

# **Critical Success Factors for Effective Use of e-learning by Pacific Learners**

**Final Report  
Prepared for ITPNZ**

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**2006**



***KOLOTO & Associates Ltd***  
**Centre of Excellence in Pacific Research & Advancement**

## Acknowledgements

I would like to acknowledge the contribution, commitment, and support of so many people, which helped to make this project possible.

### Institutes of Technology and Polytechnics of New Zealand

I gratefully acknowledge the Institutes of Technology and Polytechnics of New Zealand (ITPNZ) for commissioning this significant study and for their support throughout this study. In particular, many thanks go to Terry Neal and Brandi Fisher for their ongoing support.

### Pacific reference group

My thanks go to the members of the Pacific reference group who worked behind the scenes to shape the development of this project, and who helped to facilitate access to participants and relevant literature during the data collection phase.

### Pacific community leaders

My heartfelt thanks go to Rev. Tavake Tupou who kindly blessed this project at the first focus group meeting in November 2005, and to the Pacific community leaders who made time to participate in this project.

### Participants

Sincere and special thanks go to all participants — lecturers and tutors, student support staff, graduates, timeout students, current students, e-learners, and the e-learning staff who took part in the individual interviews, focus groups, and the case study. Without your willingness to make time to share ideas and experiences this project would not have been possible. Our most sincere fakamālō goes to the team at BEST Training for allowing us to undertake the case study with your staff and students.

### Research team

I would also like to acknowledge the contribution of the research team:

|                                |                      |                   |            |
|--------------------------------|----------------------|-------------------|------------|
| Takinga-Iva Singsam            | Lepeka Unafei Tatila | 'Alisi Katoanga   | Tupae Pepe |
| Faasiu Gae'e-Gosche<br>Stowers | Epifania Siu         | Kulisitina Pohiva | Nella      |

Thank you all for your commitment and willingness to contribute extra time to recruit, follow up, and conduct the focus groups and individual interviews whenever the participants were available.

### Administrative support team

'Emosi Koloto, Semisi Koloto Junior and Vikki Aranui provided the administrative assistance for this project, whenever it was required. Thank you all for your valuable contributions. This opportunity has allowed our team to contribute to the research-based literature on Pacific learning and e-learning, and the development of initiatives that impact on the lives of Pacific learners in the tertiary sector.

**Kia manuia, vinaka vaka vevu, fakaue lahi, fakafetai lava, faafetai tele lava, mālō 'aupito.**



Dr 'Ana Hau'alofa'ia Koloto  
Principal researcher

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# Executive summary

## Introduction

During the past decade, there has been a growing recognition of the need to increase the participation of Pacific peoples in tertiary education. Building on the Ministry of Education (MoE) *Pasifika Education Plan* (Ministry of Education, 2001), the Tertiary Education Commission (TEC) developed and implemented its *Pacific Peoples Strategy 2004 to 2006 and Beyond* (TEC, 2004). The TEC strategy emphasises improving pathways to greater and more diverse participation for Pacific peoples in all levels of the tertiary education sector. Parallel work within the e-learning Collaborative Development Fund (eCDF) and the Tertiary e-learning Research Fund (TeLRF) has increased understanding of e-learning pedagogies and the factors necessary for effective use of the emerging technology.

In December 2004, the e-learning Forum of the Institutes of Technology and Polytechnics of New Zealand (ITPNZ) gained eCDF funding from the TEC to:

- undertake research on critical success factors for Pacific e-learners
- develop professional development programmes for staff within the tertiary sector in New Zealand.

## The research

In November 2005, ITPNZ contracted a team of Pacific researchers from Koloto & Associates Ltd to undertake the research component of their project. Their key objectives were to identify the critical success factors and pedagogy for increasing Pacific students' access to, participation in, and achievement through e-learning.

## Methodology

In line with other research work undertaken by Koloto & Associates (Koloto, 2003; Koloto and Sharma, 2005; Koloto, 2005), three research frameworks proposed by Pacific researchers underpinned the research design and methods.

- The concept of the 'researcher as the first paradigm' (Mitaera, 1997) — assumes that the researcher's principles and values determine how they conduct the research. For the ITPNZ project, the researchers' guiding principles were: respect, collaboration, honesty, compassion, and empowerment.
- The *tivaevae* model (Maua-Hodges, 2000) — assigns each research team member a task. After completing their individual tasks, the team works together to prepare and analyse the data.
- The *kakala* model (Thaman, 1999, 2000, 2002) — uses three key processes for making a *kakala* garland as a metaphor for the key processes involved in any research project: the *toli*, or framework, represents gathering the data; the *tui*, or weaving, represents compiling the final report (*kakala*); and the *luva*, or presentation of the *kakala*, represents disseminating the results.

The researchers collected data through:

- analysis of the literature on Pacific learning and e-learning in the tertiary education sector
- individual interviews and focus groups with Pacific graduates, time-out students, current students, lecturers and tutors, student support staff, and community leaders

- individual interviews and focus groups with samples of Pacific e-learners and e-learning staff
- a case study of an e-learning programme at a private training establishment (PTE).

A total of 148 participants, 45 male and 103 female, from four types of tertiary institutions took part in this study. Eight target groups included:

- Pacific community leaders (11)
- lecturers and tutors (14)
- student support staff (11)
- timeout students (18)
- current students (21)
- graduates (19)
- e-learners (41)
- e-learning staff (13).

The participants were from different tertiary institutions in Auckland, Christchurch, Hamilton, and Wellington.

## Key findings

### International literature

The literature review (chapter 3) considers a limited number of international studies on Pacific learning in the tertiary sector. It focuses on the work of Konai Helu-Thaman and other Pacific educators at the University of the South Pacific in promoting cultural inclusiveness in a university course (Thaman, 1999, 2000, 2002; and Taufe'ulungaki and Sanga, 2002). This work includes key educational concepts such as *ako* (learning), *'ilo* (knowledge), and *poto* (wisdom). The researchers' analysis of the literature affirms a need to incorporate Pacific values, practices, and knowledge into the formal education system.

### New Zealand tertiary education

#### Policies, strategies, and funding for Pacific learning

The mechanisms for implementing initiatives and programmes in Pacific learning and e-learning come from a range of strategies, policies, and funding in the New Zealand education system. These include:

- the MoE Pasifika Education Plan
- the TEC Pasifika Peoples Strategy, Māori and Pacific Special Supplementary Grant, and e-learning Collaborative Development Fund
- the Government's Digital Strategy: Creating our Digital Future.

#### Trends in Pacific student enrolment in the tertiary institutions

An analysis of the enrolment statistics available in August 2005 showed the following trends in the enrolment of Pacific students (Hodgen, 2005).

- About 36,800 Pacific students were enrolled at tertiary institutions.
- More female (61%) than male (39%) students were enrolled.

- About two-thirds of Pacific students were enrolled at either an institute of technology or polytechnic (ITP) (37%) or university (28%).
- Enrolments at the PTEs were more popular than other institutions with Pacific students.
- Samoan and Niuean students were over-represented at colleges of education; Fijian and Tongan students were more likely to enrol at university; Cook Island students were more likely to enrol at wānanga; and Tokelauan students were over-represented at ITPs.
- In 2002, about a quarter of the Pacific tertiary students were enrolled at Levels 5–7, but by 2005 this proportion had increased to about a third.
- Pacific students were more likely to study part-time and intramurally.
- About 41% of Pacific tertiary students had some degree of web access in 2005; the proportion for all tertiary students was slightly higher at 45%. Only 7% of Pacific students were enrolled in web-based or web-enhanced courses, compared to 16% of all tertiary students.
- Cook Island students, 30% of whom study at wānanga, were more likely to have little or no web access; Fijian and Tongan students were more likely to be studying web-enhanced courses.

A primary concern with these trends is the variation in different ethnic groups' participation in different types of tertiary education institutions.

## **Tertiary institutions**

### **Critical success factors for Pacific students' access and success**

The main critical success factors for Pacific student access to, participation in, retention of, and success in tertiary education were:

- preparedness for tertiary study — a range of skill and attitudinal factors, such as motivation and commitment to study, reading and literacy skills, knowledge of how to use the computer and access support services, goal setting and time management, and strengths from cultural upbringing and belief in God.
- institutional policies, environment, and support services — a culture supportive and responsive to the needs of Pacific students
- family support — partners' and / or children's encouragement and understanding of what students need to succeed
- quality staff — encouraging, accessible, and helpful educators
- peer support — informal study groups and graduates as mentors
- course delivery — immediate feedback on assignments, extra time to work individually, and the same materials presented differently according to students' needs.

The study highlighted the key roles played by Pacific staff at tertiary education institutions (TEIs). In particular, the literature noted the key roles played by Pacific nurse lecturers and educators in tertiary institutions. They have been model 'change agents' in designing and incorporating Pacific cultural values, knowledge, and perspectives into the nursing education curriculum; and in advocating, mentoring, and supporting Pacific nursing students. Their strategies could inspire best practice in the tertiary institution. Agencies such as the Ministry of Health, district health boards, the Nursing Council of New Zealand,

and the Pacific Nurses Organisation have already used nurse lecturer experiences and practices as models for developing the Pacific nurse workforce.

### **What is 'Pasifika pedagogy'?**

About half of the participants agreed that there is a 'Pasifika pedagogy'. This may be defined as:

An integration of teaching and learning methods that are informed by and validate Pacific values, worldviews, knowledge, and experience.

### **Good teaching and learning practices for Pacific students**

The results provide some insight into teaching practices that effectively facilitate Pacific students' learning. These may include but are not limited to:

- peer teaching and learning and group work
- experiential teaching strategies — using and validating students' experiences, including practical hands-on experience; and illustrating points of discussion with real-life experiences
- incorporating Pacific models, symbols, metaphors, and visual aids into lectures and teaching
- participatory and student-centred teaching methods, including free-and-open discussion
- teaching strategies that engage both the mind (cognitive intelligence) and the heart (emotional intelligence).

### **Critical success factors for e-learning**

Both the literature review and the research results point to the following critical success factors for e-learning:

- access to and knowing how to use computers and the internet
- help from tutors and class members in an environment that is supportive of information technology (IT) use
- attending class and handing in assignments on time
- access to information, learning centres, and other resources
- motivation and self-confidence
- understanding e-learning and course content
- family support
- funds for tuition fees
- individual learning
- time to work on the course online
- good command of English.

### **Attitudes that help promote e-learning**

Institutional commitments to provide Pacific learners with computers and IT support promote e-learning not only for Pacific students but also for their families. The case study of BEST Training (section 3.7) highlights that family members benefit from students receiving information and communication technology (ICT) equipment (computers, printers, internet access, and desks) at home through their course fee structure. As a consequence, some family members have since enrolled in tertiary education.

### **Initiatives to enhance access to e-learning programmes**

The results highlighted various strategies and initiatives set up by TEIs to support the use of e-learning in course delivery. These include:

- support systems with pastoral care
- learning support centres or Pacific units
- providing computers and unlimited access to the internet
- tutor and peer support
- available and accessible library resources
- scholarships
- home visits to students
- bridging programmes.

### **Barriers to e-learning**

The results from e-learners also provide insight into the barriers to Pacific e-learners' participation and success with e-learning courses. These include:

- lack of understanding of technology and course content
- lack of self-confidence and motivation
- cost and finance
- lack of access to computers
- lack of time management skills
- personal reasons and family commitments
- lack of writing, communication, and English language skills
- lack of physical interaction with and support from tutors.

## Recommendations

Based on the research findings, the final chapter of this report outlines the following recommendations for educational practices and future research.

1. Further qualitative research should investigate the reasons for the variations in Pacific ethnic groups' enrolment in TEIs and the possible impact on each group's uptake of e-learning.
2. TEIs should recognise, value, and provide the necessary institutional support for Pacific lecturers and tutors to effectively serve as key 'change agents' within their institutions.
3. More in-depth research on Pacific lecturers' experiences, effective curriculum development, teaching strategies, and student support strategies should be undertaken to inform the teaching and learning of Pacific students in the tertiary sector.
4. Institutional policies and support systems should take into account the diverse learning needs and cultures of diverse Pacific learners, and the contexts in which they operate in the home, workplace, and community.
5. Orientation programmes and strategies aimed at increasing participation of Pacific learners must involve the students and their families, ensuring all understand the institutional expectations and types of support required.
6. Teacher education curricula and professional development programmes for tertiary staff working with Pacific students must include relevant materials on Pacific peoples' cultures, values, practices, knowledge, experiences, and realities.
7. Teaching and e-learning materials developed for Pacific students must include Pacific knowledge, metaphors, and materials relevant to their life experiences.
8. Staff should recognise the value of peer learning and teaching and face-to-face academic support; and they should incorporate these into teaching programmes for Pacific learners and e-learners.
9. TEIs should help students needing to enhance their academic reading, writing, and English language skills so that they can effectively engage in the e-learning environment and succeed in their tertiary studies.
10. More in-depth case studies should focus on the experiences of Pacific e-learners and e-learning staff in a range of TEIs, to explore the factors that facilitate or impede e-learners' retention and success.
11. TEIs should develop policies and support structures that include access to computers, IT support, and pastoral support for learners to ensure their success in an e-learning environment.
12. Each TEI should collect data on students' access to computers along with their enrolment forms, to inform the programmes on e-learning generally and for Pacific students in particular.
13. e-learning staff should carefully consider the design, development, and presentation of course materials so as to enhance students' learning, motivate them to engage with the content, and inspire them to complete their study.
14. TEIs should acknowledge the roles of staff and the importance of their relationship with students. Face-to-face teaching and staff availability must be an integral part of the e-learning environment for Pacific students.
15. Students must seriously consider their preparedness for tertiary studies. Equipping themselves with the appropriate goals, motivation, and determination to succeed

— as well as the IT and information literacy skills — will go a long way to ensuring success in their tertiary studies.

16. Pacific lecturers and tutors should consider taking up professional development programmes available in their institution to enhance their skills and knowledge of e-learning. That way, they can make informed decisions about using the technology to enhance students' learning and success.
17. TEIs should continue to provide scholarships to capable students from low-income families as a means of ensuring equity of access to tertiary education by all Pacific students.
18. Pacific communities and TEIs should explore the opportunities presented by e-learning as an option to enhance Pacific students' access to tertiary education.

# 1.0 Introduction

## 1.1 Background

During the past decade the New Zealand Ministry of Education (MoE), and in recent years the Tertiary Education Commission (TEC), have sought to improve access to, participation in, retention of, and success for Pacific learners at tertiary education institutions (TEIs). Much of the work has focused on identifying barriers to Pacific students' access to tertiary education. Parallel work within the e-learning Collaborative Fund (eCDF) and the Tertiary e-learning Research Fund (TeLRF) has increased understanding of e-learning pedagogies and factors necessary for effective use of the emerging technologies within education.

The e-learning Forum (eLF) of the Institutes of Technology and Polytechnics of New Zealand (ITPNZ) gained eCDF funding in December 2004 to research critical success factors for Pacific e-learners and disseminate the findings of the research to inform professional development for staff within the tertiary sector of New Zealand. The project has four objectives.

1. Describe the current use and nature of online learning for Pacific learners.
2. Identify the critical success factors and pedagogy for effective use of e-learning to increase access, participation, and achievement for Pacific learners.
3. Train educators throughout the tertiary education system in New Zealand on the effective use of e-learning for Pacific learners.
4. Establish a network of leaders, from TEIs and relevant communities, who are passionate and committed to Pacific development and success through appropriate use of technology.

Within the overall project, this research report contributes to the second objective — it increases our overall understanding of effective use of e-learning with Pacific learners. As part of the project, the report will also be a key resource for holding a fono on Pacific e-learning. This fono will bring together experts in e-learning and Pacific learning to explore the intersection between their two areas of expertise. The conclusions from the fono will, in turn, inform the professional development phase of the project. The New Zealand Council of Educational Research (NZCER) has also prepared a sister report for the fono. This report, entitled *Statistical Profile of Pacific Students in Tertiary Education and Engagement in e-learning* (Hodgen, 2005), achieves the first objective above.

## 1.2 Key research questions

The following are key research questions for this study.

### Overseas

- What is good practice for Pacific learning overseas?
- What is good practice for Pacific e-learning overseas?

### New Zealand tertiary education system

- What are the various government strategies and policies relevant to Pacific learning and e-learning, for example, tertiary education strategies and e-learning frameworks?
- What funding approaches are relevant to Pacific learning and e-learning?
- What are the demographic trends of Pacific learners and e-learners in New Zealand?

- What lessons learned by other sectors, such as the health sector, are relevant for Pacific learning and e-learning?

### **Tertiary institutions**

- What strategies at the institutional level impact on Pacific learning and e-learning?
- What is good practice to synergise Pacific and Western pedagogies for Pacific learning in New Zealand?
- What is good practice for Pacific learning and e-learning in New Zealand?
- What are current levels of, and what will enhance, access to technology for Pacific people?
- What will enhance access, retention, and completion of learning for Pacific people?
- What are the barriers to access, retention, and completion of learning for Pacific people?

### **Pacific communities**

- What attitudes help or work against the uptake of learning opportunities, in particular e-learning, for Pacific people?
- What are the 'choke points' for Pacific participation in education?

For information on the trends in demographics of Pacific learners and e-learners in New Zealand, see *Statistical Profile of Pacific Students in Tertiary Education and Engagement in e-learning* (Hodgen, 2005).

## **1.3 Project tasks**

The research focused on two specific tasks: Pacific learning and Pacific e-learning.

### **Task 1: Pacific learning**

This task gathered background on what works — in all modes of delivery — to increase access, participation, and success for Pacific learners. It included:

- a literature review
- focus groups and interviews with Pacific:
  - community leaders
  - lecturers and tutors
  - student support staff
  - timeout students (students who can but do not participate in the tertiary system)
  - current students
  - graduates.

## **Task 2: Pacific e-learning**

This task studied e-learning with Pacific learners. It included:

- gathering information on courses and enrolments of Pacific students in e-learning programmes
- small focus groups of Pacific e-learners
- case studies of e-learning with Pacific learners.

### **1.4 The research team**

In November 2005, ITPNZ contracted a team of Pacific researchers from Koloto & Associates Ltd to undertake this study (*Critical Success Factors for Effective Use of e-learning by Pacific Learners*). Nine researchers collected data over a period of 2 months between November and December 2005.

### **1.5 Overview of this report**

This report comprises six chapters, including this introductory chapter:

- Chapter 2 provides an overview of the research design and methodology.
- Chapter 3 contains a review of the literature on Pacific learning and e-learning.
- Chapter 4 presents and discusses the results on Pacific learning.
- Chapter 5 examines the findings on Pacific e-learning.
- Chapter 6 summarises the key findings of the study and outlines recommendations for educational policies and practices and future research.

## 2.0 Research design and methodology

### 2.1 Introduction

This chapter discusses the three Pacific theoretical frameworks for research that underpinned this study, and the research design and methods.

### 2.2 Pacific theoretical frameworks

Many Pacific researchers have proposed different theoretical frameworks and approaches for research to cover the cultural contexts of Pacific peoples and communities. Three Pacific theoretical frameworks and approaches for research underpin the design and methods used for this research project:

- Jean Mitaera's (1997) concept of 'researcher as the first paradigm'
- Teremoana Maua-Hodges' (2000) 'tivaevae model'
- Konai Helu-Thaman's (2002) metaphor of 'kakala'.

The design of this research project wove together appropriate research data-collection and analysis tools from all three frameworks.

#### **Researcher as the first paradigm — Jean Mitaera**

As a Pacific research team, we support Jean Mitaera's view that the researcher is 'the first paradigm'. Jean Mitaera (1997) suggests that the researcher needs to ask these questions:

- what are my visions?
- what are my principles?
- what are my values?
- what are my strategies?

Researchers bring their own visions, principles, and values to the research process. These influence how they carry out the research. For this project, the researchers used these basic guiding principles:

- respect — show respect in all interactions
- collaboration — work collaboratively with all participants, other researchers, community members, community organisations, tertiary institutions and their staff, other project staff, and other stakeholders involved in the research project
- honesty — honestly report all data collected to ensure that the 'voices' of all participants are represented in the final report
- empowerment — use methods that empower the researchers to work in partnership with the participants, who are in turn empowered to actively engage in the project; and find results that empower those within the tertiary education sector to better use e-learning tools to address the needs of Pacific peoples.

#### **Tivaevae model — Teremoana Maua-Hodges**

Teremoana Maua-Hodges' (2000) tivaevae model provided a useful framework for the work of our diverse team of Pacific researchers. Maua-Hodges uses the processes followed by Cook Island women for making a *tivaevae* (patchwork quilt) to illustrate

research processes. The making of a tivaevae involves many women; one woman has the design and allocates different roles and responsibilities to the other women in the group. Each woman has specific tasks to accomplish. Working together as a team ensures that all patterns and parts of the tivaevae will be sewn together correctly. Quality is ensured because the women individually and collectively want to display a good tivaevae.

For our project, each member of the research team was allocated tasks. For instance, each worked with specific participants, target groups, tertiary institutions, and ethnicities. Upon completing their allocated tasks, each researcher submitted their findings to the management team, who worked together to prepare and analyse the data.

As with the tivaevae, this process was designed to ensure high quality, as the researchers did not want to display poor-quality results.

## **Kakala — Konai Helu-Thaman**

In the Tongan context, *kakala* refers to both a royal garland and the fragrant flowers used to make it. As with Maua-Hodges' tivaevae, Konai Helu-Thaman (2002) proposes that the key processes involved in making a kakala are similar to the processes in the conduct of a research project. The key processes follow.

- *Toli* (gathering the kakala flowers) — the person doing the toli needs to have the skills and expertise to select and gather the kakala. In this study, skilled researchers gathered, selected, and reviewed the data from face-to-face interviews, focus groups, and case studies. The data management team then prepared the data for analysis.
- *Tui* (making or weaving the kakala) — the gathered (toli) flowers are weaved into various kakala fashioned for the people receiving them. In this study, the main kakala would be the final report prepared for Whitiareia Community Polytechnic and ITPNZ. Another kakala would be the summary of key results for all the participants in the study.
- *Luva* (giving away the kakala) — the kakala is presented to the recipient(s). In this study, the luva is the presentation of the final report to ITPNZ and the summary of key findings to all participants in the research project.

## **Research design**

The research involved four key phases (discussed in sections 2.3 to 2.6).

- Phase 1: Setting up (tivaevae)
- Phase 2: Data collection and literature search (toli)
- Phase 3: Data analysis and report writing (tui)
- Phase 4: Dissemination of results (luva)

## 2.3 Phase 1: Setting up (tivaevae)

The setting-up phase, vital for the success of the research, involved:

- confirming the research design and locations with the ITPNZ project manager
- developing and preparing the data-collection tools, including:
  - participant information sheets
  - consent forms
  - profile sheets for each target group
  - interview schedules for each target group.
- sending an introductory letter from the project manager, about the research project and research contractor, to tertiary institutions (universities, institutes of technology and polytechnics (ITP), private training establishments (PTE), and wānanga)
- developing and preparing required ethics applications to tertiary institutions
- performing a literature search
- conducting training and meetings for the whole research team
- blessing the research project
- identifying courses with Pacific e-learners
- sending progress reports to ITPNZ.

The eight target groups considered for this project were:

- Pacific community leaders
- Pacific lecturers and tutorial staff
- Pacific student support staff
- Pacific timeout students; that is, students who can but are not participating in tertiary education
- Pacific students enrolled at a tertiary education institution (TEI), but not in any e-learning course
- Pacific graduates (those who have successfully completed tertiary qualifications)
- Pacific e-learners; that is, students enrolled in a course that has an e-learning component
- e-learning staff.

## 2.4 Phase 2: Data-collection phase (toli)

The data-collection phase involved separate tasks for Pacific learning and Pacific e-learning.

Task 1 'Pacific learning' involved a literature review, focus groups, and individual interviews to gather background information on what works — in all modes of delivery — to increase access, participation, and achievement for Pacific learners.

Task 2 'Pacific e-learning' focused on gathering information to increase understanding of e-learning with Pacific learners. This involved focus groups and individual interviews with Pacific e-learners and e-learning staff, plus a case study of e-learning within a tertiary institution.

### Literature review

Researchers conducted a search of the internet and university library databases for literature on Pacific learning, e-learning, and technology. The team also asked university academics specialising in Pacific education and a PhD student, who is currently researching factors contributing to success of Pacific students in tertiary education, to provide references on Pacific education. The literature search focused on research conducted in the last 10 years, given the recent nature of e-learning.

### Individual interviews and focus group sessions

Researchers conducted 58 individual interviews and 29 focus groups. Table 1 shows the distribution for each target group.

**Table 1 Individual interviews and focus groups by target group**

| Target group          | Focus groups | Individual interviews | Total participants |
|-----------------------|--------------|-----------------------|--------------------|
| e-learners            | 8            | 17                    | 41                 |
| Graduates             | 3            | 10                    | 19                 |
| Timeout students      | 0            | 18                    | 18                 |
| Current students      | 6            | 0                     | 21                 |
| Lecturers and tutors  | 5            | 2                     | 14                 |
| Student support staff | 4            | 3                     | 11                 |
| Community leaders     | 1            | 6                     | 11                 |
| e-learning staff      | 2            | 2                     | 13                 |
| <b>Total</b>          | <b>29</b>    | <b>58</b>             | <b>148</b>         |

Appendices A to P contain the profile sheets and interview schedules used. With the consent of participants, all interviews and focus groups were tape recorded, later transcribed, and prepared for analysis.

## Participants

A total of 148 participants, 45 male and 103 female, took part in this study. Appendix Q contains details of the participants' gender by target group. Table 2 below shows the details of participants' ethnicities for each target group.

**Table 2 Distribution of participants by ethnicity**

| Target group          | Cook Islands | Fiji      | Niue     | Samoa     | Tokelau  | Tonga     | Tuvalu   | Fiji-Indian | Others *  | Sub-total  |
|-----------------------|--------------|-----------|----------|-----------|----------|-----------|----------|-------------|-----------|------------|
| e-learners            | 4            | 1         | 0        | 17        | 0        | 18        | 1        | 0           | 0         | <b>41</b>  |
| Graduates             | 3            | 4         | 0        | 6         | 1        | 3         | 0        | 0           | 2         | <b>19</b>  |
| Timeout students      | 5            | 1         | 0        | 6         | 1        | 4         | 1        | 0           | 0         | <b>18</b>  |
| Current students      | 6            | 2         | 1        | 5         | 3        | 4         | 0        | 0           | 0         | <b>21</b>  |
| Lecturers and tutors  | 1            | 0         | 1        | 3         | 0        | 7         | 0        | 0           | 2         | <b>14</b>  |
| Student support staff | 0            | 1         | 0        | 5         | 1        | 2         | 0        | 0           | 2         | <b>11</b>  |
| Community leaders     | 3            | 0         | 3        | 1         | 0        | 4         | 0        | 0           | 0         | <b>11</b>  |
| e-learning staff      | 0            | 1         | 0        | 2         | 0        | 0         | 0        | 1           | 9         | <b>13</b>  |
| <b>Total</b>          | <b>22</b>    | <b>10</b> | <b>5</b> | <b>45</b> | <b>6</b> | <b>42</b> | <b>2</b> | <b>1</b>    | <b>15</b> | <b>148</b> |

\* Others include: nine Europeans, one Phillipino-Asian, one Māori, one Papua New Guinean, one Hispanic Samoan, one Solomon Islander, and one Solomon Islander-Tongan.

The 10 non-Pacific participants were staff (nine e-learning and one student support) who work closely with Pacific students.

Participants' ages ranged from 18 to over 60 years old. Appendix R presents details of the distribution of the participants' age groups.

## Locations of the study

The four locations for this study were Auckland, Hamilton, Wellington, and Christchurch. Table 3 shows the number of participants from each location.

**Table 3 Distribution of participants for tasks 1 and 2 by location**

| Location     | Participants for Task 1 | Participants for Task 2 | Subtotal   |
|--------------|-------------------------|-------------------------|------------|
| Auckland     | 65                      | 45                      | 110        |
| Hamilton     | 8                       | 2                       | 10         |
| Wellington   | 14                      | 6                       | 20         |
| Christchurch | 7                       | 1                       | 8          |
| <b>Total</b> | <b>94</b>               | <b>54</b>               | <b>148</b> |

## Distribution of participants throughout the tertiary institutions

The study also monitored participants from each of the four types of tertiary institution, as shown in table 4 below. The breakdown does not apply to the Pacific community leader participants (recruited from the Pacific communities, not the institutions). Most participants were from universities (56), while the fewest were from wānanga (9).

**Table 4 Breakdown of participants by tertiary institution**

| Target group          | Participants from universities | Participants from ITPs | Participants from PTEs | Participants from wānanga | Subtotal     |
|-----------------------|--------------------------------|------------------------|------------------------|---------------------------|--------------|
| e-learners            | 14                             | 14                     | 13                     | 0                         | 41           |
| Graduates             | 11                             | 3                      | 5                      | 0                         | 19           |
| Timeout students      | 8                              | 3                      | 5                      | 2                         | 18           |
| Current students      | 5*                             | 10                     | 2*                     | 6*                        | 21           |
| Lecturers and tutors  | 10                             | 3                      | 0                      | 1                         | 14           |
| Student-support staff | 7                              | 4                      | 0                      | 0                         | 11           |
| Community leaders     | N / A                          | N / A                  | N / A                  | N / A                     | 11           |
| e-learning staff      | 1                              | 1                      | 11                     | 0                         | 13           |
| <b>Total</b>          | <b>56*</b>                     | <b>38</b>              | <b>36*</b>             | <b>9*</b>                 | <b>148**</b> |

\* One participant attends the university and wānanga, and one participant attends the PTE and wānanga.

\*\* This total includes the 11 community leaders.

### Task 1 — Pacific learning

Of the 148 participants, 94 took part in task 1. The majority (65) were from Auckland. The researchers talked to community leaders, lecturers and tutors, student support staff, timeout and current students, and graduates.

### Task 2 — Pacific e-learning

Data collection in task 2 involved eight focus groups, 17 individual interviews with e-learners, and two focus groups and two individual interviews with e-learning staff.

The research team and the project manager agreed to focus on Pacific e-learners and e-learning staff from institutions in Auckland and Wellington, plus two e-learners from Hamilton and one from Christchurch.

As shown in table 5, task 2 included 54 participants (41 e-learners and 13 e-learning staff), of whom 45 were from Auckland (33 e-learners and 12 e-learning staff) and six from Wellington (five e-learners and one e-learning staff member).

