The Australian Journal of
INDIGENOUS EDUCATION

ENHANCING INDIGENOUS PARTICIPATION *in* HIGHER EDUCATION HEALTH COURSES *in* RURAL VICTORIA

SANDRA KIPPEN[1], BERNADETTE WARD[1] & LYN WARREN[2]

1 School of Public Health, La Trobe University, Bendigo, PO Box 199, Bendigo, Victoria, 3552, Australia
2 Elder of the Bendigo Indigenous community

Abstract

The poor health status of Australia's Indigenous people is well-documented, as are the links between health and education. Aboriginal communities recognise the utmost importance of improving educational, physical, social and economic well-being in an environment where disproportionate numbers of Aboriginal students fail to complete secondary schooling. The aim of this paper is to highlight the issues of access, participation, retention and outcomes for Indigenous students wishing to study or currently studying health courses at a tertiary level. This project used a qualitative descriptive approach, conducting in-depth interviews with a number of key stakeholders and students in rural Victoria. Sixteen participants were interviewed, 14 of whom were from the Indigenous community.

Participants identified key issues that were linked to the university and broader community environment. Factors in the university environment included lack of Indigenous staff within the mainstream university system, limited support and culturally inappropriate teaching that lead to negative learning experiences and poor motivation to continue with education. In the broader community, the isolating experience of leaving close-knit rural communities and the influence of past experiences on students' aspirations for tertiary education was highlighted. The importance of community support and liaison with the university and marketing of health courses to the Indigenous communities in the region were key issues that participants identified as needing further attention.

Introduction

The poor health status of Australia's Indigenous people is well-documented. Life expectancy at birth for the Indigenous population is an estimated 17 years less than for the rest of the population. Death rates are three times higher, and infant mortality, morbidity and mortality from a wide spectrum of diseases remain unacceptably high (Australian Bureau of Statistics & Australian Institute of Health and Welfare, 2005). There is evidence from other countries with significant Indigenous populations that improvements in health status are linked to greater participation by Indigenous people in health service delivery (Matthews, 1997). Where Indigenous people occupy relevant positions in health agencies and health policy-making bodies, there is greater opportunity for positive cultural outcomes. Such positions are typically attainable only through higher education and training. Education is thus essential to better social and health outcomes of Indigenous people. Education also improves the skills of the individual person with snowball effects on their families and communities. Increased enrolment in health science education is essential to produce an effective health care workforce capable of meeting the needs of Indigenous people (Schwab & Anderson, 1999).

Aboriginal communities recognise the utmost importance of improving educational, physical, social and economic well-being in an environment where disproportionate numbers of Aboriginal students fail to complete secondary schooling. This is supported by the goals of the National Aboriginal and Torres Strait Islander Education Policy which incorporate the principles of equality of access to, and participation in, education (Department of Education Science and Training, 2002). Whilst there has been some positive change in recent years, statistics demonstrate that movement has been slow and participation in education by Aboriginal people is still at low levels compared with all Australian students (Australian Bureau of Statistics, 2004).

In the period 2001–2003 there was an increase of 11% in the number of Indigenous students enrolled in Bachelor degree courses in higher education (Department of Education Science and Training, 2005, p. 82). In 2003, the number of Indigenous students enrolled in Australian universities was 8,988. This

represented an increase of 1.3% on the previous year; however, consistent with non-Indigenous enrolments, the number of newly enrolled students decreased by 3.2% (Department of Education Science and Training, 2005, p. 82). Whilst the majority of non-Indigenous students (91%) are enrolled in Bachelor degree courses, 37% of Indigenous students are enrolled in courses below this level (Department of Education Science and Training, 2005, p. 85). Indigenous students are also more likely to be admitted to university under special entry schemes. In 2003, 70% of Indigenous students were admitted to university under special entry schemes. This compares with 23% of non-Indigenous students (Department of Education Science and Training, 2005, p. 85).

