



Supporting Pacific Peoples' Participation in the New Zealand Horticulture Industry

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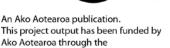
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Executive Summary

Increasing the horticultural skills of Pasifika people to enable them to train and work in New Zealand's horticulture industry would not only contribute to filling employment gaps in the industry, but would also contribute to reducing the economic and social disparities between Pasifika people and other groups in New Zealand. A horticulture foundation programme for Pasifika people would make them work-ready, so that they understand the skill requirements of the industry, and would enable them to become familiar with the industry's training culture. There is not currently a horticulture foundation training programme in existence that meets the needs of people who wish to enter New Zealand's horticulture industry. For these reasons, the New Zealand Horticulture ITO (NZ Hort ITO) wishes to develop its own horticulture foundation training programme. This report describes good practice for the delivery of such a programme to Pasifika students, as well as containing recommendations for appropriate content, resources and professional development for staff associated with the programme.

The full report consists of a literature review (Section One) and a description of stakeholder consultation about the proposed programme (Section Two). The following is a summary of the major points which would be important to consider when designing and delivering a horticulture foundation training programme for Pasifika students:

- Use of English to teach Pasifika students may be a barrier to their learning, especially when this is not their first language. Strategies to resolve this issue might include:
 - Using simple language
 - Breaking important concepts and information down into bite-sized pieces
 - Repetition of important points
 - Rephrasing or re-communicating key information in a variety of ways, both verbally, and through other teaching methods such as practical sessions, diagrams, film clips, discussions, case studies and role playing
- It may be useful for tutors of Pasifika students to deliver classes using some Pacific Island language to contribute to their effective learning
- Where possible Pasifika models, symbols, metaphors and visual aids should be incorporated into teaching as these encourage understanding
- Pasifika students may have grown up in a culture that discourages questioning and encourages interpersonal, rather than analytical, ways of thinking. To check understanding and encourage analytical thinking among Pasifika students, tutors can ask students to:
 - Summarise or put into their own words what the tutor or another student has said

- Elaborate on what has been said
- Relate the content to their own experience
- Give examples to clarify a point
- Make connections between related issues
- Pasifika students may often have a preference for collaborative methods of learning, and using these techniques to teach them may encourage them to feel safe in articulating their ideas and opinions
- Pasifika students' learning success can be augmented through good relationships with their tutors. Tutors might encourage good relationships with their students by:
 - Effective teaching
 - Allowing students adequate time to complete assignments and understand learning material
 - Encouraging and facilitating the student-tutor relationship
 - Making support readily available
 - Being able to resolve any conflicting advice or feedback given
 - Clarifying assignments and helping students plan their completion
 - Using non-confrontational behaviour management techniques
- The following tutor characteristics contribute to positive relationships with students:
 - Empathy
 - Caring
 - Respect
 - "Going the extra mile"
 - Passion to enthuse and motivate
 - Patience
 - Perseverance
- Pasifika students may often learn best through practical rather than academic or theoretical style teaching
- Appropriate themes for a Pasifika foundation horticulture programme are:
 - Organic agriculture
 - Sustainable agriculture
- A Pasifika foundation horticulture programme could be aligned with the following funding schemes which are designed to help those who may have few or no qualifications into work:
 - Cadet MAX Scheme (Ministry of Social Development)
 - Youth Guarantee (Tertiary Education Commission)
 - Straight 2 Work (Work and Income)

- The following national qualifications could be embedded within a Pasifika foundation horticulture programme:
 - National Certificate in Employment Skills (Level 1) (55-58 credits)
 - National Certificate in Horticulture (Level 2) (70 credits)
- A Pasifika foundation horticulture programme would be part of a pathway that ultimately leads to trainees taking the following qualifications through a modern apprenticeship or other adult training programme:
 - National Certificate in Horticulture (Level 4)
 - National Certificate in Horticulture (Advanced) (Level 4)
- The main resource necessary for delivery of a Pasifika foundation horticulture course would be the provision of a full-time staff member to deliver the course and develop learning materials
- Staff associated with the Pasifika foundation horticulture course including those from the Hort ITO, and the training provider, would require the following skills and qualifications, or would need professional development to achieve them:
 - A horticulture background
 - Experience of training young people
 - Personal characteristics including empathy, caring, respect, "going the extra mile", passion to enthuse and motivate, patience and perseverance
 - A thorough knowledge of Pasifika culture
 - Unit standards 4098 ("Use Standards to assess candidate performance") and 11281 ("Prepare candidate(s) for assessment against standards")
 - National Certificate in Adult Education and Training (Level 4) qualification, or equivalent
- An outline of the Pasifika foundation horticulture course developed for this project is shown on the following page.

Design of Foundation Horticulture Programme for Pacific Island People

The following design for the course was established through the consultation process.

Week	Content	Throughout course
1-3	Orientation	Holistic
	Background to the course, why trainees have been	Interactive
	selected	Student-centred
	Learning goals of course	Embedded Literacy and
	Cultural aspects of the course	Numeracy
	Attitudes necessary to do the course	Group learning wherever
	Learning to learn	possible
	Team building	Peer mentoring
	Good work habits	Spiritual teaching
	Horticulture health and safety	Communication skills
	Mentoring	Employability skills
4-5	Speakers and role models from the Pacific community	On-job training with
	to discuss their experiences	growers in industry
	People from industry to talk to students about work,	Assemblies
	history and background of the horticulture industry,	Mini celebrations to mark
	especially from a PI perspective	achievements
	Careers in horticulture	One-on-one feedback
6-7	Business values	conversations and
	Financial literacy and responsibility	progress reviews
	Introduction to computing	Trainees to keep
	Form filling	progress/reflection diaries
8-9	Valuing the environment	Pastoral care including
	Horticulture terminology	interventions in progress
	Identification of machinery and tools	if appropriate
10-12	Theory about the use of tools, including chainsaw and	Milestone evaluations
	tractor	and assessments
	Chainsaw maintenance	Reflection periods
	Specialist training in use of chainsaw	Pacific signs, symbols
	Chemical safety	and metaphors to be
	Hand tools	used Sustainable techniques
40.45	Small engines	and organic techniques to
13-15	Irrigation	be taught where possible
	Understanding "site-safe"	Mentoring using Pacific
10 10	Small garden maintenance	symbols and metaphors
16-18	Basic botany Trees and shrubs	Plot of land for each
19-21		student to work on
22-24	Gardening, floristry Viticulture	Student course
25-27		evaluations
28-30	Nursery production / production horticulture	Tractor driving practice
31-33	Landscaping Management advanced practical skills	(after week 10)
	Management, advanced practical skills	Chainsaw practice (after
34-35	Further study and career progression options	week 10)
Celebra	RUON:	

