

The Things That Matter :

**Understanding The Factors that Affect the Participation and Retention of
Indigenous students in the Cadigal program at the Faculty of Health
Sciences, University of Sydney**

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Paper for Presentation at the

1999 Annual Conference of

The Australian Association for Research in Education

29th November - 2nd December

INTRODUCTION AND OVERVIEW

Approximately 1.6% or 283,600 of Australians are Aboriginal or Torres Strait Islander (McLennan, 1996). 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is mirrored among Aboriginal and Torres Strait Islander students enrolled in tertiary health sciences programs (DEETYA unpublished data, cited in Australian Bureau of Statistics, 1997). Further, DEETYA statistics show that Indigenous students enrolled in health courses are less likely to complete their courses within a given time frame than are nonIndigenous students (ibid).

Improving the participation, progression and retention of Indigenous students in tertiary health science courses will increase the number of graduates who can "serve as important role models for the Aboriginal and Torres Strait Islander students who follow them"

(DEETYA National Review of Education for Aboriginal and Torres Strait Islander peoples, 1995). It will also enable these graduates, as qualified health professionals, to act as change agents in the process of improvement of health in Indigenous communities.

Much of the research already conducted into the issues of access, progression and retention of Indigenous students in higher education has been quantitative research aimed at establishing baseline data and statistics (Cobbin et al , 1992 , Lewis, 1994). Whilst this qualitative research has revealed the scale and proportion of participation by Indigenous students in higher education there is a need to identify the possible reasons for these statistics. There is a need to conduct research which can reveal the reality and complexity of the students' experience of tertiary study. As recommended in the final report of the 1994 Review of Education for Aboriginal and Torres Strait Island Peoples

"much more research is needed on participation, and...it must be qualitative research...capable of identifying what actually fosters continuing engagement in education by indigenous people"

(DEETYA, 1995).

This project has been designed as a qualitative study as qualitative research methods are well suited to explore the unanswered questions about the factors that influence progression and retention of Indigenous students within the Faculty.

"Aboriginal people ... 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).

The focus of this research project is to investigate the factors which influence the participation, progression and retention of Indigenous students in full time health professional courses at the Faculty of Health Sciences, University of Sydney.

The aim of this study is not to justify the exclusion of Indigenous students from tertiary education but to refine and develop strategies which promote their academic success.

Whilst we recognise that there is great diversity amongst and between the Aboriginal and Torres Strait Islander peoples, the term 'Indigenous' has been used throughout this paper to describe Aboriginal and/or Torres Strait Islander people. For the purposes of this research 'participation' is defined as gaining access to the university and 'progression' refers to successful completion of subjects leading to progress through a program of study. 'Retention' is defined as not withdrawing permanently from study. 'Recent school leavers' refers to students who studied at year 12 or equivalent level in either of the two years prior to entry to University. 'Non recent school leavers' refers to students who are over 21 years of age or have not studied at secondary level for two years prior to entry to University.

RESEARCH METHODS

Research Setting

Yooroang Garang: The School of Indigenous Health Studies is a teaching and support unit at the Faculty of Health Sciences, The University of Sydney. As well as teaching block mode programs for Aboriginal and Torres Strait Islander Health Workers, Yooroang Garang administers and implements the Cadigal Program which was developed in 1992 as a strategy for improving equity of access and participation for Indigenous students at the University of Sydney. The program acknowledges that 'equity' does not always require 'equal' treatment by providing entry criteria and specific support strategies to ensure that Indigenous students can achieve the same outcomes as non-Indigenous students.

The Cadigal program allows a differentially lower UAI (University Admission Index) score for HSC applicants and considers other attributes like motivation, capacity to succeed, work and life experience for mature age applicants. In general, Cadigal students enter the Faculty with substantially lower UAI scores, less previous educational experience in the basic sciences which underpin the Faculty programs as well as less experience with the academic skills required to succeed at tertiary study.