**Table 5 Task 2 participants by location**

| Location     | e-learners | e-learning staff | Subtotal  |
|--------------|------------|------------------|-----------|
| Auckland     | 33         | 12               | 45        |
| Hamilton     | 2          | 0                | 2         |
| Wellington   | 5          | 1                | 6         |
| Christchurch | 1          | 0                | 1         |
| <b>Total</b> | <b>41</b>  | <b>13</b>        | <b>54</b> |

## Case studies

The researchers planned three case studies for this project, each one to involve a staff member and five students from an e-learning course with a high number of Pacific e-learners, from one university, one ITP, and one PTE. Unfortunately, one institution delayed ethical approval until the last week of November, by which time the students were unavailable. Students were also unavailable throughout November and December at the second institution. Following consultation with the project manager, the researchers decided to collect data for only one case study. This involved two focus groups with five e-learning staff and two focus groups with five e-learners.

## 2.5 Phase 3: Data analysis and report writing (tui)

The researchers analysed the qualitative data, reading and rereading transcripts of the interviews and focus groups. They recorded key themes that emerged, and used them to develop categories for presenting the results. They confirmed the key themes and categories using N6, a programme that analyses qualitative data.

Members of the research team prepared the final report, including selected quotes from the focus groups and interview transcripts to illustrate the key themes that emerged from the data.

## 2.6 Phase 4: Dissemination of results (luva)

This final report contains the results from phases 1 to 4. It represents one form of kakala, to be presented to ITPNZ. A second form of kakala, a summary of results, will be prepared and distributed to each participant in the study.

## 2.7 Strengths and limitations of the data

The results of this research are based on the views and experiences of 138 Pacific and 10 non-Pacific participants (who work with Pacific students). Task 1 had 94 and task 2 had 54 total participants. The 10 non-Pacific participants included nine e-learning staff and one student support staff. This is the largest sample of Pacific peoples ever involved in a study on Pacific e-learning in the tertiary sector.

## **Strengths**

A primary strength in the data is the representation of several groups within the tertiary sector:

- Pacific community leaders
- Pacific lecturers and Pacific tutorial staff
- student support staff (both Pacific and non-Pacific)
- Pacific timeout students
- Pacific students currently enrolled in a tertiary institution
- Pacific graduates
- Pacific e-learners
- e-learning staff (both Pacific and non-Pacific).

Second, this study considers a range of tertiary institutions. As will become evident in the literature review, most past studies on Pacific learning have focused on students in one type of tertiary institution, mainly universities.

Finally, focus group sessions at a community fono proved an effective research method. In particular, researchers and research participants could share information about the purpose of the research and listen to each other's views and experiences. The qualitative information gathered provided in-depth insights into the experiences and views of diverse groups of participants.

## **Limitations**

Any qualitative study has limitations. The ethnicity of the participants was not as varied as planned. The majority were Samoan and Tongan, followed by Cook Island. A wider range would have allowed more analysis on the diversity of Pacific learning. The study also planned but could not complete more than one case study. Several case studies, examining the views of e-learners and staff from a range of institutions and programmes, would have allowed for more analysis on what works generally for Pacific e-learners.

The study was also limited by timing. Because researchers could only collect data during examination time at the tertiary institutions, some students and staff could not participate. It was also harder at that time to organise focus groups, so much of the data was collected from individual interviews. When a focus group was used, it tended to include only two or three participants.

Finally, the study was limited to four locations in New Zealand, and sample sizes were relatively small. For example, out of the many Pacific lecturers and tutors in New Zealand, only 14 participated in the study. Consequently, the results of the study cannot be used to generalise across the wider Pacific populations.

Despite these apparent limitations, the findings of this study add to the body of research literature on Pacific learning and e-learning in the tertiary sector. Critical success factors for Pacific learners and e-learning, identified by this study, could effectively inform future policies and initiatives aimed at increasing access, participation, retention, and success of Pacific learners.

## 2.8 Key points arising from the design and methodology

The experience of this research has implications for other research involving Pacific peoples.

- Relationship building is important in any Pacific community. Existing relationships within the Pacific tertiary education community meant the research team could collect the data within the short time frames of this project.
- Flexibility is key in the use of research resources.
  - By conducting individual interviews, instead of focus groups of five or six participants, the researchers could meet participants when they were available. Also, some Pacific students who might be too shy to respond in a focus group could engage freely and share their experiences and views one-on-one.
  - Focus group sessions let the researchers and participants discuss the form as well as the content of the research. In a larger group, researchers could share information about the purposes and methods of the research.
- Time frames for research involving Pacific peoples should take into account the number of different ethnic groups. At least seven groups fall under the umbrella term 'Pacific peoples'. In order to ensure representation of all, researchers need time to identify, recruit, and work with each group.
- When setting time frames, researchers should also consider the different ethical requirements of educational institutions. Some institutions were happy to accept ethical approval given by other institutions, but a few required the research team to submit a special application.

## 3.0 Literature review

### 3.1 Introduction

The major aim of the literature review is to provide background on what works — in all modes of delivery — to increase access, participation, retention, and achievement for Pacific learners in tertiary education. The review includes research studies in the tertiary sector in New Zealand, from the past decade, focusing on the perspectives of Pacific educationalists. Due to time constraints, the research team could not access research on the tertiary sector in the Pacific nations.

The studies included in this review fall into one of three groups:

- studies commissioned and funded by the Ministries of Education and Health and the Education and Training Support Agency (Anae, Anderson, Benseman and Coxon, 2002; Coxon, Anae, Mara, Wendt-Samu, and Finau, 2002; Koloto, 2003; Pasikale, 1996; Pasikale and Yaw, 1998)
- studies initiated by tertiary education institutions (TEIs) to help their work with Pacific students (Clayton, Rata-Skudder and Baral, 2004; Kalavite and Hoogland, 2004; MIT Pacific research team, 2005)
- personal research studies by postgraduate students as part of the requirements for their degrees (Dickie, 2000; Iata, 2001; Davidson-Toumu'a, 2005).

These groups represent three key purposes of research in this area: to inform policy development and funding decisions, to enhance educational practices and work with Pacific students, and to contribute to the body of research on Pacific students' learning and success in tertiary education.

### Definitions

The researchers believe that, to discuss the research questions set out for this project, it is important to define some of the terms used.

#### Pasifika

The term 'Pasifika' is the latest label used in New Zealand, particularly in the education sector, to define New Zealand residents who originate from the Pacific nations of Samoa, Cook Islands, Tonga, Niue, Fiji, Tokelau, Tuvalu, and others.

As is well documented, 'Pasifika peoples' are by no means homogeneous (Coxon et al., 2002; Manu'atu, 2000; Mara, 1996; Ministry of Education, 2003). They are diverse at many levels. The Ministry of Education (2003) acknowledges that the term is one of convenience, used to encompass a diverse range of people, cultures, languages, intra-cultural differences, and historical links to New Zealand. Coxon et al. (2002) note that these diversities affect how Pacific learners and educational institutions interact.

'Pacific Islands', 'Pacific Nations', 'Pacific', and 'Pasifika' have all been used to refer to Pacific people and their education. This report generally uses the term 'Pacific', but in quoting the literature it adopts the terminology used therein. For instance, Pasikale (1996), Pasikale and Yaw (1998), and Kalavite and Hoogland (2004) use the term 'Pacific Islands'; John Dickie (2000) and Loama Iata (2001) use the term 'Pacific Nations'; Coxon, et al. (2002) and Anae et al. (2002) use the term 'Pacific'; and Clayton et al. (2004) use the term 'Pasifika'.

## Success, achievement, and completion

In the literature reviewed, writers use the terms ‘success’, ‘achievement’, and ‘completion’ interchangeably. This study uses the term ‘success’ in its research questions, acknowledging that it may mean different things to different people.

‘Completion’ may also have multiple meanings: passing all assessment tasks of a paper or unit in a course of study; or fulfilment of all the requirements for a qualification, such as a certificate, diploma, or a degree. Likewise, ‘achievement’ sometimes refers to completing a qualification.

From the student’s perspective, ‘success’ may mean completion of a qualification or a course of study. This report uses the term ‘success’ to mean both ‘completion’ and ‘achievement’.

The literature review focuses on five main themes:

- Pacific learning — experiences in the Pacific nations
- access, participation, retention, and success in tertiary education
- Pacific students’ experiences of tertiary education
- tertiary education and Pacific workforce development
- Pacific learners and e-learning.

## 3.2 Pacific learning — experiences in the Pacific nations

### Pacific educational concepts

The researchers maintain that any consideration of good practices for Pacific learning and Pacific e-learning must include an examination of key Pacific educational concepts.

#### Education as worthwhile learning

Education has been simply defined as ‘worthwhile learning’ by Konai Helu-Thaman (1999, 2002). She distinguished between formal education (organised, institutionalised learning such as schools, colleges, and universities) and non-formal education (organised but not institutionalised learning).

Since the 1980s, based on her Tongan education and roles as a teacher, teacher educator, researcher, and consultant, Konai Helu-Thaman has theorised, researched, and written on three educational concepts:

- *ako* (learning and searching) — also used to mean teaching; when schools were introduced in Tonga, the term *faiako* (making learning) was used to refer to the school teacher
- *’ilo* (knowledge) — denotes knowing, knowledge, or information; and implies learning or searching
- *poto* (wisdom) — before the introduction of schooling, simply meant knowing what to do and doing it well. In today’s world, a person is considered *poto* if they use *’ilo* gained through *ako* for the benefit of one’s group.

Helu-Thaman maintains that although the meaning of *poto* has changed, the underlying value for learning remains: it is purposeful — one is considered a *poto* if they use the *’ilo* to become useful to their family and country.

In her work to bring about cultural inclusiveness, in a university course on 'Educational theories and ideas', Konai Helu-Thaman (2000) discussed her students' analyses of vernacular educational ideas from various countries of the Pacific. The results showed similarities and differences among Pacific cultures. In the Samoan context, for example, learning is said to occur when the learner acquires something of value that enables them to function outside their personal limits. As in the Tongan context, the term *poto* is used to refer to someone who uses *iloa* (knowledge) in a beneficial way. Likewise, in Tuvalu society a person is considered *poto* if they are not only skilful and knowledgeable but also have the respect of the wider community.

In indigenous Fijian culture, the concept of *yalovuku* is used like the concept of *poto*. Capell (1957) and Nabete (1997) (cited by Thaman, 2000) suggested that *yalovuku* is considered to be the culmination of *vuli* (learning), a process which involves the acquisition of skills and knowledge.

Terewiariki, 1997 (cited by Helu-Thaman, 2000) notes different levels of knowing and knowledge among the people of Kiribati. These range from *atatai* (common knowledge, which all people are expected to be familiar with) to *wanawana* (the highest level of knowing and knowledge).

In all cases, the process of learning and achievement takes place in a context of shared cultural values. In order to understand each educational concept, one must understand the underlying values, such as:

- spirituality and the supernatural
- rank and authority
- kinship and interpersonal relationships
- restraints and context-specific behaviour
- love and respect for all.

The 2002 publication *Tree of Opportunity: Rethinking Pacific Education* presents the results of an April 2001 colloquium at the University of the South Pacific. In it, Pacific educators, including Unaisi Nabobo, Teweiariki Teaero, 'Ana Taufe'ulungaki, and Kabini Sanga argue for the urgent need to integrate Pacific values, ways of learning, attitudes, and knowledge into education in the Pacific.

In her article 'Pacific Education at the Crossroads: are there Alternatives?', Taufe'ulungaki (2002) indicates that traditional Pacific education is also 'worthwhile learning'. It is largely informal, contextualised, task-specific, practical, interactive, interpersonal, and lifelong. To survive and develop, individuals and their communities need traditional basic education, including the lifelong learning of essential values, knowledge, life skills, and cultural literacy. Taufe'ulungaki emphasises the need for the indigenous peoples of the Pacific to create their own pedagogy, symbolic orders, sources of authority, mediating structures, and appropriate standards in development and education — rooted in their own Pacific values, beliefs, assumptions, knowledge, and processes. These, she maintains, are not necessarily measured in economic terms. The University of the South Pacific, which represents 12 member states, is now beginning to consider seriously how it could reorient its research and teaching programmes to reflect some of these concerns and make them mainstream.

In a review of various works on emerging Pacific theory, Huffer and Qalo (2004) come to the conclusion that educators are busy looking for ways to successfully integrate Pacific students into western-educational institutions. The educators challenge institutions that see Pacific cultures and attitudes as a constraint or barrier to their mission rather than as an integral part of it.

### **3.3 Access, participation, retention, and success in tertiary education**

#### **Participation of Pacific learners in tertiary education**

As is well documented, the participation of Pacific students in TEIs is low compared to other groups in New Zealand society (Ministry of Education, 1995, 1998, 2001; McPherson, Spoonley, and Anae, 2001). One of the main reasons for this low participation is that a far higher proportion of Pacific students leave school without the minimum qualifications required for entry into TEIs (Pasikale 1996; Pasikale and Yaw, 1998).

Two reviews of previous research in Pacific tertiary education that are particularly relevant to this project are *Literature Review on Pacific Education Issues* (Coxon, Anae, Mara, Wendt-Samu, and Finau, 2002) and *Pacific Peoples and Tertiary Education: Issues of Participation* (Anae, Anderson, Bensen, and Coxon, 2002). The first report includes chapters on tertiary education and teacher education. The second report contains a literature review on studies relevant to participation before 2002. Since these two literature reviews, a limited number of studies on Pacific students in tertiary education have been published.

#### **Trends in Pacific student enrolment**

An analysis by the New Zealand Council of Educational Research (NZCER) of Pacific student enrolment in TEIs shows various trends, based on data available to the Ministry of Education (MoE) in August 2005. Hodgen (2005) reports some of these trends:

##### **Participation by type of TEI**

- In 2005, 36,851 Pacific students enrolled in TEIs; 61% were women.
- Almost two-thirds of Pacific students studying at tertiary level are at either an institute of technology or polytechnic (ITP) (37%) or university (28%).
- Enrolment at private training establishments (PTEs) is more popular among Pacific peoples than other ethnic groups (16%, compared with 14% of Māori and 9% of other ethnicities).
- Pacific peoples are a relatively large proportion of all students enrolled at colleges of education, PTEs, and wānanga.
- Since 2002, the percentage of Pacific students who attend wānanga has increased (10% to 15%), as has the percentage attending ITPs (30% to 37%); but the percentage attending PTEs has decreased (27% to 16%).

##### **Participation by ethnic group**

- At colleges of education, Cook Island Māori, Fijians, and Tongans are under-represented; whereas Samoans and Niueans are over-represented.
- Cook Island Māori are under-represented at universities and over-represented at wānanga.
- Fijians are over-represented at universities and under-represented at PTEs and wānanga.
- Niueans are under-represented at wānanga, but otherwise have participation rates similar to those for all Pacific peoples.

- Samoans have participation rates similar to those for all Pacific peoples, which is to be expected as they are the largest subgroup and so are the most important in determining the overall proportions.
- Tokelauans are over-represented at ITPs and under-represented at wānanga.
- Tongans are over-represented at universities and under-represented at wānanga.

### **Participation by type of course and enrolment**

- In 2002, roughly a quarter of the Pacific peoples studying at tertiary level were enrolled in courses at Levels 5–7. By 2005 this proportion had risen to about a third.
- In 2005, 564 Pacific students were studying at postgraduate level (eight or higher).
- Pacific students were more likely to study part-time (52%) than full-time, unlike Māori students (64%).
- Pacific students were more likely to study intramurally (81%, or 90% of equivalent full-time students (EFTS); compared with 63% Māori, and 79% of other students).
- The groups that were most likely to be in tertiary study when under 25 were Fijians (52%), Tongans (44%), and Samoans (42%); those least likely were Cook Island Māori (32%).

### **Participation in web-based courses**

- In 2005, 45% of all tertiary students had some degree of web access; the proportion of Pacific students was slightly lower at 41%. The level of integration with courses is low; with only 7% of Pacific students enrolled in web-based or web-enhanced courses, compared with 16% of all students.
- Cook Island Māori, 30% of whom study at wānanga, are more likely to have little or no web access.
- Fijians, 80% of whom study at university or ITP (40% at each), are more likely to be studying web-enhanced courses; the other groups show only slight variations from the trend for all Pacific students.
- A relatively large proportion of Fijians and Tongans study at university, where there is the most web access; and those studying at Level 5 or more have the highest levels of association with web-enhanced or web-based courses.

### **Barriers to tertiary education**

As well as reviewing the literature, Anae et al. (2002) conducted a study, commissioned by the Ministry of Education, on issues impacting on the participation of Pacific students in the tertiary sector. A sample of 111 took part consisting of 25 key informants, invited from selected TEIs and PTEs; and 86 community voices, including Pacific students who did or did not complete their tertiary studies, non-participants, and some Pacific community members. The researchers conducted case studies on models of success (for Pacific peoples) at the University of Auckland, Manukau Institute of Technology, and BEST Training (an Auckland PTE).

This study showed that most Pacific people moved to New Zealand to find a better life and to educate their children. Most Pacific parents saw the value of education for their children. Many migrated to New Zealand to give their children — and the family as a whole — the chance for a better life. The study concludes: 'Education success or failure is encouraged by high parental expectation and the value placed on educational achievement by a student's family.'

This study also revealed that some Pacific families sacrifice a lot, financially and socially, for their children to attend tertiary education. For some, respect for their parents' wishes for them to go to university encourages them to successfully complete their university studies. Consistently strong evidence proved the value that Pacific families place on education in general and, increasingly, on tertiary education in particular. This value is reflected in the parents' willingness to make financial sacrifices to fund their children's education (Anae et al., 2002). This finding is consistent with another study that showed that Pacific learners were motivated to learn because they saw the end 'outcome is successful in their learning activities so that they can contribute to their families' economic resources' (Pasikale, 1996).

Anae et al.'s review also discusses the AC Neilsen (1997) study, reporting three broad layers of barriers to participation. These were low motivation; attitudes, values, and life experience; and external factors such as course fees, student loans, and allowances. The following barriers applied specifically to Pacific learners:

- high cost of education
- unrealistic cultural demands from families
- little or no access to private study areas or opportunities in extended families
- lack of literacy in English
- lack of assertiveness by some cultures
- lack of culturally familiar courses
- lack of role models and mentors.

Anae et al. (2002) commented on the 'deficit approach' used in this study, indicating the need for researchers to examine their assumptions about Pacific peoples and learners. Other studies they report, such as McInnist et al. (2000), gave similar results. Generally, they showed non-completion to be associated with the following factors:

- poor choice of course or subject
- poor preparation, lack of readiness and commitment
- low-quality initial student experience
- student dissatisfaction with the university experience
- ineffective style and quality of teaching and learning
- excessive workload
- lack of fit between student capability and institutional demands.

### **Initiatives to increase access, participation, retention, and success**

In their review of the literature on Pacific education issues, Coxon et al. (2002) include a section covering two main groups of tertiary education issues:

- access and barriers to participation
- students' experiences of tertiary education.

The barriers to participation reported are consistent with those noted above by Anae et al. (2002). The students' experiences of tertiary education are reviewed later (in section 3.4). This section focuses on the initiatives in TEIs to increase access, participation, retention, and success of Pacific students.

### **Access**

The researchers interviewed 16 key people from three universities, two ITPs, one college of education, six PTEs, and Skills New Zealand. The interviews revealed the key information listed below.

- All TEIs had full-time or part-time appointments responsible for recruiting Pacific students.
- Although the TEIs used the Pacific media, including radio and advertising in community newspapers, word of mouth was the most effective method of communicating information to Pacific communities.
- Most respondents with a recruitment and liaison role identified the competition between institutions as a barrier. Some institutions have developed cooperative strategies to overcome this barrier — recruitment and liaison staff provide information about available programmes in a variety of institutions (not only their own).
- Bridging programmes provided by TEIs were successful in getting students to access TEIs.
- PTEs provided important opportunities to prepare students who had left school without adequate qualifications or skills for mainstream tertiary study.
- The high level of fees for MoE-funded programmes was a deterrent to enrolment at TEIs; the absence of fees on Skills New Zealand-funded programmes attracted Pacific students.
- Receiving a scholarship was a significant factor in students choosing to enrol at TEIs.

### **Retention and success**

Coxon et al. (2002) also reported the following key strategies that significantly impacted on students' retention and success:

- appointment of staff to support Pacific student learning — normally in the student learning centre or in recruitment and liaison roles
- appointment of Pacific academics — seen as good role models, mentors, and supporters of Pacific students
- Pacific-allied staff in frontline positions — represented a Pacific presence in the TEIs and provided important support for Pacific students in dealing with administrative issues
- the smaller environment of PTEs — allowed personal attention to students, significant peer groups of Pacific students, larger numbers of Pacific staff, and expectations that students can succeed
- use of Pacific languages — seen as a success factor by some, as a 'soft option' by others

- successful bridging and foundation programmes that helped students' retention and success, including:
  - student-centred teaching
  - teaching that ensured academic and social engagement between lecturers and students
  - commitment to high standards of achievement and expectations of students' success
  - access to resources; for example, opportunities to become familiar with the libraries, and help with access to text books and computers
  - access to pastoral care
  - programmes providing links from one level of qualification to the next.
- institutional knowledge — accurate knowledge of the expectations and norms of tertiary study
- Pacific presence — dedicating space for Pacific students, events, and associations (effective Pacific presence depends on the leadership of students and the time commitments of recruitment and liaison staff)
- Pacific support services and programmes made available through the Tertiary Education Commission (TEC) Special Supplementary Grant (SSG), for example, mentoring programmes, leadership programmes, targeted tutorials, and family-based programmes.

These results show a range of initiatives that have been and are being implemented to facilitate the access, retention, and success of Pacific students. Generally, the PTEs appear to provide an environment that is consistent with Pacific cultures and values; other TEIs vary in their provision for Pacific students.

### **3.4 Pacific students' experiences of tertiary education**

Studies on students' experiences in the TEIs tend to focus on student needs and how best to address them.

#### **Experiences at colleges of education**

Two studies reported on Pacific students' experiences in the colleges of education: Mara, Tuhipa, Falesima, and Greenwood (1996) in Auckland, and John Dickie (2000) in Wellington.

John Dickie (2000) investigated the needs of Pacific students in primary teacher training at Wellington College of Education. The study sought to review and challenge standard aspects of teaching and learning, and to find ways to improve the learning environment for better retention and completion. A sample of 21 students took part.

#### **Difficulties faced by students**

The results indicated that students had difficulty with:

- speaking out in class or in the group
- approaching the lecturers for help
- communicating in English, especially in academic writing.

Factors outside college that impacted on the students' success included large time commitments to family, church, and part-time employment.

### **Strategies students used to complete courses successfully**

The study showed that students used the following strategies to successfully complete courses:

- seeking support from their peers, both individually and in groups
- joining study groups
- approaching lecturers for help or clarification
- using good time management strategies.

### **Support for students**

Students preferred the following support options:

- learning support workshops based on needs identified by students
- Pacific students grouped together in class
- Pacific liaison people appointed to support Pacific students
- Samoan language classes.

Anae et al. (2002) noted that although the Mara et al. (1996) study was conducted at a different institution and time, the results were similar to those found by Dickie (2000).

### **Experiences at university**

Unlike the above studies, which involve more than one Pacific group, the study by Loama lata (2001) focuses on one group, that is, Samoan. In his master's thesis, lata investigates the experiences of Samoan mature students at Victoria University of Wellington (VUW). Eight Samoan mature students (four male and four female) took part in a series of face-to-face interviews. Participants had enrolled under the special admission criteria at VUW. Five aspired to bachelor's degrees, three to graduate study. This research provided insights into students' decisions to undertake tertiary study, their aspirations to complete degrees, and the obstacles they encountered.

### **Reasons for returning to study**

lata's results showed students had multiple reasons for undertaking university studies, including:

- career changes
- being displaced from jobs
- preparation for future employment
- personal development.

The students chose their degrees and subject majors based on previous professions or areas of interest.

## **Students' concerns and needs**

The study showed that seven out of eight students faced an initial obstacle in being reluctant to enrol in university study. They were very anxious about their likelihood of succeeding in tertiary education, lack of knowledge about the university system, and limited knowledge of the English language. They also revealed concerns about managing multiple roles, finances, and feeling lonely and isolated.

Once enrolled, the main concern was time management due to the multiple roles they played in their families and communities. They were also concerned with the need to:

- understand the university system
- develop (or reacquire) adequate study skills
- have access to learning support services, flexible childcare services, Saturday classes, and computer loan programmes.

The study showed that students wanted greater understanding of their educational and cultural backgrounds and learning styles, more encouragement, and inclusion of their historical and cultural perspectives into the framework of tertiary teaching and learning. Furthermore, they wished for more Samoan administrative and teaching staff and students, as well as extra space for Pacific students on campus.

Despite these constraints — and other situational, personal, and institutional barriers — the participants developed strategies to make life at the university more manageable. As also reported by Dickie (2000), students benefited by arranging more effective study habits, such as:

- organising small study groups with friends
- approaching lecturers and tutors for one-to-one discussion
- adopting effective ways of collecting and disseminating information
- integrating student life with other parts of their lives, for example, studying at odd hours of the day and night so as not to disrupt their family life.

Anae et al. (2002) reviewed a study at the University of Auckland by Anae and Suaalii (1996), which investigated Pacific students' use of the following student support services:

- Pacific Liaison office
- Student Learning and Support Centre
- Fale Pasifika
- departmental and general libraries
- departmental Pacific liaison tutors
- departmental student representatives.

The study showed that students were more likely to use the general library, Student Learning and Support Centre, departmental Pacific tutors, and Pacific liaison tutors. It also showed that support services for Pacific students were fragmented. One of the key recommendations was that departments with many Pacific students provide departmental Pacific tutors and a Pacific liaison tutor to cater for their needs.

## **Experiences at institutes of technology and polytechnics**

Kalavite and Hoogland (2004) reported the results of a study conducted by Kalavite at the Waikato Institute of Technology (Wintec). Pacific students at Wintec included both international students from the Pacific and New Zealand residents. Concerned about an international student who had her Aotearoa scholarship terminated because she had failed half her course, Kalavite conducted the study to find out:

- why some students who entered Wintec with promising credentials failed
- how she could support these students in her role as the Pasifika Coordinator at Wintec.

The study interviewed six Pacific students (three international and three local) and two staff members, then sent transcripts of the interviews to the participants to correct and comment on before analysing the data.

The study found four groups of constraints to academic achievement:

- cultural — culture shock, cultural alienation and isolation, difficulties in acculturation, culture conflicts or clashes, and lack of family support
- economic — poverty, extended family, and community obligations
- academic — low academic qualifications, language barriers, limited study and communication skills, lack of academic support, and unfamiliar educational pedagogies
- bureaucratic — politics of the New Zealand education system and each institution.

These findings are consistent with other research reviewed by Anae et al. (2002).

Kalavite and Hoogland (2004) focus on communication skills needed for academic success (one of the identified constraints). They divide these into interpersonal skills, literacy skills, study skills, and computer skills.

Various initiatives have been put in place in Wintec to address the needs of Pacific students, including:

- one-to-one consultation between students and the Pasifika Coordinator
- weekly group meetings for Pacific students to touch base with other students and Pacific support staff
- quarterly newsletters
- meetings with Pacific communities
- establishing Te Kete Konaē (Māori and Pasifika Learning and Support Centre).

The authors concluded that further study should research retention, and how these initiatives have impacted on Pacific students' academic success.

## **Experiences at PTEs**

Two research studies funded by the Education and Training Support Agency reported on the experiences of Pacific learners at PTEs (Pasikale (1996); Pasikale and Yaw (1998)). Both studies were published as research monographs. In the first monograph Pasikale (1996) discussed a study involving a sample of 80 PTE students (51 from Auckland and 29 from Wellington). The main aim of the study was to collect information on students' experiences as learners with a special focus on gender-based and culture-based influences.

The study revealed a strong student preference for teacher-facilitated learning. Students considered teachers' awareness and empathy as important contributing factors to their success. Most students wanted to be successful in their learning so that they could contribute to their families' economic resources. The study revealed some differences between the experiences of younger learners born and educated in New Zealand and older Pacific learners, and suggested that more research was required in this area.

Pasikale and Yaw (1998) reported on the experiences of five PTEs in providing alternative education programmes for Pacific learners. All showed that their success was based on incorporating emotional, spiritual, and cultural elements into their practices, thereby validating the learners and their life experiences. The organisations also made an effort to prepare the learners and resolve personal problems affecting the learning situation. They let them know that they were in a safe learning environment, where learning occurred through doing. Once their self-confidence was raised, learners were able to set achievable goals and develop a love of learning.

Both studies demonstrated the success of the approach that Konai Helu-Thaman and other Pacific educators had supported at the 2001 colloquium on Rethinking Pacific Education in the Pacific Nations. This approach involved incorporating and integrating Pacific cultures, values, ways of learning, attitudes, and knowledge into education in the Pacific (Taufe'ulungaki and Sanga, 2002).

### **3.5 Tertiary education and Pacific workforce development**

The Government's capacity-building policies of the past 6 years have led to various initiatives in different sectors to develop and implement strategies aimed at increasing the number of Pacific people in the workforce.

The Pacific Teacher Education Supply Strategy contained in the *Pasifika Education Plan* (Ministry of Education, 2001) is one example of an initiative in the education sector. In the Pacific health sector, there is a drive to increase and build the Pacific health workforce, including Pacific doctors, nurses, mental health workers, and healthcare assistants. The TEIs play key roles in building the capacities and capabilities of the Pacific workforce in New Zealand.

#### **Pacific nursing students' participation in tertiary education**

The National Survey of Pacific Nurses and Nursing Students was initiated by the Samoan Nurses of New Zealand Inc. and funded by the Ministry of Health (Koloto, 2003). It focused on identifying the training needs of 443 Pacific active nurses (those registered with the Nursing Council of New Zealand), 84 non-active nurses (those with nursing qualifications, but not active in the nursing workforce), 158 nursing students, eight nurse lecturers and educators and 15 nurse managers.

This literature review focuses on the perspectives of the nursing students and the nurse lecturers and educators. Each participant answered a questionnaire with both closed and open-ended questions.

#### **Access to nursing education**

The survey showed:

- 27% of the students enrolled in the nursing programme through a training institution's recruitment programme
- 72% enrolled based on their own interests and choices

- 1% did not respond to the survey.

Reasons given for enrolling included:

- passion about caring for people (55%)
- encouragement from family members to become a nurse (20%)
- previous employment as a nurse or midwife (9%)
- mother being or having been a nurse (7%).

