

**The Student Experiences Study:
Understanding the Factors that Affect
Aboriginal and Torres Strait Islander Students' Academic Success**

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INTRODUCTION AND OVERVIEW

While the number of Aboriginal and Torres Strait Islander university students has doubled in recent years, these students still comprise only 1% of higher education enrolments and are under-represented in areas such as health, engineering, business, economics, management, and science (National Board of Employment, Education, and Training, cited in Bin-Sallik, et al, 1994). In addition, despite the increases in enrolment by Aboriginal and Torres Strait Islander students, the national higher education gap between Aboriginal and Torres Strait Islander students' attainment and the attainment of other Australians has remained consistent (Reference Group, 1994). This trend is mirrored among Aboriginal and Torres Strait Islander students enrolled in tertiary health sciences programs. A greater proportion of Aboriginal and Torres Strait Islander students are enrolling in health programs and the number of Aboriginal and Torres Strait Islander students graduating from health programs doubled from 1991 to 1995 (DEETYA unpublished data, cited in Australian Bureau of Statistics, 1997). But the proportion of Aboriginal and Torres Strait Islander students completing health sciences courses has remained constant at 0.5%. This suggests that Aboriginal and Torres Strait Islander students may be less likely than other students to finish their courses in a given time period.

There is an increasing acknowledgment that, for many Aboriginal and Torres Strait Islander students, university attendance is a cross cultural experience, (Sherwood & McConville, 1994; McIntyre et al, 1996; Christie, 1988; Harris, 1988), often leading to what we have termed "educational culture shock". An extensive study of Aboriginal and Torres Strait Islander students' participation in vocational education and training concluded:

"Successful experience in formal education means learning the 'academic culture' of its institutions, which may be in conflict to Indigenous cultural meanings" _(McIntyre, et al, 1996, p. 140).

In addition, Aboriginal and Torres Strait Islander students' previous encounters with educational institutions may have been disempowering, frustrating their aspirations for further education.

Clearly, in order to adequately meet the needs of Aboriginal and Torres Strait Islander students and support their aspirations, there is a need to elucidate the factors which challenge or enhance their success. The aim is not to justify the exclusion of these students from tertiary education, but to refine and develop culturally relevant strategies for promoting student learning.

The Student Experiences Study focuses on Aboriginal and Torres Strait Islander students enrolled in a block mode health sciences program at Yooroang Garang: The Centre for Indigenous Health Sciences at the University of Sydney. The study investigates the factors that affect students' academic success and students' study within the program. For the purposes of this research, 'academic success' is defined as continued participation in the academic program. 'Study' is defined as students' ability to perform the tasks required by the program such as reading, attending class, completing assignments. The focus of the research is to determine:

- 1) what are students' on and off campus experiences related to their academic outcomes? 2) what are the factors that challenge students' study on and off campus?
- 3) what are the factors that enhance students' study on and off campus?
- 4) what effect do study groups have on Aboriginal and Torres Strait Islander health students' study?

STATEMENT OF THE PROBLEM & REVIEW OF THE LITERATURE

Approximately 1.6% or 283,600 of Australians are Aboriginal or Torres Strait Islander (McLennan, 1996). The effects of the European invasion of Australia on the health and healing of Aboriginal and Torres Strait Islander Australians continue to reverberate more than two centuries after the first European settlers arrived in 1788 (Reid & Trompf, 1991; Siggers & Gray, 1991; O'Connor & Parker, 1995). Despite the attention given to Aboriginal and Torres Strait Islander health in recent years poor health status persists, reinforcing the conclusion of the Royal Commission into Aboriginal Deaths in Custody that the health of Aboriginal and Torres Strait Islander Australians is worse than that of other Australians, as indicated by nearly every possible health measure (Australian Government Publishing Service, 1992). For example, the most recent data from the Australian Bureau of Statistics indicates that, compared to the rest of the Australian population, Aboriginal and Torres Strait Islander infants are two to four times more likely to die at birth, members of the Aboriginal and Torres Strait Islander population are four to five times more likely to be hospitalised for infectious diseases, Aboriginal and Torres Strait Islander people diagnosed with cancer are more likely to die of cancer, and, within the states for which data is available, life expectancy for Aboriginal and Torres Strait Islander people is fifteen to twenty years lower (ABS Catalogue No. 4704.0/AIHW Catalogue No. IHW2, cited in "Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples," 1997).

As common as the continual reporting of such abysmal health statistics is the emphasis on the essential role of the Aboriginal and Torres Strait Islander health worker in the delivery of health care to Aboriginal and Torres Strait Islander communities (Australian Government Publishing Service, 1992). Because Aboriginal and Torres Strait Islander health workers fulfil an essential role in the provision of health care to Aboriginal and Torres Strait Islander Australians, understanding the factors that promote academic success promises not only to improve the educational status of Aboriginal and Torres Strait Islander Australians, but also the potential to improve health status.

Often in higher education, there is an assumption that a student's potential for success in a given course can be predicted by reference to measures of previous academic success such as TER (Tertiary Entrance Ranking) scores or Grade Point Average calculations. These scores are often used as a selection criteria for entry into tertiary education. The majority of

the Aboriginal and Torres Strait Islander students who enrol in our programs are mature-aged students who do not have such records of academic attainment.

Experience in our programs suggests that other factors such as motivation and goals, previous life and work experiences provide a sound basis for academic success. So there is a need to look beyond traditional numerical predictors of success to determine what factors affect success among Aboriginal and Torres Strait Islander students.

Similarly, academic support interventions must be tailored to the needs of Aboriginal and Torres Strait Islander students. The key finding of a study of factors affecting the outcomes of vocational education training for Aboriginal and Torres Strait Islander people determined that, "positive outcomes of participation in VET (vocational education training) for Aboriginal and Torres Strait Islander Australians are achieved by attending to cultural appropriateness in each aspect of the complex processes of program delivery" (McIntyre, et al, 1996, p. 138).

RESEARCH METHODS

Setting

Yooroang Garang conducts both a two-year undergraduate Diploma and a four-year Bachelor block mode program in Aboriginal Health and Community Development, plus the Aboriginal Health Sciences Preparatory Program and postgraduate programs. The setting of the study is unique not only because it is a program designed by, for, and about Aboriginal and Torres Strait Islander Australians but also because it is offered in block mode where students alternate between a total of four, two-week intensive sessions on the University of Sydney campus and six-week off-campus periods when they study at home and work in their communities. The off-campus periods are supported by Community-Based and Independent Learning Packages, structured learning activities that involve interaction with students' home communities. This block mode design specifically meets the needs of Aboriginal and Torres Strait Islander students to maintain employment responsibilities and family/kin obligations. As well, the mode of instruction allows students to remain as part of their communities so that community involvement in the courses of study undertaken by Aboriginal and Torres Strait Islander students is maximised and the relevance of that study to the community is apparent.