In 2003, the average age of those Indigenous students enrolled in higher education was 29 years (Department of Education Science and Training, 2005, p. 85). This compares with 23 years for non-Indigenous students (Department of Education Science and Training, 2005, p. 85). Compared with non-Indigenous students, Indigenous students are more likely to study part-time as external students (Schwab & Anderson, 1999). This is probably linked with the fact that Indigenous people are more likely than the non-Indigenous population to live in rural and remote areas (Australian Bureau of Statistics, 2002). In the decade to 2001, two out of three Indigenous students enrolled in higher education were in education, arts, humanities or social science courses. However, there is an emerging trend of increasing enrolments in health-related courses. From 1994 to 2000 enrolments increased by 3.8%, and 13.2% of all Indigenous students were enrolled in health-related courses (Department of Education Science and Training, 2002, p. 91). Specifically, undergraduate Indigenous students are more likely to enrol in welfare-related courses than other health courses. In the years 2000–2001, of the Indigenous students enrolled in welfare-related courses 33% were in early childhood education, 30% were in welfare studies and 16% were in social work. Public health and Indigenous health courses represented 36% of enrolments in other health courses. Nursing represented 29% of enrolments (Australian Institute of Health and Welfare, 2003, p. 64).

In general, there is a high demand for Indigenous graduates. In 2003, Indigenous graduates from higher education achieved 84% full-time employment rates. This is 4% higher than that for non-Indigenous graduates (Department of Education Science and Training, 2005, p. 92). Indigenous graduates are more likely to be employed in the Commonwealth, State/Territory government sector. Amongst non-Indigenous graduates, more than half are employed in the private setting compared with 30% of Indigenous graduates (Encel, 2000). There is a need for more Indigenous people to become health professionals (Indigenous

Nursing Education Working Group, 2002). In 2001, non-Indigenous people were twice as likely as Indigenous people to be employed in health-related occupations. Of the Indigenous group, approximately one in four were working as nurses, nearly the same proportion were working as Indigenous health workers. The remainder were working as personal care or nursing attendants (Australian Institute of Health and Welfare, 2003).

The reality is that there is a need for appropriate and relevant health education for Indigenous students. This is supported by the findings of research conducted in community-controlled and state health services in 1995 that identified 75% of the Indigenous workforce was in designated Aboriginal positions (Sibthorpe, Becking and Humes, 1998). While 44% were health workers, only 3% held a Bachelors degree (Sibthorpe et al., 1998). Given that 75% of the public health workforce (in general) holds a Bachelors degree or above (Sibthorpe et al., 1998), this is concerning. Indigenous people need to be better equipped to meet the needs of the Indigenous community. The discussion paper *Inquiry into Indigenous Health* emphasised the importance of public health training for the Indigenous community and acknowledged that "there are inadequate numbers of Indigenous people training to become health workers and health professionals" (House of Representatives Standing Committee on Family and Community Affairs, 1999).

The Loddon Mallee Region (hereafter LMR) constitutes one quarter of the geographical area of Victoria and has a population of 280,447 people. Indigenous residents of the LMR participate in tertiary education at almost half the rate of their non-Indigenous counterparts. Approximately 3% of Indigenous residents have a Bachelor degree or higher compared with 9.4% of non-Indigenous residents (Australian Bureau of Statistics, 2002). Of the residents attending university or other tertiary institutions, 1.4% of Indigenous people are represented compared with 2.3% of non-Indigenous people (Australian Bureau of Statistics, 2002). This is closely linked with the fact that only 14% of Indigenous residents have completed Year 12 or equivalent education. This compares with 29% of non-Indigenous residents (Australian Bureau of Statistics, 2002). Not surprisingly, the proportion of Indigenous students studying at TAFE (4%) is higher than the proportion of non-Indigenous students (2.2%) (Australian Bureau of Statistics, 2002).

La Trobe University, Bendigo, offers a Bachelor of Public Health programme, which teaches public health practice with an emphasis on the social model of health and the socio-ecological foundations of health inequalities. Public health is defined as "one of the efforts organised by society to protect, promote and restore the people's health. It is the combination

of sciences, skills and beliefs that is directed to the maintenance and improvement of the health of all the people through collective or social actions" (Last, 2001, p. 145). Public health courses, with their emphasis on health equity are particularly well-placed to make a significant contribution to improving Indigenous health. In accord with the philosophy of Primary Health Care, the Department of Health and Environment in the School of Public Health has taken some steps to make the courses relevant and accessible to groups who suffer disadvantage, including Indigenous communities. Staff have, therefore, expressed concern that the courses still attract a relatively small number of Indigenous students.

This paper aims to highlight the issues of access, participation, retention, and outcomes for Indigenous students wishing to study or currently studying public health. It documents specific needs of Indigenous students in relation to accessing and studying at a tertiary level. Using the context of public health programmes, it highlights the potential barriers for students and Indigenous communities.