Supporting Pacific Peoples' Participation in the New Zealand Horticulture Industry

Section One: Literature Review

Background to the need for a horticulture foundation training programme for Pasifika people

In 2006, the Recognised Seasonal Employer (RSE) scheme was introduced to fill horticulture and viticulture labour shortages in New Zealand with workers from the Pacific. The scheme allows workers from the Pacific to work on horticulture and viticulture farms in New Zealand for periods of up to seven months (Mares and Maclellan, 2007, and The Orchardist, April 2007.)

However, even taking into account the RSE scheme, the Immigration Minister has stated that there will still be employment gaps to fill in the horticulture industry in the future (Carroll, 2009.) This statement is supported by a 2009 BERL report commissioned by the NZ Hort ITO, which identified a need for an annual training requirement of between 234 and 979 additional FTE staff per annum between 2006 and 2012 (depending on the scenario used in the prediction model.)

Other research has indicated that the economic and educational status of Pasifika people in New Zealand is considerably lower than for the New Zealand population generally. For example, in 2006 the median income of Pasifika people was \$20 500 compared to \$24 400 for the whole New Zealand population and only 22% of Pasifika people aged 15 and over had a post-school qualification compared to 40% of the total New Zealand population (Statistics New Zealand, 2006). In addition, in December 2009, the unemployment rate for Pasifika people was 14.0% compared to 6.0% across the whole of New Zealand (Statistics New Zealand, 2009).

Taken together these findings suggest that it would be beneficial to increase the horticultural skills of Pasifika people to enable them to work in the horticulture industry as this would not only benefit the horticulture industry of New Zealand, but would also contribute to reducing the economic and social disparities between Pasifika people and other groups. A horticulture foundation programme for Pasifika people would make them work-ready, so that they understand the skill requirements of the industry, and would enable them to become familiar with the industry's training culture.

The Horticulture ITO also has a commitment to support horticulture training for Pasifika people as described in the Horticulture ITO strategic plan. Reciprocally, Pacific community representatives have expressed an interest in horticulture training for Pasifika people living in New Zealand such as school leavers, unemployed people and for Pacific Island people intending to migrate to New Zealand as part of the New Zealand Immigration 'quota system'. This is especially the case because traditionally horticulture has been an area of knowledge and practice for Pasifika people.

Literature scans, discussions with stakeholders, and investigation into the national qualification framework have shown there is not already a horticulture foundation training programme in existence that would meet the training needs of Pasifika people who wish to enter the horticulture industry in New Zealand.

For these reasons, the Horticulture ITO wishes to develop its own horticulture foundation training programme. However the organisation requires more in-depth information on recommended good practice for training delivery methods for Pasifika people, together with feedback from key stakeholders on Pasifika values and their horticultural learning and training needs. This will ensure that a high quality foundation programme that successfully prepares Pasifika candidates to live and learn in New Zealand horticultural contexts can be designed. The foundation programme may be used to teach both students of Pacific Island background in New Zealand, and those on Pacific Islands who wish to work in the horticulture industry in New Zealand.

The following literature review is a first step in describing the important aspects of good practice for the delivery of a foundation horticulture training programme to Pasifika students, as well as containing suggestions for appropriate content. This literature review is also supported by stakeholder consultation which is described in Section Two of this report. Together these have resulted in the development of an outline for a horticulture foundation programme for Pacific people which is also described in Section Two, on page 16.

Introduction

Responding to the specific learning needs of Pasifika students has long been emphasised as an important pedagogical issue for tutors of this group. For example, in 1974, Ramirez and Castaneda argued that an educational environment or policy that does not allow a student group to remain identified with its own culture and language is culturally undemocratic. In order to achieve this democracy Thaman (2001) asserted that teaching staff need to focus curriculum content and pedagogies on the learners themselves and take into account their home cultures and environments. Therefore, the following sections describe the issues that would need to be considered by tutors on a horticulture foundation training programme so that they can teach in ways that suit Pasifika students and provide an appropriate learning environment for them. In addition, suggestions of course content which take into account the target group's own culture are included.

Pedagogical Issues

Language, concepts and metaphors

One important aspect of Pasifika culture that needs to be taken into account by tutors of Pasifika students is language. For example, Utumapu-McBride et al. (2008) found that where English was a second language for Samoan students, teaching in English could be a barrier to their learning and often led to a situation where students had difficulties in expressing themselves both orally and in writing. However, problems that Pasifika students might have with the English language are not necessarily entirely attributable to a lack of comprehension of individual words and phrases. They might also struggle because Pacific languages are more suited to the expression of ideas and concepts that are of importance to Pacific Island

rather than Western cultures. For example, Thaman (1998) (cited in Thaman, 2003) stated that the Tongan language is most adept at:

"...communicating beliefs, emotions, sentiments and attitudes... Thinking and learning in Tongan culture are integrated into a cultural system where human relationships as well as human activities are extremely important" (p.41)'

Thus Pacific languages may often best express subjective, interpersonal concepts rather than the more objective concepts to which the English language is suited. Those who might teach Pasifika students in English on a foundation horticulture course should bear this in mind, and make efforts to express themselves as clearly as possible, especially in cases where English is not their students' first language. Indeed, McKegg (2005) suggested that the use of simple language and breaking information down into "bite-sized pieces" could contribute to clarity of communication, in a report of some action research with a Pasifika learning community. In addition, repetition of important points may also be useful as well as attempting to rephrase or re-communicate key information in a variety of ways, both verbally, and through other teaching methods such as practical sessions, diagrams, film clips, discussions, case studies and role playing.