The findings implied that for the majority of the students (73%) who went into the nursing programme, the TEI recruitment programmes might not have been useful — the students already had the motivation and goals to enrol. The study also provided insights into some of the students' motivation. The passion to serve and be useful, through caring for people, was a major motivating factor. The encouragement of family members and the desire to follow in the footsteps of their mothers also contributed to their decision to take up nursing studies.

### **Use of support services**

Sixty-four percent of the nursing students were aware of specific support programmes for *all* Pacific students in their institutions. Support for Pacific students reported by nursing students included Pacific nursing lecturers, mentoring programmes, and the learning centre.

About 80% of students knew about the support programmes available specifically to Pacific nursing students, but only 41% said that they had used them. Having knowledge of the support system did not necessarily lead to its use.

Students gave the following reasons for not making use of support services:

- being a part-time student
- not seeing any need to use these services
- lack of information on support services
- hearing from other students that they did not get much help from the services
- other responsibilities such as working and full-time parenting
- lack of time
- inadequate support.

Even though support services were available in the institutions, various factors in the students' lives prevented their access and use. These factors need to be taken into account when planning strategies to increase student access and use of support services.

### **Mode of delivery for support services**

About 83% of nursing students who had used the support services found the programmes effective in meeting their needs. The most effective modes of delivery were small-group discussions, followed by one-to-one tutorials with staff. Support with their study skills was the area students most needed.

### **Factors contributing to students' success**

The most significant factor contributing to students' success was the support offered by lecturers and tutors. The students' priorities were for lecturers and tutors to be accessible, approachable, encouraging, and available to help however and whenever needed. Other factors included:

- support from friends and family
- positive attitude
- motivation to succeed
- hard work
- extra tutorials
- encouragement and support of Pacific staff
- regular attendance at lectures and tutorials
- use of the learning centre
- well-equipped libraries
- belief in God and prayers
- support of staff in the clinical setting.

### **Nursing lecturers in the tertiary sector**

There is little research on the needs and experiences of Pacific staff in the tertiary sector. However, Koloto (2003) provided insight into the needs of Pacific nurse educators.

#### **Success factors**

The views of Pacific nurse lecturers are vital to the development of the Pacific nursing workforce. Some nurse educators see themselves as key change agents in the institutions that are training Pacific nurses. They attribute their own success as lecturers to being well mentored and supported, as well as having:

- knowledge and / or experience of the content, materials, policy, and procedures within the clinical facility and the system in general
- passion to share knowledge with Pacific students
- friendliness, approachability, genuineness, empathy, and a good sense of humour
- satisfaction from witnessing students' achievement and greater understanding of Pacific course contents
- appropriate academic credentials
- ability to advocate for Pacific students
- multilingual abilities
- enjoyment of the challenge
- national recognition for their work
- positive responses from students

- good time management skills
- autonomy
- credibility as a change agent within the institution.

The experiences of the nurse educators suggest that the most critical factors contributing to their success in this profession are relevant knowledge of the curriculum, experiences in different clinical settings, and a passion to share that knowledge.

### **Inclusion of Pacific perspectives in the curriculum**

Two key concerns for nurse educators were including Pacific perspectives in the curriculum and their departments' operations; and employing more than one person to teach, support, and advocate on behalf of Pacific students. (Five participants in the study, all women, were the sole Pacific nurse lecturers in their institutions.)

Other issues identified as critical to training current and future Pacific nurses included:

- cultural awareness
- appointing Pacific lecturers, tutors, mentors, and leaders
- helping students for whom English is a second language
- study support networks
- financial support and scholarships
- free courses or reduced fees
- building students' confidence
- recognising qualifications and experience from the Pacific nations
- developing courses for Pacific students.

A major issue is the evidence that employing just one staff member to oversee all things Pacific does not work. To comprehensively cover Pacific perspectives and content, a curriculum must include Samoan, Cook Island, Tongan, Niuean, Fijian, Tokelauan, and other Pacific cultural values and knowledge. This should be a priority for all who work in the Pacific education sector. Key issues that are the responsibility of the TEIs include: cost and affordability of training programmes, 'English as a second language' programmes, and study support networks.

A key issue at the level of the Nursing Council of New Zealand (the regulating body for registered nurses) is recognising prior learning and qualifications. All key stakeholders — Pacific nursing students, Pacific nurse educators, nursing departments at TEIs, and the Nursing Council — must come to a common agreement that such knowledge is 'worthwhile to learn'.

### **Business entrepreneurship for Pacific learners**

In 2004, a Pacific research team at Manukau Institute of Technology (MIT) studied what the institution could do to prepare Pacific students for business entrepreneurship. The project was an MIT initiative in partnership with the Pacific Business Trust (MIT Research Team, 2004). It had three key components:

- a literature review — gathering information on Pacific mindsets and preparedness for business entrepreneurship; determining the needs of minority students in business and educational settings; and identifying successful entrepreneurial behaviours

- focus groups — eliciting the responses of 70 Pacific students to nine case studies (scenarios) to build a profile of Pacific students
- face-to-face interviews — exploring the views of 11 successful Pacific entrepreneurs on factors contributing to their success.

The literature review showed that:

- the dominant, host culture needs to learn about, affirm, and celebrate minority group cultures
- entrepreneurship is universal, not culture specific
- Pacific students should be comfortable, challenged, affirmed, accepted, motivated, and captivated by culturally attuned tutors — relationships with tutors, classroom interactions, advice given out of class, and teaching style are all significant
- strengths inherent in Pacific cultures provide a strong foundation for entrepreneurship (these include sense of community, willingness to work hard to succeed, motivation to serve family and community, humility to learn from others, biculturalism, and enterprise).

The fono (focus groups) identified these characteristics of Pacific students:

- spirit of generosity, expressed in readiness to share material possessions, hospitality, and help when asked
- importance of family, and difficulty mixing family and business
- Christianity
- need for a 'safe learning environment', especially one with positive attitudes towards Pacific students
- modelling as a key way of learning, seeing the tutors do the tasks themselves
- a huge gap between family background and the business world where they intend to work.

The views and experiences of Pacific entrepreneurs included:

- keys to their success in business: relationship with God, hard work, working long hours, being at the right place at the right time, working and being around the right people
- family members, mentioned by most, as key contributors to their success as Pacific entrepreneurs
- recommendations for Pacific tertiary students to become successful:
  - gain experience in both their industry and the business environment before embarking into business
  - have a mentor to support them in their business life
  - begin to learn practical applications during their tertiary studies and focus on the benefits of running a successful business
  - succeed not only for themselves but for their family and community
  - commit to an idea, and be prepared to sacrifice and surround themselves with people who share their beliefs
  - learn the western systems of management, but use them in a Pacific way.

The study outlined some key recommendations for MIT and other tertiary institutions.

## 3.6 Effective teaching strategies

Only one study focused on actual teaching and learning processes: the master's thesis of Ruth Davidson-Toumu'a (2005). Based on her experience working with Pacific students in her role as a student learning support staff member at Victoria University, she explored ways of enhancing students' academic reading and writing skills.

### Academic reading and writing skills

Davidson-Toumu'a (2005) conducted case studies with three Pacific students. Her thesis aimed to raise awareness of the potential strengths and weaknesses of Pacific students as readers, by systematically building up reading profiles of the three participants. In her work, she saw many students from non-English-speaking backgrounds struggle with the reading demands of tertiary study in English, many having entered tertiary study with both ineffective and inefficient academic reading strategies, skills, and habits.

For this study, she investigated the Pacific students' general academic reading strategies, skills, and habits. She also looked into the perceived effects of the participants' cultural, linguistic, and literacy backgrounds on their ability to perform the academic reading tasks of 'reading to summarise'.

Several clear factors enabling academic reading at the tertiary level emerged:

- high internal motivation to succeed
- high family expectation
- a genuine desire to learn
- resourcefulness, developing idiosyncratic approaches to text
- sustained and effective comprehension-monitoring techniques
- strategies to choose relevant reading for a particular research or assignment question.

The study revealed that although summarising text was central to most academic reading tasks for tertiary study, participants disliked and avoided it. They had difficulty in reading to summarise and writing a complete and accurate summary; moderate success in identifying main points in a piece of discourse; and varying abilities in distinguishing main ideas from supporting details. Participants who could distinguish between main and supporting ideas had trouble distinguishing between ideas that were merely important and those essential to the meaning of the text.

Participants also had trouble accurately reproducing the original meaning and focus of points extracted from the text; they strongly favoured directly copying relevant words or phrases, but had difficulty whether copying verbatim or paraphrasing.

### Support and development strategies

As appropriate support and development strategies for Pacific students at the tertiary level, the researcher suggested:

- teaching word-guessing techniques and strategies at the tertiary level to improve vocabulary (as a short-term solution)
- putting in place opportunities for successful vocabulary development, such as extensive reading programmes in schools (as a longer-term solution)

- improving the relatively slow reading speed and developing the fluency of Pacific students by encouraging them to practise and read frequently
- teaching key sub-skills of reading to summarise
- teaching reading strategies, modelling, and opportunity for 'scaffold practice' to identify the most important points in text
- encouraging guided reading for set academic, course-related texts; for example, preparing sets of text-specific questions designed to guide the student reader through the set text, activating prior knowledge and encouraging interaction with the text
- using direct negotiation of cognitive-clarity issues and teaching reading systematically to make sure students understand key points
- involving and empowering Pacific parents, families, and support networks by discussing the role and nature of academic reading at the tertiary level.

The researcher maintained that implementing these strategies in culturally appropriate ways would be greatly improve academic achievement and retention rates for Pacific tertiary students.

### **3.7 Pacific e-learning**

The literature search found very few studies on Pacific e-learning, confirming that research into Pacific e-learning in the tertiary sector is in its infancy. The research team was aware, however, of new research underway on e-learning with Pacific students and staff in the institutions and community:

- the Ngā Kīwai Kete e-learning website at the Faculty of Education, University of Auckland
- a research project at Whitireia Community Polytechnic
- a Canterbury Pacific Ltd e-learning strategy for the Pacific peoples in Christchurch and the Canterbury region.

The Ngā Kīwai Kete e-learning website and associated 'e-learning toolbox' and resources are available for blended e-learning and face-to-face professional development. Other work on Pacific e-learning is not yet available to the public.

This section reviews two studies on Pacific e-learning:

- a study at a PTE by Clayton, Rata-Skudder, and Baral (2004)
- a study at a polytechnic by Kathryn Hall Research and Evaluation Ltd (2005).

#### **Students' perceptions of online learning**

Using both quantitative and qualitative research methodologies, Clayton et al. (2004) studied a group of 32 (6 male and 26 female) Pacific students' reactions to online learning. The study used an online form to gather information and a five-point ordinal scale to investigate students' perceptions of:

- their computer competence
- the appeal of the material presented
- the organisation of the material presented
- their perceptions of the benefit of online learning.

In general, students enrolled in an e-learning programme were provided with the information and communication technology (ICT) equipment, including computers, printers, internet connections, computer desks, and chairs; and participated in a 3-week induction programme that included team building, computer training, and strategies for becoming a successful e-learner.

### **Computer competence**

The study found that although the majority of the students were confident and technologically capable of participating in the e-learning environment, they felt unable solve error messages caused by software or hardware failures while learning. Therefore, a technical helpdesk could be critical to continuing success for this group. These results are consistent with the findings reported by Clayton (2003), that to fully participate in e-environments, learners have to be technologically literate, confident, and competent.

### **Information design and appeal**

The study showed that students found their learning enhanced by well-formatted text, images, and use of colours in tables and pages. The results suggest that materials used for Pacific peoples should be well designed, appealing, and illustrated extensively with graphics.

### **Order and organisation**

The students appreciated the learning objectives being clearly defined, the course well organised and easy to follow, and the content relevant. They also found a summary of each topic useful along with clearly visible links to information on the internet.

### **Impact on learning**

In general, students found the online learning to be stimulating and felt that they were in control of their learning. Whilst all 32 participants were satisfied with their e-learning experiences, 11 did not believe that they learnt more in the online environment. Another 12 agreed that online learning enhanced but should not replace face-to-face teaching. Overall, the study suggests that face-to-face teaching should form an important part of the e-learning environment.

## **e-learning and Pacific students' participation in tertiary education**

The qualitative component of the study involved nine students who completed the Advanced Certificate in Business Administration e-learning course between 2002 and 2003. Clayton et al. (2004) used focus group sessions to explore four key issues identified by the TEC Strategy (Ministry of Education, 2002b) as barriers to Pacific learners' participation in tertiary education. These issues were:

- socio-economic factors
- the effects of the 'digital divide'
- appropriate and supportive environments
- lack of recognition for Pacific communities.

### **e-learning as a way to increase participation**

The study showed that e-learning is an attractive option that would appeal to students with low income, work commitments, potential childcare costs, and family commitments and responsibilities. Blended delivery options have the potential to increase Pacific student participation in tertiary education.

### **Effects of the 'digital divide'**

The study showed that as students became familiar with the use of computers and the internet, they tend to appreciate them. Having access to the technologies at home also positively impacts on their families and the wider community. The results showed that having well-resourced courses, with ICT equipment provided in the cost-free structure, not only introduced Pacific learners to new technologies but also encouraged their families to participate in tertiary education.

### **Culturally appropriate and supportive environment**

The participants found similarities between e-learning class and family relationships. They felt responsible for their roles within the class, as in a family. The study indicates that face-to-face academic support and team-building sessions should be an integral element of blended courses offered to Pacific peoples. Online support also improved students' motivation and achievement in the e-learning environment.

### **Lack of recognition of Pacific communities**

One key finding that emerged from this study was the need to recognise the diversity of Pacific communities. The study suggested that TEIs should take into account the needs of all Pacific students, not just the larger Pacific groups.

The authors concluded that growth of online educational opportunities for Pacific students needs to be matched by a similar growth in research on their e-learning.

### **Students' access to computers**

As part of its plan to increase the number of Māori and Pacific students, the Open Polytechnic of New Zealand commissioned a study to identify and measure the barriers and levels of access to technology. This study, part of its 2005 Special Supplementary Grant Plan (SSG), was undertaken by Kathryn Hall Research and Evaluation Ltd (2005).

The researchers conducted individual face-to-face interviews with 14 Māori and Pacific students and telephone surveys with 181 participants (121 Māori and 69 Pacific). This sample represented 42% of all Māori and Pacific students in South Auckland enrolled at the Open Polytechnic in May 2005. After the survey, the researchers interviewed four students to gather a more in-depth understanding of the survey findings. The project's aim was to inform the institution's Māori and Pacific Learning Support Advisor how best to meet the needs for students to access computer technology and develop the skills to use it in their tertiary study.

Of the 69 Pacific students, 90% had access to a computer at home, 70% for more than 2 years, and 20% for less than a year. About 40% had more than one computer at home, nearly 26% had two, and 11% had three. About 80% had a printer, 74% had a CD-ROM drive, and 54% had access to a scanner.

These findings suggest relatively high access to computers in the home by this particular group of Pacific students. Given that the Open Polytechnic is a distance-learning organisation, it seems reasonable to expect that Pacific students enrolled there would have access to a computer. The findings of the study cannot be generalised to the overall Pacific student population in ITPs. However, the study provides some indication of how an ITP can use its SSG funding to develop learning support programmes to ensure retention of Pacific and Māori students.

## 3.8 Summary and discussion

This literature review is by no means a comprehensive review of all research on learning and e-learning in the tertiary sector in the Pacific nations and New Zealand. However it does provide important findings on Pacific students' access, participation, retention, and success in tertiary education. While most of the studies reported barriers to participation (Anae et al., 2002; Coxon et al., 2002, Dickie, 2000; Kalavite and Hoogland, 2004), this review focuses on factors identified as critical to the success of students. This does not mean that the barriers do not need our attention; rather the aim is to bring to the fore those factors that contribute to students' success in learning and e-learning at TEIs.

### Critical success factors for Pacific learning

The following key factors were considered critical to students' success.

#### Incorporation of Pacific cultures and knowledge into tertiary education

The work of Pacific educators such as Konai Helu-Thaman, 'Ana Taufe'ulungaki (2002), and Kabini Saga (2002) points to the need to incorporate Pacific cultures and values into formal education. In the analysis of the Tongan educational concepts of ako (learning), 'ilo (knowledge), and poto (wisdom), Helu Thaman reports similar concepts in other Pacific cultures. One of the key messages is that learning is purposeful — the role of the learner is to gain 'ilo in order to become poto. To be considered poto, a person must use the 'ilo gained from ako to become useful to their family, community, and country.

In the New Zealand context, research on students' experiences at ITPs (Pasikale, 1996, Pasikale and Yaw, 1998, Clayton et al., 2004) supports Helu Thaman's viewpoint. In a family-type, supportive, learning environment such as those provided in PTEs, Pacific students succeed. Clayton et al. (2004) demonstrated the same results for Pacific e-learners. Based on the experiences and views of Pacific nursing students and nurse educators, Koloto (2003) reported that Pacific perspectives in the nursing education curriculum were key to Pacific nursing students' success. Similarly, the MIT Research Team (2004) identified aspects of Pacific culture that were important for the development of Pacific entrepreneurship.

#### Peer support

Various studies confirm the significant role played by peer groups in students' success (Dickie, 2000; Iata, 2001; Anae et al., 2002; Coxon, et al., 2002). The underlying values that guide the work of Pacific learners are consistent with the values of Pacific cultures in general. A sense of belonging, sharing, support, and responsibility for the group may explain why working in a peer group was critical to many students' success.

#### Staff

The roles of academic staff and student support staff as mentors and supporters of students' learning were also found to be critical to students' success. Staff members who were accessible, approachable, encouraging, and available to help whenever needed contributed to students' success (Dickie, 2000; Iata, 2001; Koloto, 2003). Teachers' awareness and empathy were also considered important factors by Pacific PTE students (Pasikale, 1996; Pasikale and Yaw, 1998).

## **Students' motivation**

The literature also suggests that students' motivation and confidence are critical to their preparedness for tertiary study and ultimate success. Davidson-Toumu'a (2005) showed that high internal motivation to succeed and a genuine desire to learn helped students in a programme to enhance their academic reading skills. In fact, all studies reviewed mention students' motivation as a key factor (Anae et al., 2002; Coxon et al.; Dickie, 2000; Iata, 2001; Koloto, 2003).

## **Initiatives to increase students' access, participation, and success**

Different TEIs have implemented different initiatives. Some are implemented by the institutions, such as learning support centres and bridging or foundation studies programmes. Others are the result of the TEC Special Supplementary Grant to increase retention of Māori and Pacific students. Initiatives include appointing recruitment and liaison staff and mentoring programmes to dedicated space for Pacific students and staff. Features of successful bridging and foundation programmes include:

- student-centred teaching
- teaching that ensures academic and social engagement between lecturers and students
- commitment to high standards of achievement and expectations of students' success
- access to resources; for example, opportunities to become familiar with the libraries, and help with access to text books and computers
- access to pastoral care
- programmes providing links from one level of qualification to the next.

## **Critical success factors for Pacific e-learning**

Clayton et al. (2004) suggest that access to technology — such as computers, printers, internet, and IT-support staff — is critical to students' e-learning success. Further, while e-learning may enhance face-to-face teaching, it should not replace it. Given that Clayton et al. (2004) was the only study that examined students' experiences and perceptions of e-learning, more research is needed to inform our understanding of critical success factors that contribute to Pacific students' success in the e-learning environment.

## **Implications for future research**

The literature review provides important insight into factors that contribute to Pacific students' success at the TEIs; but findings on aspects of the actual learning process and the e-learning environment are limited. This suggests the need for further research into the items listed in the four sections that follow.

- Variations in Pacific student access and participation by ethnic group
- Investigation is needed into, for example, reasons and contributing factors for the high enrolment of Cook Island Māori in wānanga, Samoan and Niuean students at colleges of education, and Fijians and Tongans at university. We need to closely examine and identify reasons for variation in participation and access and to develop strategies that will ensure success for all Pacific ethnic groups
- Teaching strategies
- Further research is needed into effective strategies for teaching academic reading, computer literacy, and information literacy.

- Pacific students' access to ICT equipment
- The Kathryn Hall Research and Evaluation Ltd (2005) survey showed a high rate of access to computers for Pacific students enrolled at the Open Polytechnic of New Zealand, but this result cannot be generalised to the overall Pacific student population.
- Incorporating Pacific values, practices, and knowledge into tertiary education
- Only one study reported best practices of Pacific staff members from which institutional policies and practices could be developed (Koloto, 2003; on factors contributing to the success of Pacific nurse educators). Future studies should examine how staff successfully incorporate Pacific values, cultures, and knowledge into curriculum contents, policies, and practices in TEIs; and how staff successfully work with Pacific students.

## 4.0 Pacific learning

### 4.1 Introduction

This chapter presents and discusses the findings of four main aspects of Pacific learning from the perspectives of Pacific students, timeout students, graduates, lecturers and tutors, student support staff, and community leaders:

- critical factors that contribute to students' success in tertiary education
- critical factors that impede students' success in tertiary education
- initiatives aimed at increasing access, participation, retention, and success of Pacific students
- 'Pasifika pedagogy'.

Relevant responses from Pacific e-learners on Pasifika pedagogy are also used to illustrate the key points of discussions.

### 4.2 Critical factors that contribute to students' success in tertiary education

Participants identified a range of critical factors that contributed to students' success in tertiary education. These factors may be classified into seven main categories. Table 6 details the number of participants from each of the target groups who provided a particular type of response.

**Table 6 Distributions of participants by critical success factor**

| Critical success factors                                 | Current students<br>n*=21 | Timeout students<br>n=18 | Graduates<br>n=19 | Student support Staff<br>n=11 | Lecturers / Tutors<br>n=14 | Community leaders<br>n=11 |
|--|---------------------------|--------------------------|-------------------|-------------------------------|----------------------------|---------------------------|
| Students' preparedness for tertiary study                | 7                         | 18                       | 12                | 6                             | 7                          | 3                         |
| Institutional environment, policies, and support systems | 5                         | 10                       | 6                 | 10                            | 5                          | 1                         |
| Family support   | 4                         | 12                       | 7                 | 4                             | 3                          | 2                         |
| Quality staff  | 2                         | 12                       | 3                 | 2                             | 5                          | 1                         |
| Peer support   | 3                         | 8                        | 5                 | 5                             | 1                          | 2                         |
| Course delivery  | -                         | 3                        | 3                 | 1                             | 1                          | 1                         |
| Community support  | 1                         | -                        | -                 | 1                             | -                          | -                         |
| <b>Total</b>   | <b>22</b>                 | <b>63</b>                | <b>36</b>         | <b>29</b>                     | <b>22</b>                  | <b>10</b>                 |

\* 'n' stands for total number of participants from each target group. Because some participants provided more than one response, the total may be *greater* than the actual number of participants; for instance, *one* community leader provided *several* factors in this response: 'Planning, face-to-face advice, the materials and resources, one-on-one for students and tutors, access to finance to afford the fees, and ongoing support from family.' [Community leader 5]

## **Students' preparedness for tertiary studies**

Students' preparedness for tertiary studies was the most frequently cited group of factors contributing to their success in tertiary education. These responses encompass a variety of attitudinal factors, skills, and behaviours, including:

- students' motivation, commitment to study, and determination to succeed
- attendance at lectures and engagement with all class work
- reading and literacy skills
- completing assignments
- time management, planning, goal setting, and organisation of the time to achieve goals
- language skills
- critical thinking skills
- knowledge of how to access the support services that are available for students
- knowledge of how to use computers
- confidence in the course of study
- strengths from cultural upbringing
- beliefs in God.

Another factor related to preparedness for tertiary studies is whether students have sufficient funds to finance their studies.

All of the 18 timeout students discussed factors related to their preparedness for tertiary studies, indicating perhaps that based on their personal experiences they could easily identify a range of attitudinal factors and skills required for success in tertiary education. Likewise, 12 out of 19 graduates shared factors relating to students' preparedness to participate and be involved with tertiary education. About half of the lecturers and student support staff focused on issues relating to students' preparedness for tertiary studies.

One timeout student described her sources of motivation and self-confidence:

My tutor and my father have been instrumental in my success because they always believed that I was capable of achieving academically. I remember my father typing up these inspiring quotes for me to stick up on my wall and the one quote that I recall, 'God makes the impossible possible'. I guess the message that Dad always drove home to us was to apply yourself and give things a real honest go; never let other people or obstacles get in the way of achieving what you want and not to give up. My dad has always been on the sidelines cheering me on whether it was in sport or with my studies and exams. When I had exams my mum or dad would make me coffee or Milo and make me breakfast with words of encouragement like 'c'mon go for it ... you can do it'.

My tutor in college was an amazing woman, being someone from outside our family. She worked with me on my study and exam techniques. That is, how to structure an essay, or she would get the Shakespearean books on video and we would discuss the themes and characters. She really knew how to help me, and what it was that I struggled with. It would be things like exam techniques, and really studying the questions properly so that I answered them rather than how I felt. At school teachers just treated a lot of us Pacific students like we didn't know anything. My tutor and my parents really empowered me with self-confidence and that has always remained with me throughout my tertiary experience.

[Timeout student 8]

Note that although Timeout student 8 was categorised as a timeout student for this study, she was also a graduate and was taking time out from her postgraduate studies. Her response highlights the significance of the support of key people in her life (her parents and tutor). Their beliefs that she 'was capable of achieving academically' contributed to her success. Her father's expectation of success was followed through with appropriate actions such as preparing quotes and encouraging her along the way. His presence in her educational activities provided her with the self-confidence necessary for success in tertiary education. That self-confidence has remained with her throughout her life.

This student's tutor was also a critical factor in her success, helping her with examination and study skills and techniques. Knowing how to help was an essential element of the tutor's support and preparation. Tutors should fully understand and be prepared with the appropriate skills and knowledge to address students' learning needs in any learning situation.

Unlike the above timeout student, whose main sources of motivation came from parents and tutor, one student focused on her own self-determination and motivation. Her family situation acted as a motivating factor for success in tertiary studies. She explains:

Own determination and motivation to study. Seeing the future and how I am going to take care of my family motivates me to succeed. Not being ashamed of asking questions. The support of my family, for example, allowing me to spend long hours in the library. Encourage children to study rather than going to family events or gatherings.

[Wānanga student 10]

Her family supported her as a student by understanding her need to focus on her study rather than on other family events. Family support is a key factor which will also be discussed later in this section.

Academic reading skills are another important skill for academic success and were described by one of the lecturers as a critical factor:

Students should be equipped with the tools for reading and be able to extract main ideas and note-take when listening to a lecture, be able to write paragraphs, and be able to organise materials. They should be taught these skills; if they come to class and don't have the tools then maybe they will eventually drop out. The ability to read, to summarise and extract information to paraphrase; because if they are doing a diploma or a degree they should be able to do research.

[Lecturer / tutor 3]

The tools necessary for academic reading were the focus of the case study undertaken by Davidson-Toumu'a (2005). She found that three participants tended to avoid and dislike such tasks. The most enabling factor was students' motivation — students who require support with academic reading and writing must be motivated to engage with the tasks.

The quotes above demonstrate that not only motivation and self-confidence are important qualities for students' participation and engagement with their studies. Wānanga student 10 was personally motivated by the view that her study would contribute to her future role as a caregiver for her family; and Timeout student 8 was motivated and empowered by the encouragement and support of her parents and tutor. The results confirm the findings of other studies (Anae et al. 2002; Coxon et al. 2002; Dickie 2000) that showed that students' readiness for tertiary study was critical to their success.

### **Institutional policies, environment, and support services**

Institutional policies which were responsive to the needs of Pacific students were also seen as critical factors for the success of Pacific students in the tertiary sector. These include policies that:

- allow an environment that acknowledges the diverse cultures of Pacific students
- establish funding for Pacific development and initiatives
- put in place support systems for Pacific students.

Pacific lecturers, tutors, and student support staff tended to discuss the policies and structural features of the institutions. Students, timeout students, and graduates were more likely to discuss student support services and resources available for students. This difference implies that lecturers, tutors, and student support staff were more likely to be familiar with institutional policies; while students tended to focus on the practical support they needed in order to succeed.

The following features were important in creating a supportive institutional environment:

- an environment that is empowering, comfortable, and non-judgmental toward Pacific students
- access to resources such as computers and libraries that are relevant to their course of study
- Pacific support teams or units
- learning centres
- space for Pacific students
- clearly communicated institutional expectations of Pacific students
- scholarships for Pacific students and funding to resource Pacific initiatives.

These features should facilitate students' sense of belonging to the institution and connectedness to their course of studies, and consequently lead to their success. In describing the support services offered by her institution, one university student said:

Support from the institution itself, that is, support in terms of helping out the students and to clarify the ideas and concepts. For some of the Pacific students at our institution, English is their second language, and the majority struggle to understand the concepts used during the lectures. Most do not know there is help for them out there ... The institution needs to make resources available for Pacific students and let them know. I didn't know about some of the available resources, like being able to borrow a laptop and also borrowing books. I didn't know that you could bring them home; so the students have to be made aware of these.

Lecturers should not assume that all students learn at the same speed. Maybe, give them a chance to get them away from the classroom into a Pacific tutorial group; that way they will discuss more and build up their ideas and understanding. The learning centre offers programmes for students who want to learn English as a second language. They also employ staff members to help with assignments, and they offer computer courses as well. The Pacific Centre offers extra help for Pacific students at university.

[Current student 19]

A community leader said that:

A lot of the institutions have set up student support programmes within the school, but sometimes the students don't know that they exist. I know that most institutions have an internal student support system, but the students should be made aware of it as well as the parents.

[Community leader 4]

These responses illustrate some of the important support services available to Pacific students in tertiary institutions; unfortunately, the students do not always know about them. A critical factor in providing support services is to ensure that Pacific students are fully aware that support services exist.

This conclusion is backed by the National Survey of Pacific Nurses and Nursing students (Koloto, 2003), which showed that 80% of nursing students knew of specific support programmes for Pacific nursing students, but only 41% used them. Students gave several reasons for not using support services; but they should always be informed and ready to use them, as part of their preparedness for tertiary study.

An important question to ask is whether the support services are appropriate to the needs of diverse Pacific students. The review of the literature showed that one reason students could not use support services was that they were studying on a part-time basis and were working full-time off campus. Successfully meeting the learning needs of part-time students may involve a more flexible learning environment.

## **Family support**

The support of family members was seen as critical to the success of students. Family support includes that of parents, partners, and children. Parents who were very encouraging during the students' primary and secondary schooling tended to have a positive impact on students' decisions to take up tertiary education. As discussed earlier, support may include a range of activities, from preparing motivational quotes to being present at school activities and sports. It extends throughout schooling, up through tertiary education.

