

# Accessing University Education: Perceptions, Preferences, and Expectations for Interpreting by Deaf Students

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This paper provides a brief review of the history of deaf education in Australia, Australian Sign Language (Auslan), and Auslan interpreting. A panel of Australian deaf university students from diverse linguistic and educational backgrounds provides insights into their perceptions of sign language interpreting provision in university lectures. They commented on their interpreting preferences after viewing two videotaped segments of university lecture interpretation, one demonstrating a predominantly free approach and the other a predominantly literal approach. Expectations of the deaf students were explored in relation to the educational backgrounds and qualifications of university interpreters; comprehension of interpreters is also discussed. Results suggest that the university students preferred interpreters to combine both interpretation styles, switching between literal and free approaches when appropriate. In doing so, students can access lecture content in Auslan while accessing subject-specific terminology or academic language in English. In terms of qualifications, the students advocated for interpreters to have a university qualification in general, especially if they are working in a university context. However, the students also acknowledged that interpreting did not provide them with full access in educational settings.

Australia is a huge country the same size as North America. It is divided into six states and two territories, and with a population of 20 million people, it is thought to have approximately 16,000 Deaf sign language users (Hyde & Power, 1992). Australian Sign Language (Auslan), the natural sign language of Deaf Australians, was indirectly recognized by the federal government in

the Australian Language and Literacy Policy (Dawkins, 1991), and the first Auslan dictionary was published in 1989 (Johnston, 1989). Auslan has its roots in British Sign Language (BSL) and is also closely related to New Zealand Sign Language (NZSL) (Johnston, 2000) but is very different from American Sign Language (ASL). Auslan is a two-handed fingerspelling alphabet and is used Australia-wide but has two distinct dialects (North and South) (Johnston, 1989, 1998).

## Australian Deaf Education

Deaf education in Australia has followed similar trends to those in the United States, United Kingdom, and other Western countries, ranging from an oral-only approach (Hyde, Power & Leigh, 1998) to Total (simultaneous) Communication with the use of an Australasian Signed English system and spoken English (Johnston, 1996; Leigh, 1995; Leigh & Hyde, 1996) and deaf students integrated into mainstream schools with support from interpreters and note takers (Bowman & Hyde, 1993; Byrnes & Sigafoos, 2001). All of these educational approaches are still present in different parts of the country, depending on the policy of the Education Department in each state.

There are, however, bilingual programs in the states of New South Wales (NSW), Victoria, Queensland, and Tasmania (Baker, 2000; Gifford, 2000; Komesaroff, 1996, 2001; Paterson, 1996), with the schools in Queensland and Tasmania adopting a co-enrollment approach whereby deaf and hearing

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students are educated in the same classroom through a team of a regular classroom teacher and a qualified teacher of the deaf using both Auslan and English (Baker, 2000; Gifford, 2000; Potter & Rushton, 1998). The NSW Department of Education recently commissioned a review of best practice in deaf education (Beattie, Toe, Leigh, & Napier, 2003) and as a result have established primary- and secondary-level bilingual programs in two state schools.<sup>1</sup>

### Auslan Interpreting

The professionalization of Auslan interpreting underwent a similar process to that of the United States but is an incredibly young profession, with the establishment of the Australian Sign Language Interpreters' Association (ASLIA) in 1991. Training and "certification" for Auslan interpreters, however, have been in place for a longer period of time but are very different when compared with what is available to ASL interpreters.

The first training course was offered in 1986 (Flynn, 1996), and now there are community college courses available in almost every state and a post-graduate training course offered at Macquarie University in Sydney, which began in 2002. There are very few courses when compared with over 100 post-secondary interpreter training programs in the United States provided through associate, bachelors, or masters degrees (Johnson & Winston, 1998).

An accreditation system for the qualification of Auslan interpreters has been available in Australia for approximately 20 years under the auspices of the National Authority for the Accreditation of Translators and Interpreters (NAATI), which accredits all language interpreters. After long negotiations, NAATI accepted Auslan as one of 26 official languages in Australia in which interpreters can be tested (Flynn, 1985), with the first test in "Deaf Sign Language" offered in 1982. In recognition of a change in usage in the community, the term *Deaf Sign Language* was changed to *Auslan* in 1993 (Ozolins & Bridge, 1999).