Yooroang Garang also provides an academic support program which enables the students to identify and develop academic learning and literacy skills within the context of the undergraduate subjects. Specific support strategies include a six-month block mode preparatory program; a reduced load option in the first two years; concurrent academic support tutorials to assist the students with the development of contextual learning skills; the provision of physical resources such as a common room and study rooms, and learning resources such as textbooks, reference materials and anatomical models.

More recently, Yooroang Garang has introduced the use of student study groups within the teaching and academic support programs and for utilisation during the inter-block study time. This development was informed by the literature on culturally relevant educational programs for Aboriginal and Torres Strait Islander students which emphasises that an important component of Aboriginal and Torres Strait Islander learning styles is reliance on group cooperation and peer learning (Sherwood & McConville, 1994; McIntyre et al, 1996; Christie, 1988; Harris, 1988). Student study groups are utilised both during block instruction, across a

variety of subjects, and to facilitate students' study during off-block periods when they are in their home communities. For 1997, students were allocated to groups according to their geographical location.

Students

Many of the students are currently employed as full-time health workers. They often come from rural or isolated areas and the majority have significant family and kin obligations. In addition, many of the students have limited previous formal education and enter the program feeling vulnerable and tentative and with limited confidence in their ability to succeed at tertiary study.

DATA COLLECTION

Qualitative Inquiry in Tertiary Education

Qualitative research methods are well-suited to explore unanswered questions about the factors that influence the study of Aboriginal and Torres Strait Islander students in the health sciences. A quantitative study assessing students' academic success would focus on how a large number of students with different "inputs" into the university had different "outcomes" of academic success -- the goal would be to devise a formula for prediction. A qualitative study, on the other hand, focuses on a smaller number of students who are studied in depth and in detail. For this reason, qualitative studies such as this one have limited generalisability. The goal of qualitative research is understanding rather than prediction. Rather than focusing on inputs and outputs, qualitative research strives to describe the middle step, the "environment", with a particular focus on students' experiences of that middle step. So the topic for inquiry shifts from the end product of tertiary experiences to students' interpretations of the actual experiences. As Whitt (1991) emphasised in her discussion of qualitative research as "artful science",

"_Critical to understanding the developmental process are what happens between the beginning and the end, how the persons involved in the process perceive and feel about their experiences, and what development or change means to all who are connected with the process" (Whitt, 1991, p. 409).

Particularly as this topic represents a new avenue of inquiry, more useful than developing formulae for prediction is documenting the variety of complex and often *unpredictable* pathways students may take to reach the same destination. Whitt (1991) emphasised

"Interest in qualitative research is increasing as higher education practitioners and researchers seek to understand the complex qualities and processes of institutions of higher education and their participants, such as learning, growth, culture, and effectiveness and find that conventional science

assumptions and quantitative methods are not sufficient to the task" (Whitt, 1991, p. 406).

Ethical Considerations

Community Consultation

Often in the past, Aboriginal and Torres Strait Islander people have been *subjects* of research. The Student Experiences Study places Aboriginal and Torres Strait Islander people and their perspectives at the centre of the research. First, Aboriginal and Torres Strait Islander people directly involved in the research have assumed essential roles in the research project. Students are in important roles as participants in a collaborative research project. Also, the first author for this paper is Aboriginal. The qualitative nature of this project provides further assurance that the direction of the research is determined by the issues that the Aboriginal and Torres Strait Islander students bring to the project, rather than a predetermined agenda set by the researchers. As Patton (1990) asserted, "The purpose of [qualitative research] is not to put things in someone's mind but to access the perspective of the person being interviewed" (p. 278).

In addition, consultation with the Aboriginal and Torres Strait Islander community is essential for any research project involving Aboriginal and Torres Strait Islander people. In this case the Aboriginal and Torres Strait Islander community includes students, staff, and researchers who have experience in tertiary education of health workers or in the research process in order to take into account the diversity among Aboriginal and Torres Strait Islander communities. The consultation process is important because:

"Aboriginal people are the custodians of their own cultures. They are the greatest source of knowledge of their own needs, their learning process and the ways in which learning takes place and the most effective ways and environments in which....[they] learn" (Sherwood & McConville, 1994, p.40).

Before the project commenced and during data collection, members of this community were consulted for ideas, feedback and suggestions. Dissemination of the findings has included presentations to Aboriginal and Torres Strait Islander staff and students at Yooroang Garang. Staff were invited to respond to the findings and implement changes which would enhance students' academic success. Other students in the first year of the Diploma program who had not participated in the study were invited to review and scrutinise the findings and contribute their perspectives. These contributions from both staff and students enhanced the consultation process as well as the research project. An additional aspect of consultation involves how the findings are disseminated. It is essential that they are communicated through channels that are accessible to Aboriginal and Torres Strait Islander communities and health and education professionals.

Informed Consent

Participants' informed consent was obtained at several stages of the research process. First, when volunteers were sought for the study, an explanatory flier was distributed to all students. Second, an announcement and description of the project was made in a subject in which all of the students are enrolled. Third, at the first meeting with each participant, we carefully explained the purpose of the study, how the data would be used, how the

confidentiality of the students would be maintained, how the findings would be disseminated and the fact that the participant could withdraw at any time. Only after obtaining the students' written consent to participate did the interviewing commence.

Trustworthiness

Trustworthiness helps qualitative researchers answer the question, "[Are] the findings of an inquiry worth paying attention to?" (Whitt, 1991, p. 413). A standard for trustworthiness has been forwarded by Lincoln and Guba (1985) who identify four necessary components:

"credibility (the researcher's interpretations are credible to the respondents), transferability (the study may be useful in another context), dependability (changes over time are taken into account), and confirmability (the data can be confirmed by someone other than the researcher)" (Lincoln & Guba, cited in Whitt, 1991, p. 413).

Credibility can be ascertained a number of ways, including prolonged engagement, triangulation, and member checks. For prolonged engagement, our combined experience in universities, and in this specific setting facilitated our ability to learn the culture and to establish trust with the participants. Triangulation of the data is assured by the use of a team of three researchers, utilising what Denzin refers to as "investigator triangulation" (cited in Patton, 1990). To maximise the benefits of having three researchers (and therefore three different perspectives), at least two of the researchers were present for all of the interviewing. Each of us completed preliminary data analysis individually and then as a group negotiated our findings. This process was critical in ensuring that we were attending meticulously to what the students said, rather than our own biases and thoughts. Additionally, member checks occurred throughout each interview through the use of reflective listening and were also implemented with follow-up interviews with participants so that emerging themes could be confirmed or corrected.