Method

The Department of Health and Environment upholds the principle and the general Indigenous consensus that wherever possible, there should be either an Indigenous person carrying out research or some community members who can act to closely monitor the work. As well as being a moral issue (Kowal, Anderson & Bailie, 2005), this is one way of ensuring Indigenous control over the research and that the research has some relevance and ongoing benefit to the Indigenous community (Humphrey, 2000). Melville and Rankine (2000) confront this issue directly when they state that: "The issue of Indigenous research is sensitive and delicate, given the history of exploitation of Indigenous people as research subjects" (Melville & Rankine, 2000, p. 3).

Using the guidelines outlined in Humphrey's (2000) *Indigenous health and Western research* and the National Health and Medical Research Council's (2003) *Guidelines for ethical conduct in Aboriginal and Torres Strait Islander health research*, the project was designed so that there were appropriate feedback mechanisms in place. This was done in an effort to ensure that the local Indigenous community was not excluded while the research was being conducted and that the community had access to the research results and input into the final recommendations. Ethics approval was gained from La Trobe University, Bendigo, a National Health and Medical Research Council (NHMRC) constituted committee. This project did not proceed until it was approved by the local Indigenous community represented by Bendigo and District Aboriginal Corporation (BDAC) and the Local Aboriginal Education Consultative

Group (LAECG). An Indigenous Honours student participated in the early research and drafting of the literature review. Interviewing, facilitation of focus groups, community consultation, monitoring of data analysis and assistance in writing up were carried out by an Indigenous elder of the Bendigo community.

Data were collected through two focus groups and six one-to-one in-depth interviews involving 16 participants. Focus groups have been recognised as a suitable method of data collection when participants may be reluctant to be interviewed on their own. This may be because participants feel intimidated or isolated in a one-to-one interview (Kitzinger, 1995). All except two of the Indigenous participants participated in focus groups. The two non-Indigenous participants who requested one-to-one interviews were lecturers in public health who have a special interest in Indigenous issues.

The sample was purposive, comprising a wide cross-section of key stakeholders in public health courses and included elders of the Indigenous community, members of the LAECG, past and current Indigenous students in the Bachelor of Public Health, Indigenous students currently enrolled in courses at the Bendigo Regional Institute of TAFE (BRIT) and the Aboriginal Tertiary Studies Unit (ATSU) coordinator on the Bendigo campus of La Trobe University. Most of the people participating in the study had achieved, or were currently participating in, some form of higher education, and were, therefore, a particular group from across a diversity of Indigenous communities. In this paper, many, but not all, of the participants were local Jaara people. Participants from other peoples also participated and so the word "Indigenous", unless stated otherwise, is inclusive of all these peoples. We recognise that the heterogeneous nature of the sample creates complexity in carrying out research and that "one Indigenous Australian interviewing another does not create a homogenous situation"(Foley, 2000); however, we believed that the nature of the research question and the fact that regional educational agencies attract Indigenous peoples from many different lands required this kind of sample.

The same questions were asked in both the focus groups and the interviews. Participants were asked to comment on particular predisposing, enabling and reinforcing factors that impacted on entry for Indigenous people into tertiary public health programmes, and were encouraged to expand their views through the use of interviewer prompts. The taped interviews and focus groups were transcribed verbatim and the data were analysed thematically using N*Vivo (QSR International, 1999-2000), in consultation with the Indigenous interviewer. The results were presented to a sample of the participants and to LAECG and BDAC for validation and further comment.

Findings and discussion

The aim of this project was to examine barriers to Indigenous people undertaking courses in public health in order to consider ways in which the staff in the Bachelor of Public Health programme could be proactive in attracting Indigenous students to its courses. One of the difficulties in using the findings of this project to meet such a specific aim is that many of the findings relate to far more general issues than entry into just one course. They are issues that apply "across the board" of education (not only the tertiary education) generally and courses (not only health courses) generally. They are systemic barriers firmly entrenched in the lives of many Indigenous communities and, indeed, some disadvantaged non-Indigenous groups as well. Having said that, the views of the participants will be heard, and through their voices, some recommendations that can be implemented to meet the goal of attracting more Indigenous students into the Bachelor of Public Health programme. For reasons of confidentiality, any identifying features of participants or any references made in quotes that would allow the speaker to be identified have been altered or deleted. Apart from this the direct quotes are in the words of the participants.