Similar to the Registry of Interpreters for the Deaf (RID) and the previous National Association of the Deaf (NAD) testing procedures in the United States, accreditation in Australia is offered through the

process of sitting a one-off examination. Testing is available either at paraprofessional or professional interpreter levels. NAATI defines a paraprofessional interpreter as follows:

This represents a level of competence in interpreting for the purpose of general conversations, generally in the form of non-specialist dialogues ... [whereby] interpreting in situations where specialised terminology or more sophisticated conceptual information is not required [and] ... a depth of linguistic ability is not required (NAATI, 2003).

Interpreter level, however, is defined thus:

The minimum level of competence for professional interpreting ... [and] may be regarded as the Australian professional standard. Interpreters are capable of interpreting across a wide range of subjects involving dialogues at specialist consultations ... interpreting in both language directions for a wide range of subject areas usually involving specialist consultations with other professionals, e.g., doctor/patient, solicitor/client, bank manager/client, court interpreting ... [and] interpreting in situations where some depth of linguistic ability in both languages is necessary (NAATI, 2003).

According to current NAATI (2003) figures, there are 604 accredited Auslan interpreters nationally, 524 at paraprofessional level and 80 at professional interpreter level. One hundred and thirty-six of these interpreters are based in the state of NSW (where this study took place), with 119 accredited at paraprofessional level and 17 at interpreter level. It is widely recognized that there are a larger number of accredited paraprofessional Auslan interpreters than accredited interpreters. This is evidenced in a survey that was administered to accredited interpreters all over Australia whereby the number of paraprofessional interpreters outnumbered the number of interpreters by almost 40% (Napier, 2001). The U.S. system of certifying interpretation and transliteration separately is not replicated in Australia because they are not recognized as separate processes. Therefore, Auslan interpreters receiving accreditation are expected to offer an interpreting service to best meet the needs of deaf consumers.

### University Interpreting

The provision of sign language interpreters in university settings only became formalized in NSW in the early 1990s after the first successful case of discrimination against a university regarding the lack of interpreting provision (Stewart, 1998). There are no current figures available to indicate how many deaf students are studying at university using Auslan interpreters to access lectures. Anecdotal evidence collected from university interpreter coordinators would suggest, however, that numbers are increasing.

Due to the changing educational climate in Australia, with more deaf students accessing higher education through interpreters, this investigation of university students' perceptions, preferences, and expectations of university interpreting is much needed.

### Research on Educational Interpreting

Various European and North American studies have assessed the expectations of consumers of interpreting services. Moser (1996) found that users of spoken language interpreters at conferences had different qualitative expectations of the interpreting service, depending on their experience of attending conferences and using interpreters, as well as the types of conferences they were attending. Moser correlated the amount of experience that people had attending conferences with the different expectations they held. There were significant differences in expectations about the faithfulness of an interpretation, that is, the extent to which it would be a verbatim translation of the original production. Of the more experienced group, 53% stated the importance of a faithful (free) interpretation compared with only 35% of less experienced respondents.

Some respondents stated a preference for completeness of renditions, whereas others emphasized the importance of the interpreter concentrating on the expression of the essentials of any message. Moser's (1996) original hypothesis assumed that the more technical the conference, the more respondents would prefer a literal interpretation incorporating technical terms. The survey results demonstrated, however, that the conference delegates involved in his study had a variety of preferences, which would support the

need for interpreters to be willing to offer both free and literal interpretations, depending on the target audience.

In applying these findings to deaf consumers of conference interpretation, it can be assumed that survey results would be very similar in that they would prefer to receive a high-quality interpretation that focuses on meaning. Universities provide an analogous setting in that information is often presented in a way similar to its presentation at conferences. It is possible, therefore, to assume that users of interpreters in a university lecture would have similar expectations to those users of conference interpreters. However, in terms of university interpreting, little research has been conducted on the preferred interpreting style of deaf students, hence the assembly of the panel and issues raised in this article.