Transferability is analogous to the quantitative concept of external validity, though qualitative research's reliance on constructed meaning dictates that the findings are inextricably bound to the context of the study. This prevents the researchers from automatically generalising their findings to another context. The researchers' roles are to provide

"the thick description necessary to enable someone interested in making a transfer to reach a conclusion about whether transfer can be contemplated as a possibility" (Lincoln & Guba, 1985, p. 316)

Since students were reluctant to be quoted in the dissemination of the findings, thick description is provided by multiple specific examples to illustrate the themes that emerged from the data.

To guarantee dependability and confirmability, both of these criteria can be tested with an inquiry audit that would attest to the soundness of the process (the methods) of inquiry, as well as to the strength of the product (the findings) of the inquiry. We have provided for such an audit by creating a methodological journal which documents decisions regarding research design and implementation and our own impressions and reflections on the research process. We have also preserved evidence of each phase of the data collection and analysis: interview tapes, interview notes, transcripts, process notes used during data

analysis, agendas from our research meetings, all drafts of the analysis and the final report of the study.

Research Questions

The initial questions for inquiry, focused on Aboriginal and Torres Strait Islander students in a block mode health sciences program, are

- 1) what are students' on and off campus experiences related to their academic outcomes? 2) what are the factors that challenge students' study on and off campus?
- 3) what are the factors that enhance students' study on and off campus?
- 4) what effect do study groups have on Aboriginal and Torres Strait Islander health students' study?

Interviews

Data collection consisted of intensive, semi-structured interviews with participants interviewed each time they returned to campus for a block of instruction. Because some students were at times hesitant to be interviewed individually, participants were offered the option of being interviewed on their own or in a group. So that the participants, Aboriginal and Torres Strait Islander students, would feel most comfortable discussing their experiences, interviews were scheduled so that the Aboriginal researcher was present for all but one interview. This measure was essential in establishing trust and rapport with the participants.

Participants were asked to comment on their background factors, such as previous work and educational experiences and the reasons they came to study; their expectations for how they would do in the program; the on- and off-campus experiences that affected their academic success and study; and how the study groups were affecting their study.

After the first interview, each subsequent interview included a member check, the purpose of which was to ask participants to confirm and revise a _summary of their remarks and to reflect on their colleagues' comments and on some themes that were emerging from the preliminary analysis. For member checks, the goal was "to obtain confirmation that the report has captured the data as constructed by the informants, or to correct, amend, or extend it, that is, to establish the credibility of the case" (Lincoln & Guba, 1985, p. 236).

To ensure accuracy in reporting participants' comments, each interview was tape recorded and transcribed in its entirety.

DATA ANALYSIS

Consistent with qualitative research methods, we believed the most important task for data analysis was to understand the students' words, their experiences, and their perspectives, which is the task for qualitative researchers striving to achieve *verstehen*, or 'understanding' (Patton, 1990, p. 56). Tools that we used for this task included our knowledge of the literature, our skills as empathic listeners and our experience as researchers, but the students' perspective was the highest priority in the data analysis. This meant that we had to

constantly confirm that our analysis was congruent with their experience, and firmly grounded in the data of the students' reflections on their experience.

Data analysis was ongoing from the beginning of data collection through the completion of the writing process. Throughout, the analysis (such as ideas for themes, connections in the interview data, and conceptual ideas) was captured in memos to the methodological journal so that the audit trail would document the process of analysis and all research decisions made by the team.

Once each set of interviews was completed, the inductive analysis focused on identifying discrete incidents or "chunks of meaning" (Marshall, cited in Lincoln & Guba, 1985) in the interview data by reviewing each transcript. Lincoln and Guba (1985) call this process 'unitizing', with two criteria in mind 1) it must be heuristic, illuminating understanding of the phenomenon under study, and 2) it must be discrete, "the smallest piece of information about something that can stand by itself" (p. 345). A unit could be a phrase, a sentence, or a series of sentences. Lincoln and Guba (1985) suggested that over-inclusion was preferable to premature exclusion of data from the study, and therefore only those comments that were clearly unrelated to the research questions were omitted.

The companion to the unitizing process of identifying chunks of meaning is what is referred to as "coding," naming the discrete incidents, or units, whether they're a description of an event or they're a single sentence. Naming involves making the tacit meaning explicit, answering the question, "Of what phenomenon is this incident an example?"

During data analysis, unitizing and coding occurred simultaneously. As each transcript was reviewed, meaningful comments were identified as units and labelled with a code. With each successive unit that was identified, *constant comparison* was employed: the unit was tested for fit with existing codes and in the absence of a fit, a new code was established. Codes were defined narrowly, presuming that redundant codes could be combined later in the process.

It is important to note that only after each member of the research team had reviewed interview transcripts and identified units independently did the team meet to discuss how the data would be unitized and coded. _This process maximised investigator triangulation; analysis of the data was thorough and rigorously debated.

Through the unitizing and coding process completed by each researcher independently, the interview data was disaggregated so that it could be closely analysed. When the researchers reconvened to discuss the unitizing and coding overarching themes began to emerge from the data. Then, discussion of how the individual themes converged or diverged led to the development of "cognitive maps" for understanding the participants' experiences (Miles & Huberman, 1984, p. 68).

FINDINGS

It is important to note that these findings are preliminary since they address only the first two blocks (equivalent to one semester) of students' experiences in a two-year program. The goal for the research is to follow students through the course of the two-year program, so additional findings will be forthcoming. However, these findings should in no way be considered incomplete: they provide an important snapshot of students' early experiences in their study in the Diploma in Health Sciences (Aboriginal Health and Community Development) at the University of Sydney.

It may be useful to reiterate that, as a qualitative study focusing in-depth on a small sample of students in a particular context, that these findings can not be automatically generalised to other settings. Thick description of the findings is presented so that readers can determine if transfer of the findings to their own setting is appropriate.

Educational Background

One of the questions for inquiry was related to students' educational background. All of the participants left school prior to or at Year Ten of Secondary School. One of the participants completed primary school, leaving after year seven. All of the participants have attended some form of post Secondary School education. Some of these courses were award courses such as TAFE (Technical and Further Education) advanced certificates in Drugs and Alcohol, and others were community courses, such as stress management. In fact, a majority of the participants had attended TAFE at some point in their educational careers. An additional thread that ran through the participants' educational backgrounds was enrolment in courses either run through Aboriginal and Torres Strait Islander programs or containing study of related issues, for example, Aboriginal aged care. Two of the participants had previously enrolled in tertiary programs which they did not complete.

