

Literacy support for Indigenous people:
Current systems and practices in Queensland

Narelle McGlusky
Lenora Thaker
Indigenous Studies Product
Development Unit,
Tropical North Queensland
Institute of TAFE



Need more information on vocational education and training?

Visit NCVER's website <<http://www.ncver.edu.au>>

- ✓ Access the latest research and statistics
- ✓ Download reports in full or in summary
- ✓ Purchase hard copy reports
- ✓ Search VOCED—a free international VET research database
- ✓ Catch the latest news on releases and events
- ✓ Access links to related sites



Literacy support for Indigenous people

Current systems and practices
in Queensland

*Narelle McGlusky
Lenora Thaker*

*Indigenous Studies Product Development Unit,
Tropical North Queensland Institute of TAFE*

The views and opinions expressed in this document are those of the author/project team and do not necessarily reflect the views of the Australian Government or NCVER



Australian Government
Department of Education,
Science and Training

© Australian Government, 2006

This work has been produced by the National Centre for Vocational Education Research (NCVER) on behalf of the Australian Government. Funding has been provided under the Adult Literacy National Project by the Australian Government through the Department of Education, Science and Training. Apart from any use permitted under the *Copyright Act 1968*, no part of this publication may be reproduced by any process without written permission. Requests should be made to NCVER.

The views and opinions expressed in this document are those of the author/project team and do not necessarily reflect the views of the Australian Government or NCVER.

The author/project team was funded to undertake this research via a grant. These grants are awarded to organisations through a competitive process, in which NCVER does not participate.

ISBN 1 921169 62 1 print edition

1 921169 68 0 web edition

TD/TNC 86.01

Published by NCVER

ABN 87 007 967 311

Level 11, 33 King William Street, Adelaide SA 5000

PO Box 8288 Station Arcade, Adelaide SA 5000, Australia

ph +61 8 8230 8400 fax +61 8 8212 3436

email ncver@ncver.edu.au

<<http://www.ncver.edu.au>>

Contents

Tables	4
Key messages	5
Executive summary	6
Introduction	8
Background	8
Purpose	8
Methodology	9
Research questions	11
Literature review	12
Institutes	13
Student support services	13
Best practice model	14
Findings	17
Underlying issues	17
Teachers	19
Students	21
Community members	23
Best practice model	24
Conclusion	25
Implications for policy and practice	25
Systems that work	25
Best practice guidelines	26
Resource list	27
References	28
Appendix A: Methodology	30
Appendix B: Questionnaires	35

Tables

1	Research participants	10
2	Students by age	31
3	Students by gender	31
4	Students identified by cultural background	32
5	Undertaking study in town/city of usual residence	32
6	Students' enrolment status	32
7	Course delivery	32
8	Highest level of education reached	32
9	Courses in which students were enrolled	33
10	Cultural background of teachers/trainers	33

Key messages

This study identifies the literacy and numeracy support systems available for Indigenous students in vocational education and training (VET) and determines which systems work most successfully for both students and teachers.

- ✧ Literacy and numeracy skills are highly valued by Indigenous students and community members and are the key to further training, education and employment.
- ✧ Literacy and numeracy support actually given to Indigenous students remains inadequate across much of the VET sector, although effective support systems are available.
- ✧ The study identifies one-on-one support in the form of in-class tutorial support and peer tutoring as the most effective method of delivering literacy and numeracy to Indigenous VET students.
- ✧ Funding arrangements must accommodate the best practice model for Indigenous education; this can be achieved through flexible funding and institute structures.
- ✧ As the relationship between teacher/tutor and the student is of primary importance to Indigenous students, there is a need for more Indigenous staff throughout the VET sector, including teachers/trainers, administrators and support staff. Cross-cultural training should be made available for non-Indigenous teachers delivering courses in which Indigenous students are enrolled.

Executive summary

The introduction of the National Aboriginal and Torres Strait Education Policy in 1989 and subsequent policy initiatives have substantially improved the participation rate of Indigenous people in the vocational education and training (VET) sector. However, the evidence indicates that Indigenous students are studying towards lower-level qualifications or enrol in enabling (or preparatory) courses. Furthermore, pass rates have decreased, while withdrawal rates are higher than for non-Indigenous students. A number of contributing factors have been identified for these trends, but difficulties with literacy and numeracy is a recurring theme.

The Survey of Aspects of Literacy conducted in 1996 (ABS 1996) showed that approximately 44% of Indigenous Australians had low literacy levels compared with 19% of non-Indigenous Australians. This lack of literacy and numeracy skills is a significant barrier to Indigenous students accessing VET courses. In recent years it has been acknowledged that this problem is compounded by the fact that, for many Indigenous students, English is their second, third or fourth language. To address the issue, specialised literacy and numeracy courses have been developed, and literacy and numeracy components have been embedded in national training packages.

This study set out to identify the literacy and numeracy support systems available to Indigenous VET students and to determine which systems worked for both teachers and students. It looked at both formal, organised and coordinated systems and those which were informal and unstructured, and developed a set of guidelines which teachers and administrators can use to implement effective literacy and numeracy support for Indigenous VET students.

Methodology

Teachers, students and community members were interviewed across Queensland from urban, regional and remote areas. They were selected from three technical and further education (TAFE) Queensland institutes and one independent registered training organisation. The sites chosen were Brisbane, Cairns, Thursday Island, Bundaberg and Mt Isa.

Interviews were conducted with literacy and numeracy teachers and vocational teachers delivering Indigenous-specific and mainstream courses, ranging from pre-vocational through to certificate IV. Students were undertaking both Indigenous-specific and mainstream courses, apprenticeships and traineeships, and completing courses from pre-vocational through to advanced diploma.

Best practice model

This study applied the principles identified in the best practice model for Indigenous adult education to assess the current literacy and numeracy support systems being used. This model was recently articulated for the VET sector in the publication, *Gettin' into it! Working with Indigenous learners* produced by the Department of Education, Science and Training (2004). The six principles that inform the model are: intercultural competence; respect; negotiation; meaningful outcomes; relationships and 'Indigenisation' (ensuring that the curriculum is adapted for Indigenous students).

These principles acknowledge the need for a flexible and culturally supportive environment and incorporate the principles of best practice for adult learning.

Findings

The study identified one-on-one support as the most effective method of delivery for Indigenous VET students. The literacy and numeracy support systems which incorporate this method of delivery are in-class tutorial support and peer tutoring, with both teachers and students advocating these systems as the most effective. In-class tutorial support provided immediate help with class content, assessments and assignments. Students relied heavily on peer tutoring, whether informal or formal.

The majority of teachers interviewed questioned the effectiveness of learning support centres for Indigenous VET students, since, where available, their geographical isolation and hours of operation are problematic. However, if teachers decide to utilise this type of support, they need to build a working relationship with the centre, physically take students to the centre, introduce them to support staff and follow up with encouragement to attend planned sessions.

The relationship between teacher/tutor and student is of primary importance for Indigenous VET students. To build a satisfactory relationship with students, teachers need to understand the cultural and educational background of each of their students and to respect the prior knowledge and skills they bring to the learning experience. Training in cultural awareness and cross-cultural competency will help teachers in this regard.

Teachers recommend the use of real-life texts customised to individual students' needs. Although a wealth of literacy and numeracy resources is available, each learning group is different, and resources must be carefully selected and tailored to suit the particular situation. They must also be culturally appropriate, written in plain English and contain sufficient visual content.

Teachers need to seek Indigenous input from students, community members and Indigenous staff to ensure that training and resources are appropriate and acceptable. This will greatly enhance the effectiveness of the learning experience and ensure positive outcomes. This process needs to be ongoing as teachers build relationships with Indigenous mentors and advisers and grow in their own understanding of Indigenous culture and Indigenous learning needs.

Conclusion

The study found that actual literacy and numeracy support for Indigenous students remains inadequate (through under-use or inappropriate use) across many areas of the VET sector, although effective support systems have been established. It confirmed the findings of the literature review vis-a-vis applying the Indigenous education best practice model for literacy and numeracy support. The study also identified a number of barriers to the successful implementation of effective systems, including funding issues and the inflexibility of the VET system.

Introduction

Background

Since the introduction of the National Aboriginal and Torres Strait Islander Education Policy by the Commonwealth of Australia in 1989, Indigenous¹ participation rates in the vocational education and training (VET) sector have increased substantially. However, the literature reveals that this is a qualified success, since Indigenous students are concentrated in lower-level courses and their graduation rate is still considerably less than non-Indigenous students. A number of contributing factors have been identified to explain these trends, but difficulties with literacy and numeracy is a recurring theme. While support systems exist which can assist in overcoming these difficulties, they are often underutilised or accessed in an *ad hoc* manner with little consideration given to matching student need to appropriate strategies.

