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Helping students value cultural diversity through research-based teaching

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Although international students studying in New Zealand desire and expect contact with their domestic peers, the level of cross-national interactions remains generally low. This paper describes an initiative to promote more and better intercultural understanding within a target group of students having similar needs and interests in a higher education setting. A research-based teaching approach progressively increased student engagement with higher order cognitive skills and both topic and process were aligned in such a way that training opportunities in intercultural competence were explored while also providing a process that offered further training in intercultural competence. Enduring appreciation of cultural diversity issues was achieved via deep styles of teaching and learning that raised awareness, changed attitudes and behaviour and ultimately impacted classroom culture. Initiative design, evaluation and results are described and limitations noted. The findings should be of interest to teachers of multicultural students and to academics studying cultural diversity issues.

Keywords: diversity (institutional); diversity (student); educational discrimination; educational research; equal education; ethnic relations; higher education; minority groups; racial integration; research-based teaching

Introduction

Around 93,000 international students chose to leave their home country to study in New Zealand (NZ) in 2006, some 40,000 of them in tertiary education. With the NZ education industry worth approximately NZ$1.9 billion annually, government funding amounting to NZ$1 million has been allocated each year since 2005 to encourage and support innovation in export education. Recent initiatives include a new code of practice for pastoral care and reduced (domestic-level) fees for new international doctoral students (Ministry of Education [MoE], 2006a).

International students have long expressed a desire for, and an expectation of, greater contact with their domestic peers (e.g. James & Watt, 1992), yet a recent NZ study confirmed a tendency to spend most time with others from their home country; for example 24% of international students indicated that they never spent social time with NZ friends and 47% said that they never study with NZ students (Ward & Masgoret, 2004). The NZ government is aware of the issue and recognises that interventionist strategies need to be introduced to promote more and better intercultural understanding (MoE, 2007). On the other hand, it is recognised that well-intentioned

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attempts to value cultural diversity can often attract negative reactions from participants (e.g. Nemetz & Christensen, 1996).

The NZ Education Act (NZ Government, 1989) expressly requires that every university student shall be encouraged to become intellectually independent, irrespective of their nationality. Being mindful of this, and given the three-fold increase in the number of tertiary-level international students studying in New Zealand between 2000 and 2005 (MoE, 2006b), it might be expected by now that courses designed for a domestic audience would have been remodelled to address process and content objectives that take into account the cultural diversity of all the participants. However, evidence suggests that educators may be continuing to miss valuable opportunities to internationalise curricula (Ward, 2001; Ward & Masgoret, 2004) since, for the most part, educators in NZ (and particularly those at the tertiary level) appear to have made few changes to their educational activities. This potentially is a concern because ethnocentrism (a belief in, or assumption of, the superiority of one's own social or cultural group) can take many forms: from overt racism and discrimination to the more subtle reinforcements of the dominant culture via organisation and administration of the education system, as well as through the process of delivery of courses and classroom practices (Mac Ginty, 2001).

The NZ Education Act (NZ Government, 1989) also states that 'research and teaching are closely interdependent' although it does not elaborate on the nature of this interdependency, which itself is often the subject of a highly politicised debate (e.g. Brew, 2005; Hattie & Marsh, 1996). Roach, Blackmore and Dempster (2000), among others, have suggested that many research processes are actually good learning processes having a more general application that engender cognitive skills and subject-specific skills, which are transferable to other situations. Thus, the present study examines whether research-based teaching approaches to diversity training might be more effective and enduring than the usual 'show and tell' approaches that simply highlight examples of racism and the lack of cultural awareness (IES, 2002; Nemetz & Christensen, 1996).

The remainder of this paper describes research conducted in a higher education (university) classroom setting that was designed to answer the overarching research question: How effective are research-based teaching approaches for motivating university students to value cultural diversity?

Action research was backed by surveys and semi-structured interviews to triangulate results, hence the findings should be of interest to teachers of multicultural classes (classes consisting of students of more than one culture) and to academics studying cultural diversity issues. The paper is structured as follows: a brief review of the scholarship that informed the study is followed by description and justification of the methodology; then initiative description and results are followed by a discussion that includes implications for practitioners, study limitations and opportunities for future research.

Review of the scholarship

This section summarises the scholarship that helped to shape the initiative.

Valuing cultural diversity

Early studies by Hofstede (1980) and Triandis (1990) provided interpretive frameworks for understanding the 'implicit curriculum', which varies across cultures and

affects classroom activities and often leads to misperceptions across cultural groups (Ward, 2001). For example, McCargar (1993) reported that Asian students tend to view teachers as transmitters of knowledge rather than facilitators who promote learner autonomy; and perceive their role as being result-focused rather than one of developing independence and developing critical thinking (Cortazzi & Jin, 1997). Other studies (e.g. Jochems, Snippe, Smid, & Verwell, 1996; Volet, Renshaw, & Tietzel, 1994) have shown international students to be quite adept at adapting to new educational systems, although Ward (2001) cautions that the differing views are likely to result in dissatisfying and unproductive classroom encounters.

The potential for international students to change both the content and process of education has highlighted the need for cultural diversity training that enhances intercultural communication for all stakeholders (e.g. Bennett, 2004; Lo Bianco, Liddicoat, & Crozet, 1999; Ward, 2001). Training typologies have frequently been based on differences of aims, such as whether the training is aimed at knowledge, attitudes or behaviours, and/or based on differences of content – including whether the training is focused on racism, broad social issues or multicultural understanding (e.g. Baytos, 1995; Taylor, Powell, & Wrench, 1997). For example, a major UK-based study into the quality and effectiveness of racism awareness training in the public sector recommended that *organisations* need to conceptualise diversity training as being embedded within a wider cultural diversity strategy that builds on a continuous improvement action research cycle (IES, 2002, p. xvi). Thus the organisation must decide the approach it wishes to adopt towards diversity issues (IES, 2002) and teachers need to be cognisant of the wider organisation context within which the initiative will take place. For example, is the organisation concerned that people are all treated the same or is it about celebrating difference? This is a vital question as, by fully embracing diversity, the organisation will be in a different place to where it was prior to the initiative.