Participants were able to reflect on their previous educational experiences which they felt had negative and positive effects on their study. Previous experiences that detracted from students' study included limited educational experiences that led to students feeling academically unprepared for tertiary study. Also, students reported that negative encounters in previous educational settings, such as overt racism from teachers, left the students feeling defeated and doubtful of their ability to succeed at tertiary study.

The key positive influence was participation in previous education and training programs which enhanced students' preparedness and confidence for entry to the Diploma program. Further, it was considered beneficial if these previous educational _experiences were structured so that students had gradually more difficult classes over time.

Employment Background

Responses to the question about participants' employment background revealed that all have held a variety of jobs, ranging from construction to business to hospitality. All except one of the participants had at least some experience in the 'helping professions' of social service, corrective services, or education.

Motivation to Enrol and Definitions of Academic Success

Both the reasons that students chose to enrol, and their definitions of academic success once they were enrolled, related to their desire to make a difference in the health of Aboriginal and Torres Strait Islanders.

In their discussions of their decisions to study, participants noted both global and individual motivators. Global motivators included an acute awareness of a gap in community health services, gained from either personal or family experiences of poor health. In addition, participants noted being drawn to study by a desire to contribute to the improvements of Aboriginal and Torres Strait Islander community health, and a belief that Aboriginal and Torres Strait Islander people should be more involved in the decisions that affect their communities as an important part of the process of self-determination.

At an individual level, participants were motivated by a need for further education, as a requirement for work, to get a better job, and for qualifications which were perceived as

providing credibility as well as the potential for role modelling. Other individual motivators included being the "right time" in the students' lives, and feeling a readiness to learn.

Students' definitions of academic success related to both personal and global objectives. Students reported that their personal objectives related to academic success included: fully understanding the course material and being able to apply it to new contexts, developing confidence enough to speak about what they had learned, achieving high marks, and graduating with a certificate. Global objectives, like the global motivators to enrol, related to being able to make a contribution to Aboriginal and Torres Strait Islander communities. For example, students' definitions of academic success included being skilled enough to provide whatever service is needed in the community, to be able to disseminate what they've learned in the community and to be able to share their knowledge in a way that is accessible for members of the community (ie, without using academic jargon).

Factors that Influence Study

When we asked participants to talk about the factors that affected their study both on and off block, their responses centred around a number of themes. These themes include curriculum, physical environment, the students, and other commitments. Within each of the themes participants identified both challenges that detracted from their study and strategies and strengths that enhanced their study. Interwoven with many of these themes was the effect of students' newness to many aspects of their experience. _

Challenges

As noted there are a number of specific aspects of the learning experience that challenged participants' study.

Newness

Many of the challenges identified during the first block of study were accentuated by the students' own newness and by the newness of the environment. Participants' newness meant that some of them were learning how to study at the tertiary level for the first time, after having been out of formal education for several years and not completing high school. It was also noted that it was overwhelming to be in a new environment where they didn't know anybody and where staff and students were unfamiliar. Therefore, when difficulties were encountered, not only did the participant have to manage the particular difficulty, they were further challenged by not knowing where to seek assistance. During the first block, newness operated as a constant in the challenges participants encountered.

Responses in students' second block of study suggested that the influence of newness began to dissipate over time. More time on campus meant that the students were more familiar with the academic culture and how it operated. This familiarity enabled students to manage challenges differently from their first time on campus. For example, students reported that they had a better understanding of who to go to for problems and the confidence to approach those staff members. In the classroom, students were more confident participating in class discussion and more willing to take the risk of verbalising their ideas. Students suggested that there was a process which happened over time through which they found their own level among their peers. By the second block they were able to identify students from among their classmates who shared similar intensity for their study and with whom they felt comfortable.

The Students

Within the theme of 'Students', participants reported challenges related to either themselves or their fellow students in the program. Challenges related to the participants themselves fell into two categories: firstly, their skills as learners and, secondly, how they felt about themselves in their learning environment. When talking about their skills as learners, participants recognised a need to develop competencies in a number of learning skills such as reading for academic purposes, spelling, note taking, computer skills and time management. Students continued to identify these gaps in their learning competencies as an issue which challenged their study until well into the first semester. As well, students reported that these gaps in their learning competencies had an effect on their confidence.

It became evident from participants' comments that their affective responses to other difficult learning situations also presented a challenge to their study. For example, participants' consistently noted struggling with one subject in the program, which led to feelings of frustration. Participants felt unable to discuss their frustrations with the instructor and in some cases felt so frustrated that they wanted to walk out of the class, which some did. This frustration was internalised, leading to and feeling 'small'.

The participants reported that some of their interactions with their fellow students also presented _challenges to their study. These included learning to interact with people of different gender, ages or backgrounds, and some with whom they had little in common. Participants also noted that in some cases the effect of an individual's or small group's negative feeling spread quickly through the larger student group. This affected students' class attendance and motivation to study. Students reported in-class interaction such as oral presentations and role plays, was less effective when class size was diminished by their peers' non-attendance. When students were late to class, affecting the start time for the class session, participants felt that they missed out on valuable class time. Also related to in-class interaction, peers' sarcastic comments about participants' contributions made the participants feel self-conscious.

The Curriculum

Participants' comments about challenges related to curriculum issues can be grouped into content (subjects within the program), teaching staff (instructors within the program), program organisation (administration and implementation of the academic program) and student support (pastoral care).

Content

The challenges related to content were both general, such as the ability to spell and write, as well as specific to particular academic subjects, such as degree of difficulty and amount of reading. In addition, participants felt that in some subjects the pace of instruction, the time allocated, and the lack of ability grouping challenged their study.

Teaching and academic support staff

Students identified several challenges to their study which related to teaching and academic support staff and included the issues of availability, organisation, consistency, expectations, and awareness of different learning styles. Importantly, students were frustrated by their inability to contact staff both whilst on campus and off campus. On campus, when staff were unavailable to clarify concerns, students were unable to proceed with their work. Students were particularly frustrated when, at the beginning of their second block on campus, the majority of staff were off campus attending a conference. The participants' reported that their

expectations are that staff's first responsibility is to the students, a responsibility that students felt was neglected by staff in this instance.

During their off-block periods, students' ability to contact staff was also problematic. Specifically, students were often unable to make contact with staff by telephone. On some occasions when students left a message, either they received no response or they received a response several days later, at which point students reported it was 'too late'. The implication of this unavailability meant that, while off block, students often worked without guidance.