In focusing on deaf professional consumers, Viera and Stauffer (2000) found that deaf people using interpreters in professional arenas had very particular preferences in relation to the interpreting style used by interpreters, in particular the access to English terminology. Viera and Stauffer discussed the expectations of deaf consumers in relation to the use of transliteration. Much of sign language interpreting literature refers to *literal interpretation* as *transliteration* (Cerney, 2000). Thus the North American term *interpretation* can be equated with the term *free interpretation* (or translation) used by spoken language interpreter researchers and educators worldwide and by sign language interpreter educators in some parts of Europe and Australia. Similarly, the North American term *transliteration* corresponds with the term *literal interpretation* often used elsewhere. Viera and Stauffer (2000) assert that transliteration is a complex process that requires more than a verbatim rendering of the message from spoken into manually coded English. They conducted a small survey of a range of consumers with different levels of hearing loss in the United States and found that a high percentage preferred to receive transliteration rather than interpretation.

Survey recipients were asked what they hoped to achieve when using a transliterator rather than an interpreter in a meeting and found that one of the most typical answers was that consumers wanted to be able to access the English language that their peers were

using. In doing so, they could participate in the discourse using the same language and thus ensure mutual understanding of terminology. The survey respondents stressed the importance of interpreters having an excellent command of the English language at graduate-level proficiency with a wide vocabulary. Other authors, such as Kelly (2001), Siple (1997), and Winston (1989), have also discussed the merits of transliteration when used appropriately, incorporating effective linguistic strategies such as English mouthing, fingerspelling, and use of additions, substitutions, and omissions.

Viera and Stauffer's (2000) findings may also be applicable to deaf university students in that they may prefer to receive information through a more literal interpretation so that they can access the subject-specific terminology and academic English used in the university discourse environment. Seal (1998) and Sofinksi, Yesbeck, Gerhold, and Bach-Hansen (2001) have discussed the use of transliteration as an effective translation style in education. The equivalent of Viera and Stauffer's (2000) requirements of interpreters in professional settings would necessitate interpreters who work in university settings to have the appropriate level of language proficiency and to be suitably qualified to work in such an environment (i.e., university educated).

Locker (1990) found that American deaf students had similar expectations of interpreters they used in university settings with regard to the type of translation style used. One aspect of Locker's (1990) study involved her interviewing three deaf students to elicit their feelings about the effectiveness of transliteration and how they cope with errors made by interpreters. The overall response from the deaf participants was that they preferred to receive lecture information through semantically equivalent interpretations of English into ASL (i.e., free interpretation) rather than through a system of sign-for-word transliteration.

Bremner and Housden (1996), however, reported that Australian deaf postsecondary students want interpretation into "an Auslan framework with English terms" (p. 13) and prefer interpreters to fingerspell technical or subject-specific words that do not have an existing sign rather than making up a sign. This

description suggests a preference for interpretation using a free translation style with code-switching into a more literal style for the introduction of English terms (as found in Napier, 2002). This is an assumption, however, based on interpretation of Bremner and Housden's comments. This article therefore describes specific discussion with deaf university students about their perceptions and preferences in relation to translation style, as well as expectations regarding educational qualifications of university interpreters.

Another issue touched on during the panel discussion in the present study was students' level of comprehension of university lecture content. Murphy (1978) stated that sign language can effectively convey the content of university lectures, yet a deaf person's actual level of comprehension may contradict his or her reported understanding. Livingston, Singer, and Abramson (1994) studied North American deaf post-secondary students' understanding of a lecture and found that students' expressed preference in relation to signing style did not always correspond with their actual level of comprehension.

Steiner (1998) also found that the expressed preference of deaf viewers' signing style did not always correspond with their actual level of comprehension when watching televised interpreters or deaf presenters. The comprehension of sign language on television will invariably be influenced by different factors than the comprehension of a university lecture, due to the fact that the medium of television provides less clarity of depth, which is crucial to the effective articulation of sign language (through use of signing space, location, etc.). Nonetheless, the key issue is the fact that the respondents in Steiner's study contradicted themselves in terms of how much they understood and how accurately they received information from their preferred signing style.

More recently, Marschark, Sapere, Convertino, Seewagen, and Maltzen (2004) conducted a study examining deaf students' comprehension of interpretation and transliteration as a function of their reported sign language skills and preferences. The results consistently demonstrated that regardless of the deaf students' reported sign language skills and preferences, they were equally competent in comprehending interpretations or transliterations.