Salvadori (1997) states that achievement of multicultural education, 'will only be valid … when something changes in the culture of both [the classroom body of students and the teacher] so that a common culture is created that is different from the original cultures of both' (pp. 187–188). Similarly, Cadman (2000) suggests that for intercultural education to be truly effective at its deepest level it needs to involve facilitating a meld of classroom cultures.

International student learning styles

From the extensive work of John Biggs (1987, 1994, 1997, 2003), Biggs and Tang (2007), Volet et al. (1994) and Renshaw and Volet (1995) there has long been debate about perceived and actual differences that exist between the thinking and learning styles of students from Western and non-Western cultures and whether a multicultural classroom poses challenges to realising critical thinking-based teaching frameworks.

Although some authors have argued the move from 'reproductive thinking' to 'critical thinking' is a crucial one for international students (e.g. Ballard, 1987), others have suggested that assuming a deficit because of a non-critical tradition of learning is inappropriate (e.g. Biggs, 2003; Biggs & Tang, 2007; Kember & Gow, 1991; Volet & Renshaw, 1996) and that 'remediation' is actually a form of cultural imperialism (Birch, 1990).

Biggs (2003) is of the firm view that rather than attempting to assimilate 'different' students into the host culture, or having teachers accommodate perceived student differences, an inclusive teaching model is needed that focuses on the similarities

between students. This 'contextual' approach (Volet & Renshaw, 1996) recognises that, while international students undoubtedly will have special needs with regard to provision for language and social support, it is not necessary to discriminate further because both sets need to adapt from a context of a teacher-directed (school) culture to a self-directed university one. In such an approach, active teaching strategies and learning activities are to be utilised that are aligned to the intended objectives in order to actively involve every student's cognitive learning processes (Biggs, 2003, p. 137).

Research-based teaching

Maier (2005) maintains that students in a research-based teaching environment are taught by those who discover, create, apply and transmit knowledge and skills and are expected to engage with issues through questions that demand discussion, critical analysis, decision making and evaluation, mirroring a research approach that develops scholarship within the subject. The University of Warwick's learning model is based around distinguishing between two types of learning: knowledge and practice-based (adoptive) learning; and creative and higher-order (adaptive) learning (Roach et al., 2000, 2001). These learning capabilities respectively call for a body of disciplinary knowledge and techniques used within the discipline; and higher order cognitive skills that include the ability to:

- *make meaning* by interpreting information, forming and applying concepts and principles, critical analysis, and synthesis into coherent wholes;
- *generate ideas* by using innovative thought and creativity;
- *take decisions* by using procedures, algorithms, strategies and heuristics and judgements about applicability; and
- *reflect* on own purposes and processes, including justifications for judgements and decisions and possibilities of transferability.

Such cognitive skills are especially important for enabling the transfer of capability from one situation to another because they are less context-dependent than some other human abilities and because they can themselves aid transfer. Potential may be maximised if the curriculum is designed to provide appropriate course processes and assessment approaches that emulate the research environment. The need for a shift in the teaching approach from a didactic model to a dialogic model is also stressed.

Approaches to study derived from original empirical research by Marton and Säljö (1976a, 1976b) and elaborated upon by Entwistle (1981), Biggs (1987) and Ramsden (1992) among others; provided the *deep*, *surface*, *achieving* distinction. Biggs and Collis (1982) developed the Structure of Observed Learning Outcomes (SOLO) taxonomy of learning, which has links with Säljö's (1979) conceptions of learning. This framework also emphasises making connections and contextualising, similar to Bateson's (1973) levels of learning and Bloom's (1956) taxonomy in the cognitive domain. Like Bloom, SOLO describes levels of increasing complexity in a student's understanding of a subject and is claimed to be applicable to any subject area.

Key research design considerations

In seeking to address the overarching research question in a NZ setting, the assumption was made that the above scholarship was still valid, even though chiefly originating

from other national contexts. The literature informed the study via recognition of a number of key design considerations, which were synthesised into an overall teaching strategy and appropriate sequencing of the 'classroom' activities:

(1) recognition that teachers involved in the design and implementation of diversity initiatives must be cognisant of the organisation context within which it will take place (IES, 2002);
(2) recognition of the need to encourage intellectual independence in every university student as required by the NZ Education Act (NZ Government, 1990);
(3) (crucially) recognition of the need for every student to adapt from a context of a didactic, teacher-directed school culture to a dialogic, self-directed university one; hence rejecting deficit approaches in favour of active teaching strategies that encourage every student to engage with the higher cognitive processes most likely to achieve intellectual independence (Biggs, 2003; Volet & Renshaw, 1996);
(4) (crucially) recognition that research-based teaching environments not only require students to engage with higher order (adaptive) learning capabilities that encourage such higher order cognitive skills and deeper styles of learning but, being context-independent, they might also prove effective at aiding the transfer by students of acquired capability from one (cultural diversity) situation to another;
(5) recognition that the SOLO taxonomy describes progressively increasing levels of complexity in a student's understanding of a subject and is claimed to be applicable to any subject area. Incorporating such a systematic approach might, if integrated into the actual learning experiences of the students, provide a model for others?; and, finally,
(6) the need to develop competency *within the context of an information systems course* suggested that indirect instruction should be favoured (Nemetz & Christensen, 1996); weaving cultural diversity into (aligned) content, learning processes and assessment that students believed were authentic, relevant to their course context and relevant to their personal understanding.

Research methodology

As an exploratory research study involving the collection of quantitative and qualitative data, and with the researcher as participant, an action research experiment was judged to be appropriate. Students would be observed over an extended time period to detect any changes in attitudes and behaviour as they worked through the initiative; hence a within-subjects research design was judged appropriate.

The unit of analysis for the study was a small postgraduate class comprising a population of eleven students of which six were Chinese students and five were domestic New Zealanders of European origin; and with an even mix of males and females. Aged in their mid-twenties, the standard of written/spoken English language proficiency was average/good, respectively. This particular class was chosen because of difficulties experienced by the author with the previous cohort; one which had also been evenly divided along international/domestic student lines and that had steadfastly refused to work cooperatively across the 'cultural divide'. Being exploratory and involving a class that (conveniently) was to receive research methods training, it was anticipated that the findings could be used as a basis for comparison and to provoke insights.