The Cadigal program is guided by the principle that improving participation in higher education by Indigenous people requires more than 'opening the doors' by special admission requirements. So, the program also provides academic support for students throughout their undergraduate enrolment. Features of the academic support offered to students in the Cadigal program include: a two-week presemester Orientation Program, the option of a reduced load in the first two years of enrolment, the provision of the Aboriginal Health Science Support program which contains academic support subjects conducted concurrent with or preparatory to the undergraduate subjects, a peer tutoring scheme, study rooms and computer facilities, and provision of resources such as textbooks and anatomical models. The School currently employs three academic staff members to provide specialist academic support within the Cadigal program.

At the Faculty of Health Sciences, the Cadigal Program has a current enrolment of 26 students in the Schools of Physiotherapy, Occupation and Leisure Studies, Communication and Speech Disorders, Nursing and Medical Radiation Technology. Since 1992 eleven Indigenous students who entered through the Cadigal Program have graduated from the Faculty with another four expected to graduate in 2000. Since 1992 thirteen students have withdrawn from study and three have been excluded because of failure to progress. Information gathered at the time these students withdrew from study suggested a whole

range of reasons for withdrawal including financial and personal difficulties, change of preference for course of study or the offer of full time, secure employment.

Participants

The Cadigal students who participated in the study represented the range of students who are currently enrolled in the Cadigal program, including women and men; recent school leavers and non-recent school leavers; those enrolled in reduced load and those enrolled in a full load; and those in first year, second year and third year.

Research Design

The initial questions for inquiry, focused on Indigenous students in full-time health professional programs are 1) what are the factors related to the students themselves which influence their participation, progression and retention? 2) what are the factors related to the teaching and learning experience which influence student participation, progression and retention? and 3) what are the characteristics of an effective model of support for Indigenous students?

The first phase of the study involves an initial interview with students who are currently enrolled as well as students who have withdrawn from study and graduates of the program. The next phase of the research will involve follow-up interviews with each of the participants. These second interviews will serve as a *member check* (Lincoln & Guba, 1985), and also allow further investigation of themes arising from the first interviews.

As a qualitative study it focuses on a smaller number of students who are studied in depth and in detail and as such has limited generalisability. 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.

Measures were taken to insure the *trustworthiness*, or soundness, of the study (eg, by providing an *audit trail* of all notes and materials from data collection and analysis, and by including *thick description* of the findings to facilitate the likelihood that the findings are applicable in another context) (Lincoln & Guba, 1985).

DATA COLLECTION

Interviews

Data collection consisted of intensive, semi-structured interviews with participants. In most of the interviews there were two participants. To ensure accuracy in reporting participants' comments, each interview was tape recorded and transcribed in its entirety.

DATA ANALYSIS

Once the interviews were completed and transcribed, 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). The companion to the unitizing process of identifying chunks of meaning is what we referred to as "coding" naming the discrete incidents, or units, whether they're a description of an event or they're a single

sentence (Miles & Huberman, 1994). 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. Through the unitizing and coding process, overarching themes began to emerge from the data.

FINDINGS

The following section includes the preliminary findings of the study. The findings are related to the factors that participants identified as affecting their decision to study at University, the factors that facilitated their success, the factors that challenged their success, and the experience of being an Indigenous student in the Cadigal program.

Factors Affecting the Decision to Study at University

Family

A strong theme in the participants' comments about the factors that affected their decision to study at University was that of encouragement from family. Participants noted that their families encouraged them to study at University as they saw this as a real career opportunity and were confident of their ability to succeed.

"My Mum sort of hinted subtly that I could go to University

...that I have got opportunities whereas they didn't. So they wanted me to use it"

Family members who were themselves graduates were encouraging and were also able to provide valuable advice.