A best practice model for Indigenous adult education is emerging which highlights the need for flexible, innovative and supportive delivery (Commonwealth of Australia 2001; Marika et al. 2004). It promotes the use of cooperative, experiential learning which acknowledges students' cultural and language backgrounds (Department of Education, Science and Training 2004). Indigenous participation in decision-making is also considered essential, as is delivery by teachers trained in cross-cultural awareness (Department of Education, Science and Training 2004).

A more coordinated approach needs to be implemented, one which applies the best practice model for Indigenous adult education to support systems for literacy and numeracy. For literacy and numeracy programs to succeed, relevant features of the best practice model should be incorporated. Some research has been done into best practice models for mainstream students, but little research has been undertaken specifically targeting these systems for Indigenous students, particularly students for whom English is a second language (Black 1996). A set of guidelines to assist in the design and establishment of effective support systems for best practice teaching principles in Indigenous education should be developed to support literacy and numeracy competence.

Purpose

The purpose of the study was to identify and explore current systems for literacy and numeracy support for teachers and Indigenous students in the VET sector, particularly students for whom English is a second language. While organised and coordinated systems are available to provide strategic, long-term support and infrastructure to assist both teachers and students, they are often underutilised or accessed inappropriately.

For the purpose of this study, support systems were defined as structures which assisted students with their literacy and numeracy competency and helped them to remain in their chosen course of study and to complete the course. These structures include:

- ✧ literacy and numeracy teachers
- ✧ student support officers

¹ The terms Aboriginal and Torres Strait Islanders and Indigenous are used interchangeably in this report.

- ✧ learning support
- ✧ technology
- ✧ peer support systems
- ✧ mentoring programs
- ✧ family and community support.

These structures can be formal or informal, and some, such as peer support systems and mentoring programs, can operate both formally and informally. To be effective and meet the needs of Indigenous VET students, support systems for literacy and numeracy must take into consideration the background of the Indigenous students; they must also be culturally appropriate. Consideration must be given to providing support as and when the student requires it.

The project looked at teachers and students in urban, regional and remote areas of Queensland and in both technical and further (TAFE) institutes and an independent registered training organisation. The support systems were analysed and the components and features contributing to their effectiveness identified. The purpose of the study was to identify and develop concrete, practical information for teachers and administrators that will produce results for Indigenous students, particularly students for whom English is a second language.

The study has identified that literacy and numeracy support systems produce positive outcomes, including completion. The study has also highlighted best practice guidelines for designing and developing literacy and numeracy support systems.

Methodology

The methodology was designed to explore the key research questions, thereby enabling identification of critical elements of literacy and numeracy support systems for Indigenous students in VET. Qualitative data were obtained from in-depth interviews conducted with teachers/trainers, Indigenous students and community members. The content of the interviews was used to identify and develop ways of improving VET outcomes for Indigenous students through effective literacy and numeracy support systems.

The study was confined to Queensland, the state with the second highest number of Indigenous VET students nationally (NCVER 2001). The recommendations, which are based on our findings, address urban, regional and remote situations and would have applicability and relevance to the corresponding VET sector in other states with comparable Indigenous demography and population dispersal.

Although the research design orientation was qualitative, quantitative data were sought and examined (through the literature review) to provide background information on enrolments and completion rates. The paucity of statistical information available did not enable us to determine distinct correlations between current VET outcomes and the capacity of past and/or current literacy and numeracy support mechanisms.

The methodology included:

- ✧ literature review
- ✧ pilot project
- ✧ data-gathering through interviews with teachers/trainers, students and community members.

Literature review

The literature review examined a number of different areas:

- ✧ Indigenous education policy
- ✧ student support services
- ✧ best practice in Indigenous education
- ✧ literacy and numeracy support
- ✧ professional development
- ✧ current Indigenous VET outcomes.

Pilot project

The pilot project was designed to trial the proposed interview questionnaires. It was conducted on the Cairns campus of Tropical North Queensland TAFE. Two teachers were interviewed from a prevocational course, four students from a variety of courses, and one community member.

Data gathering

Teachers/trainers, students and community members were interviewed from across Queensland in urban, regional and remote areas. They were selected from three TAFE Queensland institutes and one independent registered training organisation. Originally it was proposed to interview 13 teachers, 21 students and 13 community members. Easier access to students in some areas enabled the research team to improve the student participant numbers, while difficulties in access to and availability of community members resulted in lower-than-anticipated participants. Numbers and locations of actual participants interviewed are detailed in table 1.

Table 1: Research participants

Site/Location	Teachers/trainers	Students	Community members
Brisbane region (urban):			
✧ Southbank	2	9	2
✧ Bremer	1	3	2
Cairns (regional)	4	5	2
Thursday Island (remote)	2	11	0
Rural and remote Queensland:			
✧ Mt Isa	2	1	1
✧ Bundaberg			
✧ Atherton			
Total participants	11	29	7

The number of students interviewed represented 2.4% of the total Indigenous student population of the combined sites and locations. (Indigenous students at these combined sites accounted for 6.4% of all students. The overall state total is 4%.) While this may not be considered a representative sample size in a quantitative research paradigm, the sample size, which is diverse in age, gender, Aboriginal/Torres Strait Islander identity, location, settings and courses of study, is appropriate insofar that it provides the researchers with significant narrative data analysis. Each interview represents an individual case study of how and why teachers, students and other support people, do or do not, utilise or negotiate the various mechanisms that constitute an Indigenous literacy and numeracy support system.

It was the research team's intention to interview teachers and students from the same programs. However, lack of available teachers and/or students resulted in approximately 50% of all student/teacher interviews involving students and teachers from the same program. Statistical information regarding students is detailed in tables 2 to 8 in appendix A. Table 9 in appendix A indicates the

range of courses in which students were enrolled. Table 10 indicates the cultural background of teachers/trainers who were interviewed.

The decision to include community members in the study was based on the literature and current VET practice of consulting the community in the development and implementation of support mechanisms for Indigenous students. The researchers wanted to investigate how community members' involvement was integrated into literacy and numeracy support systems and how this contributed to improving student outcomes. Unfortunately, family, community and work commitments made it difficult for community members to attend scheduled interviews, particularly from the Torres Strait region. Hence, the lower-than-expected numbers.

The teachers/trainers and community members were interviewed either face to face or by telephone. Students were interviewed separately from teachers; originally it had been proposed that students would be interviewed by a nominated third person. Budget constraints prevented members of the research team from travelling to conduct interviews with all participants who were external to Cairns. In order to collect high-quality data, it was necessary to eliminate the possibility of participants being interviewed by people with a potential conflict of interest, in that they could conceivably be part of the structure about which the participants were being interviewed. After further consideration the research team decided to conduct the student interviews external to Cairns by videoconference. This enabled a larger sample to be interviewed and provided more effective and consistent data-gathering.

Ethical considerations

The research project was carried out under the guidelines established by the Australian Institute of Aboriginal and Torres Strait Islander Studies Guidelines for Ethical Research in Indigenous Studies (current version) and the Australian Vocational Education and Training Research Association's voluntary Code of Practice.

The purpose of the research was explained to participants prior to the interviews and permission was sought to record interviews. Participants were asked to sign a consent form and were assured that they would not be identified. All interviews were electronically recorded and both audio tapes and transcripts kept in a secure location. An Indigenous member of the research team interviewed all Indigenous participants. All interviewees were provided with a summary of the transcript.

Research questions

The following research questions were developed to identify those literacy and numeracy support systems that work for both teachers and students. Once identified, the support systems were analysed to determine the features that make them effective.

- ✧ What support systems exist for both teachers and Indigenous students to encourage success in literacy and numeracy, for example, student support officers, academic support, resources (human, information technology), peer tutors, mentor programs, team teaching (with literacy and numeracy specialists), community support, professional development?
- ✧ What support systems do Indigenous students, particularly students whose first language was not English, feel they need?
- ✧ What systems do teachers feel they need to support Indigenous students to effectively achieve literacy and numeracy competency?
- ✧ Which of the identified systems works effectively for both teachers and Indigenous students accessing literacy and numeracy support?

Literature review

It is over a decade since Australian governments combined their efforts to address the problems Indigenous Australians faced in relation to education. The 1989 National Aboriginal and Torres Strait Islander Education Policy (the Aboriginal Education Policy) was devised to reduce the inequalities existing between Indigenous and non-Indigenous Australians by promoting access, encouraging participation and increasing graduation rates. In the context of the VET sector, the policy was given concrete direction by the Australian National Training Authority (ANTA) with the release of *Partners in a learning culture: Australia's national Aboriginal and Torres Strait Islander strategy for vocational education and training 2000–2005* (ANTA 1999) and, more recently, *Shaping our future: Australia's national strategy for vocational education and training 2004–2010* (ANTA 2004). Both of these documents acknowledged the importance of literacy and numeracy provision for adult Indigenous students if they are to succeed.