Naturally, a study of this scope has limitations. While the small class size and roughly equal numbers of international and domestic students made a meaningful dialogue relatively easy to achieve, it meant that everyone received the same adaptive deep learning experiences and there was no control group to directly compare results against. Also, being the final semester for many of these students, it was not possible to assess the permanence and durability of any perceived changes in student attitude after the course.

Initiative description

The *classroom* action research cycle followed the same 3-step *organisation* action research cycle (Plan, Act, Review) recommended by IES (2002). Although having its origins in a UK study there was no evidence to suggest that changes would be needed for a NZ setting.

Step 1: planning stage – what is the teacher trying to achieve?

According to best practice recommendations the organisation, and ultimately the person charged with cementing in place enduring change, must decide the approach they wish to adopt towards diversity issues (IES, 2002). Although the University of Waikato Profile demonstrated good evidence of pastoral care and support for international students, organisational support for internationalised course designs was barely hinted at:

> [The University] is home to over 3000 international students … an International Enrolment Unit … Language Institute … International Centre … manages all of the ongoing international student support, Study Abroad and exchanges … An International Student Counsellor is situated in Student Services and is available for all international students…. Our focus on our communities is balanced by our commitment to a culture of internationalisation, which is measured through the diversity of our student and staff profiles, the support and celebration of that diversity. (University of Waikato Profile, 2004, Appendix 1, p. 68)

Being unable to confirm whether the organisation had even adopted a particular approach towards diversity issues meant that the classroom interventions would take place within something of a policy vacuum.

Step 2: doing stage – putting strategy into action

In general, individuals prefer diversity 'training' they believe is applicable to their work context and relevant to their personal understanding and need for information or which changes their awareness. It is also better received when it is delivered in small homogeneous groups and when it is interesting, pitched at the right level and sufficiently challenging (IES, 2002). The overarching initiative theme 'National Culture and Gender Issues in Information Systems' was judged to be relevant for study within an information systems course. The wisdom of the decision to 'back into' the initiative was confirmed when somewhat dismissive comments were overheard in the classroom along the lines of, 'They [international students] chose to come here, so it's their problem to figure it all out'.

Students were asked to keep a diary of their learning for the whole semester in which they were asked to record their major learning inside and outside the class,

reflections on each session and any changes in perceptions and 'givens' that they brought into the classroom.

The group's learning style preferences and approaches to learning were assessed, which provided pointers to the types of exercises to include. The Study Process Questionnaire (Biggs, 1987) and the Perceptual Learning Style Preference Questionnaire (Reid, 1987) were used to investigate cognitive and environmental dimensions, respectively. The first highlighted that the Asian students (on average) exhibit more of the deep motive, deep strategy and achieving strategy in their learning styles, whereas NZ students exhibit more use of achieving motivation. Students differed in their Perceptual Learning Style preferences across all modes of learning, with the strongest disparity being in group learning – a result that supports earlier findings that Asian students are more collaborative in their learning styles (e.g. Ramburuth & McCormick, 2001).

These preferences were accommodated by dividing the diversity initiative into seven related exercises that would typically take place in two-hour sessions over some eight weeks of the semester and would involve both individual and group work elements. To evaluate the value of research-based teaching approaches for encouraging an enduring appreciation of cultural diversity, deeper styles of teaching were used to *progressively* raise awareness, change attitudes and behaviour and impact culture, as follows:

Exercise 1: presentation of business research methods and of a research proposal 'model'

This part relates to the SOLO *Pre-structural* and *Unistructural* levels (Biggs & Collis, 1982) where students acquire bits of unconnected information and make simple and obvious connections, respectively. Thus, in an exercise based around describing the characteristics of an ideal research proposal, students were led through the essential points regarding the information system research environment, skills required of the researcher, influential publication outlets and principles of good research design and technique.

Exercise 2: in-class (group) design of a research study involving an authentic problem

This part also relates to the SOLO *Unistructural* level. For this exercise the students were given a subtopic to work with: *Intercultural Communication*, in which they were invited to design a research study into the reasons why candidates from different cultures behave differently at a job interview. This topic was judged to be authentic and relevant to all of the students, particularly as this would be one of their last courses before joining the workforce.

The class was asked how two related questions might be answered with a suitable research design:

- What cultural factors influence interpersonal communication in an interview setting?
- How does interpersonal communication affect interview performance?

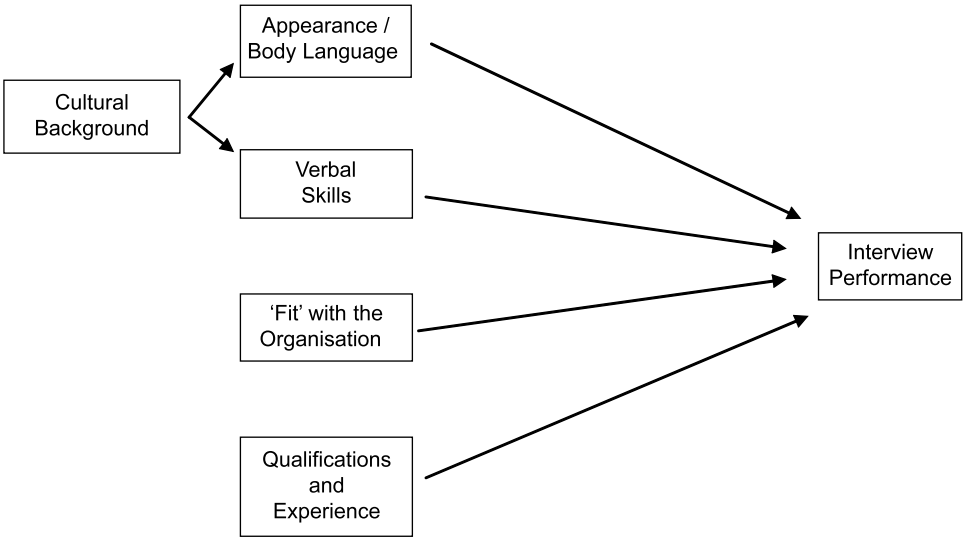

Figure 1. Some factors impacting interview performance.