Previous Educational Experiences

The findings suggested that previous educational experiences had both positive and negative influence on participants' decision to study at University. Some school teachers were very discouraging of participants' aspirations to study health at University which decreased the students' confidence in their ability. The emphasis placed on achieving a high TER (Tertiary Entrance Rank) had a very demotivating effect on participants while they were at school and a low TER led to a lack of confidence in their ability to succeed at University. One participant reflected

"I had a careers teacher and everytime I told him I wanted to do physio' it was like " You should look for something else". He never thought I'd ever get into Physiotherapy...so he sort of made me have doubts about going to Uni"

On the other hand, some participants noted that supportive teachers and success at school had a positive affect on their decision to continue study at University. Success in health related subjects at school encouraged the students to choose a health science course at University. After leaving school, several participants had studied in health science related tertiary preparation courses which contained science based subjects and these participants reported that these preparatory courses were a positive influence on their decision to study at University.

Other Life Experiences

Mature aged participants commented that their employment and life experience had influenced their decision to study at University. One participant recognised the skills that she had developed as a mother and in previous employment and noted that these had given her confidence to attempt University study. For another participant, lack of enjoyment in his job encouraged him to contemplate University study.

Knowledge Of The Cadigal Program

The existence of the Cadigal Program provided a pathway to University study for the participants. The participants learned about the existence of the Cadigal program through the UAC (Universities Admission Centre) Guide, University Information sessions, from the teachers at school or by word of mouth.

Once the students knew about the existence of the Cadigal program they then had to make enquiries to the Faculty. A strong theme in the participants' comments related to the quality of the personal interaction that they had with the staff who administer the Cadigal Program at the Faculty. Participants noted that the staff were encouraging, friendly, helpful and efficient, and that the personal contact by phone or interview was an important positive influence on their decision to study at the Faculty. As one participant reported

"...and I was a bit concerned about how I'd go with University life but the co-ordinator just seemed to make it sound easy, so it just probably made me more confident just talking to the co-ordinator on the phone"

These findings related to the factors that influenced the participants' decision to study at University suggest that there was a balance of positive and negative influences as the participants considered University study. Participants' reflections suggested that the 'balance' was tipped toward further study by the provision by the Cadigal Program as well as the early and encouraging contact of support staff from the University.

The Factors That Facilitate Success and Retention

When we asked participants about the factors that had contributed to their success, their responses centred around a number of themes. These themes include program strategies, a supportive environment and personal strengths.

Program Strategies

Cadigal Orientation program

Participants reported feeling scared, nervous, lost or overwhelmed when they first arrived at University. When asked about the factors that helped them overcome these feelings, participants commented on the benefit of the Cadigal orientation program which is conducted by Yooroang Garang in the two weeks before semester begins. The orientation program is a structured teaching period during which students begin their study in Anatomy and Physiology. Participants noted that this orientation program was particularly important as it enabled them to meet other Cadigal students, gain some experience in the study of difficult and unfamiliar subjects like Anatomy, develop academic learning skills for these and other subjects, and familiarise themselves with the geography and procedures of their new academic environment. Participants particularly noted the benefit of this orientation program on their development of contextualised learning skills. As one participant said " (the orientation program)... was really good...the teacher was teaching us how to learn".

Reduced Load Enrolment and Academic Support

Students who enter the University through the Cadigal program can choose to spread their first year undergraduate subjects over two years and at the same time enrol in an enabling program called the Aboriginal Health Science Support program. This support program contains a menu of academic support subjects which are taken concurrently with, or in preparation for, the undergraduate subjects. The support subjects are taught by staff who are specialists in the relevant undergraduate subjects. Participants reported that having a reduced enrolment load enabled them to study at a slower pace and prevented them from being overwhelmed by the volume of material in their undergraduate subjects. Participants in their second year students reflected that they would not have managed first year with a full load.

"In first year you're stunned with the amount of work to do. (In reduced load)...you get to spend more time on the subjects (so) you can sort of learn a subject and know it really well".