Research suggests that it may also be useful for tutors of Pasifika students to deliver classes using some Pacific Island metaphors and cultural examples, where appropriate. For example, in a study which investigated links between teaching practices and student learning outcomes for Maori and Pasifika students in non-lecture contexts in New Zealand¹, Airini et al. (2007) found that Pasifika students experienced success in their studies when non-English concepts were used. The authors argued that if students have the opportunity to relate their own cultural experiences to their studies, this can increase their understanding of learning material.

Checking understanding and encouraging analytical thinking

However, it is not just language and metaphors that are important to consider when teaching Pasifika students. The more general cultural environments in which Pasifika people may have been raised also influence how they learn and the ways in which they respond to being taught. For example, Latu and Young (2004) argued that Pasifika students do not always like to ask questions of their tutors as questioning can be considered a bad habit by some Pacific societies. Similarly, Dickie (2000) (cited in Utumapu-McBride et al., 2008) found that some Pasifika students had difficulties in speaking out in groups and in approaching lecturers in a study of Pasifika students in primary teacher training. In further support of the theory that other cultural aspects can impact on Pasifika students' learning, Hill and Hawke (1998) found that challenges can arise for Pasifika students when values, customs and expectations from different "worlds" conflict. For example, Pasifika students may have been taught that authority figures such as the church and parents are supposed to be respected and that their teachings should not be challenged. Similarly, in a study based on interviews with twenty-five Pacific Island families in Otara in South Auckland, Schoeffel et al. (1994)

¹ These included foundation education, academic support, studio/performance teaching and careers education service

reported that Pasifika children were frequently taught to behave unobtrusively in order to accommodate other people and not question or challenge authority figures. Thus the values that Pasifika students may have learnt throughout their lives can be at odds with Western teaching philosophies where analysis, questioning, and criticism are frequently seen as an integral part of the learning process.

So, evidence suggests that it may be difficult for some Pasifika students to achieve academically through methods that students from Western cultures take for granted. In particular for Pasifika students, questioning and analysis of classroom material may often feel unnatural, or even at times immoral. This may make it difficult for the tutor to know if a Pasifika student really understands what is being taught, and may also mean that the student does not achieve optimal learning. Indeed, Benseman (2006) argued that many Pasifika students do not achieve as well as they might in tertiary education because the system fails to take into account their cultural differences.

However, while it may not be possible, or even desirable, to completely alter Western philosophies of teaching in the tertiary education system to suit Pasifika culture, some Pasifika students have reported success in transferring their own cultural knowledge and experiences to a Western style of learning (Benseman et al., 2006). With this in mind, there may be a number of strategies that could be used by tutors on a foundation horticulture course to check understanding and encourage more analytical ways of thinking among Pasifika students. These might include: asking the student to summarise or put into their own words what the tutor or another student has said, asking the student to elaborate on what has been said, asking the student to relate content to their own experience or give examples to clarify a point, or asking students to make connections between related issues. Students should be asked to participate in these activities in a supportive, encouraging atmosphere and these strategies might best be used in combination with group work to make them less threatening. In fact, research has shown that many Pasifika students may have a preference for group learning and so the benefits of using this type of technique will now be discussed.

Collaborative learning

Hansen-Strain (1993) discussed the field/independence construct and how it relates to people's personality and learning styles. This construct can be viewed as a continuum with a holistic, or field-dependent, orientation at one end and an analytic, or field-independent, orientation at the other. Hansen-Strain described the differences between these two orientations, thus:

'[People at the holistic end of the continuum] tend to rely more on others, to be more skilled in interpersonal relations, and to derive their self-identity from people around them. They tend to be strongly influenced by context and prefer integrative approaches to problem-solving and learning. "Field independents" (those on the analytic end of the FD/I continuum), on the other hand, tend to be more independent, competitive and self-reliant.' (p.85)

Hansen-Strain stated that in many educational situations, those who are "field-dependent" are at a disadvantage, and also suggested that South Pacific cultures are often at the field dependent end of the spectrum. Much research is congruent with the theory that Pasifika students tend towards a more interpersonal style of learning. For example, among others, Dickie (2000) (cited in Utumapu-McBride et al. 2008) noted that Pasifika students prefer working together in groups. However, other research has not only noted this point but has also indicated that Pasifika students' preference for group learning need not be a disadvantage; indeed it can be utilised in effective pedagogical techniques. For example, McKegg (2005) described a specific example of a collaborative learning strategy called a 'learning community' which allows students to study together, and gives tutors a facilitatory, rather than an authoritarian role. Specifically, McKegg studied a Pasifika learning community on a foundation education programme at Unitec, New Zealand, where classes were scheduled so that one group of students could take the majority, or all, of its classes together. McKegg found that this allowed the students to get to know each other and support each other's learning, as well as encouraging them to feel safe in articulating their ideas and opinions. A wealth of other research has also indicated that Pasifika students may benefit from teaching via such social methods. For example, Latu and Young (2004) stated that collaborative exercises can help students who have low self-esteem, or who lack an academic background, and Taufe'ulungaki (2003) (as cited in Utumapu-McBride et al, 2008, p.151) found that Pacific Island students often benefit most from inclusive group-style learning that fosters feelings of solidarity and cooperation, as opposed to Pakeha students who prefer to use a more individualistic and competitive style. In general, research suggests that Pasifika students' frequent preference for collaborative learning techniques can be employed creatively by their tutors to encourage success in their learning, and this would be an important point to remember for those who teach on a foundation horticulture programme. The evidence indicates that a "field dependent" learning style as described by Hansen-Strain (1993) need not necessarily place Pasifika students at an educational disadvantage; rather it can provide them with educational benefits.