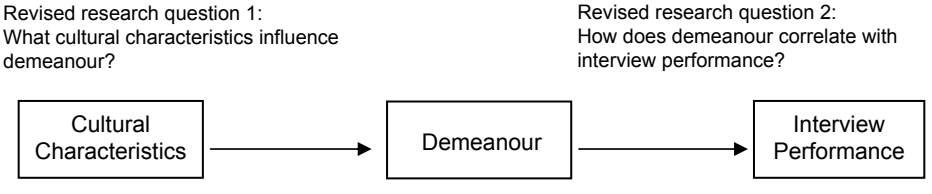

Figure 2. Revised research questions.

The class was then helped to identify some of the main factors most likely affecting interview performance (Figure 1), essentially being led by example and gently *steered* toward a simplified culture-related model that might be (at least partly) amenable to investigation through observing interview situations, Figure 2.

Exercise 3: in-class (group) application of the research design to a case-based exercise

This part relates to the SOLO *Multistructural* level, where a number of connections may be made but the meta-connections between them are missed, as well as their significance for the whole. Students were asked to comment on case study descriptions of actual interview situations in different cultural settings, in which the thoughts and questions running through the interviewer's mind were also given. The class was asked to offer possible explanations based on what they knew about their own cultural norms. This stimulated a discussion of some of the norms in Asian and Western societies, the roots of these, strengths that diverse cultures bring to the workforce, the importance of 'fitting in' while working and studying abroad and so on.

Exercise 4: cultural characteristics survey (individual) and feedback of findings to the class

This part also relates to the SOLO *Multistructural* level. First, every student was asked to complete and return a confidential 'cultural characteristics' survey (Hofstede, 1980) and to reflect on a handout description of cultural stereotypes. In the subsequent discussion of results, the students readily appreciated how even people from the same culture display a wide range of behaviours and how the Hofstede dimensions can reinforce stereotypes. Thus, it became obvious to them that reporting 'average' measures of culture requires caution, which led to further consideration of 'their' research design limitations and possibilities for its improvement.

Exercise 5: 'fitting in' survey (individual) and feedback of findings to the class

This part relates to the SOLO *Relational* level in which the student is able to appreciate the significance of the parts in relation to the whole. To this point it had been noted that students from similar cultures were routinely sitting together and there appeared to be minimal socialising across the 'divide'. A discussion was started to find out if participants felt this was an issue. Each 'side' felt that it probably was and that opportunities to share in a truly multicultural education experience were being lost. However, in private, two of the more vocal domestic students volunteered comments along the lines of: 'It's nothing to do with me. They chose to come to NZ, so it's their problem.' Yet, the Chinese students consistently expressed the view that, 'I decided to come here for a Western education and to learn from students and others who are not Asian.'

Every student was asked to complete and return a confidential 'Fitting In' survey (University of Colorado at Boulder, 1998), to identify any personal problems and issues that they felt were the result of their ethnicity. This formed the basis for an interesting classroom discussion of problems being experienced by all students, both on and off campus, with some possible reasons explored.

Exercise 6: 'about me' (individual and within-group)

This part also relates to the SOLO *Relational* level. The overarching class theme was divided into several broad subtopics and groups of 3–4 students selected a sub-topic to work with. To engender a more supportive learning environment it was judged desirable to have the groups self-select members, based on a sound knowledge of potential teammates and their interests; the only stipulation being that not everyone should be from the same cultural background. To this end, each student was asked to complete a diagram, adapted from Gardenswartz and Rowe (1994), describing significant parts of who they are or how they would choose to identify themselves to others (e.g. sister, student, Chinese, nationalist …) and to use this diagram when introducing themselves to potential team members.

Exercise 7: (individual) preparation of a research proposal and (group) presentation to the class

This part relates to the SOLO *Extended Abstract* level, in which the student is making connections not only within the given subject area but also beyond it and is able to

generalise and transfer the principles and ideas underlying the specific instance (Biggs & Collis, 1982).

A major assignment (30% of the total course marks) required students to work cooperatively within their respective groups on their own research questions under the group's sub-topic theme. Thus, students were required to prepare an individual research proposal within the supportive environment of their group and finally, as a group, to prepare a research resource (website) and prepare and present their own individual findings as a member of a 'research team'.

The presentation style was required to be 'appropriate to an overseas conference setting', which provided the opportunity for team members to discuss the cultural norms in the 'host' country and implications for their presentation; an activity that reinforced the activities in Exercise 3. This resulted in some very enjoyable role-play sessions where team members presented their 'findings' attired in their national costume, handed out traditional snacks and addressed each other formally.

By this time the number and intensity of the intercultural exchanges had increased to the point where students were meeting socially off-campus as well as within their class groups.

Initiative evaluation

It is recognised that participants generally prefer training that is of high quality – innovative, interesting, well-facilitated, delivered at an appropriate pace and with attention to context and need (IES, 2002). Thus, the final (*Review*) step of the classroom action research cycle recommended by IES (2002) involves devising an evaluation strategy.

The primary evaluation method was a confidential post-initiative questionnaire, backed by observational data gathered mainly during the classroom sessions. An existing questionnaire (IES, 2002, Appendix 3) was modified for this purpose and students were asked to refer to their diaries when answering the questions. Figure 3

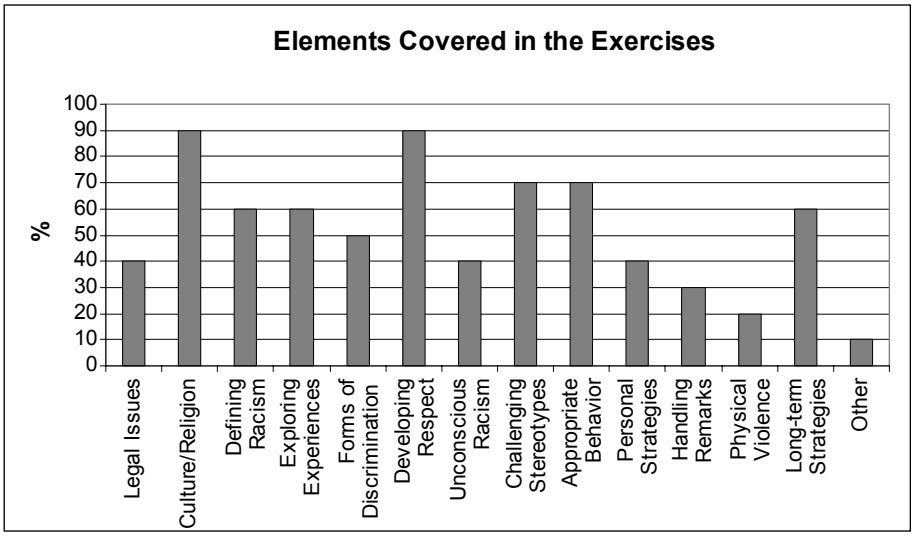

Figure 3. Elements covered in the exercises.