Reduced load enrolment also provided time for the students to participate in the support subjects which they commented were significant factors in their success. The support tutorials provided more time to ask questions, gain a good understanding of the subject material and develop learning skills for each subject. When reflecting on the value of the support tutorials, participants' comments suggested that there were particular attributes of the support tutors which they found helpful. Participants noted that the support tutors were effective when they were understanding, encouraging, able to explain concepts clearly and in a way that was understandable, knowledgeable about the subject material and the way it is examined and patient and willing to review material many times. As one participant suggested

"In the lecture you can get a bit lost but (in the support tutorials)...you can sit down with someone who knows what they are talking about, got a lot of knowledge on their subject, and they can just sit down and talk to you and it just seems to make sense"

A Supportive Environment

A Place That Feels Like Home

Yooroang Garang: School of Indigenous Health Studies is housed in a building which is separate from the Schools in which the Cadigal students are enrolled. It contains office space for teaching and support staff, an Indigenous student common room, several tutorial rooms for private study or support tutorials, a computer room, a photocopier for student use and resources such as anatomical models, charts, books and references.

The value of having somewhere friendly and supportive like Yooroang Garang featured strongly in participants' comments about factors which facilitated success. Participants reported that they did not feel intimidated to approach staff, that support staff are approachable and that the environment is relaxed and "feels like home". Participants commented that they enjoyed being in an environment in which they can identify as an Aboriginal and "be" an Aboriginal and where there is a real acceptance of them as Indigenous people. When one participant was asked about the factors that facilitated her success she offered the following comment

"being able to come up here and have somewhere to study with minimal disruption and with an understanding from an Indigenous perspective of why I have difficulties in certain areas".

Being with Other Cadigal Students

Participants also strongly identified the value of being with other Cadigal students at Yooroang Garang and in their classes because they have shared common experiences. The Cadigal students forge important and valuable friendships with one another. The findings of this study suggest that these friendships have direct benefits to academic success. The students are able to provide moral support for one another, swap lecture notes and form study groups. One participant remembered at a particularly low point in his life that

" (A Cadigal student) came around and had a chat to me...and that group of friends that you have plays a big role (in your success) 'cos everyone is there to support you and help you get that goal"

Participants also saw particular value in being able to observe and learn from more senior Cadigal students who acted as important role models. Seeing other successful Cadigal students in the years ahead was motivating because the participants identified strongly with these senior students and felt that their success enabled them to "realise that they could do it just the same as everyone else".

Resources

Participants also noted the value of having access to resources like computers and a photocopier at Yooroang Garang as those facilities are usually heavily booked elsewhere at the Faculty. Having rooms in which to study with minimal disruption was also noted as a benefit to success.

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Personal Strengths

Participants comments suggested that they possess personal strengths which play an important part in their success and retention. When asked about the factors which prevented them from 'dropping out' the participants' comments revealed a real commitment to themselves and their personal goal which motivated them to succeed. As one participant said " If I drop out....it's only going to hurt me" . Another participant was motivated by a desire to " stick with it and prove that TER's are not everything".

Also common was a determination to succeed despite, and in spite of, the negative attitudes of non Indigenous students toward the Cadigal program and the perception that Indigenous students at the Faculty receive special consideration. As one participant reported

" Just sometimes the fact that we got in on a reduced TER and that sometimes people are sort of thinking special consideration, special treatment..that sort of helps you want to succeed even more"

The Factors Which Challenge Success and Retention

Participants' comments about the factors which challenged their success and made them feel like withdrawing from study fell into the themes of the curriculum, personal and family issues and negative attitudes from other students.

Curriculum Issues

Participants noted that they struggled with the pace at which the material in the undergraduate subjects was presented and the degree of difficulty of the Biological Sciences subjects. Participants also commented that they found exam pressure a problem especially if the assessment was not progressive during the semester. Some participants found the format of multiple choice exam questions did not allow them to demonstrate their knowledge as well as written or practical assessments. The need to carry failed subjects complicated the students' timetables and sometimes led to timetable clashes and missed classes. Participants were also frustrated by lecturers that they felt were ineffective and subject material which was presented in an uninteresting way. One participant reflected on her experience as a new student and suggested that her success was compromised by her lack of knowledge about how to study at University and her ignorance of the expectations of the undergraduate subjects.