Napier (2002) investigated Auslan/English interpreters working in university lectures and found that Auslan interpreters had a dominant translation style. They used either a free or a literal interpretation method. Free *interpretation* was defined as “the process by which concepts and meanings are translated from one language into another, by incorporating cultural norms and values; assumed knowledge about these values; and the search for linguistic and cultural equivalents” (Napier, 2002, p. 285), as opposed to *literal interpretation*, which was defined as a process of interpretation whereby “the linguistic structure of the source text is followed, but is normalised according to the rules of the target language” (Crystal, 1987, cited in Napier, 2002, p. 285). Napier identified a translation-style spectrum, which demonstrated that the interpreters were either extremely literal or extremely free—or code-switched between literal and free—but were still dominant in one style or the other.

It was argued that sign language interpreting in university settings requires a flexible approach due to the sociolinguistic and sociocultural factors within the discourse environment. The results of the study indicated that it might be more appropriate in a university context for both free and literal interpretation methods to be used in combination. By switching between free and literal methods as a linguistic strategy, it was suggested that interpreters can provide conceptually accurate interpretations of lecture content as well as giving access to academic jargon or subject-specific terminology by incorporating use of fingerspelling for key lexical items of the text. “A free interpretation approach can be considered as the most effective general method for translation, but it is important to recognise that a literal approach can also be effective and may in fact be preferred by some deaf consumers” (Napier, 2002, p. 294).

The focus of the present study is on four Australian deaf university students’ perceptions of university interpreting, responses to videotaped interpretation and stated preference of translation style, and their expectations of university interpreters in terms of qualifications. The issues raised in this article are not derived from an empirical study per se because the data were exploratory and collected from a small number of people. Findings cannot therefore be automatically

extrapolated to all deaf university students. Although the deaf people involved come from a range of backgrounds, agreement or different views of panelists involved in this study cannot necessarily be generalized to the whole deaf population in Australia and might not be shared by the larger audience of deaf consumers in universities in other countries. Nonetheless, the issues raised by the deaf persons involved in the discussion provide us with a springboard for consideration of key issues for consumers of sign language interpreters in higher education.

## Method

### Participants

Initially, eight Sydney-based deaf people were contacted and asked whether they were willing to participate in a panel discussion about sign language interpreting services in universities. These people were known to be university students at the time or to have completed their university study shortly before being approached and had regularly used interpreters during the course of their study. Due to scheduling difficulties, logistic problems (i.e., location, transport), and illness, the final panel was comprised of four deaf people. The people involved were two native signers (having grown up using Auslan in the home with deaf parents) and two nonnative signers (having acquired Auslan in early adulthood through late entry to the Deaf community); two had been educated using some form of signed communication in a deaf unit within a mainstream school, and the other two were educated orally in a mainstream school. Three of the panel members were studying toward undergraduate degrees at the time the research took place, and the other had completed both undergraduate and postgraduate study and was still studying toward another university qualification. Two of the participants were familiar with the subject of language acquisition, which was the lecture topic in the interpreting task administered to the interpreters in the original study (Napier, 2001). Thus, the panel members came from different backgrounds and were thought to provide a representative sample of the Deaf community in terms of sign language exposure and educational experience. When

**Table 1** Demographics of deaf panel members

Student	Native signer	Deaf parents	Educational experiences				University qualifications
			Oral	Signed English	Cued speech	Total comm'n	
A	X	X	X (5–8)		X (8–10)	X (10–16)	BA
B			X (5–18)				BA
C			X (5–18)				BA, MA, BSc
D	X	X	X (5–8)	X (8–16)			BA

*Note.* Student B learned Auslan at 21 years old; Student C learned Auslan at 18.

initial contact was made with the panel members, it was established that their preferred mode of communication was Auslan. The detailed demographics of the panel can be seen in Table 1. The numbers in parentheses refer to the ages that each person was in that particular school environment.

**Procedure**

The panel discussion took place in a college building meeting room over a period of two hours. Discussion was conducted in Auslan by the first author (a native sign language user and interpreter) and was simultaneously recorded onto videotape and voiced-over into English by another interpreter for the purposes of later script transcription and verification. The interpreter was NAATI accredited at interpreter level with many years of interpreting experience.