Students' comments also indicated that they expected that their subject teachers would be responsible for the organisation and implementation of the learning experience in their subject. Students were concerned with an apparent lack of planning in some subjects, which meant that students had last-minute tests and assignments; handouts that were distributed haphazardly because they had not been distributed in class, resulting in some students missing out; and subject outlines were not distributed until after the first block. Some of the subject outlines distributed by teaching staff were confusing and the participants were unclear of what was expected of them, particularly with respect to due dates for assignments. For example, some subject outlines stated that assessable work should be submitted by block two, rather than specifying a date within that block, so students were confused at which point their assignments would be considered 'late'. Students reported that it seemed that some lecturers had not prepared for class, and students were disappointed when material included in the subject outlines was omitted without explanation. These issues of organisation were not insignificant as participants explained that their motivation to study was negatively affected.

Students were frustrated with staff who had unrealistically high expectations of the amount and level of work that beginning learners with limited academic skills could complete in the first year of a Diploma program. For example, some students with limited tertiary experience struggled with the academic language in assigned readings and therefore felt overwhelmed by the number of readings.

Students felt frustrated when staff members' actions were inconsistent with what students had been told. For example, marks are allocated for attendance but students seldom saw evidence of attendance sheets being completed.

Students noted that it had serious ramifications for their study when staff were unhelpful, patronising, and abrupt and in some instances the result was that students didn't complete their assignments. The detrimental effect on participants' study was further complicated by their fear of recrimination, specifically in the assessment of their grades, if they spoke out against what they saw as unprofessional behaviour.

Also, the participants found that at times the staff did not allow them to learn in their own way; in a particular class participants were instructed not to ask questions or to take notes and in another instance a request for lecture outlines was denied.

Program organisation

Participants' responses also indicated that a variety of aspects of the program organisation challenged their study, both on an off block. On-block challenges were related to timetabling and to the availability of learning resources. Off-block challenges were largely related to students' experiences of the newly developed Community Based and Independent Learning Packages.

On block, participants struggled with timetable issues, such as frequent room changes and having such an intensive schedule of classes. The Block Mode delivery used in this program dictates that the students' timetable includes eight subjects over two weeks and eight hours of classes a day. This created difficulties for participants in managing the demands of a vast array of subject material in a short time span. A full timetable meant that time for other activities was compromised: students had little time for reflecting on the material covered in their classes during that block, for accessing resources, or for working on assignments. It also meant that students found it difficult to concentrate on the subjects timetabled late in the day. The concentration of material presented in one block made it difficult for students to be absent even for a short time. Finally, students also identified a lack of resources for the computer subject as a challenge to their on-block study.

Students' comments about the factors that challenged their study off-block, reflected the nature of trialing a new component of the academic program, Community-Based and Independent Learning Packages. Students found difficulties with aspects of both format and content of these packages. Related to format, students found that typing errors were confusing and took time from students' study to clarify, and the size of the packages (A4 size, 5 cm thick hardcover binders) made them intimidating and cumbersome. Students efforts were also challenged by some aspects related to the content of the packages.

The packages included non-assessable learning activities designed to develop academic learning skills for students with limited tertiary experience. Because these learning activities were not identified as non-assessable, students with well-developed academic skills unnecessarily spent time completing activities which they felt would have been better spent on their assessable learning tasks. Students were confused by variations in information between subject outlines and packages and sometimes had to make a decision about which version was correct. A clear message was that the packages would have been more effective if everything students required for their study was in packages, including subject outlines, assessment guidelines, and readings. Finally, students suggested that it would have been helpful to include realistic estimates of the time required to complete the activities, estimates which factored in individual differences. It seemed that these estimates would have given students valuable feedback on whether they were allocating their time appropriately.

Student Support

A common thread among participants' comments concerning student support was the challenges presented by communication flow between students and staff. Participants reported that when they encountered challenges they were uncertain about who could best resolve the issue or offer support. Some participants were hesitant to seek support from staff because they weren't confident that their concerns were important enough. Additionally, participants were reluctant to seek assistance from staff they had previously found to be unhelpful. Participants concluded that, as a result of being unable to resolve their concerns, initially insignificant challenges blossomed into significant challenges that seriously affected their study.

One challenge that students identified related to student support was inconsistency. First, students felt that there was at times an apparent lack of consistency between staff members' stated intentions and their actions. For example, students were required by timetable and class commitments to arrive by 8 A.M. and were told that staff would be available to open common room and classrooms. However, students reported that they sometimes arrived to find the office unstaffed and all of the rooms locked. Second, participants identified that the amount of assistance offered to students by staff varied from student to student. For

example, students were confused when they were refused access to a phone after other students had been invited to use staff phones.

Physical Environment

Participants' comments about factors that challenged their study included references to the physical environment. The comments addressed either the campus environment or their accommodation. Challenges related to the campus environment included smaller issues such as the facilities of the academic unit as well as broad issues such as the geographical location of the campus. Participants found studying in classrooms with chairs that were not ergonomically sound, classes held indoors in small, air-conditioned rooms with no windows or fresh air made it difficult to study. Students suggested that an outdoor teaching space may be more culturally appropriate. The lack of access to a telephone, essential for students to stay in touch with families and work in their communities, was an ongoing problem and a source of frustration. Participants, especially those from rural areas, found the city location a challenge to their study because their fear of the city limited their physical activity and affected their sense of well-being.

Issues related to the accommodation include those related to the physical facilities, the nature of sharing rooms, transport to campus, and access to shopping. In the same way that some teaching spaces were considered inappropriate, students were concerned about the sterile, unfriendly nature of the accommodation. Sharing rooms presented a challenge because it was sometimes difficult to resolve lifestyle differences between rooming students and because room changes were disruptive. A further challenge related to accommodation was the fact that one of the motels was distant from the campus and students had difficulties getting transport to the university. Finally, since students were responsible for arranging their meals while on block and since they were often new to the area, they were challenged by being unable to locate supermarkets near their accommodation.

Other Commitments

Participants' comments about factors that challenged their study included commitments external to their study, specifically work and family commitments. The most commonly noted outside commitment related to family. Women who are mothers were concerned about the conflict between being a mother and being a student, specifically the imperative to have good, reliable childcare while they were away on block. Pressure from spouses was also noted as being a preoccupation for students while they were on block. Also noted was a feeling of isolation from being disconnected from family and concerns about what was happening at home while they were away. While they were off-block, the conflict between family and study continued to present challenges to study. One participant noted that in the inter-block period a number of family crises, including having to move house, arose, which left little time for study.

Related to conflicts between participants' work and their study, participants noted that sometimes they brought their work problems to campus.

In conclusion, the challenges noted were valid and important to the students in the study, however, the consultation with Diploma students not participating in the study revealed that other students may have found these issues more or less challenging. When considering the challenges identified in this study, it is useful to note that, within any student group, there will be variation in students' perceptions and responses to challenges.