The literature reveals that a lack of literacy and numeracy skills is a significant barrier to Indigenous students accessing and successfully completing VET courses. Research has established a best practice model for Indigenous education and shown how this model can be applied to literacy and numeracy teaching. Although student support systems generally have been given considerable attention, specific support mechanisms for literacy and numeracy have not been examined in any detail. Little work has been done to identify support systems and strategies and to analyse the components and features that contribute to their effectiveness. While attention has been drawn to the need for professional development for teachers and trainers working with Indigenous students, there has been no coordinated effort to supply them with practical information regarding literacy and numeracy support.

While the introduction of the Aboriginal Education Policy by the Commonwealth Government has been largely successful, there are a number of disturbing trends. In their statistical review of Indigenous people in VET, Saunders et al. (2003) found that Indigenous students tend to study for lower-level qualifications or enrol in enabling courses; pass rates have decreased; and that withdrawal rates are higher than for non-Indigenous students. Of the 58 000 Indigenous students enrolled in VET in 2001, 44% were enrolled in certificates I and II. Withdrawal rates stood at 13.8% in 2001.

This confirmed earlier findings by Robinson and Hughes (1999). One of the reasons identified was the proportion of Indigenous students whose first language is not English, a situation applying particularly in remote areas. Likewise, the *National report to Parliament on Indigenous education and training 2001* found:

The reason for Indigenous students continuing to take these basic units is partially explained by comments from several providers who cited the generally low level of students' background in literacy and numeracy, along with a history of social disadvantage.

(Commonwealth of Australia 2001, p.77)

The connection between literacy and numeracy difficulties and English as a second language was made earlier by McIntyre et al. (1996) in their comprehensive report on factors affecting the outcomes of participation in VET by Indigenous Australians. This study looked specifically at language and literacy issues in the delivery of VET in relation to access, course design, curriculum and assessment, but also found that these issues pervaded other areas of Indigenous education,

including outcomes, delivery models, access and entry requirements, teaching and learning experiences, the adequacy of support and assistance and assessment. English language and literacy was given a high priority by both learners and providers. Learners, however, voiced concerns that their needs were not always being met. The report suggested that:

Given that the nature of institutional provision is dynamic, ongoing analysis about how goals are being met and whose goals are being met is crucial. (McIntyre et al. 1996, p.135)

Institutes

The literature suggests a number of areas that need attention if Indigenous students are to be effectively helped to meet their goals and to develop essential literacy and numeracy skills. Byrnes (1994) in her report on the role of student services in enhancing the academic achievement of Indigenous students drew attention to the importance of a whole-of-institute approach to the support of students. Institute structures need to be flexible and adaptable to student needs; student support systems, including Aboriginal and Torres Strait Islander support systems, need to be integrated into the institute, not marginalised. A related issue which Byrnes and others identify is the need for secure, ongoing funding (Byrnes 1994; McIntyre et al. 1996; Govender 2000). This was recognised as a necessary strategy to achieve the objectives of *Shaping our future*, but this issue is still causing considerable concern. Institutes also need to support a collaborative approach, one which encourages solutions to be found across the institute, rather than marginalising Indigenous students, teachers or support services (Balatti et al. 2004).

Nevertheless, it has been shown that an 'enclave' approach that provides dedicated space and an Indigenous environment is fundamental to Indigenous student success, although it is important that such an area is integrated into the institutional structure and does not isolate Indigenous students either geographically or academically. The need for Indigenous students to have a defined cultural space with specific (preferably Indigenous) support staff has been recognised since the 1980s (Bin-Sallik 1996), and has been frequently reiterated (Byrnes 1994; McIntyre et al. 1996; Robinson & Hughes 1999; Govender 2000). The challenge facing institutes as more and more Indigenous students move into mainstream courses is how to accommodate the need for a culturally supportive environment which can extend beyond the enclave approach and still produce meaningful outcomes for these students (Robinson & Hughes 1999; Balatti et al. 2004).

Student support services

The importance of student support services to successful student participation in VET has been well documented (Bin-Sallik 1996; Byrnes 1994; Anderson 1995; Govender 2000). However, although the sector recognises the special needs of Aboriginal and Torres Strait Islander students, there is no uniform provision of these services (Education and Student Services Standing Committee 1997). Attempts are being made to rectify this and it has been recommended that providers consider:

- ✧ accessibility
- ✧ flexibility
- ✧ quality
- ✧ responsiveness.

The issues identified as important to the provision of support services for Indigenous students are:

- ✧ the extent of self-determination and local community involvement in the development of programs

- ✧ the extent of equitable access, participation and outcomes for Aboriginal and Torres Strait Islander people
- ✧ the extent of support for literacy and numeracy development
- ✧ the extent of support for Aboriginal and Torres Strait Islander people in urban, rural and remote communities
- ✧ the extent of integrated service delivery and support within the learning environment
- ✧ the extent to which organisational structures support the provision of student services for Aboriginal and Torres Strait Islander people (Education and Student Services Standing Committee 1997, p.58).

Not only must support services fulfil these criteria, but students have to be aware that the services exist and staff must be helpful and knowledgeable (Byrnes 1994; Anderson 1995). In the case of Aboriginal and Torres Strait Islander students, staff should be Indigenous.

As literacy and numeracy support usually sits within student support services, these features need to be taken into consideration when developing and implementing literacy and numeracy support systems.

Best practice model

A best practice model for Indigenous adult education has emerged which can be applied to these support systems. This model was recently articulated for the VET sector in the publication, *Gettin' into it! Working with Indigenous learners* produced by the Department of Education, Science and Training (2004). It is informed by six principles:

- ✧ intercultural competence
- ✧ respect
- ✧ negotiation
- ✧ meaningful outcomes
- ✧ relationships
- ✧ Indigenisation.

These principles acknowledge the need for a flexible and culturally supportive environment, incorporating an approach to adult learning in which:

- ✧ learners have control over their learning
- ✧ learning is experiential
- ✧ learning is cooperative
- ✧ learning is reflective.

This model has been developed from research carried out over the last decade. One of the most extensive studies looked at 83 projects across a broad spectrum of education, including VET and adults returning to education (McRae et al. 2000). It concluded that positive outcomes for Indigenous students depended on respect, a culturally supportive environment and good teaching practice. This report resulted in a guidebook, workbook and digital materials designed to provide practical support for practitioners. However, while the underlying teaching philosophy and practice can be applied to adult learners, the material itself is aimed primarily at school age learners.

This literature review has identified a number of case studies that illustrate the effectiveness of this best practice model. For example, a recent study documented the model developed by Gamarrwa Nuwul Landcare at Yirrkala to deliver training in a remote community (Marika et al. 2004). The

study demonstrated that training must address a local need, be relevant to the community and meet the expectations of the students. It also suggested that the focus needs to shift from industry needs to community needs and, once again, that delivery must be flexible and value Indigenous cultures and identities.

That the model applies equally in an urban area is demonstrated in a study of the adult and community (ACE) provider, the Blacktown District Community College in Western Sydney (Govender 2000). The college emphasises community consultation, the importance of teacher–student relationships and a culturally supportive learning environment. Teachers need to understand the diversity of Aboriginal and Torres Strait Islander culture and possess cross-cultural competence. The college has also addressed the issue of employment of Aboriginal staff and has created a position for an Aboriginal representative on the college management committee.

The Indigenous-specific delivery strategies proposed in the best practice model are underpinned by recognised best practice teaching for adult learners. The need for an holistic approach which considers the student in context is essential. Examining the role of ACE and TAFE in re-entry programs for early school leavers, Wyn, Stokes and Tyler (2004) found that content needs to be relevant and connected to the student’s cultural context; delivery must be flexible; and staff well trained and enthusiastic. In relation to literacy and numeracy provision for adult students, best practice includes:

- ✧ supportive and continuing structures
- ✧ content targeted to meet individual and community needs
- ✧ community ownership
- ✧ trust and collaboration between providers and communities (Guenther 2002).

Literacy and numeracy support

Literacy and numeracy support systems have been given passing attention in studies dealing with Indigenous completion rates and outcomes in VET and student support systems generally (Byrnes 1994; McIntyre 1996; Balatti et al. 2004). These studies identify team teaching, mentoring and peer tutoring as effective support systems for literacy and numeracy. They also emphasise the need for literacy and numeracy to be integrated, rather than stand-alone courses, and stress that singling out students for assistance is detrimental.

These general findings are enhanced by two detailed studies of support systems for literacy and numeracy for Indigenous students and which provide useful material for the current study. A study of best practice in literacy provision to Kooris in VET in Victoria established guidelines for administrators and deliverers (Rizzetti & Bradford 1994). The underlying theme of this research highlights the importance of personal relationships—between teachers and students, between the institute and the community, between support staff and teaching staff—and the time required to build those relationships. While it provides general guidance for delivering literacy and numeracy support, liaising with vocational teachers, and approaching language and content issues, the study does not specify particular support systems that produce positive outcomes and aid completion rates.