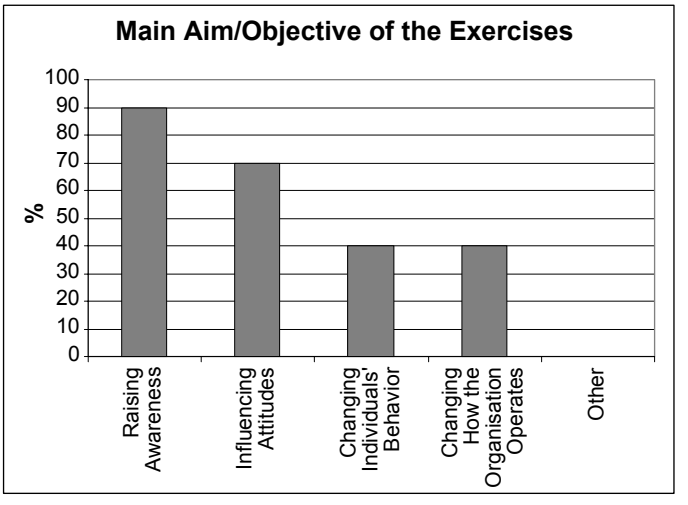

Figure 4. Main aim/objective of the exercises.

indicates the extent that students believed various elements were covered by the initiative. It can be seen that 'Knowledge about culture' and 'Developing an understanding of, and respect, for difference' were the two most frequently reported (each mentioned by 90% of the students). 'Challenging stereotypes and preconceptions and learning appropriate behaviour' (each mentioned by 70%) may be a reflection of the case-based exercise, where the focus was on interview behaviours appropriate to different cultures.

What the participants believed were the main aim and objective of the exercises are shown in Figure 4. Once again the students indicated they believed that 'Raising awareness' (mentioned by 90%) and 'Influencing attitudes' (70%) were being favoured over attempts to change individual or organisation behaviour.

Figure 5 shows that the participants felt the training was consistently provided in a reasonably open and safe learning environment, where confidentiality was respected and there was constructive engagement with the issues.

Figure 6 indicates that the participants felt the training was particularly effective for raising their awareness, influencing attitudes and outlook and improving the ability

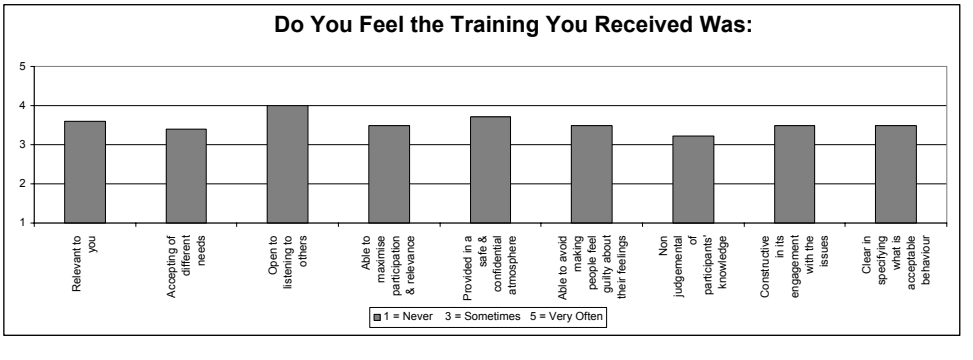

Figure 5. Quality of the learning environment.

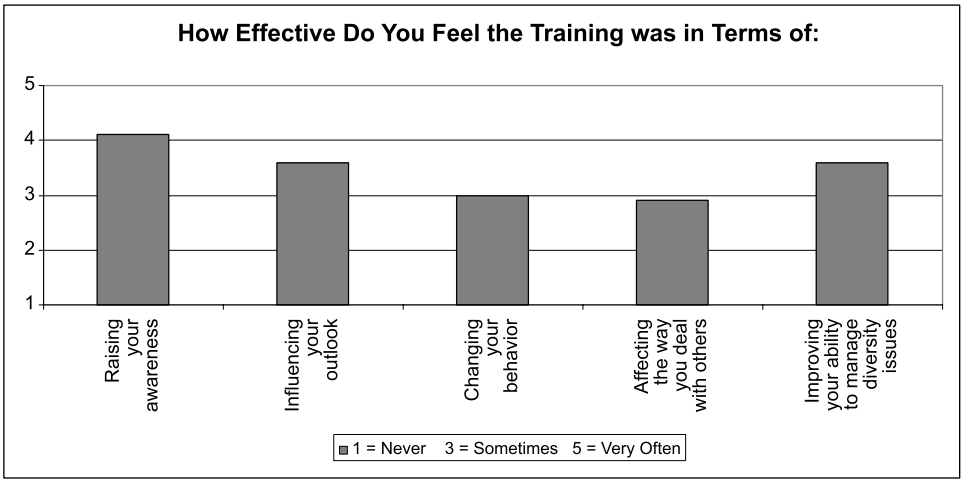

Figure 6. Overall training effectiveness.

to manage diversity issues. Again, changing their behaviour was perceived as a secondary effect.

Figure 7 indicates that the participants felt every part of the diversity training was reasonably effective.

Figure 8 shows the impact that the respondents believed the training had on them personally. Thirty percent believed it had considerable positive impact, 40% believed it had some positive impact and 10% reported that it was either too early to tell or gave a mixed response. Interestingly, 10% reported some negative impact. A possible explanation for this was offered in a later conversation with a Chinese student, who offered the insight that international students prefer to 'blend in' whereas the classroom exercises had highlighted their differences.