Strategies and Strengths

When students talked about the factors that affected their study, the themes that they discussed (students, curriculum, physical environment, other commitments) fell not only into challenges, as discussed, but into strategies and strengths as well. Strategies were defined as active things that students did or that the Yooroang Garang program did to support students' study. Strengths included participants' personal qualities and capabilities that contributed to their study. In the section below, strengths and strategies are discussed together.

The Students

Within the theme of 'The Students,' participants' comments related to themselves as well as to their peers. Participants' responses suggested to the researchers that a real benefit to students' progress was the extent to which they knew themselves, both as Aboriginal and Torres Strait Islander people and as learners. First, participants with a strong sense of their own culture suggested that this would give them a head start in their study because they felt an immediate and strong identification with their fellow Aboriginal and Torres Strait Islander students. Second, participants articulated an awareness of their preferred learning styles, for example, students often reported that they learned best when there was an experiential or hands-on component to the learning process.

Participants' responses also indicated that they brought with them to the educational experience the ability to strategise, whether it was in response to their own needs and limitations as learners or to the practical aspects of the program. For example, the participants quickly organised tutors for off-campus individual support and some reduced their enrolment loads in order to address a conflict between work, family, and study. One of the students who reduced load capitalised on the situation to commute from home rather than stay at the motel. This enabled the student to spend the commute time doing work and reflecting on the day's events. Strategies developed in response to program difficulties included organising a mobile phone when public phones were not accessible, car pooling when the motel bus was not available, and talking to fellow students about concerns.

There are also some personal qualities that the participants identified as contributing to their study in a positive way. For example, participants noted being assertive, determined to succeed, focused on their goals, mentally ready to study, and confident in their ability to do well in the program.

Participants also identified that their peers had a positive effect on their academic progress. Students reported that, within the Yooroang Garang student group, peers provided support for each other. Peers provided an important opportunity for sharing and clarifying ideas and senior students were able to act as informal mentors. Students commented that they felt that their peers were 'family' when they were on block. This level of support extended beyond the on-block periods of instruction when students reported that they maintained their connections with their peers by phone while they were in their home communities.

Curriculum

Aspects of the curriculum that promoted students' study included program organisation, teaching staff, and student support.

Related to program organisation, participants reported that they appreciated and benefited from aspects of the curriculum which ameliorated their newness: as learners, to each other and to the physical environment. Program strategies which addressed participants' newness

as learners included the Yooroang Garang Preparation Program which some of the participants had completed prior to enrolment in the Diploma program and the provision of academic support staff and regular academic support tutorials. Students appreciated program strategies which addressed their newness to each other, such as the provision of student and staff name tags distributed at first block. They also benefited from strategies that addressed their newness to the physical environment, such as being met at the motel by a former student who was available to greet students and introduce them to their new environment. Unrelated to the theme of newness but related to curriculum, students also noted that program strategies such as excursions and field trips provided a valuable adjunct to classroom learning.

Related to teaching staff, students noted that staff who provided a balance of both structure and flexibility within their teaching facilitated the students' study. Participants noted that clear subject outlines and subjects that were conducted according to the subject outlines were helpful so that student knew what to expect in their classes. Regarding flexibility, students appreciated teaching styles that responded to students' individual needs for extensions of time on completing assignments and that minimised the use of academic jargon where possible.

Regarding student support, students noted appreciating having members of academic staff who were able to provide both personal and academic support.

Other Commitments

The most frequently reported aspect of participants' other commitments that encouraged their study related to having family support. For some participants this included having other family members enrolled in the program, having a supportive spouse, and having extended family to care for dependent children. For others the family support was related to members of the family who had been strong role models. Other sources of support were members of the community, work mates, and tutors.

Study groups

As noted, the program formed student study groups for on- and off-campus peer support. Students were interviewed about their experiences of the study groups at two points: at the end of their first on-campus block of instruction when they had just met the members of their study group and then again during the second block after they had worked with their study group in their home community. The comments students made at the beginning of their first block were in anticipation of the benefits of having access to peer study groups while comments made in the second round of interviews indicated their first experiences with the groups.

In the first block, students identified the study groups as a program strategy which addressed participants' newness. Participants felt that the study groups promoted cohesion and collaboration among the students, decreased anxiety about the ability to complete assignments and provided an opportunity to share _the work load. There was also a recognition that group work promotes tolerance towards each other which was identified as a useful skill when working with communities. Participants recognised that groups which were made up of people who were geographically close would be most likely to function effectively off-campus. There were some concerns about how the study groups would function once students returned to their home communities particularly for those who were geographically isolated from their peers.

Commenting on their experiences with the study groups, students identified a number of factors that challenged the effective functioning of the groups, related to time, geography and the incompatibility of group members' commitment to their study. Some students noted the difficulty of getting together off campus because of difficulties with transport and travel. Others had difficulty committing time to their study because of family and work responsibilities. Students also noted that, when they did get together, that some members of the group had not done the required preparation for the group meeting.

Unexpected outcomes of the study groups were both positive and negative. Students noted that working in the allocated groups was not productive and that, for some, it proved very frustrating. Alternatively, students devised strategies for adapting the groups to their use, either by remaining in contact over the phone or by devolving to work in smaller groups.

Indigenous Program for Indigenous Students

Participants noted a variety of effects on their learning that derived from their being Indigenous people in a program for Indigenous students. Some of these effects related directly to the teaching-learning process, while others related to general aspects of students' educational experience.

Students reported that the learning environment was enhanced by having all Indigenous students in their classes. This made the participants less afraid to speak up in class, in contrast to participants' previous experiences in mainstream programs when they were afraid of saying the wrong thing. Students felt that the 'informality' of the program meant that they were allowed to learn at their own pace. It was also noted that participants liked the fact that it was a specialist program and they felt it provided excellent 'grass roots' training in important health areas.

Some participants also appreciated program strategies which they saw as enabling them to make the connections between their own experience and their Aboriginality. During first block, an Elder from a local community was invited to address the students in the Indigenous Perspectives on Health subject which was a particularly significant experience for students who were less familiar with traditional Aboriginal culture.

Students suggested that they have a different relationship with their lecturers in the program, compared to previous learning experiences. Because staff and students spend most of their time in geographical proximity (staff offices, student common room, and student classrooms are on the same floor), students felt that the staff were very available. Students felt there is less of a student-staff hierarchy in the program, evidenced by the fact that the students feel able to be vocal about aspects of their learning experience that do not suit them. Also related to staff, students noted that it was important to have Indigenous people on staff and that the students were aware of who the Indigenous staff were.