The second study does not deal specifically with Indigenous students but is still pertinent. It examines a team-teaching delivery method being used in Western Australia—the Course in Applied Vocational Studies Skills (Bates 2001). This course integrates literacy and numeracy by teaming a literacy specialist with a vocational teacher in the classroom to connect the theoretical with the practical skills. Again, it emphasises the stigma attached to withdrawing students from classes for special attention and the dangers of employing a deficit model when offering students support. Like many other studies, it also draws attention to the lack of understanding of literacy and the fact that:

A significant number of literacy lecturers remain apparently unaware of the highly complex and political nature of literacy skills acquisition in education systems, the nature and implications for diverse literacy and language practices, and the fact that, in the VET sector,

they are more likely to be teaching students who have already felt the impact of exclusionary language practices. (Bates 2001, p.74)

This observation identifies an ongoing concern. Although literacy and numeracy support systems do exist, they are not being utilised by teachers and students for a number of reasons. Student difficulties are not always recognised as being literacy- and numeracy-related (Bates 2001). For example, attempts to implement a team-teaching model are often resisted, leading to the less successful and less desirable practice of withdrawing students (Black 1996; Bates 2001). Students may be assessed as having difficulties—but unfortunately it becomes their responsibility to find support. These factors are compounded by students' (and teachers') lack of knowledge of the variety of support systems available and how to access them (Byrnes 1994; Anderson 1995).

Professional development

A recurring theme throughout the literature is the need for professional development for teachers in the area of literacy and numeracy support, and particularly professional development in cross-cultural training and cultural awareness. As identified by McIntyre et al. (1996), professional development in these areas is not being addressed adequately. Balatti et al. (2004) found that staff dealing with Indigenous students had problems in the following areas:

- ✧ knowledge about funding sources to meet the needs of Indigenous students in mainstream programs
- ✧ collaboration skills with stakeholders internal and external to the institute
- ✧ cultural awareness and negotiation skills when dealing with Indigenous communities and/or students
- ✧ literacy needs, especially of Indigenous students for whom English is a second or third language
- ✧ cross-cultural communication skills (Balatti et al. 2004, p.31).

The importance of professional development for teachers/trainers has been recognised at government level with the publication of *Working with diversity: Quality training for Indigenous Australians* (Robertson et al. 2004). The aim of this guide is to assist registered training organisations to implement the national Aboriginal and Torres Strait Islander strategy, *Partners in a learning culture*, and provides support for practitioners to deliver nationally recognised training to Indigenous students. It links staff development, including cross-cultural training, specifically to the Australian Quality Training Framework's *Standards for registered training organisations* and notes that all staff need to be aware of 'local languages, community concerns, cultural responsibilities and protocols' (Robertson et al. 2004, p.23).

Conclusion

The literature reveals that a lack of literacy and numeracy skills is a significant barrier to Indigenous students accessing and successfully completing VET courses. Research has established a best practice model for Indigenous education and shown how this model can be applied to literacy and numeracy teaching. Although student support systems have generally been given considerable attention, literacy and numeracy support systems for Indigenous students have not been examined in any detail. Little is known about the strategies, components and features which contribute to their effectiveness. While attention has been drawn to the need for professional development for teachers and trainers working with Indigenous students, there has been no coordinated effort to supply them with practical information in relation to literacy and numeracy support. The aim of this study is to address this gap by highlighting systems known to be successful, and developing a set of best practice guidelines for designing and developing support systems which can be utilised by all in their classroom practice.

Findings

This study set out to identify the ‘organised and coordinated’ literacy and numeracy support systems available to Indigenous VET students. The study defined support systems as structures that provide strategic, long-term support and infrastructure to assist both teachers and students; these are both formal and informal, and in some instances are both. The study revealed that the most effective support systems utilise a one-on-one delivery method and include in-class tutorial support and peer tutoring. The research also revealed a number of relevant underlying issues that affect the successful implementation of literacy and numeracy support systems for Indigenous VET students.

Underlying issues

The research showed that there is a need to rethink the concept of literacy and numeracy support for Indigenous VET students, with several teachers suggesting that the term ‘literacy’ has unhelpful connotations for both students and vocational teachers. It evokes a negative deficit model rather than emphasising positive aspects of a student’s abilities. Labelling teachers as designated literacy and numeracy specialists erects barriers to student participation and cooperation, and students may feel threatened, making associations with previous educational experiences. On the other hand, vocational teachers often cannot see the intimate connection between their content area and literacy skills. The term ‘learning support’ may be more acceptable and provide a more accurate reflection of the role of literacy and numeracy competence in a successful learning experience.

Collaboration

It was generally agreed that there was a need for greater collaboration between vocational and literacy and numeracy teachers. Literacy teachers expressed the need for first-hand information on the types of skills required for a particular vocational area. This would allow them to tailor their material to individual students’ needs and ensure the development and use of relevant, real-life texts, an essential strategy for successful literacy and numeracy support. Vocational teachers often do not see literacy and numeracy competence as a vocational skill nor understand the integral part it plays in successful learning in their area. Steps need to be taken to address this issue and to encourage communication and cooperation between literacy specialists and vocational teachers. One suggestion was to appoint a literacy and numeracy teacher to a particular vocational area within an institute. The teacher could then become familiar with the content of that area, adapting material and assisting the vocational teacher in its delivery.

Pre-course assessment

The majority of teachers administered some sort of pre-course assessment to their students. In a number of cases this was used only to determine the qualification levels the student was to undertake. However, many teachers also used it to judge the literacy and numeracy level of their students. To be effective, the assessment needs to take place in an informal atmosphere with oral support as required. The problems with pre-course assessment identified by teachers included a tendency to rely on indicator tools, and lack of follow-up.

The blanket use of these generic tools can be inappropriate. One teacher gave an example of an indicator tool designed for engineering students being administered to prospective childcare students. The complex maths involved was unnecessary for the latter, and its inclusion only served to stress the students. In many cases, if the assessment indicates that the student requires assistance with literacy and numeracy competence, the institute forwards a letter to the student suggesting they seek help from the available learning support services. However, there appears to be insufficient monitoring processes in place to ensure that students take advantage of this support.

Learning support centres

The majority of teachers interviewed questioned the effectiveness of learning support centres for Indigenous VET students. These types of centres were not always available, but where they were, their geographical isolation and hours of operation were problematic. Students were reluctant to seek out assistance, especially when it is located in an unfamiliar area of an institute. Furthermore, it may be unreasonable to expect students to voluntarily attend sessions out of hours when they have already put in a full day's study. One vocational teacher provided an example where the literacy tutorial was run at three o'clock in the afternoon. His students were undertaking block training and his own class did not finish until five o'clock. If he released students for the tutorial, they missed out on vital industry content and there was no time allowed during the block to make up that lesson.

To overcome some of these difficulties teachers recommended that vocational teachers need to take the initiative to build a working relationship with the learning support centre, arranging for the learning support teachers to drop in and introduce themselves to their students. If this can be done several times over a term or semester, it allows the students to become familiar with support personnel. Another teacher indicated that she physically took students requiring assistance to the learning support centre and introduced them to the teachers and tutors there. She also remained informed about when the student's tutorial was scheduled and regularly reminded and encouraged the student to attend.

Effective support systems

The two forms of literacy and numeracy support for Indigenous VET students, claimed by both teachers and students as effective, were peer tutoring and in-class tutorial support. Peer tutoring was encouraged by many of the teachers interviewed and was initiated both formally and informally. Trained peer tutors were utilised wherever possible, but students with the ability to help fellow students were also identified, with many students indicating that they relied on informal peer support relationships and networks. In-class tutorial support was advocated as the most effective and successful literacy and numeracy support system for Indigenous VET students, offering immediate help with both class content and assessments and assignments.

Teachers also expressed concern over class sizes and funding. The consensus was that around ten students is an ideal class size for adult Indigenous VET students. Allowing for attrition, this size ensures that there are enough students to make individual participants feel comfortable—part of a group where they can form individual relationships, but small enough not to feel lost in the crowd. Indigenous students generally prefer to learn in a group. Too few students in the group can lead to feelings of isolation or of being targeted as an individual. However, too many in a class increases the risk of the individual's particular needs being overlooked.

Funding

The lack of long-term funding to ensure certainty and continuity for both teachers and students was a constant source of anxiety. Teachers and support staff often do not have secure tenure or they are running short-term programs with no provision for delivery beyond the present teaching period. This instability has a flow-on effect, with part-time or temporary teachers unable to devote time to developing resources or attending to student needs. The issue of appropriate resources was an ongoing problem. Vocational teachers in particular see an increasing need for plain English texts

which incorporate sufficient visual material to ensure that Indigenous learners are engaged with difficult content areas. There appears to be no funding for design and development of these types of resources, although there is evidence that these resources would benefit not only Indigenous students, but mainstream students as well. Concern over funding and resources is even more acute in remote areas.