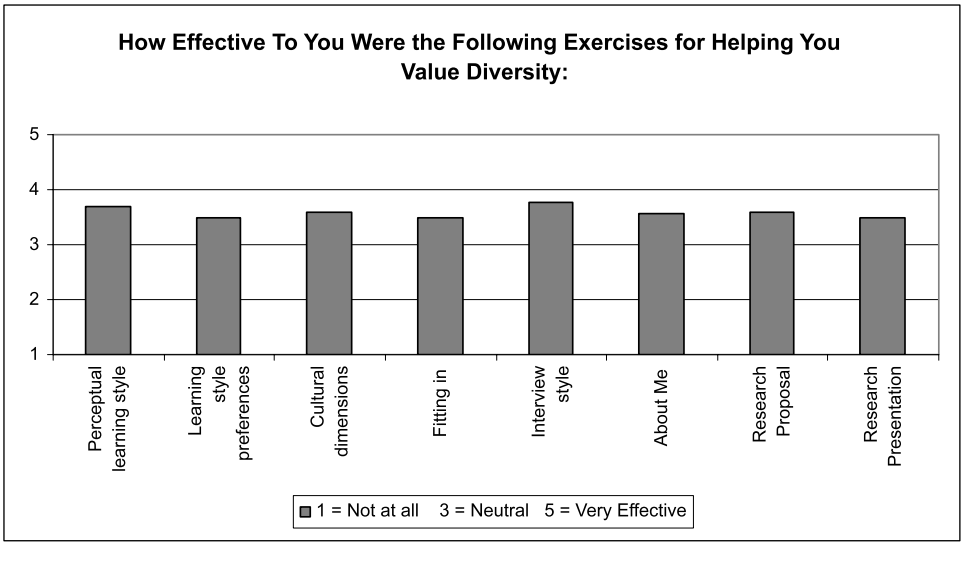

Figure 7. Effectiveness of initiative components.

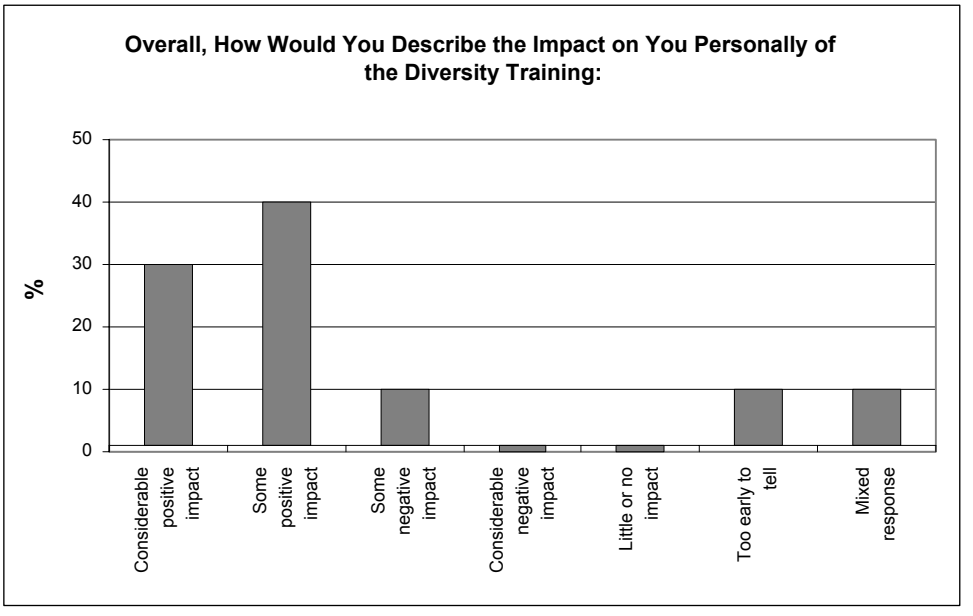

Figure 8. Initiative impact.

Discussion

Although higher education has become part of 'a global shift to a new way of creating and using knowledge' (Ramsden, 2003, p. 3), Biggs and Tang (2007) have recently cautioned that universities will need to provide teaching of a quality well above that which Asian students would receive in their home countries because, 'universities in many Asian countries have improved their teaching considerably, so that the cost benefits of Asian students leaving their countries to complete a degree … are not so apparent as they once were …' (p. 2).

In spite of many years of research into factors for improving the climate for racial and ethnic diversity on campus (e.g. Hurtado, Milem, Clayton-Pedersen, & Allen, 1999, Zhao, Kuh, & Carini, 2005) and into the factors that impact student success in the classroom (e.g. Pascarella & Terenzini, 1991, 2005), Ward and Masgoret (2004) reported that fewer than 42% of NZ students surveyed believed that opportunities were being provided to learn about the different cultures represented in the class; suggesting that NZ educators may be missing valuable opportunities to internationalise their curricula.

For the present study diversity training was conceptualised as being embedded within a wider cultural diversity strategy that builds on a continuous improvement action research cycle. Furthermore, the topic of cultural diversity and the process of learning were aligned in such a way that training opportunities in intercultural competence were explored while providing a process that offers further training in intercultural competencies.

The focus of the present action research diversity study was on using 'adaptive-deep' learning approaches which, being a generative process, require higher cognitive skills, emphasise innovation and creativity and potentially enable the transfer of capability from one diversity situation to another. Thus, in addition to assessing higher

order cognitive skills (Roach et al., 2000, 2001), attributes to be appraised included the following:

- *innovation* (via creation of a research proposal and a website learning resource);
- *independent working* (via an individual research proposal, although under a group theme to provide peer support – an approach advocated by Biggs and Tang [2007, p. 126]);
- *problem setting and solving* (via working through the research proposal design to ensure a coherent whole; for example asking questions and proposing revisions regarding whether the proposed methodology will generate the required results; whether these results will help to answer the research question … etc.). International students particularly value the opportunity to discuss without staff being present (Biggs & Tang, 2007, p. 119);
- *critical analysis* (via a discipline-based literature review and research analysis description); and
- *information handling* of a wide variety of media (via library- and web-based literature reviews, website design and team presentation design and oral production).

In line with recommendations by Biggs and Collis (1982) and Roach et al. (2000, 2001) the initiative was designed to make use, not only of disciplinary knowledge and techniques, but also the concentrated development of higher-level cognitive skills that are essential for their development and use. A research-based teaching approach progressively increased student engagement with higher order cognitive skills so that, by the end of the initiative, students would have practised the entire cognitive domain: they would have been given the opportunity to set and solve problems and to reflect on their learning processes and would be able to learn valuable lessons by having access to each others' work via the course website. Thus, they judged what is, and what is not, good quality work using the same open-ended criteria used by the teacher. In this way, students themselves contributed to the course, critiquing and introducing extra resources that supported the formation and expression of their ideas and justifying their choices.