The analysis of the rich data obtained from the focus groups and interviews uncovered themes relating to: (1) access and barriers, (2) support, and (3) Indigenous content in teaching and learning.

1. Access and barriers to entering tertiary education

1.1. Past experiences

One of the major barriers identified by the participants is previous educational experience, over generations, which leads to negative attitudes towards education. Stakeholders said:

> For most indigenous people, university is like a very long thought away and it's something that a lot of families have not achieved in following through in a lot of their education.
>
> In a lot of the families so that has been a domino effect throughout the generations. And therefore it is not forced on the children to continue their education in a lot of family settings. Only if within the family setting another member had gone on a little bit further will that be encouraged.

Hence, it is not surprising that Indigenous students often find the university environment "unfamiliar and foreign" (Schwab & Anderson, 1999). Whilst other, non-Indigenous students may have a family member or family history of someone attending university, this is often not the case for Indigenous students. Therefore, the ability of the family to provide some of the social support required is diminished.

1.2. Lack of role models

Several participants spoke about the importance of positive role models in encouraging Indigenous people to take on tertiary education:

> Yeah, and they need to be able to see other people that have been through and thought well look, Joe's done that, if he can do it, I can do it. They need to utilise the people who have been there and done that and get them as good role models to come back so that the kids that are coming up can say well look ... has done teaching and now she has come back and teaching with us, or so and so has their daughter there in policy, I mean in health in Canberra or something.
>
> I think role models are very important people for our kids, it actually shows and proves to our kids, especially kids that are in families where families are frightened to further their education, that there are ways to do it, that their story is the same as that role model's story and they have a connection with them as an Indigenous person. So role modelling is very important as it also creates an environment for it to be a little bit safer and securer for that student.

Several authors and other universities have highlighted the value of role models and mentorship programs (Australian Curriculum Studies Association Inc., 2000; Buckskin, 2000; Encel, 2000). Given that many Indigenous students do not have family or existing role models, consideration should be given to the resourcing of a programme to provide mentorship to local Indigenous students.

Another aspect of role modelling that was discussed by several participants was the lack of a visible presence of Indigenous people in either the general or the academic staff, and thus the apparent paucity of advice from an Indigenous viewpoint at all levels of the university: A staff member commented that, "[we need] more staff around in general staff, not just in academic staff, but more staff around so that there is a visible content of Indigenous people on the university and making it more Indigenous-friendly". In the period 2000–2003 there has been a 29% increase in the number of academic Indigenous staff employed in higher education (Department of Education Science and Training, 2005, p. 97). However, the proportion of Indigenous staff to all staff remains small (<1%) (Department of Education Science and Training, 2005, p.97). It is also not clear how many of these staff are employed at rural campuses.

1.3. Geographical barriers

Most participants came from regional and rural areas and had experienced the difficulties associated with leaving home. The major issues identified were related to leaving family, finance, accommodation and transport. One student noted:

> Transport issues are huge, finances are huge, living away from families are huge, and you know, family's family, it doesn't matter where you are, but it is not the same as your own mum and dad, and brothers and sisters. So I guess people can get homesick, I mean I've lived away too, and I've hated it. And that's just not you know in Indigenous communities, that is in the broader population as well so, we are not alone as far as that sort of stuff goes.

These reports are consistent with the findings of previous research that has cited lack of transport, isolation, lack of financial resources, family relationship problems and poor preparation as reasons for discontinuing tertiary education (Indigenous Nursing Education Working Group, 2002).

1.4. Lack of information

Apart from those participants who attend or have attended or worked at the university, many of the participants expressed feelings of alienation from the idea of university education. There was a perception that TAFE education is the more appropriate pathway and that TAFE is a more welcoming institution than the university. Several participants professed ignorance about the courses available. A TAFE student said about university education, "So we don't know what courses there are. So the information hasn't been fed down, as there is a lack of information getting to the community about what courses are actually available".