Related to the general aspects of students' educational experiences in an Indigenous program, students noted that they liked having the opportunity to mix with other Indigenous students because they felt at ease with their own people. Knowing that they would all be together made it possible to be supportive of each other. Students noted that it was important to have respect for themselves as well as respect for their peers and that sharing Aboriginality provided a common understanding of their backgrounds. Students commented on a perception of a 'common experience' expressed as a desire to aim for the same goals and a feeling that everybody was on the same level.

Students saw many advantages of having the opportunity to study in an Indigenous program for Indigenous students, but they also offered critiques of the program. Despite the fact that the program is an Indigenous program for Indigenous students, some participants still felt that coming to university and institutional learning remains 'white man's way'. One student felt the program was more akin to a mainstream program, because staff do not always respond to students' cultural differences or get to know students' cultural backgrounds and because there was too much emphasis placed on grades and assessments. Participants also reported a strong objection to staff who did not have an awareness of Aboriginal and Torres Strait Islander culture, either as it affected the community as a whole or the participants as learners.

In general students appreciated the opportunity to study in a program designed for Indigenous students, addressing Indigenous issues. One student reported that studying in an Indigenous program for Indigenous students was the most positive learning experience they had ever had.

DISCUSSION AND CONCLUSIONS

Educational Background

While the participants left school early, by no means was it the end of their formal education. Most of the participants continued their education in short courses. This may be because those courses were more accessible, since many of the participants live outside major metropolitan centres, and achievable, given that most of the participants had left school at or before Year Ten. These short courses enabled the students to choose classes with a degree of difficulty to match their developing competencies.

For participants in this study, previous enrolment in the Aboriginal Health Science Preparatory Program offered by Yooroang Garang or in TAFE seemed to be important gateways to university study. Both avenues provided opportunities for participants to develop their learning skills and their confidence to pursue tertiary study. However an additional advantage of the Yooroang Garang Preparatory Program noted by the participants was that it enabled students to familiarise themselves with the people and the place at which they would be studying in their formal programs. If universities hope to recruit Aboriginal and Torres Strait Islander students, then it may be advantageous to offer specific preparatory programs which imbed the learning skills within a particular academic context.

Also common in the educational background of the participants was their previous involvement in programs for or about Aboriginal and Torres Strait Islander people. The reasons for this seemed to be that participants were eager to learn about their own culture in programs with other Aboriginal and Torres Strait Islander people.

Aspects of students' educational background not only enhanced but also challenged their study at university. For example, students reported having difficulties with academic skills (eg, reading, comprehension, writing, spelling) because many had limited formal educational experiences. Not only were previous educational experiences limited but they were sometimes negative. Students who had encountered racism in previous educational processes and internalised those messages reported doubts that they could succeed at university study. Students' experiences demonstrate the influences that limited skills and negative feedback can have on further limiting Indigenous students' educational opportunities.

Employment Background

Whilst the participants had a variety of work experience, almost every one had worked in an area which could be broadly defined as the "helping profession". This may be the source of participants' awareness of existing gaps in health services for Aboriginal and Torres Strait Islander people and the subsequent desire to study in order to make a contribution to improvements in Aboriginal and Torres Strait Islander health.

Motivation to Enrol and Definitions of Academic Success

Previous research on adult students' motivations to enrol in university study has identified a variety of individual motivators such as desire for career change, intellectual curiosity and satisfaction in having a degree (Sewell, cited in Krager, Wrenn, & Hirt, 1990). Interestingly, although participants noted similar individual motivations, their primary reasons converged around the global theme of community need. Likewise, 'academic success' was defined not only in terms of individual benefits (earning a credential or getting high marks) but especially in terms of *community benefits* (being skilled to meet the needs of the community). Participants noted an *acute* awareness of the health problems within the Aboriginal and Torres Strait Islander communities and a determination to study in order to make a difference in addressing these problems.

Perhaps it is a reflection of the fact that the participants are Aboriginal and Torres Strait Islander that their motivations to study and their definitions of academic success, whether global or individual, centred on issues such as empowerment (global) and credibility (individual). We believe that this is an indication of the magnitude of the challenges facing Aboriginal and Torres Strait Islander people in facilitating self-determination within the dominant society.

Factors Influencing Study

Participants identified a number of factors that challenged or strengthened their study, factors related to curriculum, the students (either themselves or their peers), the physical environment, and other commitments (family or work).

In isolation, some of the factors that challenged participants' study may appear to be insignificant, and even the participants acknowledged that issues such as not having access to a telephone were, on their own, minor. However an important caution should be taken from participants' comments. Within the context of an intensive, two week block of instruction, minor challenges have a cumulative effect so that not having access to a telephone, having an incompatible roommate in the motel, or not having convenient access to transportation from accommodation can combine to overwhelm students and seriously interfere with their study. This may be particularly so if students don't have a means for dealing with their concerns. As Brundage and Mackeracher (1980) articulated in their synthesis of principles of adult education,

"A learner's most pressing negative concerns need to be dealt with as a priority, in order to relieve stress and free energy for learning. These needs may not necessarily relate directly to the training program" (cited in Byrnes, 1993, p. 158).

One significant observation from the participants' responses was that, as adult learners these participants had well-developed problem solving strategies that were effective in many

respects. It is clear that in order to facilitate students' problem solving on campus, communication channels need to be explicit and effective. Students require designated individuals to whom they can voice concerns, whether they are student-elected representatives, teacher mentors or program coordinators.

In addition, it's important to reiterate that when participants were interviewed during their first block, their newness to the institution, to study, and to being away from home operated as a constant in the challenges they encountered. However, the effects of newness began to dissipate by the time students were interviewed at the end of their second block on campus. Because they were now more familiar with staff, their peers, and the environment, students were better able to respond to challenges when they arose. It may be tempting for educators to assume that adult students, because of their developed problem-solving skills need less attention paid to orientation to their new environment. However, it is clear that the way that students' 'newness' is managed by the institution can have a profound effect on students' study and may have implications for retention. Seemingly insignificant efforts like providing student and staff name tags and having someone meet students at the accommodation when they arrive for first block can ease the transition to tertiary study. The findings suggest that students do eventually make the transition from newness. We believe that institutions can *actively facilitate* the transition rather than leave the students to find their own way through the maze.