Several teachers identified the process of allocating nominal hours to units of competency and courses as a major contributing factor to funding difficulties. The complex arrangements which link nominal hours and teaching time inevitably led to a shortfall. It is obvious that the process causes considerable confusion, and teachers resented the fact that the nominal hours appeared to be allocated by bureaucrats with no knowledge of the difficulties encountered in the classroom. The hours are also allocated assuming a mainstream audience and with no accommodation for low literacy and numeracy levels. Teachers consider them unrealistic and would like to see the process revised.

The overwhelming message coming from teachers was the importance of knowing their students well, to be culturally sensitive, and to adapt existing resources and material to individual students' needs. The following information summarises the responses of teachers, students and community members to the interview questions.

Teachers

The vocational and general education teachers interviewed were delivering a variety of programs, including mainstream and Indigenous-specific courses and traineeships. Qualification levels varied from pre-vocational through to certificate IV. Responses to the interview questions proved surprisingly similar, despite the disparate backgrounds, circumstances and location of the participating teachers. It could be concluded that teachers involved in delivering to Indigenous VET students are aware of the best approach to providing literacy and numeracy support. The difficulties appear to arise from a lack of understanding at managerial level, whereby the allocation of funding and resources is hindered.

Relationships

Teachers agreed that the teacher–student relationship is as important as and often more important than the content being delivered. They emphasised that the starting point for this relationship is acknowledgement of the student as an adult learner with an existing knowledge base and skills. One teacher explained that adult students are not 'empty buckets', which need filling, but rather that they have gaps in their knowledge base. Therefore their learning experience has to take place in an adult context, where appropriate materials and realistic activities are provided. This respect for the student's prior learning must be combined with recognition of cultural difference, background and history. The teacher must understand what the student is bringing to the relationship, and this includes an understanding of cultural protocol and attitudes to family, time and community. Many teachers commented on the commitment to family displayed by their Indigenous VET students and the difficulty non-Indigenous staff often have understanding this and accommodating it.

Resources

The need to redevelop mainstream resources in plain English with sufficient visual content and ensuring they are culturally appropriate was a priority for vocational teachers. Literacy and numeracy teachers indicated that there is a wealth of specific literacy and numeracy resources available. However, they emphasised that every situation is different, and existing resources are best utilised by customising them to individual needs. For example, resources developed in Victoria using bus timetables needed to be adapted to a Torres Strait audience by using tide timetables. The best resources are real-life texts, relevant to the student, either in their personal or work life. A literacy and numeracy teacher preparing students for a hospitality course adapted the menu from a

local restaurant to help students with simple maths exercises. Teachers also used shopping brochures, the yellow pages and newspapers as real-life texts. Although internet and online resources are being used effectively by literacy and numeracy teachers, teachers stressed the dangers of expecting students to cope alone with technology, and also warned against relying on technology for remote students.

Adapting resources was part of the process of individualising programs for each student. Teachers demonstrated how this could be done, even in the classroom situation, by knowing each student's personal goals and background. The teacher can tailor content and resources to enable them to become relevant and meaningful. This was another area where cooperation between vocational teachers and literacy and numeracy specialists was called for. If a literacy and numeracy teacher can gain hands-on experience of the vocational content a student is dealing with, they can ensure that the material they cover with the student reinforces that content area.

One-on-one support

Teachers unanimously agreed that the most effective form of support is one on one, either teacher–student or tutor–student. Further, they maintained that tutors are required in the classroom and that accessing tutors outside class time is ineffective. Teachers identified a number of reasons why this is unsuccessful, including the geographical remoteness of learning support centres, students missing vocational content, and expecting students to put in extra hours. Often adult Indigenous students do not have the confidence to seek out these centres. There is a stigma attached to attending separate literacy classes, and students may be too shy or embarrassed to visit them. Vocational teachers find it difficult to release students for tutorial assistance if they are going to miss vital industry content. Students are already committed to a full timetable of study while juggling family and work responsibilities. One teacher drew attention to the extra transport and child-minding costs which could be involved for students. In urban areas these costs can be considerable.

On the other hand, in-class tutorial support provides immediate help for the student. The tutor is aware of the specific vocational context and the student does not have to attempt to explain the problem. This can be a daunting task for a student who is struggling with the English language and then has to explain what they don't understand! The tutor in the classroom is aware of the learning outcome, the content, and the expectations and can address the specific area of concern to the student. In addition, students who feel they do not need help can be identified by teachers or tutors and given the help in the class. If advised to seek help, these students would not voluntarily do so.

Indigenous staff

The need for one-on-one support raised the related issue of the need for more Indigenous staff, including teachers, tutors and facilitators. Indigenous staff develop a rapport with Indigenous students that is difficult for non-Indigenous staff to replicate. They are seen as unthreatening and non-judgemental and students assume they understand their history and background. This automatically gives adult Indigenous students more confidence when approaching their learning experience. With regard to literacy and numeracy teaching, teachers expressed a desire to see more Indigenous specialists in the field. It was suggested that TAFE could do more to encourage Indigenous people undertaking a Certificate IV in Workplace Training to continue with the institutes, perhaps by way of an internship or similar arrangement. This was another area where it was felt that a long-term funding commitment was required—to reassure local Indigenous communities that their participation was important to overall training goals.

Professional development

Very few of the teachers interviewed had been offered, or had undertaken, professional development in the area of literacy and numeracy support for their students in the preceding 12 months. This could have been influenced by the relatively isolated conditions in Queensland. Conditions may be different in Victoria and New South Wales in particular, with larger populations

concentrated in urban areas, and less geographical isolation. Vocational, general and literacy and numeracy teachers all felt the need for such opportunities. The most useful type of professional development should ideally provide opportunities for teachers to exchange ideas, strategies and case studies.

It was also apparent that, despite the recent emphasis on cultural awareness training, many mainstream teachers are still not always aware of the cultural differences that may contribute to Indigenous students' specific literacy/numeracy difficulties or learning needs. Experienced teachers stressed the importance of local knowledge about the community students came from, as well as a broader knowledge of Indigenous history. This had to include an understanding of how government policy has affected their students' lives and how the attitude of mainstream society, for example with regard to racism, has influenced their previous educational experience. One teacher drew attention to the deep sense of shame felt by many Indigenous students and the need to understand this and take steps to make students comfortable in their current learning situation.

Another recurring theme was the need to provide more effective training for VET teachers. The majority of vocational teachers expressed concern that the Certificate IV in Workplace Training had not adequately prepared them for teaching. They felt the need for a better theoretical understanding of both the teaching process and the way students learn.

Students

The students interviewed were drawn from a variety of courses and qualification levels and included those undertaking Indigenous-specific and mainstream courses. Students undertaking certificate I to diploma qualifications were interviewed, as well as apprentices and trainees. They were very forthright in expressing their opinion of what worked for them with regard to literacy and numeracy support and were equally adamant about what didn't work. As with the teachers interviewed, the students provided surprisingly similar answers to many of the interview questions. The majority of students interviewed required more help with writing tasks than with reading tasks.

Relationships

Students agreed with teachers that the relationship between teacher and student was more important than the content being delivered. Students emphasised that, if the teacher was culturally sensitive, approachable and understanding, they were more likely to seek help. Students provided examples of teachers displaying insensitivity by passing comment on Indigenous issues without being fully informed about community feeling on a topic. They found this type of behaviour offensive, promoting barriers that affected their learning which were difficult to overcome. Students maintained that teachers in VET required more professional training to complement their industry knowledge as well as training in cultural awareness and cross-cultural competency.

Another area of concern for students was the language level used by teachers and tutors. Many of them were not confident enough to speak up in class and ask for an explanation of particular words or phrases. One example was given of a teacher whose language assumed an audience at university-level English. The students met with a student support officer and agreed to approach the teacher to discuss the issue. The teacher responded positively and began to use simpler language without affecting the level of the content. Students appreciated the teacher's effort.

Peer and family support

The majority of students interviewed emphasised the importance of peer and family support. Peer support was occasionally supplied through a formal arrangement, but more often by informal arrangements between students within a class. This was the case with both on-campus courses and block residential schools. Confident students gave accounts of acting as an intermediary between their fellow students and the teacher, asking for words or points to be clarified, or for assessment

and assignment questions to be explained. They also spoke of checking with fellow students to make sure they were progressing comfortably with a course and to provide encouragement. Many students expressed appreciation for the peer support they received and maintained that it was essential to their successful completion of a course.

Family support was also extremely important to students. Although many students came from family backgrounds where there was no history of educational achievement, there were a number who relied on their family to supplement their in-class experience. One student felt he did more work at home with his wife's assistance than in class with his teacher. Another student had the benefit of three family members already working in the field for which she was training and found their assistance invaluable. A recurring theme with Indigenous students is the need to provide a role model for others in their family and community by successfully completing a course. A number have enrolled in courses in order to provide support and encouragement to their own children still within the formal schooling system.