The philosophy of the staff in the Bachelor of Public Health programme is in accord with the view of the House of Representatives Standing Committee on Family and Community Affairs (1999) that appropriate health promotion and prevention programmes are required to ensure that the current trends of health inequalities do not continue. Staff in the department have gone to considerable lengths over the years to ensure that teaching is relevant and accessible to a variety of students with various needs and, in so doing, have incorporated many of the teaching and learning strategies appropriate to Indigenous learning. Therefore public health programmes have a major role to play in addressing these inequalities. However, apart from those participants who had direct contact with the public health course, the nature and philosophy of the course did not appear to be well-understood, and many of the participants were not aware of its existence in the university. Some of these, especially the TAFE students, could be potential applicants for the course and others could be influential in the community in making potential students aware of the value of the course. Thus it appears that marketing of the course has not reached Indigenous communities. This is in contrast with the Bachelor of Social Work, which tends to have a higher enrolment of Indigenous students, a number of whom have entered the course through TAFE articulation pathways. These typically allow students who have TAFE qualifications in relevant courses to enter the articulated university course at a second year level. Although generally recognised as positive action and promoted by both the university and the TAFE sector, there has been little research carried out to identify any difficulties and issues that arise from this approach. The Bachelor of Public Health does not currently have formal articulation pathways with any particular TAFE courses but routinely offers credit on a unit-by-unit basis for a number of TAFE courses.

2. Support

2.1. Perceived university support via Indigenous support units

The importance of support from departments such as ATSU at the university was a recurring theme. Current and past students spoke of the Unit as a major support throughout their time at university. Although the participants in this project were not positive about the university, community members saw ATSU as an important channel for liaison between the university and the community. Both staff within ATSU and community members identified a large number of functions that they would like ATSU to fulfil, including political lobbying within the university, assisting staff in appropriate teaching strategies, providing information and resources about Indigenous issues to staff and students and supporting individual students during their university studies. Even with the relatively small number of Indigenous students enrolled at La Trobe Bendigo, the demands on the Unit were perceived as being enormous. TAFE students were loud in their praises of the Koori Liaison Unit at TAFE and compared the university commitment to Aboriginal support unfavourably. This lack of commitment by the university was confirmed in the minds of many of the participants when it took eight months to fill the position of the ATSU coordinator in 2003, leaving the local ATSU with no leadership.

2.2 Family support

Other issues raised included family dependence on potential students to provide financial or practical support requiring them to work full-time and/or to care for both older and younger members of the family. A crucial issue for Indigenous people in undertaking further education is the support of their family. One person said:

> I had a lot of support from my family so and I'm one of nine kids, but I am the only one that actually went through university so I had a lot of support I suppose from my other family members and my mum and when I actually graduated, she was so proud and you know she is still proud of me.

Again, it is not surprising that Indigenous students may find the university environment disconcerting (Schwab & Anderson, 1999). Affirmative strategies need to be implemented to support these Indigenous students so that they may contribute to the development of positive intergenerational changes in terms of educational experiences for Indigenous people.

2.3. Community support

There was general agreement that it is desirable, if not essential, for Indigenous students attending the university to be put in touch with the local Indigenous community. The move from remote or rural areas imposes a huge cultural leap on some students. One participant said:

> Some of them had never saw escalators before. Like, that's an escalator, what's that, like it's a lift and so they were going up and down the escalators and up and down the lift, because we take things for granted in our area whereas others that come from outside, have never experienced or seen things.

Some participants had the perception that the excitement of this change can lead to undesirable consequences. Typical comments from elders of the Indigenous community were:

> They might be gullible from other influences, from other friends in the courses to say hey, you don't need to do that, come and party with me, or come and do this with me. You have your information days, you have kids that go to University and do that "O" Week or whatever it is, and they sort of think like it's a big party, but the reality is that it isn't a big party. It is getting to know the facilities and what's going on and

> then you have to knuckle down and actually produce something.

> If there's not a strong support from the community then a lot of the students fail because it gets a little bit too tough and they are too far from home.

3. Teaching, learning and Indigenous content

3.1. Cultural safety and Indigenous learning needs

Several participants commented on the ways of teaching and learning adopted by the university. Some mentioned a perceived lack of cultural awareness in staff leading to insensitivity and lack of respect. The following are selected from a number of similar comments:

> It's good that the lecturer does prepare the classes and have the education already there, but the problem with all of that happening is that a lot of the stuff that is delivered does not relate back or does not have practical reasoning for an Indigenous student.

> You are taught culture. But you are taught by a non-Aboriginal person, who hasn't got a clue anyway whilst doing the very best they can with the information and resources they've got. What I would have really liked, was to have more community people and elders that come in and talk to the groups.

> Well, I had one lecturer, and in a group of other white people said, "Oh, you're the Indigenous student, aren't you", and I said, "Yeah", and he said, "Oh, how are you, Koori. You don't look ... ". I sort of just shrank. He was probably thinking he was being really open and oh, no, it was so embarrassing.