Finally, another noteworthy finding of the study, related to the students themselves, was the reminder that the participants came to study with great insight about themselves. As educators are aware, life presents many lessons for adult learners, but not all people learn them. These participants demonstrated that through their life experiences they have come to know many aspects of themselves, both as Aboriginal and Torres Strait Islander people and as learners. This knowledge of self is a strength that benefited the participants' study in many ways. First, participants with a strong sense of their own culture suggested that this knowledge and experience would give _them a head start in their study because they felt an immediate and strong identification with their fellow students. Second, participants articulated a strong understanding of their learning styles. This knowledge enabled them to identify learning situations which denied or compromised their preferred learning styles and offer suggestions for changes.

Knowledge of their own needs enabled students to make practical decisions. For example, some participants made a decision to reduce their enrolment load so that they could spend the time that they felt they needed on their study. Other students quickly organised tutors for off-campus individual support.

Participants also entered the program with many personal qualities which contributed positively to their study. They were assertive, determined to succeed, focused on their goals, mentally ready to study, and confident in their ability to do well.

One of the bright spots when we talked to students about their expectations for their progress in the program was their level of determination. Students were determined, not only to complete the program, but to 'ace' it in the process. The corollary was that in some ways our students' comments suggested that they are vulnerable. We can't necessarily explain the source of the vulnerability. It may be because of previous negative experiences in educational settings, or because of 'sensory overload' from students' newness to study, the academic culture, the physical environment, and to living arrangements.

Regardless of the reason, the implication was that frustrating experiences in this educational environment had a common effect: students wanted to throw up their hands and walk away. They weren't necessarily talking about leaving the program, but they did say that frustrating

encounters made them want to walk away -- from the class, the instructor, the task, campus -- and some of them did. Our students bring incredible determination to their learning experiences and that determination can get short-circuited by frustrating learning experiences.

Study Groups

In the first interviews, students were able to identify the potential benefits to studying in groups. However, in practice the study groups were less fruitful than students at first hoped. Institutions that implement study groups might consider the issues that challenged the effective functioning of study groups, including geographical distances between students, students work and family responsibilities and varying levels of students' commitment to study. It was encouraging to note that, despite considerable challenges, students were able to adapt the functioning of the study groups to meet their needs and have some positive outcomes. For this reason, flexibility may be a key characteristic of successful study group programs.

Indigenous Program for Indigenous Students

Participants identified both challenges and strengths that derived from being Indigenous students in a program for Indigenous people. Challenges were related to ways in which the learning environment was in conflict with students' cultural needs. Participants noted that in some instances the program did not acknowledge the complexity of students' identities as Aboriginal and Torres Strait Islander people or the centrality of the community _in relation to subject content. For example, there were students who had strongly identified with their Indigenous community from birth and there were other students who may have only recently acknowledged their identity as Indigenous people. Participants felt that staff did not always demonstrate an appreciation for the diversity of their cultural identities.

Where the program did demonstrate an appreciation of students' identities as Indigenous people, there was a sense that this resonated with the students and positively influenced their study. Because the other students and many staff were Indigenous, shared understandings of Indigenous perspectives meant that students did not have to continually explain themselves. For example, students noted having greater confidence to speak in classes when they were surrounded by their own people, as compared to their experiences in mainstream programs. The reminder for educators is that part of learning is taking risks and where these students feel more able to do that there will be demonstrably positive outcomes for their learning.

The important message for educators is that it's essential *not only* to respond to students' needs as Indigenous people, but to remember that those needs are *not* unidimensional.

CONCLUSION

To conclude, in the current budgetary climate it is imperative that educators be able to demonstrate that education is not unexamined work: in order to be able to do it better and to articulate what will happen if education becomes the victim of further budget cuts. This has particular poignancy for Indigenous health education where there is a palpable link between the training of Aboriginal and Torres Strait Islander health workers and the improvement of the health status of Aboriginal and Torres Strait Islander Australians.

However, serving the dual roles of practitioner and researcher is not a task for the faint-hearted – more than once, the research team has been overwhelmed by the demands of the research process, coupled with the awesome responsibility of responding to the concerns that participants raised. But researching practice is the truest path to improving our students' educational experience. And the participants in the study have reminded us that, at the very least, this research endeavour has been useful because sometimes it helps just having someone to listen.

REFERENCES

Australian Bureau of Statistics (1997). *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*. (ABS Catalogue No. 4704.0). Canberra: Australian Government Publishing Service.

Australian Government Publishing Service (1992). *Aboriginal Deaths in Custody:*

Overview of the Response by Governments to the Royal Commission. Canberra: Commonwealth Government Printer._

Bin-Sallik, M.A., Blomeley, N., Flowers, R., & Hughes, P. (1994). *Review and Analysis of Literature Relating to Aboriginal and Torres Strait Islander Education*. Canberra:

Department of Employment, Education, and Training.

Christie, M. (1988). "The invasion of Aboriginal education." In B. Harvey and S. McGinty (Eds.), *Learning My Way: Papers from the National Conference on Adult Aboriginal Learning*. Perth: Western Australian College of Advanced Education.

Harris, S. (1988). "Coming up level without losing themselves: The dilemma of formal tertiary training for Aborigines." In B. Harvey and S. McGinty (Eds.), *Learning My Way: Papers from the National Conference on Adult Aboriginal Learning*. Perth: Western Australian College of Advanced Education.

"Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples"

(May/June 1997). *Aboriginal and Islander Health Worker Journal*, 21, 4-9.

Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.

McIntyre, J., Ardler, W., Morley-Warner, T, Solomon, N., & Spindler, L. (1996). *Culture matters: Factors affecting the outcomes of participation in vocational education and training by Australian Indigenous peoples*. University of Technology, Sydney: Broadway, New South Wales.

Miles, M.B. & Huberman, A.M. (1984). *Qualitative Data Analysis: A Sourcebook of New Methods*. Beverley Hills, CA: Sage.

O'Connor, M. L. & Parker, E. (1995). *Health Promotion: Principles and Practice in the Australian Context*. Sydney: Allen & Unwin.

Patton, M.Q. (1990). *Qualitative Evaluation and Research Methods*, 2nd. Ed. Sage:
Newbury Park, CA.

Reference Group. (1994). *National Review of Education for Aboriginal and Torres Strait Islander Peoples*. Canberra: Australian Government Publishing Service.

Reid, J. & Trompf, P. (1991). *The Health of Aboriginal Australia*. Sydney: Harcourt Brace Jovanovich.

Saggers, S. & Gray, D. (1991). *Aboriginal Health and Society: The Traditional and Contemporary Aboriginal Struggle for Better Health*. Sydney: Allen & Unwin._

Sherwood, J. & McConville, K. (1994). *Otitis Media and Aboriginal Children: A Handbook for Teachers and Communities*. Board of Studies: North Sydney, New South Wales.

Whitt, E.J. (1991). Artful science: A primer on qualitative research methods. *Journal of College Student Development*, 32, 406-415.