One-on-one support

Students also agreed with teachers on the overwhelming need for one-on-one support for literacy and numeracy. They expressed a need for this support in the classroom to ensure immediate help, both in keeping up with the class content and in understanding and completing assessments and assignments. Being asked to stay back for out-of-class tutorial assistance was seen as 'punishment' or 'remedial', concepts that remained from their previous educational experience. One student suggested that it would be useful if literacy and numeracy support was built into the residential program, which would enable concentrated sessions with general content and specific help with assignments or assessment tasks.

A number of the students interviewed were either studying on remote campuses or coming into a main campus for block residential. These students highlighted the lack of literacy and numeracy support available in these circumstances. They indicated the difficulties they experienced in finding qualified tutors once they were back in their own community. In urban areas where such support may be available, there was concern over the personal cost. The prevailing feelings were of isolation and being on their own.

English as a second language

Most of the students interviewed were aware that support was available for literacy and numeracy difficulties, but many students still find that language problems and a lack of confidence continue to be barriers which prevent or frustrate attempts to seek help. Many students spoke of being too shy to ask for help, a problem exacerbated for older students. Students recognised that their lack of proficiency in Standard Australian English contributed to their reluctance to seek help or take advantage of the help offered. Although they may be encouraged to seek out a tutor or a learning support centre, they felt inadequate or unable to follow up this advice. Students suggested that, as well as being informed of the support available during orientation sessions, it would be helpful if they were introduced to a number of tutors. The students felt, if tutors could drop into a class at regular intervals during the teaching period, they may gain the confidence to approach them for assistance.

Indigenous staff

Indigenous staff helped overcome some of these difficulties. Most students commented on the fact that their teachers were supportive. However, students are more comfortable with Indigenous staff to whom they can relate and who understand their backgrounds. Students emphasised the need for tutors to be carefully selected, not only for their professional qualifications, but for their understanding of Indigenous culture and history. One student recounted an experience where a well-qualified but culturally insensitive tutor had caused distress amongst a class of students.

Indigenous students in mainstream classes often feel ‘invisible’ or entirely responsible for their own learning needs. The learning environment and the teaching style of their instructor often intimidate them. They are conscious of their responsibility to portray a positive image of Indigenous people and this expectation creates extra pressure to succeed.

Community members

Community members were drawn from urban, regional and remote areas. Only one of the community members interviewed was directly involved in delivery within the VET system and two had recent experience as students within the system. However, all except one were directly or indirectly involved with developing or implementing training programs for young Indigenous people in their community. The exception was the manager of a large organisation with a majority of Indigenous employees.

All the community members interviewed identified lack of literacy and numeracy skills as a major problem in their community. One interviewee with extensive experience explained that the problem is more severe than official figures would indicate because of the nature of Indigenous society. The community provides support for its members and someone with difficulties reading and writing will always have someone else to call on for help. This supportive environment thus masks the true situation.

Survival

Community members explained that proficiency in Standard Australian English is essential for Indigenous people to gain employment and survive in today’s society. The question of survival came up in almost all the interviews. One interviewee likened literacy and numeracy to a tool which had replaced hunting equipment as necessary for modern survival. The interviewees explained that these skills were necessary just to function in modern society: to read signs, pay bills, check change, sign your name. Without them you ‘get lost in society’.

Employment

The crucial issue for all the interviewees was the link between literacy and numeracy skills and employment. Lack of basic skills can exclude Indigenous people from engaging with the employment cycle. They cannot successfully fill out applications forms. If they are helped through this process, they often cannot cope with the interview process because of a limited understanding of Standard Australian English. They are unsure of what is being asked and what is expected in their reply. The community member interviewed, who was also an organisation manager, indicated that even the lowest skilled positions would require an employee to read instructions, fill in and sign forms and understand budgets. It was also stressed that the most basic positions today require some computer literacy.

Community ownership

Community members reiterated the need for community ownership of training programs. This will only occur if the impetus for the programs comes from within the community and they have input into the design, development and delivery of the programs. Several interviewees identified the gap between secondary school and the real world of employment, and the need for community organisations to fill this gap for Indigenous youth. They also stressed the need for more practical, hands-on training and assessment. They deplored the reliance on written assessment and explained the need for students to have the opportunity to answer questions orally or to demonstrate their skill.

All the community members interviewed agreed that students do better when supported by their community, but this requires resources and funding. Some suggestions included peer tutors, women’s groups and homework classes. Several interviewees identified the importance of the

primary school years and stressed that parents must take responsibility for ensuring their children attend school regularly. One interviewee had been involved in a program that helped parents to improve their literacy and numeracy levels and become more engaged in their children's education.

Best practice model

The research confirmed the findings of the literature review with regard to applying the best practice model for Indigenous education to language/literacy support systems in VET. It provided concrete examples of how the best practice model can be implemented, while demonstrating that, where difficulties arise, those practices have not been followed. The literature stressed an experiential, cooperative, learner-centred approach delivered in a culturally supportive environment. The learning must be relevant and contextualised, as well as culturally appropriate. Teachers advised the adoption of an holistic approach which was highly visual, slow, cooperative and explicable.

Relationships

With regard to language/literacy support systems, both teachers and students identified the relationship between the teacher/tutor and student as of primary importance in obtaining successful results. Teachers emphasise that knowing their students well and acknowledging them as adult learners with existing skills and knowledge are essential for successful outcomes. Students also require a culturally supportive environment which accommodates differing perceptions of time, family and community. Recognition of Indigenous languages is important and one teacher demonstrated how the use of Torres Strait Islander Creole words and linguistic conventions could aid students.

Resources

The common denominator in the teachers' interviews was the need to contextualise the learning experience for students requiring literacy and numeracy support. Rather than recommending individual resources, they emphasised the need to adapt resources from real-life texts to individual student needs. Teachers use relevant material to individualise programs for students within the classroom situation.

One-on-one support

Teachers and students agree that the most effective delivery method is where one-on-one interaction occurs. Teachers explain that this can be accomplished by the use of tutors in the classroom. Students perceive out-of-class tutorial support as 'punishment' or 'remedial', and teachers confirm that students rarely utilise this type of service even if it were readily available. Teachers maintained that small groups are most effective; students expressed concern that large classes make it difficult to get individual attention.

Ownership

Teachers and community members repeatedly drew attention to the importance of ownership of the training and learning process. Input from students should be sought to determine what they want to get from the learning experience, and the program subsequently tailored to meet those needs. Community can and does identify training needs, and cooperation is required between community and the VET sector to ensure relevant programs are established.

The examples provided by the study reinforced the practical application of the best practice model defined in the literature. Teachers showed how the model can be implemented in a broad range of settings, and students confirmed that it provides positive outcomes, including course completion. The consistency of the information obtained from teachers, students and community members from across Queensland and in training programs, ranging from prevocational through to advanced diploma, indicate that the model is effective. The aim of this research is to promote the model and ensure practical ways it can be implemented across the VET sector.

Conclusion

This study identified in-class tutorial support and peer tutoring as being the most effective forms of literacy and numeracy support for Indigenous VET students. It also identified a number of principles which teachers can utilise to provide effective support in the classroom. The study identified underlying issues currently hampering the successful delivery of training to Indigenous VET students, including effective lack of literacy and numeracy support. The allocation of nominal hours, the formulae used to allocate funding, and the inflexibility of the VET system are all areas of concern.

Implications for policy and practice

- ✧ Funding must accommodate the best practice model and to do this, both funding and institute structures must allow flexibility. Currently funding is tied to nominal hours. These are often unrealistic even for mainstream students.
- ✧ There is a need for more Indigenous staff throughout the VET sector. To address this issue recruitment procedures have to be revised and some way found to remove the emphasis on selection criteria and written applications. To aid the retention of Indigenous staff, employment conditions have to provide more security, permanent employment opportunities and defined career pathways.
- ✧ Cross-cultural training is required for teachers, particularly teachers delivering mainstream courses. This training has to go beyond the current emphasis on cultural awareness training to provide teachers with concrete strategies and skills in intercultural competency.
- ✧ There is an overwhelming need for professional development for both literacy and numeracy and vocational teachers. In Queensland it would appear that professional development opportunities are extremely limited. These opportunities need to be provided and teachers need incentives and encouragement to participate. These should include institute support, relief teacher provision and funding.
- ✧ TAFE teacher training needs to be reviewed. Although the revised Certificate IV in Training and Assessment includes a unit of competency designed to address language, literacy and numeracy issues, it is not a core unit and it is not available to students undertaking the Diploma of Training and Assessment. Because of the nature of competency-based training, teachers/trainers who only hold a Certificate IV or Diploma in Training and Assessment have not been exposed to the underlying theoretical background which is essential to cope with the increasingly complex range of learners entering the VET system.