Conclusion

This study aimed to address the overarching research question: 'How effective are research-based teaching approaches for motivating university students to value cultural diversity?'

The effect of the initiative on the students was considerable so that they became highly motivated to appreciate the implications of multicultural diversity; they shared their personal experiences openly and this greatly enriched the learning environment. Mixed student groups also began to meet socially off-campus in addition to within their classroom groups. Participants generally reported that the initiative had been an effective means of raising their awareness, influencing their attitudes and outlook and improving their ability to manage future diversity issues. As intended, changing their own and the organisation's behaviour were seen as a secondary aim – a result that is in accord with the initiative favouring a non-deficit approach. In contrast with an earlier diversity 'training' initiative that simply tried to raise awareness of the issues albeit with a different class of students, almost no negative feedback was received and the

students were very pleased that this important issue was being tackled in a supportive and meaningful way.

Overall, this study has clearly shown that a research-based teaching approach is effective for motivating university students to value cultural diversity. Of course, generalisability of results remains to be tested in other subjects, levels and disciplines and future work could usefully explore any of these dimensions.

On reflection, the top three critical success factors for this successful outcome were judged to be:

(1) having participants engage at progressively deeper cognitive levels, using the SOLO taxonomy of learning and with a range of authentic diversity issues, culminating in 'ownership' through researching a diversity issue/problem that interested them personally;
(2) introducing the diversity issues and questions to the participants *indirectly* so as not to raise the ire of any participants who initially perceive no need whatsoever for diversity training: 'The Asians came here, it's their problem';
(3) ensuring that exercises and assessment are in line with what participants accept to be valid course content and designed to be applicable to students' global work context and relevant to their personal understanding. Furthermore, many authors have emphasised that an important goal of higher education is to prepare culturally competent individuals with the ability to work effectively with people from different backgrounds (e.g. Carnevale, 1999; Mori, 2000; Smith & Schonfeld, 2000).

The author agrees with Salvadori (1997) that, '[multicultural] education will only be valid … when something changes in the culture of both [the classroom body of students and the teacher] so that a common culture is created that is different from the original cultures of both teachers and students' (pp.187–188). It is the author's opinion that 'adaptive-deep' learning approaches that help students appreciate and celebrate their cultural differences should be viewed as a vital step in creating this new culture.

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References

Baytos, L. (1995). *Designing and implementing successful diversity initiatives.* New York: Prentice-Hall.

Ballard, B. (1987). Academic adjustment: The other side of the export dollar. *Higher Education Research & Development, 6*(2), 109–119.

Bateson, G. (1973). *Steps to an ecology of mind.* London: Paladin.

Bennett, J.M. (2004). Turning frogs into interculturalists: A student-centered developmental approach to teaching intercultural competence. In R.A. Goodman, M.E. Phillips, & N. Boyacigiller (Eds.), *Crossing cultures: Insights from master teachers* (pp. 312–342). London: Routledge.

Biggs, J., & Collis, K. (1982). *Evaluating the quality of learning: The SOLO taxonomy.* New York: Academic Press.

Biggs, J., & Tang, C. (2007). *Teaching for quality learning at university* (5th ed.). Maidenhead, UK: The Society for research into Higher Education and Open University Press.

Biggs, J. (1987). *Student approaches to learning and studying.* Hawthorn, Victoria: Australian Council for Educational Research.
Biggs, J. (1994). What are effective schools? Lessons from East and West. *Australian Educational Researcher, 21*(1), 19–39.
Biggs, J. (1997). Teaching across and within cultures: The issue of international students. In R. Murray-Harvey & H. Silins (Eds.), *Learning and teaching in higher education: Advancing international perspectives.* Proceedings of the 1997 Annual Conference of the Higher Education Research and Development Society of Australasia. Adelaide: Flinders University Press.
Biggs, J. (2003). *Teaching for quality learning at university: What the student does* (2nd ed.). Buckingham, UK: The Society for research into Higher Education and Open University Press.
Birch, D. (1990). Language, literature and critical practice. In S. Aniwan (Ed.), *Language teaching methodology for the nineties* (Anthology series 24, 9). Singapore: SEAMEO Regional Language Centre.
Bloom, B.S. (Ed.). (1956). *Taxonomy of educational objectives, the classification of educational goals – Handbook I: Cognitive domain.* New York: McKay.
Brew, A. (2005, July). *Understanding the relationship between research and teaching.* Paper presented at the Annual International Conference of the Higher Education Research and Development Society of Australasia, Sydney, NSW.
Cadman, K. (2000). Voices in the air: Evaluations of the learning experiences of international postgraduates and their supervisors. *Teaching in Higher Education, 5*(4), 475–488.
Carnevale, A.P. (1999). *Diversity in higher education: Why corporate America cares. Diversity digest.* Washington, DC: Association of American Colleges and Universities.
Cortazzi, M., & Jin, L. (1997). Communication for learning across cultures. In D. McNamara & R. Harris (Eds.), *Overseas students in higher education* (pp. 76–90). London: Routledge.
Entwistle, N. (1981). *Styles of learning and teaching: An integrated outline of educational psychology for students, teachers and lecturer.* Chichester: John Wiley.
Gardenswartz, L., & Rowe, A. (1994). *Diversity toolkit.* Burr Ridge, IL: Irwin Professional Publications.
Hattie, J., & Marsh, H.W. (1996). The relationship between research and teaching: A meta-analysis. *Review of Educational Research, 66*, 507–542.
Hofstede, G. (1980). *Culture's consequences: International differences in work-related values.* Beverly Hills, CA: Sage.
Hurtado, S., Milem, J., Clayton-Pedersen, A., & Allen, W. (1999). Enacting diverse learning environments: Improving the climate for racial/ethnic diversity in higher education. *ASHE-ERIC Higher Education Report, 26*(8), 69–78.
IES (2002). *A review of training in racism awareness and valuing cultural diversity.* Institute for Employment Studies, Online Report 09/02. Retrieved 8 May, 2007, from www.homeoffice.gov.uk/rds/pdfs2/rdsolr0902.pdf
James, G., & Watt, N. (1992). The problems of overseas students in New Zealand universities. *Many Voices: A Journal of New Settlers and Multicultural Education Issues, 3*, 5–8.
Jochems, W., Snippe, J., Smid, H.J., & Verwell, A. (1996). The academic progress of foreign students: Study achievement and study behavior. *Higher Education, 31*, 325–340.
Kember, D., & Gow, L. (1991). A challenge to the anecdotal stereotype of the Asian student. *Studies in Higher Education, 16*(2), 17–128.
Lo Bianco, J., Liddicoat, A.J., & Crozet, C. (Eds.). (1999). *Striving for the third place: Intercultural competence through language education.* Melbourne, Victoria: Language Australia.
Mac Ginty, R. (2001). Ethnocentrism in a higher education learning environment. Unpublished report of the YCAP Project at the University of York.
Maier, P. (2005). *Defining and identifying research-led teaching.* Retrieved 9 September, 2006, from http://www.clt.soton.ac.uk/
Marton, F., & Säljö, R. (1976a). On qualitative differences in learning – 1: Outcome and process. *British Journal of Educational Psychology, 46*, 4–11.
Marton, F., & Säljö, R. (1976b). On qualitative differences in learning – 2: Outcome as a function of the learner's conception of the task. *British Journal of Educational Psychology, 46*, 115–127.