Family members' understanding of students' experiences in the tertiary institutions was also critical to students' success. As one graduate suggested: 'Family members have to understand what the study is all about so that they know what their child or partner is going through in the next 3 or 4 years of study.' With a sound understanding of what tertiary students need to do in order to achieve their goals, family members will be in a better position to support them. A stable family life was also viewed as critical to students' success.

A few students also indicated that 'having a computer or laptop at home' was essential for their assignments, for example to search the internet when researching an area of study. Others identified financial support from other family members as the most important factor in their success as tertiary students. One student reported:

Family support and available resources. If you have family support then you will achieve because they are helping you achieve your goals to complete your studies. If you don't have support then you would slowly just stop and do something else like going back into the workforce and quit your studies. If there are available resources out there, then I think that we would improve our chance of success, like the library opening after hours. I guess that the support from the librarians, they can help you access the databases from the computers when you do research.

[Current student 3]

Another student also emphasised family support:

I used to have a full-time job and have cut it down to a part-time job, and that has helped me. The main one is the support of my husband and my three children, who are very young but they understand what I am going through. So it is the support from family, tutors, and extended family.

[Current student 12]

These responses reinforce the importance of family support and students' making use of available resources such as librarians. A combination of family and institutional support systems is necessary for students' success.

## **Quality staff**

A fourth group of factors focuses on the qualities and skills of staff. Timeout students, followed by staff, were most likely to describe staff qualities and skills critical to Pacific students' success. These included:

- supportive and encouraging lecturers and tutors
- staff who understand students' cultures and ways of learning and are able to 'read the situation'
- staff who take into account the cultural backgrounds and learning styles of students
- tutors with both academic and cultural skills
- staff who provide extra time for one-to-one discussions with students
- Pacific lecturers and tutors who know how Pacific students learn
- responsive teachers
- staff who have more than one way of saying the same thing
- lecturers who can communicate with students, delivering the subject matter in ways that are easily accessible to them.

An important aspect of quality staff is accessibility. One lecturer explained:

In regards to a support system, one of the critical factors for Pacific students in tertiary education is accessibility to the lecturer who is responsible for delivering the paper. With me as a staff while I am at work, if I am there for eight hours a day, I am eight hours available to any of my students. Any of my students can walk into my office and sit down and I stop everything and address their question.

I have found that we are providing a lot of support for the students. We have Māori and Pacific students and they really need support from us in comparison to big places like the university. They often get lost just trying to get somebody to support them, because usually the professor is not available to support them. Also we have to provide encouragement and support for them.

[Lecturer / tutor 2]

The results describe a variety of roles, knowledge, and skills necessary for lecturers and tutors of Pacific students. For instance, in addition to their roles as teachers, staff members must also be motivators of students' learning. They must also possess cultural as well as professional knowledge and skills; understand students' diverse backgrounds and ways of learning; have the skills to communicate and present the subject matter in different ways; and provide extra time to work with students. With these resources, staff will be in a better position to respond to the students' learning needs.

## **Peer support**

Support from peers and from graduates of their course of studies was important in getting students to engage in their courses. Informal study groups set up by students enhanced their opportunities to study the course materials, complete set assignments, and prepare for tests and examinations. There was also evidence to suggest that being mentored by other Pacific graduates or students who had completed the same course of study inspired students to succeed. Those graduates became role models.

Eight out of 18 timeout students said having supportive peers around during their course of studies was important. This view was supported by five graduates and five student support staff. Having peers who were succeeding with their course of study encouraged students to be involved in activities that promoted success. The response given by one graduate student illustrates this point:

Having a good cohort of friends that you can work together with, with everyone encouraging everyone else.

[Graduate 18]

## **Course delivery**

Participants also identified aspects of course delivery critical to the students' success:

- staff who provide feedback on students' work and assignments
- tutors who can present the same material in more than one way
- tutors who provide extra time to work with students on a one-to-one basis
- course delivery that accounts for the diverse learning styles of students.

In explaining the importance of the time lecturers put into individual students' work, one timeout student said:

The lecturers who took time to go around and work with people individually rather than sitting and listening. I feel that lecturers are actually putting a lot of effort into me, as a person, as an individual, rather than just teaching the whole class.

[Timeout student 4]

The results confirm that staff feedback on students' work is a critical element of any teaching and learning process. Time to work with students on a one-to-one basis and to present information using a range of approaches may enhance students' learning and understanding of the course material. One response suggested that the diverse learning styles of the students must be taken into account in the modes of delivery, but it did not specify how this could be achieved.

The data also include examples of approaches staff used to respond to the diverse students in their classes. For example, one wānanga student explained their staff's support in this way:

We are lucky because we have access to computer facilities and resources. Our teachers go out of their way to provide for their students and support them. There is lots of encouragement because of the support system we established in our first year. Most of our teachers are Māori and they are really good.

Another example was given by one student support staff member who discussed the manner in which he coped with a class whose ages ranged from late 20s to 60:

It goes back to being responsive to the students in front of you because not all approaches will be suitable to every Pacific student ... One of my classes has a high number of Pacific students, and it has the very senior from the 60 year old to the student in the late 20s. I could be relating an example, and I will use a TV ad that is quite humorous and I know that I have got one part of the room, and then I will turn to parables from the Bible that talk about the same thing but in a different way.

[Student support staff 4]

This response illustrates how the ages of Pacific students in classes at TEIs may vary considerably. Staff members can cope with this by knowing their students and tailoring teaching and learning examples to the different needs of students. This staff member illustrated a point using a familiar TV advertisement to cater to the younger students; and parables from the Bible to demonstrate the same point to the older students. The data also showed humour to be effective strategy with some Pacific students. In summary, the results highlight a range of skills, knowledge, and time commitments required for staff to work effectively with Pacific students.

## **Community support**

One staff member and one timeout student alluded to the critical role played by a supportive community, particularly the church. Such support may include encouraging students to keep a balance between responsibilities to the church and their studies. By understanding the time commitment required for assignments and preparation for examinations and course work, community leaders and members can help and support Pacific learners in their tertiary studies.

As well as students' links with their own communities, links between the TEIs and Pacific communities are critical. Responses from one ITP student support staff member revealed active engagement and links being forged with Pacific communities:

Our goal is also to link with the community ... Our Pacific liaison officer had just been introduced, and we have had an expo. I have heard a lot of good responses. To add to that we have had community members call in, wanting to be more involved with the process. I think that was the expected outcome we wanted to achieve. There are some things that will be taken out to the community, which was the actual target.

[Student support staff 5]

This response shows the efforts the ITP made to engage with its Pacific community, appointing a second Pacific liaison officer and involving the community in developing programmes for them.

## Discussion

Although this review highlights different critical factors, it is important to keep in mind that a combination of factors contributes to students' success in tertiary education. Some factors may be considered personal. Students may be personally responsible for creating and enhancing motivation, self-determination, preparedness for tertiary education, and peer support.

Other factors may be considered institutional. TEIs are primarily responsible for appropriate institutional policies, environment, support services, quality staff, and course delivery. A third group of factors is associated with students' families and community support systems. Students, their families, and communities need to work together to ensure the success of support systems outside TEIs.

### 4.3 Barriers to students' success in tertiary education

Table 7 presents the distribution of barriers to success in tertiary education among six target groups of participants.

**Table 7 Distributions of participants by barrier to students' success**

| Barriers  | Current students<br>n*=21 | Timeout students<br>n=18 | Graduates<br>n=19 | Student support staff<br>n=11 | Lecturers / tutors<br>n=14 | Community leaders<br>n=11 |
|---|---------------------------|--------------------------|-------------------|-------------------------------|----------------------------|---------------------------|
| Lack of preparedness for tertiary education                                   | 15                        | 9                        | 11                | 8                             | 10                         | 6                         |
| Institutional policies and cultures that are not conducive to Pacific success | 6                         | 2                        | 9                 | 3                             | 5                          | 3                         |
| Lack of family support  | 4                         | 4                        | 6                 | 11                            | 2                          | 2                         |

| Barriers                         | Current students<br>n*=21 | Timeout students<br>n=18 | Graduates<br>n=19 | Student support staff<br>n=11 | Lecturers / tutors<br>n=14 | Community leaders<br>n=11 |
|----------------------------------|---------------------------|--------------------------|-------------------|-------------------------------|----------------------------|---------------------------|
| High cost of tertiary studies    | 11                        | 5                        | 5                 | 0                             | 0                          | 2                         |
| Peer influences                  | 2                         | 6                        | 3                 | 1                             | 1                          | 0                         |
| Lack of access to the technology | 4                         | 1                        | 1                 | 0                             | 1                          | 2                         |
| Lack of access to Pacific staff  | 3                         | 1                        | 2                 | 1                             | 1                          | 1                         |
| Course content and delivery      | 1                         | 1                        | 4                 | 2                             | 0                          | 0                         |
| Community responsibilities       | 0                         | 1                        | 0                 | 2                             | 1                          | 0                         |
| <b>Total</b>                     | <b>46</b>                 | <b>30</b>                | <b>41</b>         | <b>28</b>                     | <b>21</b>                  | <b>16</b>                 |

\* 'n' stands for total number of participants from each target group; because some participants provided more than one response, the total may be greater than the actual number of participants.

Overall, the responses affirm that the absence of those critical factors presented and discussed in section 4.2 can become barriers to students' success in tertiary education.

### **Students' lack of preparedness for tertiary studies**

Most students, student support staff, and lecturers and tutors suggested that students' lack of preparedness for tertiary studies was a barrier to their success. About half the graduates, community leaders, and timeout students shared this view. The study showed the following barriers at a personal level:

- lack of motivation, interest in tertiary studies, or commitment to succeed
- changes in personal circumstances, such as getting married or having a baby
- lack of awareness of the course requirement and institutional policies regarding assessment
- lack of understanding of tertiary institution culture
- lack of academic language skills and / or fluency in English.

These barriers confirm the importance of student preparedness for tertiary studies reported in section 4.2. Without motivation, interest, or a commitment to succeed, students are not well prepared to undertake tertiary studies.

### **Institutional policies and cultures not conducive to Pacific students' success**

The results point to institutional factors that could act as barriers to Pacific students' success in tertiary education. Current students and graduates, followed by timeout students, were most likely to report factors pertaining to the policies and cultures of the tertiary institutions that could impede Pacific students' success. These factors included:

- assessment of students' work without considering or validating their cultural perspectives and experiences
- institutions' lack of understanding of Pacific cultures and the multiple roles of Pacific students
- lack of Pacific staff in management positions
- institutional racism
- Pacific courses not being valued by the institutions
- institutional cultures not reflecting Pacific cultures, leading to students feeling alienated
- lack of support systems for students.

The experiences and views of some of the graduates highlight these points:

For institutions, some of the lecturers are very boring, very disorganised, and the marking of the assignments is not very good. For example, they tend to be very hard on students for whom English is a second language. Some lecturers are not very helpful. Like, you went to ask them something; they weren't there or they gave you a funny look. That makes you feel really stupid and don't want to approach them. Fees are very high and Pacific students are not rich. Some institutions hold back your marks until your fees are paid. Again, racism and lack of knowledge of the technology.

[Graduate 4]

Lack of clarity on the part of the lecturers, lack of access to key resource materials; for example, the best book that everyone needs costs money and is sometimes not available in the library. Congestion at the university. The whole idea of time frame on certain pieces of work. Sometimes work cannot be done over 1 year. We need to open up the possibility so that if we can't do it in 1 year then we can extend it to the next year.

Students can sense when you are being treated differently from others. Still stereotypes from lecturers that generally Pacific Island students are not taken seriously. I think that there are alternative ways that should be accepted by the institution. That comes down to course content.

[Graduate 2]

These responses show that inflexible time frames, high costs, unavailable and unprepared staff, lack of access to key resources, and the different perceptions of Pacific students to non-Pacific staff and students may all impede Pacific students' success in tertiary education.

The findings imply that one of the challenges for TEIs is to acknowledge and design better ways to cater for the diverse needs of Pacific students. This may be as simple as ensuring that students access existing language support services, or may require a major paradigm shift in the institutional policies and procedures (such as accepting students' work over a longer period of time). Issues raised in this study may also need to be addressed through staff professional development programmes.

### **Lack of family support or supportive family environment**

As discussed in section 4.2, the support of family members was seen as critical to the success of Pacific students. Accordingly, the lack of family support was seen as a barrier

to Pacific students' success. About half the graduates and more than one-third of the current students shared this viewpoint. All 11 student support staff mentioned this as a barrier, indicating perhaps that the students who sought help from student support staff were more likely to lack the support of family. Responses in this category also included:

- family obligations and commitments competing with study priorities
- need to work to supplement family income
- unrealistic expectations from family members.

In terms of supplementing family income, one community leader stated:

Pacific students have obligations, like obligations to the family, church, and back home in the islands. These are to do with money; and at the end of the day it is the money that people don't like to talk about, but money is a reality with us Pacific people. With finances, many students view the \$150 a week allowance as an income and use it as a supplement for the weekly family income. Students give about 80% of that to the family and the student is left with only about \$30 or \$40 a week.

The family needs to be behind the student and be aware of what is happening and what tools does the student need for tertiary education. They are in a foreign environment, in a Palagi institution, and whatever they have put in place, like \$150 and all, it is put in place for education and that is just enough to see a single student right through for the academic year ... Also, about 70–80% of students' families are not aware that at the end of the 3 or 4 years, the students will be in debt with \$30,000–\$40,000.

[Community leader 2]

Another participant raised the need for students to balance their study and responsibilities to family:

High expectation of Pacific families and trying to balance the study and family responsibilities, needing to go out and have a job to help families.

[Graduate 19]

The financial issues raised by the community leader are critical not only to students' success in tertiary education, but also to their success as members of their families. The extent to which financial matters impact on the well-being of Pacific tertiary students needs careful consideration by both students' families and the TEIs. It is possible that students in this category may belong to families with very low income. For them, contribution to family income is a necessity. Being seen to be useful to the family could also be an important motivating factor for some students — to work and contribute while at the same time pursuing their studies.

## High cost of tertiary studies

About half the current students mentioned the high cost of tertiary education and / or course materials as the main barrier to participation and retention in tertiary education. One student explained:

Technology is a major thing, something that is new. Because we are living in a technological world everything is basically around e-learning so that's hard for Pasifika students. Also cost-wise, they would have to support themselves as well as their family, and therefore more scholarships should be available for us. The language barrier and the course content may be a bit difficult to understand. We need more helpful Pacific tutors and lecturers ... To support your family financially, students may have to find part-time jobs. The major one is the technology and the cost.

[Current student 3]

A third of the timeout students and graduates also referred to the high cost of tertiary studies. For these students, the most common reasons for deciding to take time off from their studies were related to finance. As one student explained:

Money. As a student I did not have enough money to survive as a student. I had seen my friends with their jobs and careers, and I had nothing else other than just studying. I was still stuck with studying.

[Timeout student 4]

Another timeout student withdrew from her university course because her parents alone could not afford to provide for the needs of the family. She had to find a job to help them while her older sister completed her degree. She went on to say that once her sister graduated, she would return to university to complete her course of study.

Generally, when asked what could have been done differently to help them continue with their studies, these students' main response was to provide funds. For this group of Pacific students, the main barrier to access and participation in tertiary education is a lack of finance.

### **Peer influences**

One-third of timeout students referred to the influence of their peers as a barrier to success:

Too much socialising with friends, too much going to nightclubs, drinking too much and ending up withdrawing from their courses.

[Timeout student 1]

Another student shared similar views:

Students have too much freedom at the tertiary level and they take advantage of that freedom. Things that distract them like alcohol and partying, etc.

Although the influence of their peers could be very positive, as discussed in section 4.2, it could also be very negative, impacting on students' ability to focus on their studies. Preparedness for tertiary studies may require knowing how to deal with distractions of a social life and possible negative peer influences.

### **Lack of access to technology**

Nine participants, including four current students, reported lack of access at home to technology (computers and the internet) as a key barrier to their success. Another group found it difficult to access computers in the tertiary institutions.

### **Lack of access to Pacific staff**

The lack of Pacific staff was reported as a barrier by at least one participant from each of the six target groups of participants. Nine participants saw access to Pacific staff as critical to Pacific students' access, participation, retention, and success in tertiary education. They perceived Pacific staff as having the necessary skills and understanding of Pacific students' needs and cultures and being more responsive to them. For example:

Not having Pacific Islands tutors in the institution is one of the biggest barriers for me. Tutors who are qualified and skilled in the right areas to teach students.

[Current student 14]

Lack of support because there is not enough Pacific people as decision makers. Not enough Pacific staff. This institute is a mainstream one and it has a lack of knowledge of different cultures and ethnic groups, they cater for mainstream.

[Current student 21]

The results show students are concerned about the lack of Pacific staff members in the institutions. They believe Pacific staff understand them better. Staff should have the cultural knowledge to relate as well as the appropriate skills and qualifications to teach.

## **Course content and delivery**

Eight participants described methods of course delivery that could become barriers to students' success. They highlighted teaching strategies and course content that do not take into account the students' cultural upbringing, experiences, or values; and pressure to produce assignments and course work on time for students who already have too much work within their jobs, families, and communities. One timeout student also discussed the assessment of students' course work:

It is important for the Pasifika students to have, like in the assessment, that there is always a Palagi and a Pasifika person assessing a piece of work that you handed in. The point of view of the Pasifika person as well as a Palagi should be taken into consideration when it comes to marking and assessment because we have a different worldviews. Even if it is an oral assessment or a video assessment we seem to interpret a lot of things differently; the institution should provide a cultural assessment.

Assessing you on a performance like teaching practice or counselling skills and they video you, and the way you say things can be misinterpreted. The body language can be misinterpreted by other people who do not understand our protocol and our ways of doing things.

[Timeout student 3]

A similar view of course content was evident in the response by one of the graduates:

Lack of connection to the course of study at the institution. A course of study that does not cater for the diverse learning styles or needs of students. A course that does not incorporate the students' values and beliefs. Lack of strong and well-organised institutional support system.

[Graduate 7]

These responses imply that students require new approaches the assessment of their work. There is an underlying assumption that Pacific staff, with similar worldviews, would be in a better position to interpret Pacific students' work.

## **Discussion**

The results show diverse groups of Pacific students with diverse needs. For example, while some New Zealand-born Pacific students may not have difficulty with the English language, some Pacific students for whom English is a second language may require special support services to address their language needs.

Other students may be more likely to be affected by institutional policies and culture. For a small group of Pacific students, lack of Pacific worldviews in the teaching, content, and assessment of students' work are considered barriers.

Student support staff were most likely to encounter students who lacked family support or expressed lack of family support and commitments to meeting family financial needs as critical factors impeding their learning success.

The barriers reported in this section can impact at different levels. Costs impede access and retention. Other barriers, including institutional and family factors, must also be critically examined and removed to improve the success of Pacific students in the tertiary education system. Some work has been done within the tertiary sector to address some of the barriers mentioned. This work is examined in section 4.4.

The issues participants raised about course content and delivery are particularly relevant for e-learning. Online delivery lends itself to presentation of material in alternative ways. Tutors with online learning spaces can provide alternative means of feedback, such as:

- answers to frequently asked questions (FAQs)
- automated feedback within course material
- questions answered in a discussion forum so that once a student has asked a question the reply is available for every student to read.

Well-designed learning material can accommodate diverse learning styles. Text-based web content will, however, increase the need for high literacy and academic reading skills; and the issue of access to technology, identified as a barrier to success, will need to be resolved.

## **4.4 Initiatives to increase access, participation, retention, and success of Pacific students**

This study focuses on issues of access, participation, retention, and success for Pacific students, building on the work of Anae et al. (2002) and others reported in the literature review.

### **Access and participation**

Institutions' marketing and promotional strategies are only part of facilitating Pacific students' access to tertiary institutions. Other strategies include:

- Pacific quotas for particular courses, such as medicine, law, or commerce
- scholarships
- foundation study courses or new-start programmes at universities and ITPs
- showcases of courses, current students, teaching staff, support staff, and graduates to target groups of prospective students
- specific functions for Pacific students
- Pacific liaison or recruitment officers
- Pacific academic advisors
- extramural courses
- summer courses
- Pacific student associations.

## Preparation for tertiary studies

Various institutions have programmes to prepare students for tertiary studies. For instance, universities and ITPs offer foundation studies programmes. The duration of programmes varies considerably, from full-semester courses to 2- or 3-day short courses. A university support staff member explained one of their initiatives:

One of the things we are doing is called 'Pasifika transition', which is a 3-day programme, aimed at getting students ready for study at the university. It is academic and pastoral care. It is all to do with e-learning, the university culture, and getting them ready for the class. One of the things that we would love to do if we had the time is to get them to career counselling and get them reviewing 'why are they here?' and where do they see themselves at the end of their diploma or degree in 3 or 4 years time. One of the problems that I see is the students that are there, and they don't know why; so some sort of career focus and getting them to visualise where they are going to be.

[Student support staff 7]

Another participant described the approaches used to promote and recruit students into a polytechnic degree programme:

We have an information forum to recruit potential students who are already employed and who have no or some level of qualification, for them to come and talk to year 3 students, so they get a student's perspective of the workload and of the realities of the programme. We have a wine evening and really turn it on for social service providers and the community to come to our centre of learning. It showcases to us, our students, and people who live next door to you that you didn't know had completed a degree, the whole thing of recruiting and promoting potential areas for access into the polytechnic. And then, you also see who's there to support you should you choose to enrol. You also get to meet one-to-one with the lecturers, so you have the beginning of a relationship instead of coming cold in the new year.

[Lecturer 1]

While this response focused on a particular degree programme, a university staff member described initiatives aimed at increasing participation for the whole institution:

In the last 10 years there have been considerable developments in supplementary programmes to the universities and tertiary institutions. I was involved with a Māori / Pacific mentoring programme, but it was not funded by the university. It was funded by TEC. A liaison officer for recruitment was appointed to recruit students. In student learning support, there is a Pacific advisor and there is a community outreach programme for secondary schools.

There are a number of programmes and initiatives. Some of the programmes are focusing too much on the deficit view ... What we haven't focused on in the last ten years is why our students are doing well. Why are our two students here? for example, how come they have graduated?, how come they are doing graduate studies?, what are the factors?, what are the strategies behind this?, instead of always sort of trying to pick on the negative factors of learning for Pacific students. The university hasn't really fully responded to the needs of Pacific students. They haven't really listened as much as I hoped they would have.

They do listen to staff to some extent, but it is not directly with the student communities, that research and participation with them, that dialogue.

[Lecturer / tutor 9]

## **Retention and success**

One approach aimed at retaining students was to send them a letter after three consecutive absences from class. Another institution made phone calls to students after two consecutive absences from class.

In describing the initiative to retain students at a private training establishment (PTE), a lecturer said:

If the students are away for 3 consecutive days I would send them a letter, letting them know that they have been away for 3 days. And say that if they feel that they need academic support, etc, come and see us. We give them our phone number in the letter. I will send three letters; if the student does not respond to the first letter, I will send a second letter and then further on I would send a third letter for the students to respond. So when the student comes forward, they will sit down with me or another staff, and that would be like a counsellor. If it is an academic problem, they come to me. If it is personal, they go to the counsellor and talk it out. We have had three successful outcomes so far this year, and we have retained them.

[Lecturer / tutor 2]

Other initiatives reported by participants included:

- Pacific strategy or specific target initiatives
- Target 2010, an initiative where the institution identified a target number of Pacific students to be enrolled in the institution and successfully complete a programme of studies by 2010
- student learning centres
- computer centres and access to the internet
- 24-hour support services
- Pacific staff members
- open-door policies
- library services and resources on Pacific issues
- dedicated spaces for Pacific staff and students
- use of the Tertiary Education Commission (TEC) Special Supplementary Grant (SSG) for retention of Māori and Pacific students
- Pacific student support groups
- mentoring programmes
- Pacific counselling services
- noho marae
- Pacific-focused courses, for example, in nursing or social work degrees

- publication of students' work in journals
- special awards for students' success
- booklets on successful students.

A PTE student reported that an effective strategy was having flexible time frames to submit course work and assignments. There is no doubt that for some students, being able to extend deadlines, so that they can deal with unexpected events in their lives allows them to complete and submit their work.

One lecturer described a range of initiatives to promote and acknowledge the successes of Pacific students:

If we think that students are struggling because of their language and are unable to meet the English-writing requirements but can understand the concepts and translate the concepts to you. They still have to submit the written work in English, but we supplement the assessment with an oral conversation in their mother tongue. We have done it a couple of times for students...

Another one is promoting the notion that selected works will be published in our journal. This year, 12 pieces of work from students, most who are Pacific, will be published as abstracts or policy assignments. They are either the top in the class or there is a significant difference and it is really interesting about their perspective that sets a benchmark. If there is a benchmark for them, we have stories of last year's graduations that overall acting of excellence; so you get prizes for first in the year at a subject, first in the year of academics. The way our student body is made of in our school, over three-quarters of those awards must be made to Pacific students; and that means that they have to achieve 95 or higher marks in order to get those awards.

[Lecturer 1]

Flexible time frames to submit assignments indicate that staff are willing to take into account students' multiple roles and responsibilities as well as unforeseen family circumstances. For some students, this means they can successfully complete assignments and course requirements instead of failing and possibly spending another semester or year to complete the course. Opportunities to submit assignments after due dates may seem unfair for other students, but for a few Pacific students it can mean the difference between failure and success.

## **Impact of access and retention initiatives**

The initiatives described have had varying impact on the progress of Pacific students in tertiary institutions, particularly on levels of enrolment and activity within the Pacific tertiary sector.

### **Special funding for Pacific tertiary education**

TEIs have responded to the TEC Pasifika Strategy through a variety of initiatives, including Pacific mentoring programmes, dedicated spaces for Pacific students, and Pacific student support staff for recruitment and support of students. Three TEIs reported Pacific strategies or plans, but did not specify details.

Staff, students, and graduates alike shared the view that initiatives in the past decade have led to increased access and participation in tertiary education. However, much work is still needed to ensure the retention and success of Pacific tertiary students. As one university lecturer explained:

There seems to be a retention policy for improving participation and ensuring success for Pacific people in tertiary institutions and tertiary education. There are institutional responses to that, to the government intention and institutional policies expressing similar intentions. In our own university there is a section for Pasifika. That is good.

What is not good is that it never really translates into the budget of the university, so there is never really money put down to actually make the institutional intention happen. That is why you can't really do anything. That is why for us participation is not really the issue. The programmes for recruitment, the publicity promotion is there and is bringing the students in. Then we are still struggling with what then happens because the university has not really put money in what it then wants to do.

So, it is left to Pacific staff to then try and do what they can do. Individuals can do that and sometimes they are very successful in what they do for communities; but that is individuals doing what they can do, it hasn't really been institutionalised... I don't expect our institution here to suddenly say: 'Ok, now that we realise, let's put money to this particular strategic grand policy that deals with Pacific people'. We have to appreciate the complexities of institutional ways of doing things in order to appreciate that.

[Lecturer / tutor 10]

Although the TEC SSG funding has led to TEI initiatives in Pacific tertiary education, this response reminds us of the critical roles that individual Pacific staff members undertake within their institutions to serve Pacific students and communities. What strategies they used to ensure the success of Pacific tertiary students needs further investigation. After carefully analysing their successful processes and strategies, we can begin to work towards institutionalising them.

### **Learning and computer centres**

While most institutional learning centres at the tertiary institutions are established for all (not just Pacific) students, the responses from Pacific graduates indicate that the support and academic learning they received from them contributed to their success. In particular, they found assistance with academic writing skills and preparation of assignments and course work to be most beneficial.

### **Future initiatives or strategies**

Although the reported initiatives showed progress for some, the evidence suggests that a lot more is needed to improve the retention and success of Pacific students. As one student support staff member said:

With regards to access and participation there is a famous saying: 'Access without support is not opportunity'. So I will say even though there are initiatives going, we can't have more students without providing our support. The people who we are dealing with for recruitment can't be separated, can't work separately from people like myself who give the support for retention. There must be consolidation, to provide access, and we provide the support that equals opportunity ... Retention of Pacific students, while I can't reach all students I can build a network and stimulate enough people to want to be involved in the Pacific support system.

[Student support staff 2]

Pacific lecturers and student support staff in Christchurch raised concerns about the competitive nature of the tertiary sector. One way forward is for tertiary institutions to identify and focus on what they are good at. For instance, an ITP may be the best institution for nursing degree programmes; the local university may provide law and medical students with the best option; and a PTE might have the most effective programme for English as a second language.

A PTE staff member pointed out this strategy and the need for resources to ensure that the institutions are in a position to deliver on their charters.

Stake out our territory and work on it. The current targeting of TEC is that we are not a real tertiary institution. The current climate makes us look like we are not real a tertiary institution. The PTE sector is not being resourced to provide what you promise in your charter.

[Student support staff 11]

Other staff members also acknowledged that collaboration between the Government, TEIs, and community is necessary — one stakeholder cannot play its role without the support of other key stakeholders.

Seek participation of the community and private sector. Government does not have all the answers or the resources. Many private businesses are providing scholarships and funding curriculum initiatives ... Some community groups collaborate with high schools in their communities to establish learning centres and study clinics.

[Student support staff 1]

The results suggest that the competitive nature of the tertiary education sector can work against efforts to increase access and participation of Pacific students. In one location, Pacific staff within different tertiary institutions worked together to inform the Pacific communities of the opportunities available in all local TEIs. Such a collaborative approach is needed to ensure that Pacific students can make informed choices about their course of study. All Pacific recruitment and student support staff should be trained on the courses that are available in other TEIs, as well as their own.

## 4.5 ‘Pasifika pedagogy’

This study explored the concept of ‘Pasifika pedagogy’ by asking: ‘Is there something called Pasifika pedagogy? If yes, please explain.’

Three types of response emerged:

- yes, there is something called ‘Pasifika pedagogy’
- yes, but more research is needed to identify exactly what it entails
- no.

### What is ‘Pasifika pedagogy’?

About half the lecturers and tutors and student support staff answered ‘Yes’. The half who said ‘No’ maintained that there is a ‘Tongan’ or ‘Samoaan’ but not necessarily a ‘Pasifika’ pedagogy.

In explaining her definition of 'Pasifika pedagogy', one lecturer said:

It is the integration of Pacific knowledge and Pacific experiences and validating those in an appropriate way of learning. It is being able to integrate your own experiences as a Pacific person into your own teaching.

[Lecturer / tutor 13]

Another staff member described it this way:

Pasifika pedagogy is a teaching and learning method that revolves around the notion of searching, acquiring, teaching, and learning knowledge within a context that is informed by Pacific values, worldviews, knowledge, and experience.