Importance of tutor characteristics

The importance that Pasifika people place on human relations is also demonstrated by the fact that a good relationship between tutor and student is a significant influence on Pasifika students' learning, according to a number of researchers. For example, Cowley et al. (2001) stated that many doctoral and masters' theses relating to Pacific pedagogies in recent years indicated that empathy between the learner and tutor was an essential ingredient of student success. Similarly, Pasikale (1996) noted that Pasifika students respond positively to tutors who care about them, and highlighted the importance of a sense of belonging for Pasifika students to achieve. Likewise, Benseman et al. (2006) found that the presence of Pasifika role models and mentors encouraged achievement by Pasifika students in tertiary education.

Airini et al. (2007) provided a number of examples by which tutors can encourage positive relationships with their students, including: effective teaching, allowing students adequate time to complete assignments and learn in class, encouraging and facilitating relationships, making support readily available, and being able to resolve any conflicting advice or feedback given. Airini et al.'s study also highlighted that there should be sufficient numbers of tutors in the classroom to be able to cope with student requests for help, and that tutors could also aid students by clarifying assignments and helping them plan their completion.

Furthermore, in a report based on three separate research projects, covering the primary, secondary and tertiary sectors, Hawk et al. (2002) also noted a number of characteristics that contribute to a positive relationship between tutors and students. Students in the primary and secondary sectors in Hawk's study were Maori and Pasifika and students from the tertiary study were Pasifika students only. Hawk et al. found that a positive relationship with students occurred specifically when the tutor had characteristics including empathy, caring, respect, "going the extra mile", a passion to enthuse and motivate, patience and perseverance. Finally, in another study, McKegg (2005) recommended that non-confrontational behaviour management should be used by tutors and that they should deal with difficult situations away from the rest of the teaching group as "shaming" caused by publicly confronting difficult students could create ongoing resentment.

Research has been fairly general in specifying the exact benefits that might be accrued from a positive student-tutor relationship but Hawk et al's (2002) study suggested that these could include students who were more motivated to learn and who would more actively participate in their learning. Hawk et al.'s study also highlighted that while tutors with a similar cultural background to their students might have some advantage in forging a successful relationship with them, this was not essential, nor was there any association between age, gender, type of teacher training completed, subject being taught or years of experience and effective teaching. Rather the tutor's attitudes, values, behaviours, effort and skills were important alongside an understanding of and empathy towards the students' culture.

Practical learning

A number of studies suggest that Pasifika students may learn best through practical, rather than academic-style teaching. For example, Utumapu-McBride et al. (2008) found that students felt that they learnt best through experience, face-to-face exposure, modelling by listening and then practice in a study based on the experiences of 24 Samoan students born in both New Zealand and Samoa. This study also noted that some students criticised courses for being too theoretical and not practical enough and that students felt that their tutors should take them outside the classroom more often. Similarly, Latu and Young (2004) argued that one way for tutors to facilitate Pasifika students' learning is by providing realworld problems, and Koloto et al. (2006) recommended the use of group work and open discussions, and incorporating Pacific Island models, symbols, metaphors and visual aids into lessons. McKegg (2005) also argued that Pasifika students learn best when the curriculum is made real through relating what is taught to the students' own experiences, and helping students see the links between lessons. Thus research suggests the effectiveness of practical teaching for Pasifika students as well as the importance of relating teaching material to applied situations which have relevance to the students' own lives and culture. Fortunately, practical training would suit a foundation horticulture course very well, as a number of the basic skills required to enter this industry can be readily taught through practical training, such as planting crops, identification of plants and trees, applying basic horticultural techniques, using tools and even first aid. Therefore, horticulture tutors might benefit from employing practical teaching techniques with Pasifika students wherever possible.

Course Content Issues

Suggested Horticulture Foundation Training Programme themes

The importance of recognising Pasifika students' own culture for effective pedagogy has been emphasised above, but cultural recognition does not only occur through appropriate teaching styles, it is also manifested through the inclusion in a programme of topics which are relevant to Pasifika people. Therefore, this literature review will now consider some of the types of content that could be included in a foundation horticulture programme specifically designed for Pasifika students. (This issue is also considered in more detail in Section Two, where consultation with stakeholders about programme content is reported.) It may be of most benefit to the learning of Pasifika students, and of most relevance to their culture, if course content is aligned with the sustainable and organic agriculture principles that have traditionally been employed in the Pacific Islands, and which are currently being promoted by the Pacific Island governments.

A definition of organic agriculture as offered by the International Federation of Organic Agriculture Movements (IFOAM) is:

'A production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved' (IFOAM, 2009)²

Rural producers in the Pacific have traditionally used farming methods that are in harmony with the environment and modern organic principles and organic agriculture has again become increasingly important in the Pacific Islands (Secretariat of the Pacific Community, 2009).

As a part of food security, Pacific Leaders have also acknowledged the importance of sustainable agriculture to Pacific nations (Government of Samoa, Ministry of Finance, 2008). Sustainable agriculture is an emerging issue which relates to the future wellbeing of people across the Pacific Islands, as these populations need access to sufficient, safe and nutritious food to meet their dietary needs and contribute to them leading active, healthy lives. Sustainable agriculture can be defined as:

'an integrated system of plant and animal production practices having site-specific applications that will, over the long-term: i) satisfy human food and fibre needs; ii) enhance environmental quality and the natural resource base upon which the agricultural economy depends; iii) make the most of non-renewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls, iv) Sustain the economic viability of farm operations and enhance the quality of life for farmers and society as a whole' (Kama, 2003; p.45)

² On-line: http://www.ifoam.org/growing_organic/definitions/doa/index.html. Accessed: 21.04.10

The inclusion of sustainable and organic horticultural content in a Pasifika foundation horticulture training programme would allow unique aspects of Pacific culture to be recognised as well as current issues which are of increasing importance to Pasifika people. Inclusion of this kind of content would also encourage Pasifika students to achieve by giving them the opportunity to learn skills which are relevant and practical to their cultures. Indeed, given the importance that Pasifika students may place on human relationships, their tutors may find it advantageous to highlight the social relevance of these subjects as they are taught, so that students can understand how their learning might benefit their own people.

