

## **Student Success: Bridging the gap for Chinese students in collaborative learning**

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### **Abstract**

*International research is positive about the educational benefits of working in diverse groups but there has been little New Zealand research in this area. This paper investigates how students are prepared for collaborative learning in three New Zealand tertiary institutes and identifies the particular problems experienced by Chinese students when the preparation in multi cultural classes is not carried out adequately and does not address cultural issues.*

*An initial research project by Clark and Baker (2006) involved a survey of staff and students at two Wellington tertiary institutes. The results indicated that students were often inadequately prepared for working in groups and, although they usually valued informal collaborative learning, they did not achieve the desired outcome of learning to work together constructively and cooperatively in assessed collaborative assignments.*

*This paper, which reports on a follow up research project, presents findings from focus groups with Chinese international students and with New Zealand tertiary lecturers who use collaborative learning techniques in their teaching. The findings from these focus groups indicate that there is a strong cultural conflict in the conceptualisation of collaborative learning between Chinese students with little prior experience of collaborative learning and New Zealand lecturers who are often not fully prepared to help Chinese students to bridge the gaps. The majority of Chinese students value lecturers' programme content delivery and the achievement of high marks over the development of interpersonal skills; this is contrary to the lecturers' belief that the development of team skills is the most important outcome from collaborative learning. This cognitive dissonance reinforces the importance of understanding cultural differences and their impact on student patterns of classroom behaviour.*

*To bridge the gaps, this paper recommends that Chinese students be prepared more effectively to understand the reasons for the use of collaborative learning in New Zealand tertiary classrooms and that lecturers be trained in designing assessment programmes that are pedagogically sound and culturally accommodating.*

### **Keywords**

Collaborative learning, group assignments, team skills, Chinese students, culture

### **Introduction**

This research project records the experiences of Chinese students at three New Zealand tertiary institutions and examines whether institutes and lecturers are preparing international students to succeed in an unfamiliar culture and learning environment. The attitudes of Chinese students and of lecturers are analysed in order to identify

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how New Zealand lecturers can better help Chinese students achieve in a learning environment that emphasises collaborative learning when these students have generally had no prior experience of assessed group work.

Collaborative learning, for the purposes of this paper, is defined as a formal group of two or more students working collaboratively towards assessed outcomes. Collaborative learning is generally assumed to involve the development of student interpersonal and problem solving skills. The term "group work" is sometimes used in this paper, however, as it is a more familiar term to practising teachers.

The benefits of collaborative learning have been well documented by researchers (Cuseo, 1990; Johnson, Johnson & Stanne, 2000; Skon, Johnson & Johnson, 1981; Slavin, 1990). Much of this research, however, has taken place in Western societies with students generally from the same society (Ward, 2006). There is less agreement on whether collaborative learning is appropriate for Asian students and whether students from Confucian heritage countries can, or should, develop Western style team skills from participating in collaborative learning groups at their tertiary institutes (Earley 1997; Hofstede 2003; Phuong-Mai, Cees & Pilot 2006). Likewise there is very little research or agreement on the effectiveness of collaborative learning in educational institutes, such as those in New Zealand, where the student body comprises of a mixture of domestic and International students.

Lecturers' attitudes to collaborative learning involving Chinese students have to be examined in the context of the overall classroom experience. The findings of this project, therefore, involve general issues in the preparation of students for collaborative learning in New Zealand as well as those directly applicable to the preparation of Chinese students.

## **Review of the literature**

Extensive research on collaborative learning has been carried out in the last thirty years, mainly in the United States. This research has come to generally positive conclusions about its academic benefits in that collaborative learning has been shown to lead the way to improved student learning and revitalised teaching methods. (Cuseo, 1990; Johnson, Johnson and Stanne, 2000; Skon, Johnson and Johnson, 1981; Slavin, 1990)

Researchers have also identified benefits that are additional to higher academic achievement. Slavin's (1990) research concluded that when students of different racial or ethnic backgrounds work together towards a common goal, liking and respect for one another is increased. Johnson and Johnson's findings (1998) indicate that working cooperatively with peers and valuing cooperation result in greater psychological health than does competing with peers or working independently. Collaborative learning is believed to prepare students for the modern participative workplace (Feichter & Davis 1992), and some researchers have argued for a correlation between the use of collaborative learning in the classroom and the development of a democratic society (Kagan 1994).

With this enthusiasm for collaborative learning came an increased awareness of the role of the teacher in ensuring that collaborative groups were successful and that the expected benefits were achieved. Johnson and Johnson (1998) identify five conditions for successful collaborative learning: positive interdependence, face to face interaction, individual accountability, use of relevant interpersonal and small group skills and frequent and regular group processing. They maintain that 'placing people in the same room, seating them together, telling them that they are a cooperative group, and advising them to 'cooperate', does not make them a cooperative group.' (Johnson & Johnson 1998, p.15) They warn of the dangers of 'pseudo groups' - groups whose members have been assigned to work together but who have no interest in doing so - and of 'traditional groups' where members interact primarily to share information and to clarify how to complete the tasks (Johnson & Johnson 1998). Researchers also established that students need training in team skills if collaborative learning is to deliver the expected results and that teachers themselves needed guidance on how to train students and structure group assessments (Oakley et al 2004).