[Student support staff 1]

A Pacific education graduate explained his views as follows:

I have heard of pedagogy, and understand it to be a method of teaching based on your personal values, experiences, and beliefs which takes into account the best way students learn according to research done. Therefore, Pasifika pedagogy must be about the best method of teaching for Pasifika students.

[Graduate 7]

## **Good teaching practices for Pacific students**

The results provide some insights into teaching practices that effectively facilitate Pacific students' learning, from the perspectives of lecturers and student support staff. These may include but are not limited to:

- group work
- free-and-open discussion
- peer teaching and learning
- teaching strategies that use and validate students' experiences
- learning through experience and modelling
- using Pacific models and symbols in teaching
- learning through humour
- participatory and student-centred teaching methods
- teaching strategies that engage both the mind (cognitive intelligence) and the heart (emotional intelligence)
- role play
- being prepared.

The responses of graduates, timeout students, current students, and e-learners revealed the following as good teaching practices for Pacific students:

- group work
- one-to-one tutorials or discussions with lecturers or tutors
- a combination of personal work and class presentation
- peer teaching and learning

- use of metaphors
- use of visuals in lectures
- lectures with opportunities for students' questions
- interactive teaching practices
- small-group discussions
- use of real-life experiences to illustrate points
- individual research projects
- practical and hands-on learning practices
- individual study
- lectures
- using Pacific languages as a medium of instruction.

Although the participants identified these teaching strategies as good for Pacific students, some were cautious about treating them as appropriate for all. They were concerned that strategies might not address the diversity of students, including:

- ethnicities
- cultural backgrounds
- languages
- birthplaces (for example, the very different experiences of New Zealand-born and Pacific-born students)
- mature students and those entering tertiary studies straight from secondary school
- full-time and part-time students.

Two responses from e-learners highlighted successful teaching strategies:

I like working in groups like small groups, not in lectures where only one person talks. I am comfortable working in small groups as I know the others in the group and where they are coming from and they will understand what I am talking about. Also in groups, not only that I share and talk but there is hands-on doing and making things. These are practical activities where I gain experience by doing things that are relevant to the course.

[e-Learner 14]

Having teaching to be visual and real as it's Pasifika; for example, real stories, true stories, visual, pictures, etc. This is exciting and the lecturers are culturally responsive and are aware of other cultures when they bring relevant examples from the Pacific nations, etc. With these I learn more and I remember things for a long time. Lecturers should lessen talking or lecturing only, but deliver the lectures in a more fun and exciting way, as this really catches our attention, or else we as students get to stay away from lectures or sleep. When the lecture is delivered in a way that makes us happy; I learn heaps when I am very happy.

[e-Learner 25]

## Good learning practices

Researchers asked six target groups to describe 'good learning practices' for Pacific students. Their feedback is summarised in table 8, below.

**Table 8 Distributions of participants by learning strategy**

| <b>Good learning strategies</b>         | <b>Current students<br/>n*=21</b> | <b>e-learners<br/>n=41</b> | <b>Graduates<br/>n=19</b> | <b>Student support staff<br/>n=11</b> | <b>Lecturers / tutors<br/>n=14</b> | <b>e-learning staff<br/>n=13</b> |
|---|-----------------------------------|----------------------------|---------------------------|---------------------------------------|------------------------------------|----------------------------------|
| Peer learning and group work            | 19                                | 28                         | 14                        | 5                                     | 3                                  | 7                                |
| Self-directed personal research         | 0                                 | 8                          | 4                         | 2                                     | 0                                  | 1                                |
| Individual learning                     | 6                                 | 11                         | 5                         | 0                                     | 0                                  | 0                                |
| Hands-on practical experience           | 0                                 | 5                          | 4                         | 0                                     | 1                                  | 0                                |
| One-to-one student / teacher discussion | 2                                 | 2                          | 2                         | 0                                     | 0                                  | 3                                |
| e-learning                              | 0                                 | 2                          | 0                         | 1                                     | 1                                  | 2                                |
| Assignments                             | 0                                 | 3                          | 0                         | 0                                     | 0                                  | 0                                |
| <b>Total</b>                            | <b>27</b>                         | <b>59</b>                  | <b>29</b>                 | <b>8</b>                              | <b>5</b>                           | <b>13</b>                        |

\* 'n' stands for total number of participants from each target group; because some participants provided more than one response, the total may be greater than the actual number of participants.

### Peer learning and group work

Peer learning and group work were perceived as good learning practices by graduates, e-learners, and current students. For instance, one graduate student suggested: 'Peer learning always helps a lot. As everyone gets to express their views, thus making you think broader and also faster'.

Being exposed to other viewpoints tends to encourage thinking and expansion of ideas. Another benefit of group or peer learning is the opportunity to get up, be involved, and build one's confidence. A current student also indicated that group work helps students to motivate one another and take responsibility for the group. Other students talked about the sharing of reading materials, where group members divided the reading materials among themselves and gave feedback to the group on what they had learned. This allowed them to get to know the reading materials faster and discuss the content.

When asked what specific strategies helped her own learning, one graduate student reported:

The Pacific student network in the Pacific learning space, as it provided opportunity to dialogue about course work and beyond course work to try to make connections with Pacific worldviews; for example, Pacific learners are usually perceived as underachievers. Being around successful Pacific students raises that awareness to question and critically unpack this statement of assumption.

[Graduate 9]

Although table 8 categorises the results into seven groups, some participants identified a combination of learning practices:

Personal attitude towards studies, such as setting a goal to what I want to achieve and work hard towards it, through own individual learning and also peer learning. Ask for help when I struggle, as there is also help available through tutorial, lecturer's office hours, and also through your peers.

[Graduate 10]

Group studies where we share knowledge and experiences, etc. This is useful as we discuss assignments. The many heads and minds, to me, is better.

[e-Learner 24]

Group learning like having extra classes and homework centres, not just for the primary schoolers but also for the tertiary students, can motivate our people to study and also remove the shame of studying as a mature student.

[e-Learner 25]

Good learning practices for Pacific students are when students concentrate in learning. If students have young children, just learn but get a babysitter; however, we should consider the energy and age of the learner too. Learners should be happy, be interested, read textbooks, etc and have peers or friends who can be good companions and be able to study together. These are the friends who can motivate and keep encouraging each other.

[e-Learner 17]

### **Individual learning and personal research**

Peer learning and group work stood out as the most frequently cited good learning practices. However, several respondents also specified the value of individual learning, personal research, and being a role model. For example:

I like this peer learning as I learn a lot of things from the other students and we all have to express our views. If you say something wrong, the others will correct you. But as an individual and a student, I also have to do my own personal research. This is learning by doing and hands-on learning.

[e-Learner 31].

As shown in table 8, less than a third of current students, but most of the e-learners, found self-directed personal research and individual learning to be good learning strategies. This suggests that perhaps online course delivery provides more opportunities for individual learning and personal research.

## What does not work for Pacific students?

Along with the data on good teaching and learning practices, the study also provides some insights into what does not work for Pacific students. Key issues raised by current students, timeout students, and graduates included:

- lecturers who ‘talk and talk’
- short time frames for assignments
- long lectures full of academic language and content not relevant to students
- lectures which do not involve students or give them opportunities to ask questions
- unclear expectations about assignment tasks
- too much reading
- lecturers assuming that students understand course content
- lecturers embarrassing or singling out students in class.

Some students found lectures a good teaching practice; but as these results show, some aspects of their delivery and content do not work for Pacific students. As one e-learner said:

Straight lecturing can prove to be too boring and distracting for Pasifika students as they prefer something that’s lively, visual, and interactive.

[e-Learner 4]

Trying to keep a balance between home activities and course requirements, particularly when a student has more than one assignment to work on, can be problematic for some. For instance:

The strategy of charging for the internet is not working. Multiple assignments lead to last-minute work and students are stressed with time management. Do your homework at the university as university is university and home is home where you come and help with the home. When you get home, you do not follow your schedules. Your daddy wants you to do something and you must do it. If you have an assignment due date that is coming up, but you have other things to do. Pacific is not like the Palagi. When the assignment due date is coming up, the Palagi goes straight to the library for 4 hours or so.

For me, after the lecture, I rush home to help Mum and Dad and they think that I have done all my work at the campus. When you go to university, as a young adult, as your age increases, your responsibility increases too. You realise that you have more responsibility and education is more advanced and you find it hard to cope with the university’s course requirements.

[e-Learner 14]

This example provides evidence that for Pacific students, family responsibilities can have a negative impact on their ability to cope with tertiary studies. Compared to their Palagi counterparts, more Pacific students may live at home, with more family responsibilities than in a flatting situation. The time commitment must be clearly communicated to family members for them to support students and give them the time to focus on their studies, work on assignments, and complete course requirements.

## **Discussion**

The section has examined the concept of 'Pasifika pedagogy' and the teaching practices that were effective or ineffective with Pacific students. The results reveal that although the concept of 'Pasifika pedagogy' is acceptable to some participants, it could be problematic to others. The results highlight some of the difficulties associated with the term 'Pasifika'.

Some participants believed that there are specific pedagogies for specific ethnic groups (such as Samoan, Tongan, or Cook Island), but not for all Pacific people. Despite the lack of agreement, the results clearly demonstrate that peer learning and group work are considered good teaching practices for Pacific students. This result supports the findings of studies with colleges of education (Dickie, 2000) and university students (Iata, 2001) who used peer support and informal study groups to help successfully complete their studies.

One possible explanation of the success of peer learning and group work is that they are consistent with the communal approaches characteristics of Pacific families and communities. Also, students used the peer group to share the workload, for example, dividing up the reading workload and then coming together as a group to share the information each had gathered. Peer learning and group work may also work by giving students a chance for dialogue among themselves, in a language that is meaningful and understood by all. Students' understanding of the issues covered in class can be clarified through discussion with their peers.

The educational value of peer learning and group work cannot be understated. They provide students with opportunities to share ideas and expand on their existing viewpoints. The peer group also has a motivational role, whereby students encourage, motivate, and build each other's confidence. All of these contribute to successful learning outcomes.

## 5.0 Pacific e-learning

### 5.1 Introduction

This chapter examines experiences of Pacific e-learners and e-learning staff. Researchers asked eight target groups of participants to share their experiences with e-learning and views on future use of e-learning as a mode of delivery for Pacific learners. This chapter reports their responses, focusing on:

- participants' experiences and views of e-learning
- critical factors that contribute to students' success in e-learning
- current initiatives that enhance Pacific e-learners' access to e-learning programmes
- a case study of an e-learning programme at a private training establishment (PTE).

### 5.2 Experiences of e-learning

#### Types of e-learning technology used

Data from the profile sheet for each group of participants revealed that although participants might not have enrolled or taught in a course that had an online component, they reported having used some of the e-learning tools.

Eleven of the e-learning staff were tutors, and two were in management positions but had formerly taught in e-learning programmes within the last 2 years. Table 9 illustrates the types of technology used by each group of participants. The data from lecturers and tutors are combined with data from student support staff.

**Table 9** Distribution of e-learning tools used by groups of participants

| Types of e-learning tools used       | e-learners<br>n*=41 | Graduates<br>n=19 | Timeout<br>students<br>n=18 | Current<br>students<br>n=21 | Lecturers<br>/ student<br>support<br>staff<br>n=25 | Community<br>leaders<br>n=11 | e-learning<br>staff<br>n=13 |
|--------------------------------------|---------------------|-------------------|-----------------------------|-----------------------------|--|------------------------------|-----------------------------|
| Virtual-learning environment         | 25                  | 9                 | 6                           | 13                          | 9  | 4                            | 11                          |
| Web-based research                   | 25                  | 10                | 8                           | 12                          | 8  | 4                            | 7                           |
| Discussion board / bulletin board    | 19                  | 8                 | 6                           | 9                           | 5  | 4                            | 8                           |
| Computer-based assessment            | 19                  | 4                 | 10                          | 8                           | 4  | 2                            | 6                           |
| Authored web pages                   | 16                  | 5                 | 5                           | 11                          | 6  | 5                            | 2                           |
| Learning software / virtual tutorial | 14                  | 3                 | 2                           | 10                          | 5  | 3                            | 5                           |

| Types of e-learning tools used | e-learners<br>n*=41 | Graduates<br>n=19 | Timeout students<br>n=18 | Current students<br>n=21 | Lecturers / student support staff<br>n=25 | Community leaders<br>n=11 | e-learning staff<br>n=13 |
|--------------------------------|---------------------|-------------------|--------------------------|--------------------------|---|---------------------------|--------------------------|
| Electronic whiteboard          | 14                  | 6                 | 9                        | 2                        | 9   | 5                         | 0                        |
| Video conferencing             | 12                  | 4                 | 6                        | 7                        | 2   | 2                         | 1                        |
| Streaming video / audio        | 9                   | 4                 | 4                        | 12                       | 7   | 1                         | 0                        |
| Mobile or wireless device      | 6                   | 2                 | 1                        | 0                        | 0   | 2                         | 0                        |
| Simulation / microworld        | 2                   | 1                 | 0                        | 0                        | 0   | 0                         | 1                        |
| Others                         | 11                  | 4                 | 6                        | 0                        | 1   | 2                         | 5                        |
| <b>Total</b>                   | <b>172</b>          | <b>60</b>         | <b>63</b>                | <b>84</b>                | <b>56</b>                                 | <b>34</b>                 | <b>46</b>                |

\* 'n' stands for total number of participants from each target group; because some participants provided more than one response, the total may be greater than the actual number of participants.

As the table shows, Pacific e-learners and e-learning staff were most likely to have used a virtual-learning environment, web-based research, discussion boards or bulletin boards, and computer-based assessment. Interestingly, current students showed very similar patterns to e-learners. The main selection criteria for 'e-learners' were that they were enrolled in a course or courses offered by e-learning; whereas 'current students' were those enrolled in a tertiary institution but not in courses offered by e-learning. The selection criteria focused on enrolment at the time of data collection, but were not sensitive enough to eliminate current students who had enrolled in e-learning courses or used e-learning tools in the past; this reflects the diverse experiences of tertiary students generally.

More than half the current students and a quarter of e-learners had used authored web pages and learning tutorial software or virtual tutorials. Furthermore, more than half of the timeout students had enrolled in courses that had some computer-based assessment.

## Experiences and views of e-learning

The majority of e-learners and e-learning staff were involved in courses delivered through a blended approach, that is, a combination of face-to-face and online delivery. In two of the courses, all course materials were available online; however, there was still a face-to-face component, where students would either go to their campuses or the lecturers travelled to locations outside of their campuses to deliver workshops with the students. The e-learners reported having had experiences in a variety of study programmes, including introductory, teaching, social work, nursing, statistics, economics and management, accounting, computing, freight and shipping, and tourism and hospitality. The online component of each course varied from as low as about 20% to as high as about 80%.

Participants exhibited a range of experiences and views in the use of e-learning. Table 10 contains details of the experiences and views of e-learners and e-learning staff; and table 11 presents details of the types of experiences shared by the remaining participants.

**Table 10 Experiences of e-learning by e-learners and e-learning staff**

| <b>Experiences and views of e-learning</b>                         | <b>e-learners<br/>n*=41</b> | <b>e-learning staff<br/>n=14</b> | <b>Subtotal<br/>n=55</b> |
|--|-----------------------------|----------------------------------|--------------------------|
| Facilitate access to course materials and information              | 13                          | 13                               | 26                       |
| Facilitate access to technology and enhance use of the technology  | 12                          | 5                                | 17                       |
| Facilitate assessment  | 11                          | 6                                | 17                       |
| Facilitate research on course work                                 | 10                          | 7                                | 17                       |
| Effective communication tools                                      | 6                           | 6                                | 12                       |
| Online tutorials which facilitate understanding of course contents | 5                           | 5                                | 10                       |
| Facilitate access to tutors and classmates                         | 3                           | 6                                | 9                        |
| <b>Total</b>   | <b>60</b>                   | <b>48</b>                        | <b>108</b>               |

\* 'n' stands for total number of participants from each target group; because some participants provided more than one response, the total may be greater than the actual number of participants.

All e-learning staff shared the view that e-learning facilitates students' access to course materials and information. More than a third of the e-learning staff discussed the use of e-learning to facilitate assessments, research information relevant to course work, provide access to the tutors and classmates, and serve as effective communication tools. The e-learners shared similar views, but tended to focus on one or two particular advantages of e-learning.

As presented in table 11, the results from the other six groups of participants confirm the views of the e-learners and e-learning staff.

**Table 11 Views of e-learning**

| <b>Experiences of e-learning</b>         | <b>Current students<br/>n*=21</b> | <b>Timeout students<br/>n=18</b> | <b>Graduates<br/>n=19</b> | <b>Student support staff<br/>n=11</b> | <b>Lecturers / tutors<br/>n=14</b> | <b>Community leaders<br/>n=11</b> |
|--|-----------------------------------|----------------------------------|---------------------------|---------------------------------------|------------------------------------|-----------------------------------|
| Effective communication tools            | 3                                 | 8                                | 13                        | 5                                     | 14                                 | 3                                 |
| Facilitate access to information         | 10                                | 9                                | 5                         | 6                                     | 4                                  | 5                                 |
| Facilitate learning and build confidence | 5                                 | 5                                | 6                         | 1                                     | 4                                  | 1                                 |
| Facilitate access to course materials    | 3                                 | 1                                | 5                         | 2                                     | 0                                  | 1                                 |

| Experiences of e-learning | Current students<br>n*=21 | Timeout students<br>n=18 | Graduates<br>n=19 | Student support staff<br>n=11 | Lecturers / tutors<br>n=14 | Community leaders<br>n=11 |
|---------------------------|---------------------------|--------------------------|-------------------|-------------------------------|----------------------------|---------------------------|
| No travelling cost        | 1                         | 0                        | 0                 | 0                             | 0                          | 0                         |
| Informal use only         | 5                         | 5                        | 5                 | 2                             | 2                          | 2                         |
| <b>Total</b>              | <b>27</b>                 | <b>28</b>                | <b>34</b>         | <b>16</b>                     | <b>24</b>                  | <b>12</b>                 |

\* 'n' stands for total number of participants from each target group; because some participants provided more than one response, the total may be greater than the actual number of participants.

A total of 21 participants had no experience in e-learning courses; the remaining 73 had some experience with courses delivered online. Even though they were not enrolled in an e-learning course, all 21 indicated that they had used various e-learning tools (such as email) informally. The range of experiences and views overall suggested some advantages to e-learning. One community leader described his experiences and views as follows:

e-learning is timeless and fascinating as it is a progressing development stage of learning. It is a tool that is available globally and is very useful but the answers are not always there.

[Community leader 1]

Another community leader agreed:

There is a lot more information now than what there used to be and also the content is now designed in a way that it is more user friendly than what it used to be. Some of the policies that a lot of institutions are introducing now are more focused on meeting the needs of Pacific communities. A lot of institutions now are actually recruiting Pacific people to take the lead or promote a lot of these e-learning courses to the community. I still believe it is a relatively new concept and there is still a lot to be done to try to promote that and use it. You come up against things like e-learning, the e-learning requires investment and machinery and capital and all that sort of things.

For something like this to succeed at the Pacific community level you really need to have not only the equipment and the content, but also the right people to be able to offer support for people, because one of the things about e-learning is that it assumes independent learning; but for someone who is learning for the first time they are always a bit hesitant, they need to have people around who can lead them along. If you had people in the community who were familiar with that, then they would be able to provide supporting roles that would be good.

[Community leader 3]

The above community leader points out issues that should be carefully considered to ensure the successful use of e-learning by Pacific communities: a need for investment in the equipment, course content, and appropriate staff who could offer the types of support necessary in an e-learning environment. Information and communication technology (ICT) support for those who are new to the technology is critical.

Taken together, the data reported in tables 10 and 11 reveal four main advantages of e-learning:

- effective communication tools

- easy access to information
- easy access to learning and course materials
- cost savings.

### **Effective communication tools**

Most staff and graduates and about half of the timeout students affirmed the effectiveness of e-learning tools for course delivery and as a means of communication between staff and students. Five student support staff, three current students, six e-learners, and six e-learning staff agreed.

One lecturer pointed out some advantages to offering a course online:

The advantage of it is, you are able to communicate and you don't really need to see students face-to-face. Especially when an assessment is due, students can submit online and you can return online; and if need be, you can come and discuss or whatever. It works when your class size is really big; my class last semester was 48. If my class comes down to 10 or 15, I will change, but because you need to get through to all of them that works well with this size. Your strategy also depends on the numbers.

[Lecturer 11]

Another lecturer shared the advantages of students being able to email an assignment; some especially found it easier to email late assignments rather than meeting or phoning the lecturer to explain their lateness.

What I find with the postgraduate Pacific students, the students have called to leave a message on my machine and then I picked up the phone, they just want to leave a message to say their assignment was late. They are using email to do that. When things are not going well and we are not meeting deadlines we feel bad about it. And it is safer to email. It is an issue of retention because it allows our student to still hand in assignments late, because unfortunately some of the students enrol and use the technology because they can't face you to tell you.

[Lecturer / tutor 10]

One community leader noted advantages of online communication:

e-learning is available at any time and you can correspond at your leisure. You can put stuff online at anytime to send to your tutor and you know that they will get it. There is less worry too, so if you have come up with something then in your mind you put it through so it is instant.

[Community leader 2]

Two e-learning staff described using video conferencing for students and staff across the world to communicate. In describing a project for a Bachelor of Design, one e-learning staff member said:

In my programme we did an online project with one student from New Zealand and one student from Germany. They paired up and met at 9pm at night. The student would come here to the lab. They would communicate for an hour. They were given the brief and they were supposed to work together to design one project, a boathouse, to be built in Germany. In the final assessment, the critics [examiner], the students, and staff got together for a video conference. The students would work on the design together, then they would work

individually and they would swap files after their design. They would work until they got to some sort of agreement.

They would prepare a video or an animation of the project. And they had to present it to a group here in New Zealand and a group in Germany in a live-streaming video conference. The critics would comment online. They met online but not in person.

[e-learning staff 4]

These examples show how e-learning tools facilitate communication between students and staff — both within a local course using email and across the world in a global e-learning environment. With video conferencing the students, staff, and critics could meet, discuss, and assess students' work from two different parts of the world. One of the outcomes of the use of e-learning as a means of communication is the development of an online global community. The same e-learning staff member also went on to discuss two outcomes of e-learning:

Rather than being an expert who works in New Zealand, I can also be an expert conducting classes with people further away. It's the ability to become a global academic rather than being located here [in New Zealand]. Another one would be the construction of online communities. Not just through the internet and computers but through mobile technology such as the mobile phone.

[e-learning staff 4]

The advances of e-learning technologies allow ease of communication and consequently the development of new ways of working with students and communities across the country and across the world. Email and discussion forums facilitate communication between staff and students, and students and students; video conferencing facilitates communication and interaction between students and staff on a global level. The challenge for Pacific students and communities is whether to embrace and engage with these opportunities.

### **Access to information**

The use of e-learning promotes access to information. Student support staff reported how students extensively used the technology — accessing information through searching databases and communicating through electronic blackboards and email. Given their roles in supporting students, student support staff provide an important perspective on how students access and need to learn to use the technology.

In student support there has been quite an extensive use, especially with the library databases that have been set up. Searching databases has been a useful tool in the courses. Sitting with students who are able to go through those courses, often students weren't aware that these were accessible at any time. And the use of blackboard as a means of communication for students, to download notes that we have negotiated with the tutors. On blackboard that they can access with the permission of the tutor as part of their specific time that they can study when they are off the campus. Email has also been useful.

[Student support staff 5]

Similarly, one current student commented on how e-learning tools had helped her:

e-learning is very helpful because it helps you with your studies for information and researching subjects. You can go online and find information on your topics instead of having to go to a library and just look for a book, which takes ages. Email is very helpful too because

you can email people if you want to interview them instead of having to do it in person. It is really fast as well. I think it is very positive and they should advertise it more and get it out there so that Pacific students know that it is there, so they can take advantage of it, so it can help them with their studies. It took me a while to learn the e-learning method but when I grasped it was really helpful.

[Current student 2]

### **e-learning facilitates access to learning and course materials**

The data illustrate that e-learning facilitates learners' access to course materials and information:

It is very effective, convenient for learning and as well as for your time. A lot of people don't have time to be seated in classes attending classes, committed to a study. e-learning has made it possible to study from home. It caters for all age groups.

[Graduate 15]

Some e-learners reported a combination of online activities in their courses:

Most of my management courses include e-learning. For example, my finance paper requires a lot of research online to complete assignments. There is also a project that requires access to information online through the net and university databases. There are also supplementary online lectures, which are pre-recorded sessions on streaming video. There are online quizzes and tests. Notes for lectures can also be found online. There is also a class forum. All these are found within the management databases, called 'my web', which each student can access. Most of my management papers are organised and delivered in this manner.

[e-Learner 29]

The above response showcases many tools that are available for students in an e-learning course. It also indicates the types of ICT-literacy skills required to effectively access the information. Students need the skills to search information online, access and use databases, access pre-recorded lectures on streaming video, access and complete online quizzes, and access and participate in class forums.

One major advantage of e-learning is the opportunity for students to study at a time and place that is convenient to them (as long as they have access to the internet). As one community leader confirmed:

Time and e-learning suits my style of learning, I am a very independent learner and e-learning gives me the opportunity to figure out things for myself; and if I have any queries that is when I seek a tutor's or lecturer's assistance. When I used it, it was very new and there is this human thing about trying something out for the first time that sort of put me off; but now that I tried it and know a little bit more about it I think it is a very good idea, particularly if you find it difficult to study in a classroom. e-learning is very useful and would probably suit a person who is seeking to go back to learning and doesn't feel comfortable and doesn't have enough time to go to the institute, then e-learning is the way to go, because rather than you going to the classroom, the classroom comes to you.

[Community leader 3]

## Cost savings

One participant pointed out that one of the advantages of having access to her course online was the saving on travel costs — both time and expense. As one current student noted:

e-learning is positive learning experience and will benefit out Pacific students because there is no travelling and no travel cost.

[Current student 21]

Another e-learner concurred:

Using of technology and e-learning is useful in transmissions of lecture information and course contents; for example, a student in Tokoroa that comes to class about once every fortnight or a month. This saves him his petrol and time to travel back and forth. Rather, he can get the information from the internet via e-learning and then come to class occasionally.

[e-Learner 24]

Clearly, students' ability to access course materials and requirements online saves time and money.

## Disadvantages of e-learning

The data also highlighted some possible disadvantages of e-learning as a mode of delivery. For example, a lecturer explained:

I prepare the material putting it online and the students access it straight away. Two lectures a week, one on Monday and one on Friday; because the lecture is already available there, instead of making photocopies of ten pages of the lecture notes, the student can simply download them. I don't know whether it is good or not, but I could see also there is a disadvantage at the same time. Because the lecture notes are available online, some students think it isn't worth coming to the lecture, because they have the notes of what you are about to do. So they don't come to class, but what is provided there is very limited, because still a lot of it is done in the lecture and in the class with the students.

[Lecturer / tutor 11]

This explanation clearly illustrates that staff need to get used to a mode of delivery that may not necessary encourage or require students to turn up to class. Moreover, information available online must be sufficient to afford students the opportunity to study at their own pace and in their own time. This lecturer also went on to explain other possible disadvantages of e-learning delivery:

It can also be a challenge on the lecturers because sometimes when you put up an issue for discussion you have to be online at that particular time so you can interact with them. Sometimes when other things come up it is a bit difficult to reschedule and be available online. Sometimes technology doesn't work like power cuts; there is still a lot that should be available on paper as backup at the same time. You go to a lecture room expecting to use the technology and it is not working ... I am all for it but there are also disadvantages relying entirely on delivering your course online. I also miss the personal interaction; everybody has got a photo online, so once you talk to each other the photo of that person appears for you to remember.

At the end of the semester some of your students have never walked in your door so you miss that.

[Lecturer / tutor 11]

Another lecturer said:

I am e-learning illiterate. When it comes to technology, I have a blackout. As a consequence of that I use the old overhead projector. I do not want my students to mistake technology for quicker learning. The technology is really a means to an end, which is critical learning. But many of my students think that by getting notes through the web, just the bullet points should be enough and not to read books; when in fact I would prefer them to read books, where these bullet points simply should just guide them into reading books ... I do not deny the use of technologies. I think that it is very necessary and our students should be able to use them, but they should understand that they are only there to enhance their learning.

[Lecturer / tutor 8]

These responses suggest that some Pacific staff would benefit from professional development programmes on how to use the technology. Computer literacy is an essential first step to using the technology necessary for successful delivery of e-learning programmes.

## **Discussion**

This section has examined the views and experiences of e-learning by all groups of participants. The results show a wide range of staff and student experiences and views of e-learning, including different levels of acceptance of the online mode of course delivery and associated technology. Although most e-learning staff embraced it, a few lecturers showed some reluctance. For example, e-Learner 24 suggested that having the materials available online did not necessarily encourage her to engage with them; whereas a face-to-face mode of delivery would have encouraged her to act on and participate in learning activities. The results support the conclusions of Clayton et al. (2004) that for Pacific e-learners, face-to-face delivery must be an integral part of the e-learning environment. A blended approach to teaching, which combines e-learning and face-to-face delivery, appears to be most effective.

The results also suggest that both staff and students need to acquire new ways of working and engaging with learning materials. Both students and staff need to be supported to acquire the appropriate ICT-literacy skills for e-learning. Further, students must acquire the skills not only to access information from the internet but also to judge its validity.

One feature of the e-learning environment that is similar to the face-to-face delivery is that staff still need to deal with non-attendance — in this case, students who do not log on to access the learning materials online. e-learning may facilitate access to information and course materials, but it does not guarantee that students will be motivated to access and participate in the learning environment. Students' motivation continues to be a critical consideration.

## 5.3 Critical factors that contribute to students' success in e-learning

### Perspectives on critical success factors

Table 12 summarises the key groups of critical factors contributing to the success of Pacific e-learners. The findings are based on the views and experiences of the 13 e-learning staff and 41 e-learners from universities, institutes of technology or polytechnics (ITPs), and PTEs.