> I've heard a few people say that they've written assignments on their own culture and stuff, and they've gotten bad marks for it, because it wasn't in the books or something, and that's ridiculous, here they are, Koori, and they can't even write about their own.

While it is reported that 80% of universities support cultural inclusiveness in academic curriculum (Department of Education Science and Training, 2005), it is not clear that this translates to the daily experiences of students. It is clear that some staff do not have extensive knowledge about the learning needs of Indigenous students and are not providing environments that are culturally safe. Williams (1999)

defines this as an environment that is "spiritually, socially and emotionally safe ... It is about shared respect, shared meaning, shared knowledge and experience of learning together". While in recent years there has been increase in enrolments by Indigenous people and an increase in the number of Aboriginal support units within universities, it is clear that culturally safe practices are not the norm (Bin-Sallik, 2003; Eckermann et al., 2006). The importance of an awareness and knowledge of Indigenous learning styles is critical to recruitment (Bourke, Burden & Moore, 1996; Main & Nichol, 2000). At La Trobe University Bendigo, previous attempts to improve staff knowledge and skills in Indigenous learning styles have not been sustained (Main & Nichol, 2000). While the projects have been worthwhile in themselves, the lessons learned have not been translated across the campus. Consideration needs to be given to ensuring that university programmes are culturally safe and that any projects directed towards staff development and education around Indigenous learning styles are resourced so that they can be sustained over time. It could be argued that despite the increase in Indigenous student numbers and graduands, some universities continue to perpetuate institutionalised racism which is defined as:

> Institutional racism is manifest in the laws, norms and regulations that maintain dominance of one group over another. It is covert and relatively subtle; it originates in the operation of essential and respected forces in society and is consequently accepted. Because it ... is sanctioned by the power group in that society and at least tacitly accepted by the powerless, it receives very little public condemnation (Adapted from Carmichael & Hamilton, 1967, cited in, Eckermann et al., 2006, p. 17).

The perceived lack of information regarding university courses, support and cultural safety within some universities may be interpreted as systemic discrimination against Indigenous people (Bin-Sallik, 2003). Cultural awareness and cultural sensitivity are supported by many universities but culturally safe environments are needed to address underlying and subtle residual racism.

3.2. Teaching environments

A number of participants expressed their concern and frustration about the unsuitability of the current teaching formats. The setting and the lecture/tutorial format was unsuitable and intimidating for some students who said:

> A lot of Indigenous people are comfortable talking in small groups, and not large groups. In some

lectures you may have up to 150 students in the one room and that's a scary factor when you don't have enough confidence in yourself to publicly speak or to publicly ask questions. So therefore a lot of students will internally close themselves in and say I don't understand and walk away from it.

> I was a student up there for two years. I found the buildings very intimidating; I'd go up and sit in the room for half an hour, then I'd have to get up and walk out, go for a walk, and then come back ... The way they talk to you, they just stand up there and lecture and you know it comes out, you can't write fast enough, you don't get breaks, and it's just not our way of learning, you know.

One lecturer was very aware of the importance of appropriate presentation of subjects, but expressed some of her own frustrations in trying to maintain excellence in teaching with limited, and diminishing, resources:

> I'm trying, I'm in class, I'm listening, and I do think that a lot of the things I do in the classroom are inclusive and not too challenging and all that. But when you have 70 in the classroom it is very difficult to have the one size fits all, but you can almost see it in the eyes of some of the students – you are not actually engaging them and you can see the distance getting greater and that's a real problem.

Once again, these aspects of university teaching were compared unfavourably with TAFE approaches. A TAFE student commented:

> Everything you do at University is very formal, and I don't think that fits in with our ways. You should be able to do things informally and casually ... I mean the TAFE is just so flexible in the understanding of we come from families, we do things different. They are culturally aware; where the University isn't.

It is clear that for many Indigenous students, the formal environment of the university is linked to lack of flexibility and, hence, poor learning. The notion that academic success is linked to understanding "academic" culture is often in conflict with Indigenous cultural meanings (Farrington et al., 1998, in Indigenous Nursing Education Working Group, 2002). It is important that efforts are made to convey to students that learning in university can occur with some flexibility that is culturally safe. Further investigation into the cultural constraints faced by many Indigenous students in university settings is needed.