Because all panel members knew each other, discussion began by asking the panel members to comment on their background in relation to how old they were when they began to sign, how they were educated (i.e., orally, mainstreamed, signed English, etc.), and to what level they had studied or were currently studying at university. This information can be seen in Table 1.

The panel was then shown two videotaped segments of an interpreted university lecture segment entitled “Signed Language Acquisition of Deaf Children.” Both interpreters were NAATI accredited at interpreter level. The first interpreter used an extremely dominant free interpretation approach (interpretation), which incorporated linguistic features such as use of possessive pronouns, placement and corresponding spatial reference, exploitation of visual metaphor, use of

rhetorical questioning and nonmanual features, elaboration on meaning, equivalency of meaning and not equivalency of each lexical item, and fingerspelling limited to proper nouns and glosses already lexicalized in Auslan. This interpreter was not familiar to participants because the interpreter lives in a different state.

The second interpreter used an extremely dominant literal interpretation approach (transliteration), including use of possessive pronouns, spatial reference and nonmanual features, less exploitation of visual metaphor with little meaningful elaboration, equivalency based on lexical gloss with higher proportion of borrowing from English in terms of fingerspelling, and closer adherence to English syntactical structure and use of lip patterns articulating English words, especially noticeable when fingerspelling. This interpreter was familiar to the participants because she had previously lived in Sydney, although she had not interpreted for any of the participants during their university studies.

The panel members were asked to discuss their perceptions of the different interpretation methods, their preferences, and reasons for those preferences. A series of questions was developed with reference to questions used by Moser (1996) and Locker (1990) to prompt the discussion in relation to the issues of translation style, educational background of interpreters, and expectations in university settings. The prompt questions addressed what participants wanted from their interpreters in university lectures; their preferred translation style; whether they wanted interpreters to introduce terminology by fingerspelling, then giving a signed explanation; whether they

preferred interpreters to have background knowledge of the university subject; and whether interpreters should have a university qualification generally to interpret in university lectures.

On completion of the procedure, the spoken English interpretation of the discussion was transcribed and analyzed by the interviewer. To address reliability and validity, another sign language researcher fluent in Auslan was asked to watch the videotape of the discussion (without sound) and note the signed comments made by the panel members in response to the questions. These were then compared with the transcribed English interpretation and found to be 100% accurate.

One limitation of the methodology should be acknowledged in that the panel members may well have prejudiced their responses throughout the discussion due to observing each other. In particular, the first response to a question may have influenced subsequent responses. This factor is inevitable in a situation using prompting questions. However, because this discussion was focusing on qualitative issues raised by deaf university students, the points raised can still be considered to be a valid foundation for further qualitative and quantitative study.

Another factor that may have influenced the discussion is the panel members' familiarity with one of the interpreters. Because the Deaf community is such a small community, it is common for the few interpreters in that community to be recognized or known by the majority of Deaf community members. This factor needs to be taken into consideration when asking deaf people to comment on their preference for interpreting style. The comments may well be influenced by subjective personal opinion based on prior experiences with a particular interpreter, rather than on an objective perspective of the interpreting style used.

## Results

The results are presented as a summary of the panel discussion in relation to the key topics of translation style and interpreter education. In reading the results, readers are advised to consider the following questions in relation to the provision of university interpreting services.

Should universities hire only interpreters with university qualifications and subject-specific knowledge?

Should interpreters be assessed on their ability to provide free and/or literal interpretations in the university context?

Are deaf students' perceptions of translation styles accurate?

Should deaf students be asked about their preferences for interpreters?

Do deaf university students need to be educated on how to work with interpreters specifically in this setting?

Should interpreters receive specific training prior to working in higher education?

## Perception and Preference of Translation Style

When asked which interpretation approach they preferred of the two clips they were shown, the panel concurred that they liked both approaches but that each was more appropriate in different contexts. They stated that the extremely dominant free interpretation approach would be fine for more general interpreting situations but that the literal approach would be more suitable for interpreting in university lecture situations. The reasons posited were that a literal approach incorporated more use of fingerspelling, thus allowing the students to access technical vocabulary and academic English. The panel members also trusted that they were receiving more information from the interpreter using the extremely dominant literal approach because she seemed to be keeping up with the pace of the lecturer and pausing less, thus conveying that she was confident to interpret the information.