**Table 12 Distribution of critical success factors by tertiary institution**

| Critical success factors   | University e-learners<br>n*=14 | ITP e-learners<br>n=14 | PTE e-learners<br>n=13 | e-learning staff<br>n=13 |
|--|--------------------------------|------------------------|------------------------|--------------------------|
| Access to computers and the internet and knowing how to use the technology | 5                              | 7                      | 1                      | 13                       |
| Help from tutors and class members and IT-supportive environment           | 2                              | 5                      | 6                      | 12                       |
| Attending class and handing in assignments on time                         | 2                              | 3                      | 7                      | 5                        |
| Access to information, learning centre, and other resources                | 4                              | 5                      | 1                      | 0                        |
| Motivation and self-confidence   | 3                              | 5                      | 1                      | 1                        |
| Understanding course content   | 4                              | 1                      | 2                      | 7                        |
| Supportive family  | 0                              | 4                      | 3                      | 1                        |
| Funds for tuition fees   | 0                              | 2                      | 1                      | 0                        |
| Individual learning  | 1                              | 3                      | 0                      | 0                        |
| Time to work on the course online  | 3                              | 1                      | 5                      | 1                        |
| Good command of English  | 1                              | 1                      | 0                      | 5                        |
| <b>Total</b>   | <b>25</b>                      | <b>37</b>              | <b>27</b>              | <b>45</b>                |

\* 'n' stands for total number of participants from each target group; because some participants provided more than one response, the total may be greater than the actual number of participants.

Table 13 presents the findings on perceived barriers to e-learning.

**Table 13 Barriers to e-learning**

| <b>Barriers</b>   | <b>University e-learners<br/>n*=14</b> | <b>ITP e-learners<br/>n=14</b> | <b>PTE e-learners<br/>n=13</b> | <b>e-learning staff<br/>n=13</b> |
|---|--|--------------------------------|--------------------------------|----------------------------------|
| Lack of understanding of technology                       | 8                                      | 5                              | 7                              | 5                                |
| Lack of self-confidence and motivation                    | 4                                      | 9                              | 5                              | 0                                |
| Cost and finance  | 2                                      | 8                              | 2                              | 0                                |
| Lack of access to computers                               | 3                                      | 5                              | 1                              | 5                                |
| Lack of time management skills                            | 1                                      | 3                              | 5                              | 1                                |
| Personal reasons  | 1                                      | 5                              | 3                              | 1                                |
| Family commitments  | 0                                      | 6                              | 2                              | 8                                |
| Lack of writing and communication skills                  | 2                                      | 1                              | 3                              | 2                                |
| Lack of physical interaction with and support from tutors | 1                                      | 3                              | 4                              | 1                                |
| Lack of understanding of English                          | 3                                      | 1                              | 1                              | 5                                |
| <b>Total</b>  | <b>25</b>                              | <b>46</b>                      | <b>33</b>                      | <b>28</b>                        |

\* 'n' stands for total number of participants from each target group; because some participants provided more than one response, the total may be greater than the actual number of participants.

Taking together the responses on critical success factors and barriers to e-learning for Pacific students, key areas include but are not limited to:

- access to computers and the internet, and understanding the technology
- help from tutors and peers
- attending class and handing in work on time
- self-confidence, motivation, and personal factors
- understanding course contents
- family support and commitments
- cost and finance
- writing and English language skills.

### **Access to computers and the internet, and understanding the technology**

The most critical factors for success were access to computers and the internet (including a telephone line at home for accessing the internet) and understanding how to use the technology. Table 12 shows that all 13 e-learning staff considered access to ICT equipment as most important.

Five e-learners from universities and seven from ITPs, but only one from a PTE, reported this as a critical factor. It is possible that because most PTE e-learners had access to computers, they did not see it as a critical factor. What they did note included:

- attending class
- handing in assignments on time
- accessing course materials
- getting help from tutors, class members, and IT-support staff
- having time online to work on their courses.

Technological barriers can arise in an online environment. Sometimes telephone accounts are not paid on time and phones are disconnected, which prevents access to the course material online. Students who access the internet through dial-up can only download material of a limited size. This may depend on where they live and their arrangement with their internet service provider (ISP). Before students can access courses online from their homes, they must have adequate technology in place. One community leader noted that the 'lack of a computer or e-learning tools because of the cost was the key factor that contributes to him not using e-learning' [Community leader 5]. Another community leader said that: 'there is a particular institute that offers computing for free. Our people are not accessing it. We need to encourage people to use it.' [Community leader 6].

An extract from a university e-learner's interview emphasises lack of access to computers in the institution:

I think there's lack of access to resources provided by the institution. For example, there aren't enough computers. When it's all being used up by the students, we have to check computers elsewhere as there's none to be used at that time for our assessments.

[e-Learner 24]

Likewise, an ITP e-learner highlighted the need to access computers:

Make computers available to students 24 hours 7 days a week.

[e-Learner 10]

An e-learner from another ITP agreed:

Students are overloaded with assignments. There are computers in the library; however, you have to wait in a long queue and you are waiting forever. Also the library charges for access to the internet.

[e-Learner 14]

As well as having access to computers and the internet, students need to know how to use them. As one e-learner explained:

Not having access to e-learning before attending the tertiary institute ... Being expected to know how to use e-learning when you don't know, not knowing the basics. Need to be taught the basics, for not all students take up computing at high schools or have computers at home.

[e-Learner 8]

A similar view was shared by another e-learner when she described the barriers to effective use of e-learning:

Barriers would be not knowing how to navigate around different databases; not using the tool to support learning; being fearful or unsure about putting up your notes, visuals, or experiences for shared critique. Not being aware of all the different tools that can support your learning, for example, things like endnotes for documentation.

[e-Learner 16]

These results support those of Clayton et al. (2004) and Clayton (2003), reported in chapter 3 — that to fully participate in the e-learning environment, learners must be technologically literate, confident, and competent. Institutions cannot assume that all students enrolling in e-learning programmes already have the technological and ICT literacy skills needed for success in this learning environment.

### **Help from tutors and peers**

The support of tutors and other students was also seen as critical to the success of Pacific e-learners. A total of 13 out of 41 e-learners and 12 out of 13 staff members mentioned this factor in their responses.

For example:

A lot of tutor support, peer support, and also support from our workmates who have already completed the course to have a good support group for those who juggle so many roles such as parenthood, work, and study.

[e-Learner 4]

Other e-learners reported on the help given by Pacific staff:

Appointments of Pasifika staff assist the students as staff push the students and encourage students to be confident with their learning. That makes students feel that they are part of the learning. Not only that, but the Pacific staff have a personal level of understanding of the students as they can give the students notes and a second chance.

[e-Learner 14]

The Pasifika Unit helps the students with how to do their assignments, how to understand what's required for the assessment. The unit works together with our course department in order for students to pass the course. The unit assists the students with study skills, communication skills etc. If there's a failure or so, then using these services means that we can pass and or improve to a higher grade. This unit employs Pasifika employees and this makes communication easier when it has to deal with Pacific students. With the Pacific mentor, they encourage the access and participation of our Pacific students.

Students can email their assignments to an employee at the unit for comments. Their assistance really helps students, and I as a student feel that they are there to help. I feel that they do not see me and my weaknesses; where if I did, I would not have gone there again or feel like going there again. The unit motivates me to study. If I didn't utilise their services, I think that I would have given up already or kept procrastinating and would have led to giving up. The unit says and makes us see that it's easy to do it. See, it's easy and you can do it.

[e-Learner 24]

Likewise, an e-learning staff member discussed the critical role of the staff in the delivery of online courses. Availability of e-learning staff contributed to the retention of students.

There is high retention because the staff are available during the day. Students know that we are there and they come in if they have a day off work. Our availability gets them to come back. The bottom line is the willingness of staff to go the extra mile, in terms of providing other opportunities and times where students can come to do what they need to do. e-learning is the most challenging area because the change in delivery mode means we are changing the delivery mode that our students are used to. We are getting students to get used to not having someone right there, and to ask questions every step of the way. We get them to adjust to the fact that they have someone out there, but that they may have to send an email to find out the answer or pick up the phone.

[e-learning staff 5]

The practical help and encouragement given by Pacific staff clearly contribute to students' motivation to study, seek further help with their assignments, and use learning support services. The commitment demonstrated by Pacific staff perhaps shows students that they care and expect them to succeed in their studies.

Expectation of success and understanding of students' needs are consistent with the critical factors reported in section 4.2. The relationship between the staff and students is critical; staff availability to provide feedback on students' assignments contributes to their success and improves their grades. There is also evidence that a closer working relationship between the Pasifika Unit and the staff in departments where students were enrolled was essential to the ongoing support services delivered by the learning support unit. This implies that a well-coordinated teaching and learning support service can lead to Pacific students' success.

The results also point to the critical role of peers and peer learning. e-learners found peer learning helpful and useful.

Peer learning is most helpful. Not only that we assist each other when the course is difficult but we also research into each other's cultures.

[e-Learner 21]

Most saw the support of their peers as critical; some also suggested that working with peers may also lead to distraction from study.

In peer learning we mutually help each other; however, we are to be very cautious as we may get distracted and / or disturbed from the subject, either by our own doing or by our other peers.

[e-Learner 23]

The results show that both staff and students must acquire new ways of engaging in the teaching and learning process. Although a course may be available online, the availability of staff for face-to-face discussion appears critical to students' success.

On the other hand, the students need to take responsibility for making sure that they are engaged with the learning material and seeking the necessary help from their tutors. Generally, students show confidence in using email and searching the internet. They also use discussion boards to enhance interaction between each other and their lecturers. This helps to build strong professional relationships between students and lecturers, and to improve students' understanding of course content. e-learning can motivate students to learn, but students must be able to communicate freely using the technology available in their institutions.

## **Attending class and handing in assignments on time**

Almost all the courses referred to by students and staff were delivered online and face-to-face. Some evidence suggested that some course materials may be more easily delivered face-to-face than online. Thus, students still need to attend classes and hand in their assignments on time. For example, one e-learning staff member explained the delivery of an accounting course:

I teach the accounting and some information technology (IT). And it's all night classes ... We have mixed multilevels of delivery; for two nights they come in and the rest of the time they work from home. I find it very difficult with accounting, with actually trying to understand the theory work online. So it's better that they come to class. If they miss classes they miss quite a lot of work, especially in accounting. The IT is easy for them to get all the work from the computer and into the practical work. Practise at home and they come in and show me what they have done. With the accounting, it is quite difficult for them to understand the theory as most of them don't have accounting backgrounds. And because it's Level 4 accounting, they struggle with it.

[e-learning staff 9]

Among e-learners, PTE students were most likely to report this as a critical factor (seven PTE versus only two university and three ITP e-learners).

## **Self-confidence, motivation, and personal factors**

As in any learning situation, students' motivation and self-confidence are critical to their engagement, participation, and success in the learning process. The data revealed that several areas could impact on their motivation and self-confidence.

These areas may include but are not limited to:

- ability to use the computers and the technology
- understanding of and interest in the course content
- other personal matters such as family support and commitments
- availability of support from staff and peers.

One e-learning staff member indicated that using software and technology should be relevant and work to motivate students:

Any technology that used in e-learning should relevant and should work. By relevant, I am referring to software. If you're an e-learning student, you're primarily learning the piece of software. Then that software should be up to date when it is used in that environment. The hardware must also be up to the task of running that software. Specifically e-learning strategies are all about motivation.

[e-learning staff 4]

Two e-learners' views illustrate the importance of the individual learner:

Remember that everything depends on the individual. Once the individual makes up his or her mind to do something, he or she will do it as his or her mind is already onto achieving it.

[e-Learner 25]

e-learning is good for individual learning as it depends on how an individual learn. One might learn through the paper while another may learn through seeing, so there is an option depending on the student's ability... e-learning also helps in gaining confidence which motivates me. I see and understand the information given at my own pace, and I have confidence, and I am therefore encouraged to start talking with other people.

[e-Learner 15]

The above responses are a reminder that even though the course may have all the necessary materials, staff, and support systems in place, the learner may not be ready and motivated to engage with the learning material. In the final analysis, learners must be motivated and ready to actively engage in the learning environment.

## **Understanding course contents**

Understanding of course content was also perceived as critical to students' success. Lack of understanding of course content might lead students losing interest in the course and eventually withdrawing. As shown in table 12, seven e-learning staff and seven e-learners shared this view. For instance, e-Learner 4 said: 'It would have to be lack of real understanding of the course content, so they start to lose interest.' Similarly, e-Learner 7 suggested the need to 'make sure that students understand the course content and all requirements for the study'.

Another e-learner included understanding course content in a list of barriers to students' success with e-learning:

Lack of understanding of search engines. The high cost of the courses and lack of finance. Family issues such as sickness and bereavement. Lack of motivation and understanding of the course work. And lack of peer support.

In the e-learning environment, the design and presentation of course materials are key elements of the delivery. As one e-learning staff indicated:

Poor course content could put students off. There are times that it might be too text based, that intentionally that be a barrier. How often it is in reality here, I don't know. Certainly need to consider the material you're using and how you're presenting. The students don't like the bulky workbook. For me I give exercises and use the overhead, do PowerPoint demonstrations or just demonstrations, and then give another exercise for them to do. And then, checking answers, and going on like this until they are comfortable. All information I give to students they generally use, sometimes it has to be presented on paper before they can access it online.

[e-learning staff 2]

The data highlight the need for e-learning staff and those involved in the course design to take into account the students' need to access and understand the course contents. The design and presentation of the course materials and information must assist students' learning and promote their motivation to engage with the materials and the learning activities.

## **Costs of tertiary education**

Chapter 4 discussed cost of tertiary education as one of the main barriers to tertiary studies. Likewise, some e-learners identified this as a factor in their success. For example:

Lots of Pacific peoples want to attend tertiary education; but the funding is a problem, as some people in terms of money are not stable enough. The institution should improve funding or to look at the individual to set up strategies like having scholarships in order to become more financially able for the Pacific.

[e-Learner 21]

For some e-learners, lack of finance may mean a need to work to supplement family income or to take out student loans to finance their study. Another e-learner explained:

Pressure to work to provide for the family. There is student loan only but there is no benefit to provide for the family of adult students who chose to study and can't work. Lack of access to finance to pay for course.

[e-Learner 35]

As discussed in the next section, the availability of finance correlates with students' family support and commitments.

## **Family support and commitments**

Although evidence suggested that family support and commitments were critical to e-learning success, it was apparent that these factors may not be relevant just to Pacific students. As one e-learning staff member said:

The main barrier we have highlighted is access to the technology and adequate support for older Pasifika students who may be digital immigrant. Cost as such is not an issue as there are no fees for the programme and the students are employed for the duration of the course. Family commitments can be a barrier; however, we have found especially this year that has been a barrier for all students, not just Pasifika students.

[e-learning staff 1]

The responses given by two e-learners are characteristic:

Students are too busy with other commitments like family and work and could not make it to the lectures and tutorials.

[e-Learner 22]

There is lots of personal stuff like fa'alavelave and family obligations that the student has to oblige with or is expected to bear, like having to attend cultural meetings that distract their attention from studies.

[e-Learner 21]

The fa'alavelave is a Samoan term that refers to family occasions such as funerals, weddings, or church fundraising activities. These occasions normally require the family to contribute money and / or time to support their extended family or church community. As e-Learner 21 pointed out, such occasions often require students to take time away from their studies to contribute and participate in those activities.

In addressing these barriers, one e-learner stated that it was important that 'families are included in a short orientation of the course that the students undertake' [e-Learner 10]. This could be a means of ensuring that the families are aware of the workload, course requirements, and commitments that the student must juggle to successfully pass the course. The need for students to work to supplement family incomes, and how that impacts on their full participation in tertiary education, is a cause for concern.

The study indicates that although some students were able to enrol at the tertiary education institutions (TEIs), successful participation and completion of their courses depended on them having the time to attend their classes and tutorials. Balancing work, family, and tertiary studies is a challenge for some Pacific students. This has important implications for the availability of courses in a more flexible learning environment.

## Writing and English language skills

Five e-learners and five staff members reported that a good command of the English language and good writing skills were critical to Pacific students' success. When considering barriers to access for Pacific e-learners, five e-learners and five staff members said that lack of understanding or fluency in the English language can become a barrier, particularly for students for whom English is a second language. As one e-learning staff member explained:

Understanding is the key, and this becomes much more apparent in e-learning. The language should be simple, in any written document. Any student should be given every opportunity to post questions. Moreover the students should be made to understand the questions. More so in e-learning, the content needs to be engaging visually including pictures, and diagrams, and sound needs to be employed.

[e-learning staff]

The study also implies that for these students, not only will there be a need to learn to use the technology, but also to address language and literacy needs. Another e-learning staff member elaborated:

Reading is a real issue with student where English is the second language. It is hard to teach students to take reading to another level within a short time frame like a 6-month course. But there are things you can do as you go through the course, pulling out keywords, and having a technician on hand. There are techniques you can teach students, but it takes time.

[e-learning staff 3]

## Discussion

The results of this study raise some important factors to consider as critical to students' success in the e-learning environment. Some factors are applicable across all tertiary education, such as cost, family support and commitments, students' motivation, and help from tutors and peers. Others are especially relevant to the e-learning environment and have important implications for course design and delivery. These are:

- access to computers and the internet, and understanding how to use the technology — the study suggests that TEIs cannot assume that all learners have the same experience with the technology; training sessions on the use of the technology should be an integral part of any e-learning course
- writing and English language skills — particularly pertinent to the e-learning environment, given that most communication and assessment tasks are completed in a written format; support systems are crucial
- course design and presentation — must facilitate students' understanding of course content, which is crucial to their ongoing interest and engagement with the course of study

- attending class and face-to-face delivery — an important component of course delivery; face-to-face meeting with tutors and lecturers appears crucial not only for clarification of course materials and areas where students lack understanding, but also to encourage and motivate students to succeed; all courses had a combination of face-to-face and online delivery.

## 5.4 Initiatives to enhance access to e-learning programmes

The results demonstrated various strategies and initiatives set up by the TEIs to support students in the use of e-learning. Table 14 details the range of initiatives and number of e-learners and e-learning staff who identified a particular initiative.

**Table 14 Initiatives to enhance e-learning**

| Initiative  | e-learners<br>n=41 | e-learning staff<br>n=14 | Subtotal  |
|---|--------------------|--------------------------|-----------|
| Appointment of Pacific tutors                       | 11                 | 5                        | 16        |
| No specific initiative other than supportive staff  | 13                 | 5                        | 18        |
| Access to computers and the internet                | 13                 | 2                        | 15        |
| Mentors and pastoral care                           | 11                 | 5                        | 16        |
| Learning centre                                     | 10                 | 1                        | 11        |
| Training on the technology; for example, blackboard | 5                  | 1                        | 6         |
| Access to library and course materials              | 6                  | 0                        | 6         |
| Bridging programmes                                 | 6                  | 0                        | 6         |
| Scholarships  | 2                  | 0                        | 2         |
| <b>Total</b>  | <b>77</b>          | <b>19</b>                | <b>96</b> |

### Support systems

Table 14 includes support systems that TEIs set in place for Pacific students. Some initiatives focused on getting students to access the tertiary institutions (such as scholarships and bridging programmes) However, most initiatives focused on student retention and success (such as access to Pacific staff, computers, and the internet; mentoring and pastoral care; the learning centre; and access to library and course materials). Several TEIs also offered training programmes in the use of the technology.

An ITP e-learning staff member emphasised the mentor programmes in describing the support systems in her institution:

There is access to computers on campus after hours. We provide mentorship when students are having difficulties, either through the tutorial staff, library distance staff, or other as required ... we have a Pasifika mentor programme where we identify early who is a digital immigrant and who requires additional support. We are working on this in our programme; however, this could be something that could be undertaken institution-wide rather than programme specific.

[e-learning staff 1]

A PTE e-learning staff member described how their support structures are integral to the programme:

The support structure that we put around the student is part of the institutional framework. Like the student in the middle, with the course director provides pastoral care and monitoring the content of the support and look at the tutorial theme, having to understand the academic needs, having a literacy educator, student support, IT support. The strategy comes from the staff, who are really committed to help the student to succeed. We really need to find staff who are passionate and committed to what we do. It is not a nine-to-five job. It's not a normal teaching job. It's social work, teaching, way of life, and providing assistances on Saturdays. This is flexibility of the staff.

[e-learning staff 5]

Most responses focused on support for students, but some also mentioned support for e-learning staff:

There is full training at the beginning of the programme on the use of Blackboard in relation to online use.

[e-learning staff 1]

Given that the research questions focused on initiatives to enhance students' access to e-learning, the data tended to focus on student-based initiatives. It would have been useful also to have asked about the institutional support systems for staff who deliver their courses online.

## 5.5 Case study

The case study was conducted at BEST Training (BEST), a PTE with a high number of Pacific students. At the time of data collection, 1620 students (77% female and 23% male) were enrolled at BEST. Of these, 51% were Pacific, 27% Māori, and 22% other ethnic groups. About 76% of students entered BEST with no formal qualifications.

For the case study, researchers collected data from five staff and five students in BEST's Certificate of Business Administration and Computing courses (levels 3 and 4).

### Participants

To differentiate between staff and students, and to safeguard the identity of participants, the students have been given fictitious names and the staff are referred to by code number.

- The students were 'Sione', a male in his 20s; 'Leilani', a female in her 20s; and 'Saane', 'Nila', and 'Iva', all females in their 40s.
- The staff were four tutors and one management staff member who had previously taught the programme.

### Rationale for the use of e-learning as a mode of delivery

The following responses from staff give insight into some of the factors that contributed to BEST's decision to use e-learning as a mode of delivery:

The organisation had policy and visions to increase its accessibility to Pacific communities. It's a means of bridging the gap with our communities. Pacific communities in recent census results, for example, have had very low access to technology, compared to other groups here in New Zealand. Primarily flexibility and market trends, it's becoming a necessity to offer e-learning for tertiary providers. Also

culture; many of our students too, may be working to support large families and not just immediate families, but also kids, possibly siblings. They have heavy commitment in communities beyond employment, in church groups, community boards. In terms of cultural differences, being a Pacific provider, for example, family occasions, family commitments, are so strong and different mainstream organisations often do not place too much emphasis on these.

[Tutor 1]

There was a demand for it from students. Students wanted a lot more flexibility in their courses. Past students are now employed and they wanted to upskill, and that's why they are not available during the day; so the demand to study in a flexible manner has increased.

[Tutor 5]

When the Government decided to come up with the e-learning strategy, we just got to put up our hands and say that's us ... and the e-learning was the natural progression.

[Tutor 2]

Researchers identified the following reasons why the institution developed and offered e-learning courses:

- BEST's vision and policy to increase its accessibility to Pacific communities
- a demand from students met by the flexible mode of delivery
- response to a government e-learning strategy.

### **Support structure for e-learning**

To ensure students' access to e-learning, BEST developed a support structure that included access to computers and technology. As one staff member explained:

I think, institutionally, one of the critical factors is providing students with equipment. That's an institutional support having e-learning students get that. They get a PC, unlimited internet access, a desk, a chair, a printer, plus access to extra cartridges if they need to. They still want paper from us; we're kind of stopping there. And because the students have the computers at home, they have become very much more independent, because they've got to do the learning themselves. But they become a lot more self-sufficient and directed and gain great self-confidence in themselves. That also helps them to get that success.

[Tutor 5]

Other staff discussed different aspects of the support structures they offered:

I think for me personally, together with everything else that we teach, the structure that we actually operate in. We operate in a family environment, and I think for that Pacific people can actually relate to it ... Tutors being there pretty much 24 hours online and having that one-to-one with the tutors online. It's the support that BEST had created. In spite of challenges at home for students, they are pretty resilient to come and complete the course; from our side, we have given them the opportunity of coming back. But also having course directors who gave pastoral care and arrange time for them, so that they come back and finish their courses.

[Tutor 4]

It's worth mentioning the support structures, like the IT, that's another support we provide, coz we're now talking about factors and with the student in the middle you've got different support structures that the student needs, like IT managers. What they do, they provide quite a comprehensive IT support. When students have problems, they can bring their PC and often gets fixed. And they get help at the help desk, and we show them how to set up their PC; then you have the pastoral care staff, the course directors that are non-teaching staff whose main job is committed to help motivate students beyond today's assessment. You've got onsite, more like a social-work type support. You've got literacy support. Then you've got managers who manage the whole process. It's quite an outstanding support system in place.

[Tutor 2]

While acknowledging the support of the institution, the role of the student and family support were also vital. Tutor 2 continued:

It's their determination, which gets them to keep on coming. We may be one factor, sometimes it depends on what sort of support factor they've got at home. We haven't perfected the strategy to make learning successful for Pasifika students, we're talking about the intangible stuff and we're now working towards supporting the tangible success factors. That's the next focus for 2006.

[Tutor 2]

BEST's experiences illustrate that e-learning requires the training provider to invest time and resources. This includes creating a support structure that facilitates access to the technology, IT support, and staff time and accessibility. All five students discussed these factors as helping Pacific students to participate in e-learning programmes. Here are four of their responses:

The pastoral care programme is tutors personally talking, calling, and interviewing the students, checking up on students, going to residences to check on them. The tutors work hard and provide for the students in terms of their time. They offer special tutors for students with English as a second language.

[Sione]

We can email the tutors if we have any problems. Some of our Saturday classes we do our work then sit around and chat and see how far we are going. If people are having problems like family problems they can see the career lady.

[Leilani]

If anything happens to the computer like it breaks down, you can ring up the tutor.

[Nila]

They have a Saturday class. If you have difficulty with your papers you make an appointment with one of your tutors and they will sit down with you and help. We do have a get-together to help the students to motivate and encourage each other.

[Iva]

The results indicate that the combination of e-learning and face-to-face modes of delivery enhances students' participation and engagement with the courses. Whilst there is a need to prepare students for tertiary education, the findings also suggest the need to prepare staff who are committed to deliver the support systems required for an e-learning environment.

### **Student and staff experiences of the e-learning mode of delivery**

In discussing their experiences in the programme, and factors that contributed to their success, Nila and Iva both emphasised support from the tutors. Iva also explained the types of e-learning technology she used:

I am doing more research and ask a lot of questions; there is a website on our learning programme that you can give information. They get straight back to you on the email, which is really helpful. The types of e-learning technology that we learn at the course are web sites, email, PowerPoint, database, spreadsheets, Excel, and Word.

[Iva]

Sione described aspects of the programme that facilitated his learning and contributed to his participation:

Helpful tutors who sacrifice their own time; personal problems of the students are solved too. The environment at BEST Training, the career department, and job hunting; and we have an exciting programme online. There is a time frame for e-learning and the face-to-face component. We are in class in the afternoon, 2 days a week; this saves on expenses of going to class everyday. Accessibility of tutors online and prompt reply from tutors. Support from family and my determination.

[Sione]

The accessibility of the tutor online was a feature of the e-learning environment that was commonly mentioned by e-learners. As Saane said:

Flexibility and availability of tutors. Some students are shy or want to deal with things privately. So with e-learning, students are more open to express themselves rather than them being shy and confused from the face-to-face meeting and having to speak in English, given English is a second language. The tutor is also available just to focus on my question and not on other class members' questions.

[Saane]

Access to tutors online helps learning in many ways. e-learning:

- allows immediate feedback and responses to students' questions
- gives the freedom to communicate, for students who may find it hard to ask questions face-to-face
- promotes more individual attention to students' learning needs
- becomes a vehicle for students to become ICT-literate.

## Issues of retention and success

The data suggest two areas that need further investigation: the retention and success of e-learners. Three students raised concerns about others dropping out of the course. Both Nila and Iva were enrolled in a course where some Pacific students quit. Nila attributed this to several factors:

I think the reason why some have dropped out is because some students are working so they can't get the time to come to the class and some may not understand what to do like Leilani said. The cost is too much. Pacific students don't really know the relevant groups where we can ask for help.

[Nila]

Iva focused on cost:

The cost, because some of the students are giving up. StudyLink should think about employing counselling people to talk to the students, because the cost is high and if they give up easily they still have to pay for it.

[Iva]

When asked what initiatives are in place to assist the access, retention, and success of Pacific e-learners, the staff again referred to the existing support system:

With access, what we've done is when we initially start our e-learning classes they were all-day classes. So it goes online and face-to-face. So initially the face-to-face component was sort of happening during the day. And we found that many of students had to work. So we came up and developed our evening e-learning classes. So that sort of gave access to most students who could attend in the evening.

For retention, we have course directors that help with retention ... We go and discuss the issue with the course directors. And the close relationships we have with the course directors, we find that course directors will follow up on these students' issues. The course directors offer pastoral care, call students in and sit down and discuss or do home visits ... So we work towards the retaining of students and success.

[Tutor 2]

Tutor 1 also discussed the home-visiting initiative:

We do house visits for students that are really in need, and we actually go and teach there, and help them in the areas they need help.

[Tutor 1]

Leilani noted the impact of pastoral care and follow up:

I know of a Pacific lady in the course who was almost going to give up because she didn't understand it, not enough information was given to her. But she is doing all right now because of the professional development and help given to her. They ask all the time if we don't understand ... The tutors are really good and helpful; whatever you don't understand, they will always sit down with you and explain it to you. Another good aspect is being able to take the computers home.

[Leilani]

## **Discussion**

This case study focused solely on the views and experiences of a small sample of staff (n=5) and e-learners (n=5), and just particular aspects of the e-learning programme. The successful e-learners benefited from the programme; however, e-learning did not guarantee success for all Pacific students. In particular, more in-depth investigation is needed to study the factors that contributed to students dropping out of the course. It would have been very helpful to include in this case study the views of students who did not complete the course.

Overall, this case study suggests that for successful e-learners, the most critical factor is the accessibility of tutors both online and face-to-face. Tutors' support, time for e-learners, and immediate responses to questions were critical success factors to learning. Flexibility of delivery in the daytime, evening, and on Saturdays facilitated access and participation of full-time workers and mothers. A blended mode of delivery, combining e-learning and face-to-face delivery, appeared to be most effective for Pacific learners.

## 6.0 Summary and recommendations

### 6.1 Introduction

This final chapter:

- summarises the results from chapters 3–5 that inform the key research questions specified in section 1.2
- discusses implications of the results
- outlines recommendations for educational practices and future research.

### 6.2 International literature

#### What are good practices for Pacific learning overseas?

The literature review (chapter 3) includes a limited number of international studies on Pacific learning in the tertiary sector. It focuses on the work by Konai Helu-Thaman and other Pacific educators at the University of the South Pacific to bring about cultural inclusiveness in a university course. The analysis of the key educational concepts provided by Konai Helu-Thaman (1999, 2000, 2002) and other Pacific educators (Taufe'ulungaki and Sanga, 2002) suggests the need to incorporate Pacific values, practices and knowledge into the formal education system.

In her analysis of the Tongan educational concepts of ako (learning), 'ilo (knowledge), and poto (wisdom), Thaman (1999, 2000, 2002) demonstrated that learning and achievement take place in a context of shared cultural values. Education is considered purposeful, 'worthwhile learning', and learners are considered poto people, if they use the 'ilo acquired from ako to become useful to family, community, and country.