3.3. Assessments

The nature of assessments also produced difficulty for Indigenous students. The TAFE students particularly were vocal in their view that insufficient opportunity to discuss and fully understand the issues before writing large essays is an intimidating barrier to their consideration of entering university:

> I like to ask questions, talk about it and then write it. It sticks in my mind more than if I was to get a book handed to me and, oh, here's your assessment.

A public health lecturer recognised this problem:

> People like academics get very set in the way that they want to assess students. One of the other barriers that you've probably come across very often for Aboriginal students getting into mainstream in tertiary education is that the teaching styles and I think particularly the assessment alienate them and that academics are unwilling to do something for one student that they won't do for everyone. I know that that's got another side in that Aboriginal students don't want to be singled out anyway, but that has been an issue.

3.4. Experiences of culturally appropriate education

Several participants identified the importance of culturally appropriate and motivating primary and secondary education:

> They start right back in primary school and I guess it could be a lot of work done there in communities, like a big health promotion project. I guess there is always things going on like that all the time, perhaps that's where we should be targeting people, is in primary school? You know, instead of high school, you know and get that motivation, yeah and enquiring minds and things like that.
>
> So that is a problem right across the whole board and that is where we are not catching a lot of our children because cultural awareness within schools that deliver to our kids and have our kids in their care for six hours a day is just not there. So we really need now to start packaging that out and start educating and culturally including indigenous culture within mainstream areas.

The importance of the inclusion of Indigenous culture in the learning curriculum at all levels of education has been highlighted by numerous others (Aboriginal and Torres Strait Islander

Commission, 1999; Barnes, 2000; Buckskin, 2000). Many Indigenous students have had nil/negative experiences of cultural education in the early years of education. Hence, it is critical that adequate resources and support are provided to ensure that students entering tertiary education courses have appropriate education for cultural maintenance. This will promote learning amongst Indigenous students as learning and culture are linked (Barnes, 2000). In turn, this will promote student retention and recruitment.

Conclusion

Indigenous people have fewer opportunities for tertiary education than their mainstream counterparts. This paper has highlighted many of the issues surrounding access to and participation in higher education for Indigenous people. Some of the barriers relating to distance, family commitments and finance are widely recognised. In particular, the focus has been tertiary education in health courses and more specifically public health. Whilst it is clear that there have been some achievements in improving access to tertiary education for Indigenous students, inequities between Indigenous and non-Indigenous students continue. These include negative past experiences, lack of role models, lack of information about courses, limited support, culturally inappropriate learning environments and institutionalised racism. This research highlights that these issues that face Indigenous people in accessing and participating in public health courses are generic issues throughout the education system. This paper has included suggestions that could be used to address some of these barriers in the setting of a Bachelor of Public Health programme. It is hoped that strategies arising from these suggestions will be supported and every endeavour will be made to enhance their implementation and thus, improve access to and participation in public health courses in higher education.

Acknowledgements

authors acknowledge their biases that they bring as non-Indigenous Australians.

References

Aboriginal and Torres Strait Islander Commission. (1999). *Submission to the Human Rights and Equal Opportunity Commission Inquiry into Rural and Remote Education in Australia*. Canberra: Aboriginal and Torres Strait Islander Commission.

Australian Bureau of Statistics. (2002). *2001 Census of population and housing*. Canberra: Australian Bureau of Statistics.

Australian Bureau of Statistics. (2004). *The Year Book*. Canberra: Australian Bureau of Statistics.

Australian Bureau of Statistics, & Australian Institute of Health and Welfare. (2005). *The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples* (ABS Catalogue No. 4704.0, AIHW Catalogue No. IHW14). Canberra: Australian Bureau of Statistics and Australian Institute of Health and Welfare.

Australian Curriculum Studies Association Inc. (2000). *What works: Explorations in improving outcomes for Indigenous students*. Canberra: Australian Curriculum Studies Association and National Curriculum Services.

Australian Institute of Health and Welfare. (2003). *The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples*. Canberra: Australian Institute of Health and Welfare.

Australian Institute of Health and Welfare. (2005). *Mortality over the twentieth century in Australia: Trends and patterns in major causes of death* (Mortality Surveillance Series no. 4, AIHW cat. no. PHE73). Canberra: Australian Institute of Health and Welfare.

Barnes, A. (2000). Learning preferences of some Aboriginal and Torres Strait Islander students in the veterinary program. *The Australian Journal of Indigenous Education, 28*(1), 8-16.