Family and Personal Issues

Participants cited the negative effect of personal and family crises on their success and mentioned these as factors which had led them to contemplate 'dropping out'. Death and illness in the family left participants feeling torn between the desire to be with their family at these times and the need to maintain their focus on study. As one participant noted

" When my grandmother died... I just found it very hard to concentrate like my thoughts would be elsewhere (and) cos' I'm here and they're all in the country... I feel a bit helpless.. and I can't go away from Uni, I've got to stay down here and keep up to date... it's hard to get motivated again."

Financial difficulties were also noted as contributing to participants thoughts of 'dropping out'. The expensive of living in the city on limited finances restricted the students' ability to socialise , and also meant that they had to find paid employment and then balance the competing activities of university study and work. About this issue, one participant commented

" ...the 35 hour commitment to study, and you have to work outside that....I was starting work at 4am in the morning, finishing at 9am and coming to Uni say three or four days a week...so I was trying to manage work, uni and a social life".

Participants from the country struggled with negative attitudes to living in the city as they felt "out of place in the city" and missed the support of their families.

Negative Attitudes of Non Indigenous Students

The most alarming findings about the factors which affected participants success and retention were related to the attitudes of non Indigenous students towards the existence of the Cadigal Program and its features. Participants commented that non Indigenous students did not think that the reduced load option and the provision of academic support and other

resources for Indigenous students was fair and expressed racist and discriminatory attitudes around the issue. One participant reported that these negative attitudes affected the Cadigal students by making them feel uncomfortable about being in the program and doubtful about whether they should be there. One participant remembered

"I've had people straight out say to me that the only reason I am passing is because I come from the Aboriginal Unit"

Other participants suggested that it was annoying to have to explain yourself and justify the Cadigal Program to others.

The Experience Of Being an Indigenous Student in the Cadigal Program

Despite the negative attitudes toward the Cadigal program which were sometimes expressed by non Indigenous students in the Faculty, participants comments about the experience of being an Indigenous student at the Faculty were overwhelmingly positive. Being part of a group of people who were all Indigenous Australians meant that there was a place and a group that they could come to where they did not have to defend themselves and they could all be themselves. On a personal level, participants reported that the racism and ignorance within the Faculty had made them more committed to Indigenous issues and open about their Aboriginality. The experience of studying with other Indigenous people at Yooroang Garang which is supportive of Indigenous perspectives and people, led to an improvement in self esteem and confidence in Aboriginal identity. Being with other Indigenous people provided an opportunity for them to learn more about their culture from others. As one participant reported

"being at Yooroang Garang...I've been given a chance to grow, my cultural awareness has grown and my identity has grown and I'm a lot more at ease with my own Indigenous background now".

DISCUSSION

The following section provides a synthesis of the findings as well as some implications for practice which follow from the findings.

The Importance of 'Opening Doors'

Participants comments about the factors that affected their decision to study at University suggests that they stood very tentatively at the threshold of higher education. On one hand they had a real personal desire to gain a degree and the support and encouragement from family. Opposing this were negative 'messages' sent by high school staff and their own doubts about their capability because of their lower UAI or TER. The preliminary findings from this research demonstrates the critical importance of providing a 'doorway' to higher education through which tentative Indigenous students like these may enter. The Cadigal program provided the opportunity that these students needed. Students' comments suggested that the successes they experienced once they were in the program seemed to act as an antidote to their lack of confidence and breed further success. Their success within the program affirms the view that 'equity' is not about "treating unequals equally" (Sartour, 1992) but about the provision of alternative strategies so that Indigenous students can achieve the same outcomes as non Indigenous students.

These findings also suggest that the quality of personal interaction may be a deciding factor in encouraging students to come through the doorway provided by alternative modes of

entry. Friendly, encouraging and effective support at the time of application is an important counterbalance to the students' feelings of doubt and uncertainty.