Analyses undertaken by Thaman's graduate students from Samoa, Fiji, and Kiribati showed similarities and differences. In the Samoan context, the term poto is similarly used; in the indigenous Fijian culture, the concept of yalovuku is used like the concept of poto; and in Kiribati, different levels of knowing and knowledge range from atatai (common knowledge, which all people are expected to be familiar with) to wanawana (the highest level of knowing and knowledge).

These different educational concepts have important implications for the education of Pacific students in New Zealand. Often Pacific students are treated as one group; yet for their education to be worthwhile, we have to consider the unique educational concepts and underlying cultural values from each of the main Pacific cultural and ethnic groups (including Samoa, Cook Islands, Tonga, Niue, Fiji, Tokelau, and Tuvalu). The results of such analysis should add to the body of educational theories and frameworks that inform educational practices in New Zealand.

#### What are good practices for Pacific e-learning overseas?

As specified in section 3.7, the literature search did not uncover any research studies on Pacific e-learning in the Pacific nations and other overseas countries. In New Zealand, the researchers only found two studies, confirming the view that research on Pacific e-learning is still in its infancy (Clayton et al., 2004).

Development in Pacific e-learning is a relatively new field; and there is a need for programme developers to document learning processes and build a research component into new e-learning programmes. The good practices and critical success factors for the effective use of e-learning with Pacific learners that they capture can then be used to inform future development in Pacific e-learning. To address the lack of research on Pacific e-learning to date, New Zealand is taking a leadership role in the development of and research on use of e-learning by Pacific learners.

### **6.3 New Zealand education system**

#### **What are the various government strategies and policies relevant to Pacific learning and e-learning?**

Various government strategies and policies relevant to learning and e-learning include:

- the Ministry of Education (MoE) *Pasifika Education Plan*, Tertiary e-learning Research Fund (TeLRF) and *Interim Tertiary e-learning Framework*
- the Tertiary Education Commission (TEC) *Tertiary Education Strategy 2002–2007*, *Statement of Tertiary Education Priorities 2005/07*, *Inspiring Education for Pacific Peoples through Tertiary Education*, *Pacific Peoples Strategy for 2004 to 2006 and Beyond*
- the Government's *Digital Strategy: Creating our Digital Future 2005*
- the Ministry of Pacific Islands Affairs (MPIA) *Pacific Capacity Building Strategy*.

Other government agencies have their own strategies on Pacific workforce development that are relevant to Pacific learning and e-learning in the tertiary education sector.

The MoE *Pasifika Education Plan* provides a framework generally for the education of Pacific peoples. Its main focus for tertiary education is 'increasing participation and achievement, improving retention and encouraging higher levels of study' (MoE, 2001). The TEC *Pacific Peoples Strategy* shares this focus, with particular emphasis on 'improving the pathways to diverse and higher levels of participation for Pacific peoples in all sectors of tertiary education' (TEC, 2004). It also makes a priority of capacity-building initiatives to enhance Pacific peoples' participation in the tertiary education sector and New Zealand society.

#### **What funding approaches are relevant to Pacific learning and e-learning?**

Several funding approaches within the tertiary sector are relevant to Pacific learning and e-learning. These include:

- the TEC Special Supplementary Grant (SSG) — to fund initiatives aimed at increasing the access and retention of Māori and Pacific students in tertiary institutions
- the e-learning Collaborative Development Fund (e-CDF) — to help the tertiary education system deliver e-learning, improving the access and quality of education and aiming for a cooperative and strategic implementation of e-learning in the tertiary education institutions (TEIs)
- the Tertiary e-learning Research Fund (TeLRF) — to fund research into selected e-learning-related topics, including a focus on the needs of diverse e-learners in 2006/07.

## **What are the trends in the demographics of Pacific learners and e-learners in New Zealand?**

The analysis by Hodgen (2005) of key trends in Pacific learners' enrolment in TEIs revealed the following.

- Almost two-thirds of Pacific students enrolled in August 2005 were either at an institute of technology or polytechnic (ITP) (37%) or university (28%).
- Enrolment at private training establishments (PTEs) was more popular among Pacific peoples than other ethnic groups.
- The enrolment of students in different types of TEIs varied by ethnic group: Cooks Island students were most likely enrolled at wānanga; Samoan and Niuean students at colleges of education; Fijian and Tongan students at university; and Tokelauan students at ITPs.
- About 41% of Pacific tertiary students had some degree of web access in 2005, slightly less than the proportion for all tertiary students at 45%. Only 7% of Pacific students enrolled in web-based or web-enhanced courses, compared to 16% of all tertiary students.
- Cook Island students, 30% of whom study at wānanga, are most likely to have little or no web access. Fijian and Tongan students are most likely to be studying web-enhanced courses.

Although these trends are important, the quantitative data do not explain the variations. Educators should be concerned with, among others, the questions that follow.

- What are the reasons for the variations in enrolment by different Pacific ethnic groups in TEIs?
- Why are Cook Island students more likely to enrol at wānanga? Is the environment at wānanga more conducive to their success? Are they more likely to leave school without the formal qualifications that would allow them to enrol at university instead?
- Why are Samoan and Niuean students more likely to attend colleges of education? Is the presence of Samoan and Niuean teachers and educators more likely to attract them there?
- Why are Fijian and Tongan students more likely to enrol at university? Are they more likely to leave secondary school with the appropriate qualifications to allow them to enrol there?
- What are the factors that account for the difference in percentage enrolment in web-based or web-enhanced courses for Pacific (9%) versus all (16%) tertiary students?

### **Recommendation 1**

Further qualitative research should investigate the reasons for the variation in Pacific ethnic groups' enrolment in TEIs and the possible impact on each group's uptake of e-learning.

## **What lessons learnt by other sectors are relevant to Pacific learning and e-learning?**

In the health sector, Pacific workforce development is a major initiative. Notably, the review of the literature includes findings of a national survey of Pacific nurses, nurse educators, and nursing students (Koloto, 2003). The experiences of this small sample of nurse educators highlighted the roles played by Pacific nurse lecturers and educators in the tertiary institution as key change agents in designing and incorporating Pacific cultural values, knowledge, and perspectives into the nursing education curriculum, as well as advocating, mentoring, and supporting Pacific nursing students.

The strategies identified could become models of best practice in the tertiary institution in general. Agencies such as the Ministry of Health, district health boards, the Nursing Council of New Zealand, and the Pacific Nurses Organisation have already used the nurse lecturer and educators' experiences and practices to inform their work on Pacific nurse workforce development.

### **Recommendation 2**

TEIs should recognise, value, and provide the necessary institutional support for Pacific lecturers and tutors to effectively serve as key change agents within their institutions.

### **Recommendation 3**

More in-depth research on Pacific lecturers' experiences, effective curriculum development, teaching strategies, and student support strategies should be undertaken to inform the teaching and learning of Pacific students in the tertiary sector.

## **6.4 Tertiary institutions**

### **What strategies at institutional level impact on Pacific learning and e-learning?**

This study revealed the following institutional factors as critical to Pacific students' access, participation, retention, and success in tertiary education.

#### **Institutional policies, environment, and support services**

The results show that TEIs need to establish policies that support:

- an environment which acknowledges the diverse cultures of the students
- funding for Pacific development and initiatives
- support systems for Pacific students that they know and use.

A supportive institutional environment:

- is empowering, comfortable, and non-judgmental toward Pacific students
- gives access to resources such as computers and library resources relevant to their course of study
- has Pacific support teams or units
- has learning centres

- has dedicated space for Pacific students and staff
- clearly communicates institutional expectations of Pacific students
- offers scholarships for Pacific students and funding to resource Pacific initiatives.

### **Initiatives to increase access and participation**

In addition to the above list, the strategies TEIs used to recruit and increase access and participation of Pacific students included:

- Pacific quotas for particular courses such as medicine, law, and commerce
- foundation study courses or new-start programmes at universities and ITPs
- showcases of courses, current students, teaching and support staff, and graduates to targeted groups of prospective students
- specific functions for Pacific students
- Pacific liaison or recruitment officers and student support
- Pacific academic advisors
- Pacific student associations
- extramural and summer courses.

### **Initiatives to increase retention and success**

The following initiatives were also shown to enhance students' retention and success:

- Pacific strategies or specific target initiatives, such as 'Target 2010', where the institution identified a target number of Pacific students to be enrolled and successfully complete a programme of studies by 2010
- student learning centres or Pasifika units
- computer centres and access to the internet
- 24-hour support services and an open-door policy
- library services and resources on Pacific issues
- Pacific mentoring programmes and counselling services
- noho marae
- Pacific-focused courses, for example, within nursing or social work degrees
- publication of students' work in journals.

The review of the literature showed that different types of TEIs provide different learning environments for Pacific learners. For instance, some PTEs are smaller and serve mainly Pacific learners; whereas the universities have varying provisions for Pacific learners. The PTEs were proven particularly successful with Pacific learners in incorporating emotional, spiritual, and cultural elements, as well as pastoral care into their practices.

Generally, important factors in Pacific students' learning included teachers' awareness and empathy (Pasikale, 1996; Pasikale and Yaw, 1998); a family-type environment (Clayton et al., 2004); and an institutional environment that validated the learners, their life experiences, and relationships with the tutors (MIT Research Team, 2005).

The literature showed that the TEIs used the TEC SSG mainly to appoint Pacific support staff, provide targeted space for Pacific students, and encourage recruitment of Pacific students (Anae et al., 2002; Coxon, et al., 2002; Kalavite and Hoogland, 2004). One ITP used the funding to undertake a survey of Māori and Pacific students' access to computers (Kathryn Hall Research and Evaluation Ltd, 2005), by which to inform the work of its learning support centre.

### **e-learning initiatives**

The case study reported in section 5.5 illustrates an institution-wide approach (by a PTE) to use e-learning to serve the needs of its mainly Pacific student population. The PTE developed a policy to 'increase its accessibility to Pacific communities', and invested time and resources to build a support structure for e-learning. The support structure included student access to computers, the internet, IT support, teaching staff support, and pastoral care support. Provision of the computers and an in-depth orientation programme to prepare students for the e-learning environment were critical factors to students' success.

The case study confirms the conclusions of Clayton (2004), that institutions must provide the equipment and information and communication technology (ICT) support to ensure that students access the e-learning tools. The study also proved that e-learning is an attractive option that appeals to students with multiple roles, low income levels, work commitments, potential childcare costs, or the need to fulfil other commitments and responsibilities.

### **Recommendation 4**

Institutional policies and support systems should take into account the diverse learning needs and cultures of diverse Pacific learners, and the contexts in which they operate in the home, workplace, and community.

### **Recommendation 5**

Orientation programmes and strategies aimed at increasing participation of Pacific learners must involve the students and their families, ensuring all understand the institutional expectations and types of support required.

## **What are good practices for Pacific learning in New Zealand?**

The present study provides some insight into teaching and learning practices that effectively facilitate Pacific students' learning. It also explores different understandings of the concept of 'Pasifika pedagogy'.

### **Good teaching practices**

The study highlights several good teaching practices:

- group work and peer teaching and learning
- teaching strategies that use and validate students' experiences
- learning through experience and / or modelling, practical hands-on experience, and use of real-life experiences to illustrate points
- using Pacific models, symbols, metaphors, and visuals in lectures and other teaching
- teaching strategies that engage both the mind (cognitive intelligence) and the heart (emotional intelligence)
- interactive teaching practices, free-and-open discussion, and one-to-one tutorials or discussions with lecturers and tutors

- role play
- a combination of personal work and class presentation
- lectures with opportunities for students to ask questions
- individual research projects and individual study
- using the Pacific languages as a medium of instruction.

Pasikale and Yaw (1998) showed that teaching strategies that validated PTE students' experiences contributed to their success. Coxon et al. (2002) reported that the smaller environment of PTEs, personal assistance given to students, a larger number of Pacific students and staff, and an expectation of success were significant strategies that contributed to students' success. Pasikale and Yaw (1998) and Pasikale (1996) went further to conclude that students' success at PTEs was based on the incorporation of emotional, spiritual, and cultural elements in their practices.

### **Good learning practices**

The good teaching practices that researchers identified parallel good learning practices evident in the data. Most current students, timeout students, and graduates found peer learning and group work, self-directed and personal research, individual learning, hands-on practical experience, one-to-one discussions with teachers and tutors, and e-learning to be good learning practices.

These findings support those reported by Dickie (2000) and Lata (2001), that student teachers and university students used the following strategies to successfully complete their courses:

- seeking support from peers, both individually and in a group
- joining a study group
- approaching lecturers and tutors for assistance.

### **'Pasifika pedagogy'**

The study showed a mixture of views about 'Pasifika pedagogy'. Half the sample of 14 lecturers and tutors and 11 student support staff suggested that there was something called 'Pasifika pedagogy'. The other half said either that it did not exist or that more research was needed to define it.

A few staff believed that there was something called 'Samoan pedagogy' or 'Tongan pedagogy' but not a 'Pasifika pedagogy'. Summarising the definitions shared by half of the Pacific staff and some students, 'Pasifika pedagogy' may be defined as 'an integration of teaching and learning methods that is informed by and validates Pacific values, worldviews, knowledge, and experiences'.

### **Recommendation 6**

Teacher education curricula and professional development programmes for tertiary staff working with Pacific students must include relevant materials on Pacific peoples' cultures, values, practices, knowledge, experiences, and realities.

### **Recommendation 7**

Teaching and e-learning materials developed for Pacific students must include Pacific knowledge, metaphors, and materials relevant to their life experiences.

## **What are good practices for Pacific learning and e-learning in New Zealand?**

Critical success factors for Pacific e-learners include:

- access to computers and the internet, and understanding the technology
- help from tutors and peers
- attending class and handing in assignments on time
- motivation and self-confidence
- family support and commitment
- good writing and English language skills
- blended online and face-to-face teaching.

The most critical factors contributing to Pacific e-learners engagement with e-learning were access to computers and the internet, and understanding the technology. These findings are consistent with Clayton et al. (2004), that provision of computers, IT support, and an orientation programme to prepare students for the e-learning environment contribute to e-learners' success.

This study also highlighted the importance of an e-learning class relationship being similar to that of a family, where students felt responsible for their roles within the group. The results also suggest that face-to-face academic support and team-building sessions were integral elements of blended courses offered for Pacific learners.

Tutors and lecturers played critical roles in being accessible, approachable, and available to support students. Pacific staff members were vital because of their understanding of Pacific students' ways of learning, backgrounds, and what they brought into the learning situation. Pacific staff members were also considered by students to be good role models (Coxon et al., 2002).

Peer learning and group work were found to be particularly effective ways of learning for Pacific learners and e-learners. These modes of learning are consistent with the communal approach which characterises Pacific families and communities. They also allowed students to share their workload, for example, dividing the reading materials among themselves and then discussing it together in a language they all understood. Research showed that Pacific students who formed peer groups informally found them to be effective (Anae, et al., 2002; Coxon et al., 2002; Dickie, 2000; Iata, 2001; Koloto, 2003).

Good writing and English language skills are critical factors for success generally in tertiary education and particularly in the e-learning environment. Written communication becomes central when students need to communicate with their tutors and classmates by email and discussion forums. Good academic reading and communication skills are critical to tertiary learning generally (Davidson-Toumu'a, 2005; Kalavite and Hoogland, 2004).

### **Recommendation 8**

Staff should recognise the value of peer learning and teaching and face-to-face academic support, and incorporate these into their teaching programmes when working with Pacific learners and e-learners.

### **Recommendation 9**

TEIs should help students needing to enhance their academic reading, writing, and English language skills so that they can effectively engage in the e-learning environment and succeed in their tertiary studies.

### **Recommendation 10**

More in-depth case studies should focus on the experiences of Pacific e-learners and e-learning staff in a range of TEIs, to explore the factors that facilitate or impede e-learners' retention and success.

### **What will improve the levels of access to technology for Pacific students?**

The literature review (section 3.7) showed that 90% of the students from South Auckland who enrolled at the Open Polytechnic of New Zealand in May 2005 had access to a computer. About 80% had access to a printer, 74% had CD-ROM drives, and 54% had a scanner (Kathryn Hall Research and Evaluation Ltd, 2005). These results are relevant to the Pacific student population in South Auckland enrolled at the Open Polytechnic of New Zealand, but they should not be used to generalise about other TEIs. The survey results gave the Open Polytechnic appropriate information to inform its planning and use of their TEC SSG.

The BEST Training initiative provides Pacific e-learners with ICT equipment, such as a computer, printer, desk, and access to the internet. This initiative was shown to have helped Pacific e-learners and their families to access both the technology and tertiary education. Clayton et al. (2004) showed how providing ICT equipment and support within the course fee structure helped students to access the technology. An orientation programme that includes training on how to use the technology can enhance students' preparedness to engage in the e-learning environment.

The study also demonstrated the benefits of other TEIs, such as the universities and ITPs, providing free access to computer labs or computers in libraries, having longer opening hours, and offering support for students in the use of the technology.

### **Recommendation 11**

TEIs should develop policies and support structures that include access to computers, IT support, and pastoral support for learners to ensure their success in an e-learning environment.

### **Recommendation 12**

Each TEI should collect data on students' access to computers along with their enrolment forms, to inform the programmes on e-learning generally and for Pacific students in particular.

## **What will improve access, retention, and completion of learning for Pacific students?**

### **Students' preparedness for tertiary studies**

Students' preparedness for tertiary studies was shown to be the most frequently cited group of factors that affected their access, retention, and completion. These included a variety of attitudinal factors and a range of skills and behaviours, such as:

- motivation, commitment to study, and determination to succeed
- attendance at lectures, engagement with all class work, and completion of assignments
- reading, language, and literacy skills
- time management, planning, goal setting, and organising the time to achieve goals
- knowledge of how to access the support services that are available for students
- knowledge of how to use computers
- confidence in the course of study
- strengths from cultural upbringing
- belief in God.

These findings support those reported by other researchers such as Coxon et al. (2002), Anae (2002) and Dickie (2000). Students' motivation is key to their engagement with e-learning. How well e-learning course materials are presented and understood impacts on students' motivation and likelihood to continue study.

Clayton et al. (2004) found that formatting the text using colours and images enhanced students' learning. Learning materials should be well designed and use graphics extensively. These findings have important implications for the design of learning materials that will be used with Pacific learners.

### **Family support**

Family members' understanding of students' experiences in the tertiary institutions was also perceived as critical to students' success. Parents who were very encouraging during the students' primary and secondary schooling tended to make a positive impact on the students' decisions to take up tertiary education.

With a sound understanding of what tertiary students need in order to achieve their goals, family members will be in a better position to offer support. A stable family life was also viewed as critical to students' success. Parents' as well as tutors' expectations motivate students to succeed.

### **Quality staff**

The following factors relating to staff qualities and skills were critical to Pacific students' success:

- supportive and encouraging lecturers and tutors
- staff who understand students' cultures and ways of learning and are able to 'read the situation'
- staff who take into account the cultural backgrounds and learning styles of students
- tutors who possess both academic and cultural skills

- staff who provide extra time for one-to-one discussions with students
- Pacific lecturers and tutors who know how Pacific students learn
- responsive teachers
- staff who have more than one way of saying the same thing
- lecturers who can communicate with students and deliver the subject matter in a way that is easily accessible them.

Only two of the e-learning staff were Pacific staff, implying that the majority of Pacific staff at TEIs are not actively involved in the design and delivery of courses using e-learning. As well as the skills identified above, the findings suggest that staff members who work with Pacific e-learners also need to consider training and professional development programmes in ICT offered by their institutions. With further training in ICT they can make informed decisions about the possible use of the technology to enhance their own teaching.

### **Peer support**

Peers and graduates from Pacific students' courses of study were important sources of support. Informal study groups enhanced opportunities to study the course materials, complete set assignments, and prepare for tests and examinations. Graduates became role models for current students.

### **Course delivery**

Constructive feedback from staff on students' work is a critical element of any teaching and learning process. Time to work with students on an individual basis and to present information using a range of approaches may enhance students' learning and understanding of the course material.

Pacific learners can individually influence some critical factors — such as motivation and commitment to study. Other factors can only be addressed at the institutional, staff, family, and community levels. An institutional environment and support system that acknowledges the realities and cultures of Pacific learners; the support and influence of peers; encouragement, care, and time given by staff; and understanding and support of families can all impact on Pacific learners' and e-learners' success in tertiary education.

For staff and students to effectively use various e-learning technologies (specified in section 5.1) as modes of communication, the technologies need to be incorporated into the learning process; and this requires huge time commitments by staff, especially to develop courses and offer the required support.

### **Recommendation 13**

e-learning staff should carefully consider the development, design, and presentation of course materials so as to enhance students' learning, motivate them to engage with the content, and inspire them to complete their study.

### **Recommendation 14**

TEIs should acknowledge the roles of staff and the importance of their relationship with students. Face-to-face teaching and staff availability must be an integral part of the e-learning environment for Pacific students.

## 6.5 Pacific communities

### What attitudes help the uptake of learning opportunities, including e-learning, by Pacific peoples?

#### Attitudes that help the uptake of e-learning

Institutional commitments to provide Pacific learners with computers and IT support facilitate the use of e-learning not only by Pacific e-learners but also their families. The case study of BEST Training (section 3.7) highlighted that having the ICT equipment (computer, printer, internet access, and desk) at home, provided for students through their course fee structure, allowed other family members to access and use the technology. As a consequence, some family members have since enrolled in tertiary education.

The majority of current students, student support staff, and lecturers and tutors viewed students' preparedness for tertiary studies as the most critical factor for students' engagement with learning and success in tertiary education. Conversely, lack of students' preparedness for tertiary studies was seen as a major barrier to their success. Inhibiting factors that participants reported included:

- lack of motivation
- lack of interest in tertiary studies
- not being committed to succeeding
- poor understanding of tertiary institution culture
- lack of awareness of course requirements
- poor academic language skills.

#### Attitudes that inhibit the uptake of e-learning

The results revealed a few lecturers who were not able to use the e-learning tools that were available in their institutions. Some believed that students must always be present in class and others had difficulty accepting the idea of a virtual-learning environment. Those attitudes, together with an unwillingness to embrace e-learning as a teaching tool, can work against the uptake of e-learning.

Concern about what is available on the internet impacts on parents' decisions to purchase a computer for their families. Such decisions will have an impact on their families' access to the internet and consequently their uptake of e-learning.

#### Recommendation 15

Students must seriously consider their preparedness for tertiary studies. Equipping themselves with the appropriate goals, motivation, and determination to succeed — as well as the IT and information-literacy skills — will go a long way to ensuring success with their tertiary studies.

#### Recommendation 16

Pacific lecturers and tutors should consider taking up professional development programmes available in their institution to enhance their skills and knowledge of e-learning. That way, they can make informed decisions about using the technology to enhance students' learning and success.

## **What are the ‘choke points’ for Pacific participation in education?**

This study focused on a small subset of Pacific peoples, mainly timeout students, who could but did not participate in tertiary education. The study did not include those who had acquired the necessary school qualifications to enrol in the TEIs but did not. Based on the results from timeout students, two key ‘choke points’ could be identified from the data: the cost of tertiary education and the need to work to supplement family income.

### **High cost of tertiary education**

The high cost of tertiary education was one of the main reasons for timeout students’ withdrawal from their studies. If those students had access to finance, their chances of completing their courses of study would have been much greater.

### **Families’ financial needs**

In relation to the above point, there was also evidence to suggest that the need to contribute to family income was a major reason for timeout students’ decisions not to continue with their studies. Those who had more than one member of the family attending tertiary institutions at the same time found it difficult to cope on the parents’ low income; one of them needed to withdraw from study in order to work and contribute to the family’s income.

### **Recommendation 17**

TEIs should continue to provide scholarships to capable students from low-income families as a means of ensuring equity of access to tertiary education by all Pacific students.

### **Recommendation 18**

Pacific communities and TEIs should explore the opportunities presented by e-learning as an option to enhance Pacific students’ access to tertiary education.

## **6.6 Concluding thoughts**

This study contributes to the research-based body of knowledge on Pacific learning and e-learning in the tertiary sector. It highlights the critical success factors for Pacific learning and e-learning. It shows that e-learning:

- can enhance the access of particular groups of Pacific learners, such as mothers and full-time workers, to tertiary education
- is an effective communication tool for staff and students
- provides a means of accessing course materials and information
- can enhance learning, but does not guarantee retention and success for all Pacific learners
- should not be used as a teaching tool on its own — support and face-to-face interaction of students with peers and staff are critical to success in the e-learning environment.

The findings of this study have important implications and recommendations for teaching and learning practices and future research.

Finally, this report should be considered a kakala, woven from the research. It is our hope that the voices and experiences of the research participants contained in this kakala will be used to inform future strategies and practices, and ultimately lead to more Pacific learners experiencing success in the tertiary sector.

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## Appendix A: Participant information sheet

### CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS

#### PARTICIPANT INFORMATION SHEET

**Kia Ora, Kia Orana, Fakaalofa Lahi Atu, Ni Sa Bula Vinaka, Talofa Lava, Taloha Ni, Mälō e  
Lelei and Greetings**

#### INTRODUCTION

We are a team of Pacific researchers from Koloto & Associates Ltd, a Pacific research company who specialises in research with Pacific peoples. Our team includes researchers from six Pacific nations, namely Samoa, Cook Islands, Tonga, Niue, Fiji, and Tokelau. We are contracted by the Institutes of Technology and Polytechnics of New Zealand (ITPNZ) to undertake research on the 'Critical Success Factors for the Effective use of e-learning by Pasifika learners'.

**Auckland:** Dr 'Ana Koloto, Takinga-Iva Singsam, 'Alisi Katoanga, Munokoa Tupae Pepe, Fa'asi'u Gae'e-Gosche, Lepeka Tatila, and Epifania Siu.

**Wellington:** Nella Stowers and Dr 'Ana Koloto.

**Hamilton:** Kulisitina Pohiva.

**Christchurch:** Dr 'Ana Koloto and Takinga-Iva Singsam

#### INVITATION

You are invited to take part in this study. Your participation is entirely voluntary. If you agree to take part, you can still choose to withdraw at any time before the final analysis of the data, without having to give a reason. If you decide to withdraw from the study, any data that you have provided will either be returned to you or destroyed by the researchers.

#### AIMS OF THE PROJECT

1. To describe the current use and nature of online learning for Pasifika learners;
2. To identify the critical success factors and pedagogy for effective use of e-learning to increase access, participation and achievement for Pasifika learners;
3. To gather information to inform professional development programs for tertiary educators on the effective use of e-learning for Pasifika learners; and
4. To establish a network of leaders (from tertiary education institutions and relevant communities) who are passionate and committed to:
  - a. Pasifika development aspirations; and
  - b. The potential of e-learning to realize those aspirations.

#### TIMING

The data collection for this research will start on **Monday 7<sup>th</sup> November**. A Final Report on the research is expected to be submitted to the ITPNZ by the **9<sup>th</sup> January 2006**. The key results of the study will be disseminated to the participants in **February 2006**.

#### PARTICIPANTS

A sample of 84 participants from each of the following groups will be invited to take part in either a focus or individual interview.

- Pasifika community leaders with a passion and commitment to the potential use of e-learning to realise Pacific development aspirations
- Pasifika lecturers and tutorial staff in tertiary institutions (i.e. universities, institutes of technology and PTEs)

- Pasifika student-support staff in tertiary institutions
- Pasifika students who are currently enrolled in tertiary institutions
- Pasifika students who are able but not participating in tertiary education
- Pasifika students who have successfully completed their studies from tertiary institutions
- Pasifika e-learners in tertiary institutions

### **FOCUS GROUPS AND INDIVIDUAL INTERVIEWS**

A member of the research team will work with you to:

1. ensure that you have all the information about the study; and
2. facilitate a focus group or individual interview.

### **CASE STUDIES**

Three case studies of e-learning programmes, one each from a university, institute of technology, and PTE, will also be undertaken with Pasifika e-learners and teaching staff, and e-learning support staff.

### **CONFIDENTIALITY**

Please be reassured that the information you will give will be treated **confidentially** and will only be used by the research team for the purpose of this study. The data collected from this research will be kept in a locked cabinet for a period of 5 years and then destroyed.

### **POTENTIAL BENEFITS**

Although there may be no special individual benefit for taking part in the research, the overall benefits of the information to the Pasifika learning and e-learning will be considerable. Information gathered from this research will be used to develop professional development programmes for educators in the tertiary education sector.

### **POTENTIAL RISKS**

There are no risks involved in taking part in this research. The only inconvenience will be the time taken to be interviewed or take part in a focus group. Should you wish to lay a complaint or discuss any concerns you may have about this study, please contact Dr 'Ana Koloto, Principal Researcher, Phone (09) 270 6437 or Email: [ana@koloto.co.nz](mailto:ana@koloto.co.nz)

### **INFORMATION ON THE FINDINGS**

A final report on the methods and the results of the study will be presented to the ITPNZ by the 9<sup>th</sup> January 2006. A copy of the summary of the key results will be made available to all participants in the research in February 2006.

### **CONTACT PERSONS**

If you have any questions or would like to receive more information about this survey, please contact:

**Dr 'Ana Koloto**, Principal

Researcher, (09) 270 6437 or 027 663 0010

**Iva Singsam**, National Research Co-coordinator, (09) 270 6437

This research has been commissioned by the Whitireia Community Polytechnic and Institutes of Technology of New Zealand, as part of their e-learning Collaborative Development Fund project.

## Appendix B: Consent form

### CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS

#### CONSENT FORM

- I have been given and have understood an explanation of the nature and aims of this study.
- I have had an opportunity to ask questions and have them answered.
- I have understood the information provided by the researcher and have been given the opportunity to seek further clarification or explanations.
- I understand that I may withdraw myself and/or any information I have provided for this project at any time before the final analysis without having to provide reasons, and that if I withdraw from the project, any data that I have provided will be returned to me or destroyed by the researchers.
- I understand that the information I provide will be treated confidentially and will only be used for the purposes of this research.
- I understand that the information collected from this study will be used by the Whitireia Community Polytechnic and Institutes of Technology of Polytechnics of New Zealand (ITPNZ) to develop professional programmes for tertiary educators.
- I understand that the information collected will be used to prepare a Final Report to the ITPNZ and that the information may also be used for publication in journals or presentation at conferences.
- I understand that the interview will be carried out in the appropriate language of my choice.
- I understand that all information will be destroyed five years after the end of the project.

I \_\_\_\_\_ (Participant's Name) declare to have read and/or understood the above points and hereby consent to take part in this study.