Bin-Sallik, M. (2003). Cultural Safety: Let's name it! *The Australian Journal of Indigenous Education, 32*, 21-28.

Bourke, C., Burden, J., & Moore, S. (1996). *Factors affecting performance of Aboriginal and Torres Strait Islander students at Australian universities: A case study*. Canberra: Department of Employment, Education, Training and Youth Affairs.

Buckskin, P. (2000). The way forward-Australian education: How are we doing? *Education Quarterly, 4*(Summer), 43-45.

Department of Education Science and Training. (2002). *National Report to Parliament on Indigenous Education and Training, 2001*. Canberra: Department of Education Science and Training.

Department of Education Science and Training. (2005). *National Report to Parliament on Indigenous Education and Training, 2003*. Canberra: Department of Education Science and Training.

Eckermann, A. K., Dowd, T., Chong, E., Nixon, L., Gray, R., & Johnson, S. (2006). *Binan Goonj: Bridging cultures in Aboriginal health*. Marrickville, NSW: Churchill Livingstone.

Encel, J. (2000). *Indigenous participation in higher education*. Canberra: Higher Education Division, Department of Education, Training and Youth Affairs.

Foley, D. (2000). Indigenous research, differing value systems. *The Australian Journal of Indigenous Education, 28*(1), 17-30.

House of Representatives Standing Committee on Family and Community Affairs. (1999). *Inquiry into Indigenous Health*. Canberra: Parliament of the Commonwealth of Australia.

Humphrey, K. (2000). *Indigenous health and "Western research"*. Melbourne: VicHealth, Koori Health Research and Community Development Unit.

Indigenous Nursing Education Working Group. (2002). *Getting em n keepin 'em*. Canberra: Department of Health and Ageing.

Kitzinger, J. (1995). Introducing focus groups. *British Medical Journal, 311*, 299-302.

Kowal, E., Anderson, I., & Bailie, R. (2005). Moving beyond good intentions: Indigenous participation in Aboriginal and Torres Strait Islander health research. *Australian and New Zealand Journal of Public Health, 29*(5), 468-470.

Last, J. (Ed.). (2001). *A dictionary of epidemiology* (4th ed.). New York: Oxford University Press.

Main, D., & Nichol, R. (2000). Reconciling pedagogy and health sciences to promote Indigenous health. *Australian and New Zealand Journal of Public Health, 24*(2), 211-212.

Matthews, J. (1997). Historical, social and biological understanding is needed to improve Aboriginal health. *Recent Advances in Microbiology, 5*, 257-334.

Melville, J., & Rankine, P. (2000). Where to now? Issues in the management of indigenous research in higher education. *Issues in Educational Research, 10*(1), 67-76.

National Health and Medical Research Council. (2003). *Values and ethics: Guidelines for ethical conduct in Aboriginal and Torres Strait Islander Health Research*. Canberra: National Health and Medical Research Council.

QSR International. (1999-2000). *Nvivo version 1.2*. Melbourne: QSR International.

Schwab, R., & Anderson, I. (1999). *Trends in indigenous participation in health sciences education: The vocational education and training sector, 1994-97*. Melbourne: Centre for Aboriginal Economic Policy Research, Australian National University.

Sibthorpe, B., Becking, B., & Humes, G. (1998). Positions and training of the Indigenous health workforce. *Australian and New Zealand Journal of Public Health, 22*(6), 648-652.

Williams (1999). Cultural safety-what does it mean for our work practice? *Australian and New Zealand Journal of Public Health, 23*(2), 213-214.

About the authors

Sandra Kippen is a Lecturer in the Department of Health and Environment, La Trobe University. She teaches in sociology and research methods subjects and has a particular interest in Indigenous health and education issues.

Bernadette Ward is a Lecturer in the Department of Health and Environment, La Trobe University. She has research interests in workforce development and rural health. Currently Bernadette lectures in rural health and public health research.

Lyn Warren comes from the Yorta Yorta people and is an elder of the Bendigo Indigenous community. She is an active member of the Bendigo and District Aboriginal Cooperative (BDAC) and Local Aboriginal Educational Consultative Group (LAECG). In addition she is an Indigenous representative on the boards of the Goldfields Local Learning Employment Network (GLLEN) and Women's Health, Loddon-Mallee as well as an active member of the Hospital Reference Group, the NAIDOC committee and the La Trobe University Elders' Council.