McCargar, D.F. (1993). Teacher and student role expectations: Cross-cultural differences and implications. *Modern Language Journal, 77*, 192–207.
Ministry of Education (MoE). (2006a). *Export education innovation programme strategic overview and operational guidelines, December 2006.* Wellington, NZ: Author.
MoE (2006b). *New Zealand's International Education Sector: Tracking the influence of currency values, December 2006.* Wellington, NZ: Author.
MoE (2007). *Ministry of Education discussion document: The international education agenda 2007–2012, August 2007.* Wellington, NZ: Author.
Mori, S. (2000). Addressing the mental health concerns of international students. *Journal of Counseling & Development, 78*, 137–144.
Nemetz, P.L., & Christensen, S.L. (1996). The challenge of cultural diversity: Harnessing a diversity of views to understand multiculturalism. *Academy of Management Review, 21*(2), 434–452.
Pascarella, E.T., & Terenzini. P.T. (1991). *How college affects students: Findings and insights from twenty years of research.* San Francisco, CA: Jossey-Bass.
Pascarella, E.T., & Terenzini. P.T. (2005). *How college affects students: A third decade of research* (Vol 2). San Francisco, CA: Jossey-Bass.
Ramburuth, P., & McCormick, J. (2001). Learning diversity in higher education: A comparative study of Asian international and Australian students. *Higher Education, 42*, 333–350.
NZ Government. (1989). Education Act (Section 162, Part 14, Section 4, Page 342). Wellington, NZ: Ministry of Education.
Ramsden, P. (1992). *Learning to teach in higher education.* London: Routledge.
Ramsden, P. (2003). *Learning to teach in higher education* (2nd ed.). London: Routledge-Falmer.
Reid, J.M. (1987). The learning style preferences of ESL students. *TESOL Quarterly, 21*(1), 87–111.
Renshaw, P.D., & Volet, S.E. (1995). South East Asian students at Australian universities: A reappraisal of their tutorial participation and approaches to study. *Australian Educational Researcher, 22*(2), 85–106.
Roach, M., Blackmore, P., & Dempster, J. (2000). *Supporting high-level learning through research-based methods and e-learning, The TELRI Project.* Retrieved 8 May, 2007, from www.telri.ac.uk
Roach, M., Blackmore, P., & Dempster, J. (2001). Supporting high level learning through research-based methods: A framework for course development. *Innovations in Education and Training International, 38*(4), 369-381.
Säljö, R. (1979). *Learning in the Learner's Perspective I: some common-sense conceptions.* No. 76, Institute of Education Report, University of Gothenburg, Sweden.
Salvadori, R.G. (1997). The difficulties of interculturalism. *European Journal of Intercultural Studies, 8*(2), 185–191.
Smith, D.G., & Schonfeld, N.B. (2000). The benefits of diversity: What the research tells us. *About Campus, 5*(5), 16–23.
Taylor, T., Powell, D., & Wrench, J. (1998). *The evaluation of anti-discrimination training activities in the United Kingdom.* International Migration Paper 21. Geneva, Switzerland: ILO.
Triandis, H.C. (1990). Theoretical concepts that are applicable to the analysis of ethnocentrism. In R.W. Brislin (Ed.), *Applied cross-cultural psychology* (pp. 34–55). Newbury Park, CA: Sage.
University of Colorado at Boulder. (1997). *CU-builder 1998 community survey.* Retrieved 8 May, 2007, from http://www.colorado.edu/pba/surveys/comm/comm98/
University of Waikato university profile 2005–2007. (2004). Retrieved 18 August 2006, from http://www.waikato.ac.nz/profile/UWProfile2005-2007.pdf
Volet, S.E., Renshaw, P.D., & Tietzel, K. (1994). A short-term longitudinal investigation of cross-cultural differences in study approaches using Biggs' SPQ questionnaire. *British Journal of Educational Psychology, 64*, 301–318.
Volet, S.E., & Renshaw, P.D. (1996). Chinese students at an Australian university: Continuity and adaptability. In D. Watkins and J. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences.* Camberwell, Victoria: Hong Kong Centre for Comparative Research in Education/Australian Council for Educational Research.

Ward, C. (2001). *The impact of international students on domestic students and host institutions: A literature review.* Retrieved 18 August, 2006, from http://www.minedu.govt.nz/index.cfm?layout=document&documentid=5643&indexid=11330&indexparentid=6663

Ward, C., & Masgoret, A-M. (2004). *The experiences of international students in New Zealand: Report on the results of the national survey.* Geneva, Switzerland: Centre for Applied Cross-cultural Research and School of Psychology Victoria University of Wellington.

Zhao C-M., Kuh, G.D., & Carini, R.M. (2005). A comparison of international student and American student engagement in effective educational practices. *Journal of Higher Education, 76*(2), 209–231.