Signature: \_\_\_\_\_

Date: \_\_/\_\_/05

**Principal Researcher:** Dr 'Ana Koloto (09) 2706437

**National Research Co-ordinator:** Iva Singsam (09) 2706437

## Appendix C: Profile sheet — community leaders

### CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS STUDY PARTICIPANT PROFILE SHEET – COMMUNITY LEADER

#### ETHNICITY:

- Cook Islands  Samoa  Tuvalu  
 Fiji  Tokelau  Indo-Fijian  
 Niue  Tonga  Other (Please specify \_\_\_\_\_)

- AGE:  18 – 20 Years  40 – 49 Years  
 21 – 29 Years  50 – 59 Years  
 30 – 39 Years  60+ Years

- GENDER:  Female  Male

#### TYPES OF PACIFIC COMMUNITY ORGANISATION (PCO) INVOLVED WITH:

- Church  
 Community Group  
 Specific Ethnic Community Group  
 Health Provider  
 Training Provider  
 Business  
 Others (Please specify) \_\_\_\_\_

CURRENT ROLE WITHIN YOUR PCO (Please specify): \_\_\_\_\_

CURRENT JOB TITLE (Please specify): \_\_\_\_\_

NAME THE TYPE OF ACTIVITY WITHIN YOUR PCO THAT USES e- LEARNING?  
\_\_\_\_\_

*Please tick all the appropriate boxes that indicate the type of e-learning technology you used or is currently used.*

#### TYPES OF E-LEARNING TECHNOLOGY

- Virtual learning environment (e.g. WebCT., Blackboard)  
 Authored web pages (i.e. for specific learning outcomes)  
 Web-based research (via search engines, portals)  
 Discussion board/bulletin board  
 Videoconferencing  
 Electronic whiteboard  
 Mobile or wireless device (e.g. palm-top, voting system)  
 Simulation/microworld  
 Learning software/virtual tutorial (e.g. NLN online, RDN)  
 Streaming video/audio  
 Computer-based assessment (MCQ)  
 Others (Please specify) \_\_\_\_\_

**WHAT IS YOUR OWN EXPERIENCE WITH E-LEARNING?**

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*Please provide your contact details so that we can send feedback on the results of this study. (The information below is strictly confidential and will be used for feedback purposes only):*

Name: \_\_\_\_\_

Postal Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

**THANK YOU FOR YOUR CONTRIBUTION**

**OFFICE USE ONLY:**

**RESEARCHER'S NAME:** \_\_\_\_\_

**Profile Data Entered**    **Date:** \_\_\_\_\_    **DATE OF INTERVIEW:** \_\_\_\_\_

**Transcripts Entered**    **Date:** \_\_\_\_\_    **PARTICIPANT'S CODE:** \_\_\_\_\_

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## **Appendix D: Interview schedule for community leaders**

### **CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS**

#### **INTERVIEW SCHEDULE FOR COMMUNITY LEADERS**

##### **E-LEARNING EXPERIENCE**

1. Can you describe your personal experience with e-learning?
2. What are the critical factors that contribute to your use and/or not use of e-learning?

##### **PASIFIKA STUDENTS' SUCCESS**

3. What are critical factors that contribute to Pasifika students' success in tertiary education? (eg. personal, institutional, technology, course content material, cost)

##### **BARRIERS TO TERTIARY EDUCATION**

4. What are critical factors that contribute to Pasifika students' failure to succeed in tertiary education? (eg. personal, institutional, technology, course content material, cost)

##### **PASIFIKA DEVELOPMENT ASPIRATIONS**

5. What does success, of a Pasifika student in tertiary education, mean to you?
6. What are initiatives in tertiary institutions that have been set up to increase access, participation, retention and success of Pasifika e-learners?
7. What are your PCO's development aspirations for Pasifika students in tertiary education?
8. How can e-learning be used to achieve those development aspirations?
9. Do you have any other information on Pasifika e-learning in tertiary education that you would like to add?

Thank you

## Appendix E: Profile sheet — staff

### CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS STUDY

#### PARTICIPANT PROFILE SHEET – STAFF

**ETHNICITY:**

- Cook Islands    Samoa    Tuvalu  
 Fiji    Tokelau    Indo-Fijian  
 Niue    Tonga    Other (Please specify \_\_\_\_\_)

- AGE:**    18 – 20 Years    40 – 49 Years  
           21 – 29 Years    50 – 59 Years  
           30 – 39 Years    60+ Years

- GENDER:**    Female    Male

**TYPES OF TERTIARY INSTITUTION YOU ARE WORKING AT:**

- University  
 Institute of Technology & Polytechnics  
 Wānanga  
 Private Training Establishment

**CURRENT JOB TITLE (Please specify):** \_\_\_\_\_

**MAIN ROLE**

- Lecturer    Tutor    Student Support    Others (please specify) \_\_\_\_\_

**DO YOU TEACH IN A PROGRAMME OF STUDY THAT USES E-LEARNING? (eg. BA in English, Dip. of Business Studies)**

- No  
 Yes

(If yes, please specify the programme of study): \_\_\_\_\_

**HOW MANY OF YOUR PAPERS/COURSES USE E-LEARNING AS A MODE OF DELIVERY? (Please specify the number of papers/courses)**

\_\_\_\_\_

**WHAT PERCENTAGE OF YOUR PAPERS/COURSES IS DELIVERED VIA E-LEARNING?**

\_\_\_\_\_

*Please turn over*

*Please tick all the appropriate boxes that indicate the type of e-learning technology you use in your programme.*

**TYPES OF E-LEARNING TECHNOLOGY**

- Virtual learning environment (e.g. WebCT., Blackboard)
- Authored web pages (i.e. for specific learning outcomes)
- Web-based research (via search engines, portals)
- Discussion board/bulletin board
- Videoconferencing
- Electronic whiteboard
- Mobile or wireless device (e.g. palm-top, voting system)
- Simulation/microworld
- Learning software/virtual tutorial (e.g. NLN online, RDN)
- Streaming video/audio
- Computer-based assessment (MCQ)
- Others (Please specify) \_\_\_\_\_

**MODES OF DELIVERY**

- Face-to-face
- Online
- Face-to-face and Online

*Please provide your contact details so that we can send feedback on the results of this study. (The information below is strictly confidential and will be used for feedback purposes only):*

Name: \_\_\_\_\_

Postal Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

**THANK YOU FOR YOUR CONTRIBUTION**

**OFFICE USE ONLY:**

Profile Data Entered      Date: \_\_\_\_\_      RESEARCHER'S NAME: \_\_\_\_\_      DATE OF INTERVIEW: \_\_\_\_\_  
 Transcripts Entered      Date: \_\_\_\_\_      PARTICIPANT'S CODE: \_\_\_\_\_

## Appendix F: Interview schedule for staff

### CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS

#### INTERVIEW SCHEDULE FOR PASIFIKA STAFF

##### PASIFIKA STUDENTS' SUCCESS

1. What are the critical factors that contribute to Pasifika students' success in tertiary education?

##### BARRIERS TO TERTIARY EDUCATION

2. What are critical factors that contribute to Pasifika students' failure to succeed in tertiary education? (eg. personal, institutional, technology, course content material, cost)

##### CURRENT INITIATIVES IN PASIFIKA EDUCATION

3. What are initiatives in your institution that have been set up to increase access, participation, retention and success of Pasifika students?
4. What progress have these initiatives made towards increasing access, participation, retention and success of Pasifika students?
5. What other strategies can tertiary institutions use to enhance the access, participation, retention, and success of Pasifika students?

##### PASIFIKA PEDAGOGY ("Pasifika Teaching Method')

6. What are good teaching practices for Pasifika students in New Zealand? (eg. chalk and talk, lecturing)
7. What are good learning practices for Pasifika students in New Zealand? (eg. peer learning, personal research, individual studies)
8. Is there something called 'Pasifika Pedagogy'? If Yes, please explain?
9. What are some of the strategies that do not work with Pasifika students?

##### USE OF E-LEARNING

10. What are your experiences in the use of e-learning in course delivery?
11. What are your views in the use of e-learning to support the learning of Pasifika students?

Thank you

## Appendix G: Profile sheet — timeout students

### CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS STUDY

#### PARTICIPANT PROFILE SHEET – PASIFIKA TIME-OUT

**ETHNICITY:**

- Cook Islands     Samoa     Tuvalu  
 Fiji     Tokelau     Indo-Fijian  
 Niue     Tonga     Other (Please specify \_\_\_\_\_)

- AGE:**     18 – 20 Years     40 – 49 Years  
           21 – 29 Years     50 – 59 Years  
           30 – 39 Years     60+ Years

- GENDER:**     Female     Male

**TYPES OF TERTIARY INSTITUTION YOU WERE ENROLLED AT:**

- University  
 Institute of Technology & Polytechnics  
 Wānanga  
 Private Training Establishment

**WERE YOU ENROLLED IN A PROGRAMME OF STUDY THAT USED E-LEARNING AS A  
MODE OF DELIVERY?**

- No  
 Yes

**HOW MANY OF YOUR PAPERS/COURSES USED E-LEARNING AS A MODE OF  
DELIVERY? (Please specify the numbers of papers/courses)**

\_\_\_\_\_

*Please turn over*

*Please tick all the appropriate boxes that indicate the type of e-learning technology you use in your programme.*

#### **TYPES OF E-LEARNING TECHNOLOGY**

- Virtual learning environment (e.g. WebCT., Blackboard)
- Authored web pages (i.e. for specific learning outcomes)
- Web-based research (via search engines, portals)
- Discussion board/bulletin board
- Videoconferencing
- Electronic whiteboard
- Mobile or wireless device (e.g. palm-top, voting system)
- Simulation/microworld
- Learning software/virtual tutorial (e.g. NLN online, RDN)
- Streaming video/audio
- Computer-based assessment (MCQ)
- Others (Please specify) \_\_\_\_\_

#### **MODES OF DELIVERY**

- Face-to-face
- Online
- Face-to-face and Online

*Please provide your contact details so that we can send feedback on the results of this study. (The information below is strictly confidential and will be used for feedback purposes only):*

Name: \_\_\_\_\_

Postal Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

#### **THANK YOU FOR YOUR CONTRIBUTION**

**OFFICE USE ONLY:**

**RESEARCHER'S NAME:** \_\_\_\_\_

Profile Data Entered    Date: \_\_\_\_\_    **DATE OF INTERVIEW:** \_\_\_\_\_

Transcripts Entered    Date: \_\_\_\_\_    **PARTICIPANT'S CODE:** \_\_\_\_\_

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## **Appendix H: Interview schedule for timeout students**

### **CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS**

#### **INTERVIEW SCHEDULE FOR PASIFIKA TIME-OUT LEARNERS**

##### **PASIFIKA STUDENTS' SUCCESS**

1. What are the critical factors that contribute to Pasifika students' success in tertiary education?

##### **BARRIERS TO TERTIARY EDUCATION**

2. What are critical factors that contribute to Pasifika students' failure to succeed in tertiary education? (for example: personal, institutional, technology, course content material, cost)

##### **CURRENT INITIATIVES IN PASIFIKA EDUCATION**

3. What were initiatives in your institution that have been set up to increase access, participation, retention and success of Pasifika students?
4. What progress have these initiatives made towards increasing access, participation, retention and success of Pasifika students?
5. Did you use any of those initiatives? If yes, what were those initiatives? If no, why not?
6. What other strategies can tertiary institutions use to enhance the access, participation, retention, and success of Pasifika students?

##### **PASIFIKA TEACHING AND LEARNING METHODS**

7. Is there something called 'Pasifika Pedagogy'? If Yes, please explain?
8. What specific teaching strategies have helped you, as a Pasifika student, in learning?
9. What are some of the strategies that do not work with Pasifika students?

##### **TIME-OUT FROM TERTIARY EDUCATION**

10. What are the reasons for your decision to take time out before completing your course of study?
11. What could have been done to assist you in completing your course of study?
12. Do you intend to complete your course of study?

##### **USE OF E-LEARNING**

13. What are your experiences in the use of e-learning to support Pasifika students' learning?
14. What are your views in the use of e-learning to support Pasifika students' learning?
15. Would you consider undertaking e-learning as a mode of delivery for the future? If yes, please explain? If no, why not?

**Thank you**

## Appendix I: Profile sheet — Pasifika students

### CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS STUDY

#### PARTICIPANT PROFILE SHEET – PASIFIKA STUDENT

**ETHNICITY:**

- Cook Islands    Samoa    Tuvalu  
 Fiji    Tokelau    Indo-Fijian  
 Niue    Tonga    Other (Please specify \_\_\_\_\_)

- AGE:**    18 – 20 Years    40 – 49 Years  
 21 – 29 Years    50 – 59 Years  
 30 – 39 Years    60+ Years

- GENDER:**    Female    Male

**TYPES OF TERTIARY INSTITUTION YOU ARE ENROLLED AT:**

- University  
 Institute of Technology & Polytechnics  
 Wānanga  
 Private Training Establishment

**WHAT IS YOUR PROGRAMME OF STUDY (Please specify, e.g. BA in English, Dip of Bus. Studies):** \_\_\_\_\_

**ARE YOU ENROLLED IN PAPERS/COURSES OF STUDY THAT USE E-LEARNING AS A MODE OF DELIVERY?**

- No  
 Yes

**HOW MANY OF YOUR PAPERS/COURSES USE E-LEARNING AS A MODE OF DELIVERY? (Please specify the number of papers/courses)**

\_\_\_\_\_

*Please turn over*

*Please tick all the appropriate boxes that indicate the type of e-learning technology you use in your programme.*

#### **TYPES OF E-LEARNING TECHNOLOGY**

- Virtual learning environment (e.g. WebCT., Blackboard)
- Authored web pages (i.e. for specific learning outcomes)
- Web-based research (via search engines, portals)
- Discussion board/bulletin board
- Videoconferencing
- Electronic whiteboard
- Mobile or wireless device (e.g. palm-top, voting system)
- Simulation/microworld
- Learning software/virtual tutorial (e.g. NLN online, RDN)
- Streaming video/audio
- Computer-based assessment (MCQ)
- Others (Please specify) \_\_\_\_\_

#### **MODES OF DELIVERY**

- Face-to-face
- Online
- Face-to-face and Online

*Please provide your contact details so that we can send feedback on the results of this study. (The information below is strictly confidential and will be used for feedback purposes only):*

Name: \_\_\_\_\_

Postal Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

#### **THANK YOU FOR YOUR CONTRIBUTION**

##### **OFFICE USE ONLY:**

**RESEARCHER'S NAME:** \_\_\_\_\_

Profile Data Entered      Date: \_\_\_\_\_      **DATE OF INTERVIEW:** \_\_\_\_\_

Transcripts Entered      Date: \_\_\_\_\_      **PARTICIPANT'S CODE:** \_\_\_\_\_

## **Appendix J: Interview schedule for current students**

### **CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS**

#### **INTERVIEW SCHEDULE FOR PASIFIKA STUDENTS**

##### **PASIFIKA STUDENTS' SUCCESS**

1. What are the critical factors that contribute to Pasifika students' success in tertiary education?

##### **BARRIERS TO TERTIARY EDUCATION**

1. What are critical factors that contribute to Pasifika students' failure to succeed in tertiary education? (eg. personal, institutional, technology, course content material, cost)

##### **CURRENT INITIATIVES IN PASIFIKA EDUCATION**

2. What are initiatives in your institutions that have been set up to increase access, participation, retention and success of Pasifika students?
3. What progress have these initiatives made towards increasing access, participation, retention and success of Pasifika students?
4. What other strategies can tertiary institutions use to enhance the access, participation, retention, and success of Pasifika students?
5. Do you use any of those initiatives? If yes, what are the initiatives? If no, why not?

##### **PASIFIKA TEACHING AND LEARNING METHODS**

6. What are good teaching practices for Pasifika students in New Zealand? (eg. chalk and talk, lecturing)
7. What are good learning practices for Pasifika students in New Zealand? (eg. peer learning, personal research, individual studies)
8. Is there something called 'Pasifika Pedagogy'? If Yes, please explain?
9. What are some of the strategies that do not work with Pasifika students?
10. What specific strategy has helped you, as a Pasifika student, in learning?
11. What can be done to improve the learning of Pasifika students?

##### **USE OF E-LEARNING**

12. What are your experiences in the use of e-learning to support Pasifika students' learning?
13. What are your views in the use of e-learning to support Pasifika students' learning?

Thank you

## Appendix K: Profile sheet — graduates

### CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS STUDY

#### PARTICIPANT PROFILE SHEET – PASIFIKA GRADUATE

**ETHNICITY:**

- Cook Islands    Samoa    Tuvalu  
 Fiji    Tokelau    Indo-Fijian  
 Niue    Tonga    Other (Please specify\_\_\_\_\_)

- AGE:**    18 – 20 Years    40 – 49 Years  
 21 – 29 Years    50 – 59 Years  
 30 – 39 Years    60+ Years

- GENDER:**    Female    Male

**TYPES OF TERTIARY INSTITUTION YOU WERE ENROLLED AT:**

- University  
 Institute of Technology & Polytechnics  
 Wānanga  
 Private Training Establishment

**WHAT WAS YOUR PROGRAMME OF STUDY (Please specify, eg. BA in English, Dip of Bus. Studies):** \_\_\_\_\_

**WERE YOU ENROLLED IN A PROGRAMME OF STUDY THAT USED E-LEARNING AS A MODE OF DELIVERY?**

- No  
 Yes

**HOW MANY OF YOUR PAPERS/COURSES USED E-LEARNING AS A MODE OF DELIVERY? (Please specify the numbers of papers/courses)**

\_\_\_\_\_

*Please turn over*

*Please tick all the appropriate boxes that indicate the type of e-learning technology you used in your programme.*

**TYPES OF E-LEARNING TECHNOLOGY**

- Virtual learning environment (e.g. WebCT., Blackboard)
- Authored web pages (i.e. for specific learning outcomes)
- Web-based research (via search engines, portals)
- Discussion board/bulletin board
- Videoconferencing
- Electronic whiteboard
- Mobile or wireless device (e.g. palm-top, voting system)
- Simulation/microworld
- Learning software/virtual tutorial (e.g. NLN online, RDN)
- Streaming video/audio
- Computer-based assessment (MCQ)
- Others (Please specify) \_\_\_\_\_

**MODES OF DELIVERY**

- Face-to-face
- Online
- Face-to-face and Online

*Please provide your contact details so that we can send feedback on the results of this study. (The information below is strictly confidential and will be used for feedback purposes only):*

Name: \_\_\_\_\_

Postal Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

**THANK YOU FOR YOUR CONTRIBUTION**

**OFFICE USE ONLY:**

**RESEARCHER'S NAME:** \_\_\_\_\_

Profile Data Entered      Date: \_\_\_\_\_      **DATE OF INTERVIEW:** \_\_\_\_\_

Transcripts Entered      Date: \_\_\_\_\_      **PARTICIPANT'S CODE:** \_\_\_\_\_

## Appendix L: Interview schedule for graduates

### CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS

#### INTERVIEW SCHEDULE FOR PASIFIKA GRADUATES

##### PASIFIKA STUDENTS' SUCCESS

1. What are the critical factors that contribute to Pasifika students' success in tertiary education?

##### BARRIERS TO TERTIARY EDUCATION

2. What are critical factors that contribute to Pasifika students' failure to succeed in tertiary education? (for example personal, institutional, technology, course content material, cost)

##### CURRENT INITIATIVES IN PASIFIKA EDUCATION

1. What are initiatives in your institution that have been set up to increase access, participation, retention and success of Pasifika students?
2. What progress have these initiatives made towards increasing access, participation, retention and success of Pasifika students?
3. What other strategies can tertiary institutions use to enhance the access, participation, retention, and success of Pasifika students?
4. Did you use any of those initiatives? If yes, what were those initiatives? If no, why not?

##### PASIFIKA TEACHING AND LEARNING METHODS

5. What are good teaching practices for Pasifika students in New Zealand? (eg. chalk and talk, lecturing)
6. What are good learning practices for Pasifika students in New Zealand? (eg. peer learning, personal research, individual studies)
7. Is there something called 'Pasifika Pedagogy'? If Yes, please explain?
8. What are some of the strategies that do not work with Pasifika students?
9. What specific strategy has helped you, as a Pasifika student, in learning?
10. What can be done to improve the learning of Pasifika students?

##### USE OF E-LEARNING

11. What are your experiences in the use of e-learning to support Pasifika students' learning?
12. What are your views in the use of e-learning to support Pasifika students' learning?

Thank you

## Appendix M: Profile sheet — e-learners

### CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS STUDY

#### PARTICIPANT PROFILE SHEET – PASIFIKA E-LEARNERS

**ETHNICITY:**

- Cook Islands    Samoa    Tuvalu  
 Fiji    Tokelau    Indo-Fijian  
 Niue    Tonga    Other (Please specify \_\_\_\_\_)

- AGE:**    18 – 20 Years    40 – 49 Years  
 21 – 29 Years    50 – 59 Years  
 30 – 39 Years    60+ Years

- GENDER:**    Female    Male

**TYPES OF TERTIARY INSTITUTION YOU ARE ENROLLED AT:**

- University  
 Institute of Technology & Polytechnics  
 Wānanga  
 Private Training Establishment

**ARE YOU ENROLLED IN A PROGRAMME OF STUDY THAT USES E-LEARNING AS A  
MODE OF DELIVERY?**

- No  
 Yes

**HOW MANY OF YOUR PAPERS/COURSES USE E-LEARNING AS A MODE OF  
DELIVERY? (Please specify)**

---

*Please turn over*

*Please tick all the appropriate boxes that indicate the type of e-learning technology you use in your programme.*

**TYPES OF E-LEARNING TECHNOLOGY**

- Virtual learning environment (e.g. WebCT., Blackboard)
- Authored web pages (i.e. for specific learning outcomes)
- Web-based research (via search engines, portals)
- Discussion board/bulletin board
- Videoconferencing
- Electronic whiteboard
- Mobile or wireless device (e.g. palm-top, voting system)
- Simulation/microworld
- Learning software/virtual tutorial (e.g. NLN online, RDN)
- Streaming video/audio
- Computer-based assessment (MCQ)
- Others (Please specify) \_\_\_\_\_

**MODES OF DELIVERY**

- Face-to-face
- Online
- Face-to-face and Online

*Please provide your contact details so that we can send feedback on the results of this study. (The information below is strictly confidential and will be used for feedback purposes only):*

Name: \_\_\_\_\_

Postal Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

**THANK YOU FOR YOUR CONTRIBUTION**

**OFFICE USE ONLY:**

**RESEARCHER'S NAME:** \_\_\_\_\_

Profile Data Entered    **Date:** \_\_\_\_\_    **DATE OF INTERVIEW:** \_\_\_\_\_

Transcripts Entered    **Date:** \_\_\_\_\_    **PARTICIPANT'S CODE:** \_\_\_\_\_

## **Appendix N: Interview schedule for e-learners**

### **CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS**

#### **INTERVIEW SCHEDULE FOR PASIFIKA E-LEARNERS**

##### **COURSE(S) USING E-LEARNING**

1. Can you describe the nature of your course that is delivered via e-learning?
2. How many Pasifika e-learners in your course, if you are aware of them?

##### **PASIFIKA STUDENTS' SUCCESS**

3. What are critical factors that contribute to Pasifika students' success in a course of study delivered through e-learning?

##### **BARRIERS TO TERTIARY EDUCATION**

4. What are critical factors that contribute to Pasifika students' failure to succeed in a course of study delivered through e-learning? (eg. personal, institutional, technology, course content material, cost)

##### **CURRENT INITIATIVES IN PASIFIKA EDUCATION**

5. What are initiatives in your institution that have been set up to increase access, participation, retention and success of Pasifika e-learners?
6. What progress have these initiatives made towards increasing access, participation, retention and success of Pasifika e-learners?
- 7.
8. What other strategies can tertiary institutions use to enhance the access, participation, retention, and success of Pasifika e-learners?
9. Do you use any of those initiatives? If yes, what are the initiatives? If no, why not?

##### **GOOD EDUCATIONAL PRACTICES**

10. What are good teaching practices for Pasifika students in New Zealand? (eg. chalk and talk, lecturing)
11. What are good learning practices for Pasifika students in New Zealand? (eg. peer learning, personal research, individual studies)
12. What are some of the strategies that do not work with Pasifika e-learners?

Thank you

## Appendix O: Profile sheet — e-learning staff

### CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS STUDY

#### PARTICIPANT PROFILE SHEET – E-LEARNING STAFF

##### ETHNICITY:

- Cook Islands    Samoa    Tuvalu  
 Fiji    Tokelau    Indo-Fijian  
 Niue    Tonga    Other (Please specify \_\_\_\_\_)

- AGE:**    18 – 20 Years    40 – 49 Years  
           21 – 29 Years    50 – 59 Years  
           30 – 39 Years    60+ Years

- GENDER:**    Female    Male

##### TYPES OF TERTIARY INSTITUTION YOU ARE WORKING AT:

- University  
 Institute of Technology & Polytechnics  
 Wānanga  
 Private Training Establishment

**CURRENT JOB TITLE (Please specify):** \_\_\_\_\_

##### MAIN ROLE

- Lecturer    Tutor    Student Support    Others (please specify) \_\_\_\_\_

**NAME THE PROGRAMME OF STUDY IN WHICH YOU TEACH THAT USES  
E-LEARNING? (eg. BA in English, Dip. of Business Studies)**

\_\_\_\_\_  
\_\_\_\_\_

**HOW MANY OF THE PAPERS/COURSES THAT YOU TEACH USE E-LEARNING AS A  
MODE OF DELIVERY? (Please specify the number of papers/courses)**

\_\_\_\_\_

**WHAT PERCENTAGE OF YOUR PAPERS/COURSES IS DELIVERED VIA E-LEARNING?**

\_\_\_\_\_ *Please turn over*

*Please tick all the appropriate boxes that indicate the type of e-learning technology you use in your programme.*

##### TYPES OF E-LEARNING TECHNOLOGY

- Virtual learning environment (e.g. WebCT., Blackboard)  
 Authored web pages (i.e. for specific learning outcomes)  
 Web-based research (via search engines, portals)

- Discussion board/bulletin board
- Videoconferencing
- Electronic whiteboard
- Mobile or wireless device (e.g. palm-top, voting system)
- Simulation/microworld
- Learning software/virtual tutorial (e.g. NLN online, RDN)
- Streaming video/audio
- Computer-based assessment (MCQ)
- Others (Please specify) \_\_\_\_\_

**MODES OF DELIVERY**

- Face-to-face
- Online
- Face-to-face and Online

*Please provide your contact details so that we can send feedback on the results of this study. (The information below is strictly confidential and will be used for feedback purposes only):*

Name: \_\_\_\_\_

Postal Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

**THANK YOU FOR YOUR CONTRIBUTION**

**OFFICE USE ONLY:**

**RESEARCHER'S NAME:** \_\_\_\_\_

Profile Data Entered    Date: \_\_\_\_\_    **DATE OF INTERVIEW:** \_\_\_\_\_

Transcripts Entered    Date: \_\_\_\_\_    **PARTICIPANT'S CODE:** \_\_\_\_\_

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## Appendix P: Interview schedule for e-learning staff

### CRITICAL SUCCESS FACTORS FOR EFFECTIVE USE OF E-LEARNING BY PASIFIKA LEARNERS

#### INTERVIEW SCHEDULE FOR E-LEARNING STAFF

##### COURSE(S) USING E-LEARNING

1. Can you describe the nature of your course that is delivered via e-learning?
2. How many Pasifika students in your course?
3. What are the factors that contribute to using e-learning as your mode of delivery?

##### PASIFIKA STUDENTS' SUCCESS

4. What are critical factors that contribute to Pasifika students' success in a course of study delivered through e-learning?

##### BARRIERS TO TERTIARY EDUCATION

5. What are critical factors that contribute to Pasifika students' failure to succeed in a course of study delivered through e-learning? (eg. personal, institutional, technology, course content material, cost)

##### CURRENT INITIATIVES IN PASIFIKA EDUCATION

6. What are initiatives in your institutions that have been set up to increase access, participation, retention and success of Pasifika e-learners?
7. What progress have these initiatives made towards increasing access, participation, retention and success of Pasifika e-learners?
8. What other strategies can tertiary institutions use to enhance the access, participation, retention, and success of Pasifika e-learners?

##### GOOD EDUCATIONAL PRACTICES

9. What are good teaching practices for Pasifika e-learners in New Zealand? (eg. chalk and talk, lecturing)
10. What are good learning practices for Pasifika e-learners in New Zealand? (eg. peer learning, personal research, individual studies) (e.g. peer learning, personal research, individual studies)
1. What are some of the strategies that do not work with Pasifika e-learners?
11. Do you have any other information on Pasifika e-learning that you would like to add?

Thank you

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## Appendix Q: Gender

Table Q1: Distribution of participants' gender

| Target group          | Female     | Male      | Total      |
|-----------------------|------------|-----------|------------|
| e-Learners            | 31         | 10        | <b>41</b>  |
| Graduates             | 15         | 4         | <b>19</b>  |
| Timeout               | 15         | 3         | <b>18</b>  |
| Students              | 16         | 5         | <b>21</b>  |
| Lecturers / tutors    | 9          | 5         | <b>14</b>  |
| Student support staff | 6          | 5         | <b>11</b>  |
| Community leaders     | 2          | 9         | <b>11</b>  |
| e-Learning staff      | 9          | 4         | <b>13</b>  |
| <b>Total</b>          | <b>103</b> | <b>45</b> | <b>148</b> |

## Appendix R: Age groups

Table R1: Distribution of participants' age groups

| Target sample         | 18–20 years | 21–29 years | 30–39 years | 40–49 years | 50–59 years | 60+ years | No response | Total      |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-----------|-------------|------------|
| Pasifika e-learners   | 7           | 15          | 6           | 8           | 4           | 0         | 1           | <b>41</b>  |
| Graduate              | 1           | 10          | 4           | 2           | 1           | 1         | 0           | <b>19</b>  |
| Timeout               | 3           | 7           | 1           | 4           | 3           | 0         | 0           | <b>18</b>  |
| Students              | 3           | 7           | 3           | 2           | 5           | 1         | 0           | <b>21</b>  |
| Lecturers             | 0           | 0           | 2           | 8           | 4           | 0         | 0           | <b>14</b>  |
| Student support staff | 0           | 2           | 3           | 5           | 1           | 0         | 0           | <b>11</b>  |
| Community leaders     | 0           | 0           | 3           | 2           | 5           | 1         | 0           | <b>11</b>  |
| e-Learning staff      | 0           | 2           | 6           | 3           | 2           | 0         | 0           | <b>13</b>  |
| <b>Total</b>          | <b>14</b>   | <b>43</b>   | <b>28</b>   | <b>33</b>   | <b>25</b>   | <b>3</b>  | <b>1</b>    | <b>148</b> |