Student A, a native signer, stated that it was important for key concepts to be interpreted using a more free approach but that terminology should be fingerspelled (i.e., the interpreter should switch to a more literal interpretation at key points of the text). The general consensus seemed to be that the extracts they had been shown were both too extreme and that they would prefer to receive information in conceptually accurate Auslan with the use of fingerspelling and English mouth patterns when appropriate for conveying terminology and academic terms (i.e., a dominant

free interpretation approach with occasional code-switching into a literal approach).

The panel members were asked to consider a university lecture and to discuss in more depth whether interpreters should be more free or literal in their interpretation approach. It was during discussion of this point that many contradictions seemed to occur. Student B, who had previously stated a preference for a literal approach, proceeded to say that concepts should be freely interpreted because it made it easier to absorb more complex information. Student D pointed out that a free interpretation approach was sometimes more appropriate but that it made taking notes difficult because deaf students would have to reinterpret the information into written English. In relation to this point, the other three panel members agreed and asserted therefore that a mixture of free and literal interpretation approaches was required. Two people went on to explain that the appropriate mix should fit the needs of the student, and interpreters could work toward this by building a close relationship with their clients.

When asked how much they understood when following an interpreted university lecture, Student D said she felt she got about 80% of lecture material, whereas Student A said he accessed between 50% and 70% of a lecture and had to follow up what he had missed in his own time through additional reading and study. Student B claimed to understand 80–90% of her lectures, a percentage with which she was happy. Student D, who said she followed 80%, stated that she was very satisfied with what interpreting provides and that the 20% she missed was mostly due to her own inattention. Another student commented that the brain could take in only a limited amount of information anyway and that how much you understand of the lecture can depend on yourself and not just the interpreter's skills.

In relation to the deaf students' reported level of understanding, all of the panel conceded that they never accessed 100% of a university lecture and that this was expected.

#### Expectations of Interpreters' Education

The issue as to whether interpreters should have some knowledge of the subject matter they are interpreting

provoked varied responses. Student C claimed that subject knowledge definitely helps in a lecturing situation. Student D complained that she has had many different interpreters over several years as a part-time student and even had eight different interpreters for one subject. Still, she has never hesitated to reject interpreters who did not have adequate background knowledge to be able to cope with the subject matter of her studies. One panel member explained that in an ideal world, students would be able to choose the interpreter most suited to their needs from an entire "army" of different interpreters. It was recognized that this is not the current reality, however, and that the mismatch between supply and demand must be acknowledged. The other members expressed the view that regardless of the reality, it is best to aspire to have an interpreter with the appropriate subject knowledge, although it was not the only criterion.

In response to the question of whether interpreters should have a university qualification before being allowed to interpret in universities, the panel unanimously agreed that it was necessary, although one panel member admitted that perhaps knowledge and skills equivalent to having a university qualification were also appropriate. Two people pointed out that a high school certificate (HSC—secondary school final exams) should be the minimum requirement. Another three panel members reasserted their opinion that interpreters really ought to have a university background themselves if they aimed to work in that environment. Student A gave an example of an experience in which a non-university-educated interpreter could not recognize a word that was fingerspelled and was unable even to pronounce it.

This discussion was followed with a debate about whether interpreters should have a university qualification to interpret in general, again with differing perspectives. Student C agreed that all interpreters should have a university education, stating that it was especially important if interpreters were going to work in medical and legal settings. Student B added that for working in linguistically demanding interpreting situations, interpreters must be university educated. The other two panel members were unsure. Student A felt that as a university-educated professional, she would prefer to have an interpreter



with a similar background in a range of interpreting situations so that his or her language skills could reflect her skills and education to her colleagues and co-workers. Student D argued that the reverse of this problem was that some overqualified interpreters misrepresented the language skills of people in the Deaf community by interpreting their limited signing into a formal and sophisticated variety of English, giving the impression that they were more educated than they actually were.

In relation to the educational background of interpreters, there was general agreement that interpreters should have a university education, especially if they are going to interpret in university contexts and that familiarity with the subject they were interpreting was preferable, although not mandatory.