Literature review conclusion

This literature review has highlighted some of the issues that the NZ Hort ITO needs to consider when designing its foundation horticulture training programme for Pasifika students. The importance of using Pasifika language, concepts and metaphors when delivering a course has been discussed, as well as allowing students to undertake collaborative and practical learning where possible. Techniques by which a tutor can check Pasifika students' understanding of learning material and encourage them to think analytically have also been described. Furthermore, the characteristics of a tutor who would likely be able to teach successfully on a horticulture foundation training programme have been outlined and the Horticulture ITO should consider these when recruiting a training provide for their programme. Finally, two broad themes around which a foundation horticulture training programme could be developed: organic and sustainable agriculture, have been suggested.

Of course, the discussion in this literature review has frequently, and by necessity, been based on generalisations about what may be the best ways to teach Pasifika students. However, it must be remembered that individual Pasifika students may come from a wide variety of different backgrounds. Therefore, the final point that needs raising is that while the issues highlighted in this literature review are likely to be broadly relevant across groups of Pasifika students, the recommendations made will not necessarily be applicable to every student in every situation. Ultimately, each student needs to be treated as an individual with his or her own unique personality and characteristics.

This report will now discuss the development of the Pasifika horticulture foundation programme that was undertaken through consultation.

Section Two: Development of the Pasifika Foundation Horticulture Programme

Consultation procedure

An advisory group consisting of Pasifika and horticulture industry stakeholders (including industry members, training representatives, and members of government bodies) was established through phone and email contact. This group was tasked with developing the outline of a foundation horticulture programme for Pacific People. (A copy of the participant information sheet and response slip used to recruit people to the advisory group is shown in Appendix A.) The advisory group met formally on two occasions: Friday 11 June and Tuesday 22 June, 2010. Both sessions were conducted from 11.00am to 2.30pm.

The following individuals were present at the first advisory group session on Friday 11 June:

- Barb Pownall, NZ Hort ITO
- Brent Ingles, NZ Hort ITO
- Cathy Tautu, Raro Orchids
- Christine Newland, NZ Hort ITO
- Dean Westerlund, Ministry of Pacific Island Affairs
- Dominic Madell, Researcher
- Fata To'o, Sustainable Pacific Development
- Fetuli Aholahi, Natural Habitats Landscapes
- Grant Ingles, NZ Hort ITO
- Luka Crosbie, Best Pacific Institute of Education
- Lusi Schwenke, Pacific Island Advocate
- Mark Wonglyn, Career Services
- Peter Endemann, Sustainable Pacific Development

The following individuals were present at the second session on Tuesday 22 June:

- Barb Pownall, NZ Hort ITO
- Cathy Tautu, Raro Orchids
- Christine Newland, NZ Hort ITO
- Dominic Madell, Researcher
- Fata To'o, Sustainable Pacific Development
- Grant Ingles, NZ Hort ITO
- Luka Crosbie, Best Pacific Institute of Education
- Lusi Schwenke, Pacific Island Advocate

In addition, post-advisory group consultation was carried out via email and telephone with members of the advisory groups who had specific knowledge relating to alignment of the programme with existing qualifications and schemes (as will be discussed shortly), and understanding of the resources and staff professional development that would be necessary to deliver the programme.

Advisory group session on Friday 11 June, 2010

The draft literature review as described in Section One was handed out to the participants and they were asked to take it away and read it, and provide the researcher with any feedback either at the next session, or by phone or email.

The Hort ITO's Pacific Strategy and the reasons for the development of the foundation horticulture programme were then described to the group by the Policy and Research Manager from the NZ Hort ITO.

Consultation which took the format of small group work and presentations, followed by larger group discussion was then undertaken to allow the group to develop the design of the horticulture foundation programme. The sessions included discussion of:

- Suitable content for the programme, taking into account issues important to Pacific people, topics that trainees would enjoy and would benefit from learning about, and industry priorities now and into the future
- How much time should be allocated in the programme to allow for training in the topics discussed
- The types of teaching methods that should be used for the programme, taking
 into account the learning styles of Pacific Learners (as described in the literature
 review) and the types of knowledge and skills that they would need to acquire

At the end of the first session, the researcher took the information that had been collected and put together a structure for the course that could be further developed in the second advisory group session.

Advisory group session on Tuesday 22 June, 2010

Feedback was sought on the literature review circulated to the participants at the first advisory group session. Participants were broadly happy with the report, and no specific changes were suggested. The researcher also invited the participants to forward him feedback in the coming weeks if they had any further comments to make, and informed the group that he would circulate a completed draft of the report at the end of the project, about which they could also provide feedback.

Content and delivery methods for the foundation horticulture programme were then further discussed with the members of the group for the rest of the session, and the resulting ideas were posted on a large week-by-week skeleton diagram of the course by the researcher, who also facilitated the session.

There was also discussion at this session about how the foundation course could be aligned with existing schemes and qualifications. (This is described in a later section.)

Post-advisory group session consultation

The researcher developed the programme structure around the comments and feedback from the advisory group sessions. The course structure can be seen on the following page.

Follow-up questions about the resources necessary to deliver the course and professional development that would be required for those teaching on the course were discussed by phone with staff representatives of the training provider, who had knowledge of these requirements.