Furthermore, the existence and success of alternative entry programs like the Cadigal program should be made more publicly and widely known in the secondary school sector so that the teachers and advisors of prospective Indigenous students can encourage these students toward University study rather than actively discouraging them.

Existence of an Indigenous Support Unit

Participants identified that Yooroang Garang and its staff offered them not only academic but social and cultural support, and that there are benefits that come from having "the support offered to Indigenous students ... organised into one discrete support unit" (Bourke, Burden, & Moore 1996). In their study, Bourke et al (1996) also found that "one of the most potent factors in the decision of indigenous 'on-campus' students to 'withdraw' from University life was isolation". The findings of our study suggest that by providing students with a smaller community within a larger community in which they can meet, feel accepted and supported, mix with other Indigenous students from other courses and use resources especially designated for their use works to prevent this sense of isolation. As well as preventing a sense of isolation for the Cadigal students the environment within Yooroang Garang had a positive effect on their identities as Indigenous people. Having other Cadigal students with them in their undergraduate classes also enabled them to bring their small community and its positive benefits into the classroom.

The Importance of Other Indigenous Students

Participants' comments suggested that the presence of other Cadigal students with similar backgrounds and experiences was very an important factor in their success. Meeting other students early in orientation helped to ameliorate those feelings of newness and began valuable and lasting friendships. For study purposes the Cadigal students became an important resource for each other, being able to provide notes and form study groups. This finding may significant for institutions which are in the beginning stages of development of strategies directed at encouraging participation by Indigenous students as it may take some time to develop a 'critical mass' of students of a number great enough to provide this peer support.

Opportunity to Study at Reduced Load with Contextualised Academic Support

The 1992 Royal Commission into Black Deaths in Custody Report recommended that

"It be recognised that owing to the substantial historical educational disadvantage which Aboriginal people may have experienced, a course for Aboriginal students may necessarily be longer than might be the case if the course were provided to non-Aboriginal students" (p 97). Our study suggests that Indigenous students who enter the University with reduced UAI, often no background in science subjects and lacking confidence in their ability to succeed, benefit by being able to enrol in a reduced academic load especially in their first years of study. The participants in this study identified the reduced load option available to them within the Cadigal program as a significant factor in their success as it enabled them to enrol concurrently in the accompanying Aboriginal Health Science Support Program. The support tutorials provided an opportunity for the students to revise and consolidate the material in their undergraduate subjects and develop learning skills within the context of each subject. Students' comments suggested that they recognised the need to, and the value of, 'learning

how to learn' within each subject. As an intervention and support program the Aboriginal Health Science Support program has the following important features. It has "contextualised and content specific material, a perceived relevance and an acknowledgment of metacognitive aspects of learning" (McLean et al , 1995)

Confront racism and negative attitudes

The most alarming findings about the factors which affected participants' success and retention were related to the negative and racist attitudes of non Indigenous students towards the existence of the Cadigal Program and its features. Participants found their own individual ways to deal with these attitudes and in general they reported that these negative attitudes galvanised them into striving for success in order to prove their critics wrong. However, it should not be assumed that these negative attitudes will always produce such a positive response and outcome for Indigenous students. Institutions must strive to promote cultural awareness and acceptance for all equity groups within the academic and student community. The findings of this study also suggest that it may be beneficial to assist Indigenous students to develop a range of personal and political strategies for dealing with these sadly inevitable instances of racism and non acceptance.

CONCLUSION

In conclusion we would like to suggest that this study has revealed some of the 'things that matter' in participation, progression and retention of Indigenous students in the Cadigal Program at the Faculty of Health Sciences. We assert that such 'things' include: support and encouragement from family, other Cadigal students and staff, a place to go where they can be themselves as Indigenous people, more time to complete their program, the provision of effective academic support and personal determination to succeed. We would like to leave the final words to one of the participants who said that he thought the important thing was "sticking with it and proving that TER's are not everything".

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