiry, and to adopt the discourses of their disciplines, is already clear to ALL advisers and writing centre tutors; but this article contributes some analysis of how that works and adds the suggestion that records should be kept for students with limited hearing, in lieu of notes that hearing students take for themselves. Similarly, for students with limited sight, it is helpful to use a system of written feedback on drafts that is very simple, clear, and consistent, and easily recognisable as feedback. Indeed, although these methods have been developed with a student who is both Deaf and blind, they may usefully be employed with students with a single sensory impairment, as appropriate.

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