There was also post-advisory group consultation via telephone and email with some members of the advisory group about how the course was aligned with existing funding schemes and how specific qualifications could be embedded within the course.

This final report including the course design was also distributed to the members of the advisory group for any further comment.

Design of Foundation Horticulture Programme for Pacific Island People

The following design for the course was established through the consultation process.

Week	Content	Throughout course		
1-3	Orientation	Holistic		
. •	Background to the course, why trainees have been	Interactive		
	selected	Student-centred		
	Learning goals of course	Embedded Literacy and		
	Cultural aspects of the course	Numeracy		
	Attitudes necessary to do the course	Group learning wherever		
	Learning to learn	possible		
	Team building	Peer mentoring		
	Good work habits	Spiritual teaching		
	Horticulture health and safety	Communication skills		
	Mentoring	Employability skills		
4-5	Speakers and role models from the Pacific community	On-job training with		
	to discuss their experiences	growers in industry		
	People from industry to talk to students about work,	Assemblies		
	history and background of the horticulture industry,	Mini celebrations to mark		
	especially from a PI perspective	achievements		
	Careers in horticulture	One-on-one feedback		
6-7	Business values	conversations and		
	Financial literacy and responsibility	progress reviews		
	Introduction to computing	Trainees to keep		
	Form filling	progress/reflection diaries		
8-9	Valuing the environment	Pastoral care including		
	Horticulture terminology	interventions in progress		
	Identification of machinery and tools	if appropriate		
10-12	Theory about the use of tools, including chainsaw and	Milestone evaluations		
	tractor	and assessments		
	Chainsaw maintenance	Reflection periods		
	Specialist training in use of chainsaw	Pacific signs, symbols		
	Chemical safety	and metaphors to be		
	Hand tools	used		
	Small engines	Sustainable techniques		
13-15	Irrigation	and organic techniques to be taught where possible		
	Understanding "site-safe"	Mentoring using Pacific		
40.40	Small garden maintenance	symbols and metaphors		
16-18	Basic botany	Plot of land for each		
10.24	Trees and shrubs	student to work on		
19-21	Gardening, floristry	Student course		
22-24 25-27	Viticulture Nursery production / production horticulture	evaluations		
		Tractor driving practice		
28-30	Landscaping Management, advanced practical skills	(after week 10)		
31-33	Management, advanced practical skills	Chainsaw practice (after		
34-35 Further study and career progression options Celebration! Chairsaw practice (after week 10)				
Celebra	RUON!	·		

The following more general recommendations were also made regarding the development of the course at the advisory group sessions:

- An open day should be held before the programme takes place to introduce trainees to the learning environment and give them understanding of the content of the programme
- The programme should be managed (including management of stakeholder and governance groups) with project management software
- The programme should be reviewed annually to keep it up-to-date and relevant
- A permanent advisory group should be established for the programme
- The programme should consist of Levels 1 and 2 units, which are appropriate for this level of training

Suggestions for alignment of the Pasifika foundation horticulture programme with existing funding schemes and qualifications

Suggestions were also made at the advisory group sessions about how existing qualifications and funding schemes could be aligned with the foundation horticulture programme. These suggestions were followed up in post-advisory group consultation, as has been described.

National Certificate in Employment Skills (Level 1) (55-58 credits)

The content of the National Certificate in Employment Skills (Level 1) is such that it could be embedded in a 35 week horticulture foundation programme. This has content relating to work and study skills, occupational health and safety, communication skills, business administration and reading and writing skills.

National Certificate in Horticulture (Introductory) (Level 2) (70 credits)

The content of the National Certificate in Horticulture (Introductory) (Level 2) is also such that it could be embedded in a 35 week foundation programme. This is an introductory certificate for people entering a career in the horticultural industry. People who have completed the National Certificate in Horticulture (Introductory) (Level 2) are able to demonstrate fundamental knowledge and/or elementary skills relevant to various sectors of the horticulture industry.

Training Pathway

A Pasifika foundation horticulture programme would be part of a pathway that ultimately leads to trainees taking the following higher-level horticulture qualifications through a modern apprenticeship or other adult training programme:

- National Certificate in Horticulture (Level 4)
- National Certificate in Horticulture (Advanced) (Level 4)

These qualifications allow those who achieve them to act as tradespeople (and as advanced tradespeople for the advanced qualification) by covering the knowledge and skills relevant to working at these levels in the horticulture industry.

Funding schemes

The foundation horticulture programme could align well with funding for the following schemes:

- "Cadet MAX" scheme, which was developed to respond to labour and skill shortages by offering youth the opportunities, guidance and support they need to identify and achieve their career goals (Ministry of Social Development, 2009)
- Youth Guarantee, which is designed to increase the educational achievement of 16 and 17 year olds not currently engaged in education by providing them with the opportunity to study towards qualifications at Levels 1 to 3 on the NQF (TEC, 2010)
- Straight to Work, which is a pre-employment training programme allowing participants to gain skills directly relevant to industry requirements. Training provided is offered through industry partnerships and is tailored to the needs of employers within the industry (Work and Income, 2010)

Further discussion would need to be held with the organisers of these funding schemes to determine exactly how the foundation horticulture course for Pacific people could be aligned with them, but it is clear that there are similarities between recommendations for the programme and their overall purposes.

Resources necessary for course delivery

In post-advisory group consultation, it was considered that the main resource that would be necessary for delivery of the foundation horticulture course would be the provision of a full-time staff member to deliver the course and develop learning materials.

In terms of other resources, clothing such as protective boots would be supplied by the training provider and this expense would need to be factored into funding requirements. Computer facilities for up to 30 students would also be necessary to teach the course. There would need to be at least 10 computers available for learners that that they would be able to use at different times.

There would also be a small funding requirement for general administration and pastoral support for the course, as well as funding for staff training. However, these types of costs would be shared across other courses being delivered by the training provider, and so would only be modest.