Systems that work

One-on-one support was identified as the most effective method of literacy and numeracy support for Indigenous VET students. This can be either teacher–student or tutor–student.

The two systems that utilise one-on-one support are:

- ✧ in-class tutorial support
- ✧ peer tutoring—either formal or informal.

Where learning support centres are the only support system available, the teacher/trainer should personally take the student to the centre, introduce them to the tutors and follow up to ensure the student is attending sessions.

Best practice guidelines

Adult learning best practice

- ✧ Respect student as an adult learner having prior knowledge and skills.
- ✧ Understand student's individual background, including cultural and educational background.
- ✧ Develop a positive relationship with each student.
- ✧ Seek student input to determine what the student wants to get from the learning experience.
- ✧ Encourage collaboration between literacy and numeracy specialists and vocational teachers.
- ✧ Administer relevant, pre-course assessment that specifically identifies literacy and numeracy levels in an informal environment that provides oral support as required.

Indigenous-specific best practice

- ✧ Understand cultural protocols and attitudes to family, time and community.
- ✧ Be aware that Indigenous students may not always ask for help or clarification; offer explanations in plain English and frequently ask if students understand.
- ✧ Be aware that, for many Indigenous students, English is their second, third or fourth language; employ English-as-a-second-language strategies.
- ✧ Undertake cultural awareness and cross-cultural competency training. Start with a cultural awareness course but ensure the process is ongoing by seeking out Indigenous advisors and mentors.

Appropriate resources

- ✧ Use relevant, real-life texts customised to individual needs.
- ✧ Ensure resources are culturally appropriate.
- ✧ Ensure resources are age-appropriate.
- ✧ Ensure appropriate literacy and numeracy levels.
- ✧ Incorporate appropriate literacy and numeracy instructional design principles—font type and size, plenty of white space, wide margins, plain English.
- ✧ Build a working relationship with dedicated learning support centres and physically take students to the centre, introduce them to support staff and follow up with encouragement to attend sessions; encourage flexible arrangements.
- ✧ Recognise that the ideal class size is ten.

Indigenous input/consultation

- ✧ Encourage Indigenous input at all stages (formal and informal) including design, development and delivery.
- ✧ Collaborate with Indigenous staff.
- ✧ Collaborate with the local Indigenous community.
- ✧ Seek out successful models of collaboration, including community advisory boards.

Resource list

Resources should be relevant, real-life texts customised to individual students' needs. Some suggestions are:

- ✧ newspapers
- ✧ magazines related to topic, trade area etc.
- ✧ advertisements
- ✧ yellow pages
- ✧ menus.

The exceptions to the above advice were the following two resources which were frequently recommended by teachers:

- ✧ *Strength in numbers: A resource book for teaching adult numeracy* by R Goddard, B Marr and J Martin, Language Australia, Melbourne, 1996.
- ✧ *Numeracy on the line – Language based numeracy activities for adults* by B Marr, C Anderson and D Tout, Language Australia, Melbourne, 1994.

Associations

- ✧ Australian Council for Adult Literacy and associated state councils <<http://www.acal.edu.au>>

Websites

- ✧ Literacy Net <<http://www.dest.gov.au/literacynet/resources.htm>>
- ✧ Literacy and Numeracy for VET: the nuts and bolts of vocational education and training <<http://www.decs.act.gov.au/publicat/litnumVET/vet0005.htm#streams>>
- ✧ National Adult Literacy Database—Canada's Adult Literacy Information Network <<http://www.nald.ca>>
- ✧ Online literacy and numeracy resource centre for trainers and assessors (no. 425 listed under Equity Toolboxes) <<http://www.flexiblelearning.net.au/toolbox>>
- ✧ Skillswise <<http://www.bbc.co.uk/skillswise/>>

References

- ABS (Australian Bureau of Statistics) 1996, *Aspects of literacy: Assessed skill levels*, cat. no.4228.0, ABS, Canberra.
- ANTA (Australian National Training Authority) 1999, *Partners in a learning culture: Australia's national Aboriginal and Torres Strait Islander strategy for vocational education and training 2000–2005*, ANTA, Brisbane.
- 2004, *Shaping our future: Australia's national strategy for vocational education and training 2004–2010*, ANTA, Brisbane.
- Anderson, D 1995, *Are you being served? Client perspectives on student services and amenities in TAFE*, Education and Student Services Standing Committee, Melbourne.
- Balatti, J, Gargano, L, Goldman, M, Wood, G & Woodlock, J 2004, *Improving Indigenous completion rates in mainstream TAFE: An action research approach*, NCVER, Adelaide.
- Bates, S 2001, 'The course in applied vocational study skills: Professional development issues for the delivery of integrated literacy support in VET', in *Knowledge demands for the new economy: Proceedings of the 9th annual International Conference on Post-compulsory Education and Training*, Centre for Learning and Work Research, Brisbane.
- Bin-Sallik, M 1996, *Aboriginal tertiary education in Australia: How well is it serving the needs of Aborigines?*, Aboriginal Studies Key Centre, Adelaide.
- Black, S 1996, *Literacy/numeracy support and team teaching in VET: TAFE teachers reflect on their practice*, Foundation Studies Training Division, Western Sydney Institute of TAFE, Sydney.
- Boyd, K 2001, *Mentoring research for adult literacy and numeracy practitioners in the top end of the Northern Territory*, Northern Territory University, Adult Learning National Australian Research Consortium Project, Darwin.
- Byrnes, J 1994, *The role and potential of students service in enhancing the academic achievement of Aboriginal and Torres Strait Island students in TAFE: The report of a national research project conducted for the Education Student Services Standing Committee of the National TAFE Chief Executives Committee by Batchelor College, Northern Territory*, Batchelor College, Darwin.
- Commonwealth of Australia 1989, *National Aboriginal and Torres Strait Islander education policy*, Department of Employment, Education and Training, Canberra.
- 2001, *National report to Parliament on Indigenous education and training 2001*, Commonwealth of Australia, Canberra.
- Department of Education, Science and Training 2004, *Gettin' into it! Working with Indigenous learners*, Australian Training Products Ltd, Melbourne.
- Education and Student Services Standing Committee 1997, *Indigenous students in TAFE: Towards performance measures*, ANTA, Brisbane.
- Govender, E 2000, 'Working together: A co-operative approach to Aboriginal education', paper for the 2000 Australian Indigenous Education Conference, Canberra.
- Guenther, J 2002, *What makes 'good' literacy and numeracy provision? Case study research of regional Australia*, viewed 9 February 2005, <http://www.staff.vu.edu.au/alnrc/onlineforum/AL_pap_guenther.htm>.
- Kral, I & Schwab, R 2003, *The realities of adult literacy acquisition and practice: Implications for capacity development in remote communities*, Australian National University, Centre for Aboriginal Economic Policy Research, Canberra.
- 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*, Research Centre for Vocational Education and Training, Sydney.
- McRae, D, Ainsworth, G, Cumming, J, Hughes, P, MacKay, A, Price, K, Rowland, M, Warhurst, J, Woods, D & Zbar, V 2000, *What works?: Explorations in improving outcomes for Indigenous students*, Australian Curriculum Studies Association and National Curriculum Services, Canberra.
- Marika, B, Lane, C, Smith, H & Reinke, L 2004, 'Working towards an Indigenous training model: Learning from Gamarrwa Nuwul Landcare, Yirrkala', in *Equity in vocational education and training: Research readings* ed. K Bowman, NCVER, Adelaide.
- NCVER (National Centre for Vocational Education Research) 2001, *Australian vocational education and training statistics 2000: In detail*, NCVER, Adelaide.
- Rizzetti, J & Bradford, J 1994, *More than just words: Good practice in literacy provision in the Koorie vocational context*, Aboriginal Services Unit, Northern Metropolitan College of TAFE, Preston.

- Robertson, R, Sclanders, M, Zed, J & Donaldson, H 2004, *Working with diversity: Quality training for Indigenous Australians*, ANTA, Brisbane.
- Robinson, C & Hughes, P 1999, *Creating a sense of place: Indigenous peoples in vocational education and training*, NCVET, Adelaide.
- Saunders, J, Jones, M, Bowman, K, Loveder, P & Brooks, L 2003, *Indigenous people in vocational education and training: A statistical review of progress*, NCVET, Adelaide.
- Wyn, J, Stokes, H & Tyler, D 2004, *Stepping stones: TAFE and ACE program development for early school leavers*, NCVET, Adelaide.

Appendix A: Methodology

Qualitative data were obtained from in-depth interviews conducted, using appropriate interviewing techniques, with teachers/trainers, Indigenous students and community members. The content of the interviews was used to identify and understand ways of improving vocational education and training outcomes for Indigenous students through effective literacy and numeracy support systems.