Ultimately, the panel agreed that there are fundamental, prerequisite skills that an interpreter needs to work in a university context. The panel recognized the importance of the context of situation, however, by stating that ideal skills would be prioritized differently according to the type of learning environment. In summary, the panel described the ideal skills of interpreters working in university lectures. All members of the panel generally agreed that interpreters should have a good university education and good skills in both languages, especially in fingerspelling. They should be able to code-switch between free and literal interpretation as the situation, consumer, and content of the message requires, using clear mouth patterns and fingerspelling when appropriate. They should be expressive, confident, and assertive. They need to be able to develop a good rapport with the deaf student and should have a reasonable knowledge of the subject.

## Discussion

In evaluating the outcome of the discussion panel, it would seem that the few Australian deaf university students involved in this discussion have differing expectations, depending on their experience and the university setting, much like users of conference interpreters (Moser, 1996). The participants in this panel agreed with the deaf students in Locker's (1996) study that information should be interpreted concep-

tually into Auslan for ease of understanding, yet they also agreed with respondents in Bremner and Housden's (1996) study, which found that deaf students also wanted access to English terms. It would seem, therefore, that the university students involved in this study would endorse the notion of Auslan interpreters utilizing a dominant free interpretation approach and switching into a literal approach as a linguistic strategy to deal with the complexity of the information received and the demands of the context of situation, as discussed by Napier (2002).

Although the panelists stated that they followed a high percentage of university lectures through sign language interpretation, their comments were subjective and based only on reported rather than demonstrated understanding. In fact, all four panelists were prepared to accept the fact that they could not fully access university lectures, which raises major questions about the accessibility of university education for deaf students (as discussed by Harrington, 2000).

In relation to the educational background of interpreters, there was general agreement that interpreters should have a university education, especially if they are going to interpret in university contexts, and that familiarity with the subject they were interpreting was preferable, although not mandatory. This finding is comparable with that of Locker (1990), who stated the ideal that interpreters should be familiar with the content of lectures they interpret and also to that of Bremner and Housden (1996), who reported that deaf students felt that subject-specific knowledge would be an advantage to educational interpreters, and they should be encouraged to "specialize" in interpreting for subjects they have studied.

These panel results cannot be used to generalize deaf university students' perceptions, preferences, and expectations of university interpreting throughout Australia or internationally, so interpretations of the results should be considered cautiously. Nonetheless, the panel responses support previous reports in the literature, particularly that there is a need for both free and literal interpretation styles to be utilized where appropriate and for interpreters to be educated and to have background knowledge of the material they are expected to interpret.

## Implications: Accessing University Education

The preliminary discussion presented in this article has highlighted areas requiring further research and discussion:

The actual extent of comprehension of Australian deaf students in university lectures and whether it correlates with deaf students' perceptions of what they understand

The efficacy of universities hiring interpreters with university qualifications and subject-specific knowledge, and how much preference students should have in the interpreters they have

The assessment of interpreters' abilities to provide free and/or literal interpretations in the university context

One of the key issues raised in this discussion relates to fact that deaf students readily acknowledge that they do not receive full access to information in university lectures. This acknowledgment is a matter of concern for the Deaf community, interpreters, and educators alike. Based on further research and discussion, a model for the training and employment of university sign language interpreters could be developed to improve educational access and to ensure consistency throughout higher education institutions in terms of quality interpreting services and access to university education. It must be recognized, however, that with the changing nature of the Australian Deaf community (see Johnston, 2004), such a model must respond to the needs of the sign language using population.

It is hoped that this initial discussion will lead to further research and investigation of the provision of interpreting services and the needs of interpreting consumers in universities. In conclusion, we would like to quote from and echo Harrington (2000), who states:

It is hoped that our work will result in a greater awareness of at least some of the issues which surround educational interpreting, which can in turn be fed into training, not only for interpreters, but for lecturers and deaf and hearing university students as well, leading to improved practices and relationships for and between those who strive to give deaf students realistic and valid access to higher education (p. 236).

## Notes

1. The incumbent bilingual program in NSW is the Thomas Pattison school, which is a private school administered by the Royal Institute for Deaf and Blind Children.

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