Assessment tools would be supplied by the Hort ITO as part of their role of supporting workplace training, and it was considered that horticulture equipment and facilities (including tools and land) would be supplied by the learners' workplaces.

Professional development necessary for ITO staff and industry trainers and assessors associated with course

The staff associated with the foundation programme, including industry trainers and assessors and NZ Hort ITO staff, would at the very least need a horticulture background or experience of delivering training to young people to be involved with the programme. The personal characteristics of an ideal tutor as described earlier in this report, including empathy, caring, respect, "going the extra mile", passion to enthuse and motivate, patience and perseverance would also be essential. It was also stated that staff associated with the course would need to have the following characteristics or skills, but staff could be trained for these once recruited, if necessary:

 A thorough knowledge of Pasifika culture and teaching methods (including those methods described in this report)

- Unit standard 4098 ("Use Standards to assess candidate performance")
- Unit Standard11281 ("Prepare candidate(s) for assessment against standards")
- National Certificate in Adult Education and Training (Level 4) qualification, or equivalent

Concluding remarks

It is hoped that this report has provided clear guidelines about how the NZ Hort ITO could proceed with the development of the Pasifika foundation horticulture programme, in terms of content, delivery and necessary resources. There was tremendous enthusiasm and support for the development of this programme from all of those consulted and a strong desire, especially among representatives of the Pasifika community, to see it succeed. It is hoped that this horticulture foundation programme for Pasifika people will contribute to them being work-ready, so that they understand the skill requirements of the industry, and will enable them to become familiar with the industry's training culture. Furthermore, it is hoped that as the foundation programme is developed it will increase the horticulture skills of Pasifika people to enable them to train and work in industry, and that this will contribute to reducing the socioeconomic disparities between Pasifika people and other demographic groups in New Zealand.

References

- Airini, T.O.R., O'Shea, M., Tarawa, M., Sauni, P., Ulugia-Pua, M., Sua-Huirua, T., & Curtis, E.T. (2007, September). Success for all in higher education: Improving indigenous and minority student success in degree-level studies. Paper presented at the British Education Research Association Conference, London, England. Retrieved from http://www.nzare.org.nz/pasifika/Airini et al 07.pdf
- Carroll, J. (2009, 18 March). Seasonal work vacancies hard to fill. *The Southland Times*. Retrieved from http://www.stuff.co.nz/southland-times/news/2271358/Seasonal-work-vacancies-hard-to-fill
- Cowley, E., Dabb, H. and Jones, B. (2001). *Academic experience of Pasifika students in the New Zealand Diploma of Business Economic Environment 120*. Paper presented at the NZ Association of Bridging Educators, Manukau Institute of Technology, New Zealand, 2001.
- Government of Samoa, Ministry of Finance. (2008). Strategy for the Development of Samoa 2008 2012: Ensuring Sustainable Economic and Social Progress. Retrieved from http://www.mof.gov.ws/publish/cat_index_46.shtml
- Hawk, K., Cowley, E.T., Hill, J. & Sutherland, S. (2002). The importance of the teacher/student relationship for Maori and Pasifika students. *Set: Research Information for Teachers*, *3*, 44-49.
- Hill, J. & Hawk, K. (1998). Aiming for Student Achievement: How teachers can understand and better meet the needs of Pacific Island and Maori Students. Set: Research Information for Teachers, 2(4), 1-4
- Kama, A. (2003). Sustainable agriculture: how do we get there in Samoa? *Proceedings of the 2002 National Environment Forum*, 4, 43-50. Retrieved from http://www.mnre.gov.ws/documents/forum/2003/8.%20Kama.pdf
- Koloto, A.H., Katoanga, A.N. & Tatila, L.U. (2006). Critical success factors for effective use of e-learning by Pacific learners: a report for ITPNZ. Auckland: Koloto & Associates Ltd. Retrieved from http://akoaotearoa.ac.nz/download/ng/file/group-996/n4006critical-success-factors-for-effective-use-of-e-learning-by-pacific-learners.pdf
- Ministry of Social Development (2009). *Labour Market Development News. Issue 8, May 09.* Retrieved from:

http://www.google.co.nz/url?sa=t&source=web&cd=2&ved=0CBoQFjAB&url=http%3 A%2F%2Fwww.workandincome.govt.nz%2Fabout-work-and-income%2Fnews%2Fdocuments%2Fw-i-lmd-news-may-2009.rtf&rct=j&q=cadet%20max%20employer&ei=FMJ6TOCFOYLfcaOV3JYG&usg=AFQjCNHJSRBIX6_9V0PRsO8Tu9SX5AP14Q

- Latu, S., & Young, A. (2004). Teaching ICT to Pacific island background students.