The study was confined to Queensland, the state with the second highest number of Indigenous VET students nationally (NCVER 2001). The recommendations are based on our findings and address urban, regional and remote situations and would have applicability and relevance to the corresponding VET sector in other states with comparable Indigenous demography and population dispersal.

Although the research design orientation was qualitative, quantitative data were sought and examined (through the literature review) to provide background information regarding enrolments and completion rates. The paucity of statistical information available did not enable us to determine distinct correlations between current VET outcomes and the capacity of past and/or current literacy and numeracy support mechanisms.

The methodology included:

- ✧ literature review
- ✧ pilot project
- ✧ data-gathering through interviews with teachers/trainers, students and community members.

Literature review

The literature review examined a number of different areas:

- ✧ Indigenous education policy
- ✧ student support services
- ✧ best practice in Indigenous education
- ✧ literacy and numeracy support
- ✧ professional development
- ✧ current Indigenous VET outcomes.

Professional development was added, as it became evident that it was of major concern in the area of literacy and numeracy support.

Pilot project

The pilot project was designed to trial the proposed interview questions. It was conducted on the Cairns campus of Tropical North Queensland TAFE. Two teachers were interviewed from the Access course, four students from a variety of courses, and a community member.

The original expectation was to interview teachers and students from the same program. However, problems arose because the pilot was conducted during February and many courses had not commenced. The two teachers were teaching off-campus at Yarrabah and Bamaga during the period. The student support officers were approached and put the research team in contact with students who had already commenced courses or who were on campus for block residential programs.

Data gathering

Teachers/trainers, students and community members were interviewed from across Queensland in urban, regional and remote areas. They were selected from three TAFE Queensland institutes and one independent registered training organisation. Originally it was proposed to interview 13 teachers, 21 students and 13 community members. Easier access to students in some areas enabled the research team to improve the student participant numbers. Difficulties in access to and availability of community members resulted in lower-than-anticipated participants. Numbers and locations of actual participants interviewed at the time of this report are detailed in table 1 (see main report).

The number of students interviewed represented 2.4% of the total Indigenous student population of the combined sites and locations. (Indigenous students at these combined sites accounted for 6.4% of all students. The overall state total is 4%.) While this may not be considered a representative sample size in a quantitative research paradigm, the sample size, which is diverse in age, gender, Aboriginal/Torres Strait Islander identity, location, settings and courses of study is appropriate to providing the researchers with significant narrative data analysis. Each interview represents an individual case study of how and why teachers, students and other support people do or do not utilise or negotiate the various mechanisms that constitute an Indigenous literacy and numeracy support system.

It was the research team's intention to interview teachers and students from the same programs. However, lack of teacher and/or student availability resulted in approximately 50% of all student/teacher interviews involving students and teachers from the same program. Statistical information regarding students is detailed in tables 2 to 8.

Table 2: Students by age

Age range	Number of students
25 and under	16
26–35	4
36–45	5
46–55	3
65 and over	1
Total student participants	29

Table 3: Students by gender

Gender	Number of students
Male	12
Female	17
Total student participants	29

Table 4: Students identified by cultural background

Cultural background	Number of students
Aboriginal	15
Torres Strait Islander	11
Aboriginal and Torres Strait Islander	3
Total student participants	29

Table 5: Undertaking study in town/city of usual residence

Response	Number of students
Yes	19
No	10
Total student participants	29

Table 6: Students' enrolment status

Enrolment status	Number of students
Full-time	26
Part-time	3
Total student participants	29

Table 7: Course delivery

Mode of delivery	Number of students*
On campus (timetable)	26
On campus (block)	3
Off campus	2
Total student participants	29

Note: * Some students were enrolled in multiple courses with varying modes of delivery.

Table 8: Highest level of education reached

Highest level of education*	Number of students
Primary	1
Secondary**	23
Cert. I	3
Cert. II	5
Cert. III	4
Cert. IV	2
Other	3

Notes: * Students nominated a compulsory and where applicable, non-compulsory schooling level.

** Various grades from year 8 to year 12.

Table 9 lists the range of courses in which students were enrolled. Table 10 indicates the cultural background of teachers/trainers interviewed.

Table 9: Courses in which students were enrolled

Course
Cert. IV Community Sport and Recreation
Advanced Dip. Visual Arts
Cert. III Teacher's Aide
Cert. III Business Administration
Vocational Access
Cert. III Education
Cert. IV Education
Cert. II Aged Care
Cert. IV Primary Health Care (Aged Care)
Dip. Indigenous Primary Health Care
Carpentry and Joinery Apprenticeship
Cert. II Business Administration
Cert. IV Business Administration
Cert. II Information Technology
Cert. IV Clothing Production

Table 10: Cultural background of teachers/trainers

Cultural background	Number of teachers/trainers
Indigenous	1
Non-Indigenous	10
Total teachers/trainers	11

The decision to include community members in the study was based on the literature and current VET practice of consulting communities in the development and implementation of support mechanisms for Indigenous students. The researchers wanted to investigate how community members' involvement was integrated into literacy and numeracy support systems and how this contributed to improving student outcomes.

The teachers/trainers and community members were interviewed either face to face or by telephone. Students were interviewed separately from teachers on all but one occasion, where a group of remote area students chose to have their teacher present. Originally it was proposed that students would be interviewed by a nominated third person. Budget constraints prevented members of the research team from travelling to conduct all interviews with student participants who were external to Cairns. In order to collect high-quality data, it was necessary to eliminate the possibility of participants being interviewed by people with a potential conflict of interest, in that they could conceivably be part of the structure about which the participants were being interviewed. After further consideration, the research team decided to conduct the student interviews external to Cairns by videoconference. This enabled a wider, more diverse sample to be interviewed across the state, and provided more effective, consistent data gathering.

Ethical considerations

The research project was carried out under the guidelines established by the Australian Institute of Aboriginal and Torres Strait Islander Studies Guidelines for Ethical Research in Indigenous Studies (current version), and the Australian Vocational Education and Training Research Association's voluntary Code of Practice.

The purpose of the research was explained to all participants before they undertook the interview and permission was sought to record the interview. Participants were asked to sign a consent

form and assured that they would not be identified. All interviews were electronically recorded and both audiotapes and transcripts kept in a secure location. An Indigenous member of the research team interviewed all Indigenous participants. All interviewees were provided with a summary of the transcript.

Appendix B: Questionnaires

Teacher/trainer questionnaire

- 1 How do you identify the literacy and numeracy needs of your students?
- 2 What do you do to assist your students to attain literacy and numeracy competence at the level they require to complete your course?
- 3 Is this something you have developed yourself?
- 4 Is it something already existing in the VET system?
- 5 Is it something specific to the course or to the institute?
- 6 What features of the support system worked for your students?
- 7 Why did those features work?
- 8 What features didn't work for your students?
- 9 Why didn't those features work?
- 10 Do you use any literacy and numeracy resources? If so could you tell us which ones?
- 11 What do you think constitutes best practice for literacy and numeracy support for your Indigenous students?
- 12 What sort of professional development in this area has been made available to you in the last twelve months?
- 13 Did you find this professional development useful? Please comment.
- 14 What sort of professional development do you feel would be most useful for you in this area?
- 15 Are there any other comments you would like to add?

Student questionnaire

- 1 Were you interviewed before you began this course?
- 2 Did you have to do a test before you began this course?
- 3 Have you found this course easy or difficult?
- 4 Have you been given any help with your reading and writing during this course?
- 5 If yes, what type of help have you been given?
- 6 Did it help you with your reading and writing?
- 7 If it did help you, why did it help you?
- 8 If it didn't help, why didn't it help you?
- 9 What sort of help would you like to have to complete this course or future courses?

10 Does the teacher realise you're Indigenous, if so, how?

11 Would you like to add any other comments?

Community members questionnaire

- 1 Do you think reading and writing skills in Standard Australian English are important for people in your community?
- 2 Could you explain why you think it is important for people to be able to read and write in Standard Australian English in your community or why it is not important?
- 3 Do students in your community need help with reading and writing and numeracy skills?
- 4 What do you think would be the best way to help those students develop reading and writing and numeracy skills?
- 5 How do you feel the community can best support students needing literacy and numeracy support?
- 6 Are there any other comments you would like to add?



This report is part of the Adult Literacy National Project, funded by the Australian Government through the Department of Education, Science and Training. This body of research aims to assist Australian workers, citizens and learners to improve their literacy and numeracy skills.

Research funding is awarded to organisations via a competitive grants process.

**National Centre for Vocational
Education Research Ltd**

Level 11, 33 King William Street
Adelaide SA 5000

PO Box 8288 Station Arcade
South Australia 5000

Phone +61 8 8230 8400
Fax +61 8 8212 3436
Email ncver@ncver.edu.au

www.ncver.edu.au