 *Proceedings of the Sixth Conference on Australasian Computing Education, 30, 169-175. Retrieved from http://portal.acm.org/citation.cfm?id=979991
- Mares, P. & McLellan, N. (2007). Pacific seasonal workers for Australian horticulture: A neat fit? *Asia and Pacific Migration Journal 16(2)*, 271-288.
- McKegg, A. (2005, July). Learning communities: A structured approach to student integration. Paper presented at the 2005 Higher Education Research and Development Association of Australasia (HERDSA) annual conference, Sydney, Australia. Retrieved from http://conference.herdsa.org.au/2005/pdf/refereed/paper 027.pdf
- RSE aims to help ease seasonal labour burden. (2007, April). The Orchardist, 24-25.
- Pasikale, A. (1996). Seen, but not heard: voices of Pacific Islands learners: a qualitative study of Pacific Islands learners in second-chance education; and the cultural differences impacting on their aspirations, opportunities and participation. Wellington: Pacific Islands Education Unit, Education & Training Support Agency.
- Schoeffel, P. & Meleisea, M. (1996). Pacific Island Polynesian attitudes to child training and discipline in New Zealand: Some policy implications for social welfare and education. *Social Policy Journal of New Zealand,06.* Retrieved from http://penelopeschoeffelmeleisea.net/samoa/socialisation%20NZ.pdf
- Benefits of organic agriculture. (2009, August). Policy Brief. Secretariat of the Pacific Community. Retrieved from http://www.spc.int/sppu/images/stories/policy%20brief8_web.pdf
- Statistics New Zealand. (2006). *QuickStats About Pacific Peoples 2006 Census*. Retrieved from http://www.stats.govt.nz/census/2006censushomepage/quickstats/quickstats-about-a-subject/pacific-peoples.aspx
- Statistics New Zealand. (2009). Household Labour Force Survey: December 2009 quarter Media Release. Retrieved April 25, 2010 from http://www.stats.govt.nz/browse_for_stats/work_income_and_spending/Employment/HouseholdLabourForceSurvey_MRDec09qtr.aspx
- Tertiary Education Commission (2010) *Youth Guarantee*. Retrieved from http://www2.careers.govt.nz/youth_guarantee_programme.html
- Thaman, K.H. (2001). Towards culturally inclusive teacher education with specific reference to Oceania. *International Education Journal*, 2(5), 1-8
- Thaman, K.H. (2003, February). Staff Development for Culturally Inclusive Teaching and Learning in Higher Education. Paper presented at a Colloquium for Tertiary Teachers, Teaching and Learning with Pasifika Students, AUT University, Auckland. Retrieved from

http://www.aut.ac.nz/resources/staff/cepd/pdf/proceedingsofpasifikacolloquiumfeb03.pdf#page=41

Utumapu-McBride, T., Epenesa, E., Toia, S.F., Tone-Schuster, L. & So'oaemalelagi, F.L. (2008). Saili Mo Le Lumana'i: Research on Samoan Students' Learning Perspectives and the Impact on Their Achievement. *AlterNative*, *4*(1), 149-172.

Work and Income (2010) *Straight 2 Work.* Retrieved from http://www.workandincome.govt.nz/business/a-z-services/straight-2-work.html

Appendix A: Participant Information Sheet

Hort ITO Pacific people's foundation programme development project

Participant information sheet

The Horticulture Industry Training Organisation (Hort ITO) is developing a foundation training programme to support Pacific people to train and work in the horticulture industry in New Zealand (NZ), and would like to ask you to participate in an advisory group to contribute to the development of this programme. Two advisory group sessions will be held at the following venue:

NZ Horticulture ITO Unit 3, 106 Bush Road Albany Auckland

The times of the session are:

Friday 11 June: 11am-2.30pm (lunch provided)
Tuesday 22 June: 11am-2.30pm (lunch provided)

The horticulture foundation programme will assist Pacific learners to successfully access higher-level training and/or employment in the horticulture industry and it is hoped that it will ultimately be used first in New Zealand and then in Pacific countries for both New Zealand born and Pacific born candidates.

Why we are asking for your help

To inform the development of the programme, we need to obtain feedback on Pacific learner needs. In particular, we need to consult with you about the programme's potential structure, its content, the resources necessary to deliver it, relevant delivery methods, the learning styles of Pacific people and required professional development for those intending to deliver the programme.

Therefore, we are inviting you to be part of an advisory group that we can consult about these issues. The advisory group will include New Zealand-born and Pacific-born Pacific education and training experts, New Zealand Horticulture industry members, Pacific horticulturalists and Hort ITO representatives.

The information we collect from you will also be supported by a literature review to obtain information on current thinking around good practice for foundation learning for Pacific learners.

The advisory group will be asked to meet formally twice: once to consult for feedback, and a second time to comment on findings obtained from the literature review and to comment on a report of findings from the first session. The group may also meet informally as necessary.

Outputs from the advisory group meetings

The information collected will be included in a report that informs the Hort ITO on issues for the development and implementation of a foundation training programme in horticulture. This report will make recommendations on programme structure, programme content and good practice in terms of delivery skills, professional development for ITO staff and industry trainers and assessors, and the learning and physical resources that are considered necessary for the programme.

A report containing recommendations for good practice in developing vocational foundation programmes for Pacific people will also be developed.

Dissemination of information

If you choose to participate in the advisory group, you will be given a copy of the report that informs the Hort ITO on issues for the development and implementation of a foundation training programme in horticulture.

A report containing recommendations for good practice in developing vocational foundation programmes will also be distributed to the Ministry of Pacific Island Affairs, the Tertiary Education Commission (TEC), Industry Training Organisations (ITOs) and Training Providers, as well as other key training and Pacific focused organisations in New Zealand.

The reports arising from the project will also be made available through the Ako Aotearoa website (www.akoaotearoa.ac.nz).

Confidentiality issues

We ask for your permission to include your name as part of the advisory group in reports and documentation arising from the project, but it is up to you if you choose to allow this. To preserve confidentiality, we will ensure that comments are not directly attributable to specific individuals in any reports arising from the project.

If you choose to participate you will be free to withdraw from the project at any time, without needing to offer a reason.

Further information

We will discuss the purpose of the project again at the first advisory group session. At this time, you will also have an opportunity to ask any relevant questions. In addition, you may contact the Project Leader at any time for further information using the contact details below.

For further information, please contact:

Dominic Madell Project Leader

Email: XXXXXXXXX@XXXXX.XX.XX

Phone: XX XXX XXXX

Thank you for your interest in the Hort ITO Pacific people's foundation programme development project.

Response Slip

1. I agree to participate in the advisory group for the Hort ITO Pacific people's foundation training programme development project and I understand that I am free to withdraw from the project at any time.					
Yes	No	(Please circle your response)			
2. I am happy to be identified as part of the advisory group on any reports or documentation arising from this project, but I understand that specific comments will not be attributed to any individual member of the group.					
Yes	No	(Please circle your response)			
Name:					
Signature:					
Organisation:					
Date:					
Phone number:					
Email address:					
Please return this slip to:					
Dominic Madell					
< <address goes="" here="">></address>					