While the research on collaborative learning in Western societies is positive, the research on using collaborative learning in Asian cultures is contradictory. Hofstede (2003) and Earley (1997) argue that the cultural norms in Asian society might make the use of collaborative learning techniques inappropriate. Dimensions such as power distance and uncertainty avoidance might make it difficult for Chinese students to operate in an equal, collaborative context. Phuong-Mai, Cees and Pilot (2006) likewise suggest that an educational method born of one culture may be adapted to another only when relevant cultural preferences are rigorously considered. Other

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researchers disagree. Tjosvold, Yu and Su (2004) argue that China is transforming its economy and its society and therefore has a need for Western-style cooperative learning in management education. Meng (2005) examines collaborative learning in the Chinese context and concludes that its style is different from Western styles. She suggests that the Confucian heritage of inter-relatedness makes cooperative work appropriate for Chinese students but suggests that it should be based on a group effort / individual reward structure.

The use of collaborative learning in Australian and New Zealand tertiary institutes with large numbers of international students leads to similar debate. International students are generally unfamiliar with student centred learning, and there are often mismatched expectations between international students and their lecturers (Li et al, 2002). Volet and Renshaw (1995), in a study of Chinese learners in Australia, however, found that the longer students study in Australia the more likely they are to adapt to the Western style of teaching and learning. Wong (2004) suggests that the main barriers for Asian students at Australian universities are different learning styles, cultural barriers, and language problems: his research indicates that Asian students adapt easily to the Australian student centred style of learning in a matter of months and, with experience, come to prefer it. Campbell and Li (2006) interviewed 22 Asian students studying in New Zealand on their views on collaborative learning and concluded that, although Asian students valued classroom group discussions, they felt disheartened and negative when they needed to participate with others in an assessed group project. They noted:

When most students had negative attitudes towards group assignments, when Asian students' prior learning experiences and intellectual constraints did not match what was practised, students were still forced to do group assignments, without taking students' feelings into account and without evaluating pedagogical effectiveness (Campbell & Li 2006, p.11 ).

Research addressing the particular issues of mixed Asian and Western student groups in New Zealand is minimal. Ward, in her 2006 literature review update, is positive about the benefits of culturally mixed groups; she states that, 'there is considerable evidence that this practice produces positive academic and social benefits.' (Ward 2006, p. 45) She adds, however, that,

For successful outcomes, collaborative learning requires significant preparation. Students must be informed of the purpose and objectives; collaborative activities should be placed in a broader context of multiple approaches to teaching and learning; the role of culture in communication and interactions should be discussed and explained; in addition to making students aware that culture influences the way in which people acquire and process information and knowledge.' (Ward 2006, p. 47)

There is little literature in New Zealand examining the extent to which teachers are carrying out these recommendations on student preparation for collaborative learning. This research attempts to fill this gap with a particular emphasis on the quality of preparation for Chinese students in New Zealand tertiary classrooms.

## **Methodology**

Both qualitative and quantitative research methods were chosen for this in-depth study. The first stage of the research project, carried out in 2005, involved workshops with tertiary tutors in Auckland, Wellington and Christchurch to discuss attitudes to collaborative learning. Tutors identified the main issues of collaborative learning as the influx of international students into New Zealand, with the resulting language and cultural issues, and the difficulty in developing a fair assessment system for groups comprising of students with mixed levels of motivation and ability.

For the second stage, in 2006, research questionnaires were used to identify staff and student perceptions of collaborative learning. The questionnaires consisted of 40 statements about collaborative learning with a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Any response of 1 or 2 was taken as disagreement, 3 as neutrality, and 4 or 5 as agreement. The questionnaire included one additional question requiring staff and students to rank seven outcomes of collaborative learning in order of importance to them, and five open-ended questions on collaborative learning issues. A majority of questions were common to both staff and student questionnaires. The questionnaires were distributed to a convenience sample at two educational institutes and the results were collated and compared with the issues that had been identified the previous year. Twenty staff questionnaires were returned and 148 student questionnaires. This represented a response rate of 70% for staff and 60% for students. Closed questions were analysed using SPSS. Open-ended questions were collated and analysed for major themes and for consistency with the closed questions. Students surveyed were from Diploma and Degree programmes in Business, Information Technology and Hospitality.

The third stage of the research was conducted in 2007 using semi-structured focus group interviews lasting up to one hour. Student focus groups were facilitated in Mandarin with 13 Chinese international students from two Wellington tertiary institutes. Fictional names have been used to record their statements in this paper. Focus group interviews were also held with 12 tutors from one Wellington tertiary institute. The criteria for participant selection were as follows: participants in student groups were Chinese international tertiary students who had experience of group work in a Wellington tertiary institute. Staff were tutors at a tertiary institute who had experience in using collaborative learning for assessment with Chinese students. Both groups were convenience samples. Participants in the focus groups were asked to elaborate on issues identified in the 2006 questionnaires. Focus groups were audio taped, transcribed verbatim and coded. In addition to the focus groups, in-depth opinions were canvassed from two Chinese born academics who were educated in Chinese Universities.

## Findings

### Lecturer and student perceptions of collaborative learning

Chinese students in the 2006 survey were generally positive about collaborative learning. Sixty nine percent of the Chinese students surveyed stated that they enjoyed working in groups and 70% stated that they learnt more in groups than when they worked on their own. Ninety-one percent answered that they enjoyed getting to know other members of a group when working together. Seventy eight percent of Chinese students considered that they had developed interpersonal communication skills when working in groups and 61% agreed that they had developed intercultural skills. Open-ended questions, however, showed that, in most cases, students had not learned the skills to deal with problems with other students in their groups. Many of the answers indicated anger and frustration on the part of the student, particularly in the area of group assessment.

Focus groups held with Chinese students in 2007 asked them to elaborate on issues identified in the 2006 survey; these sessions confirmed the 2006 findings. Chinese students in the focus groups generally believed that they learned from others in a group, that they made new friends in a group and that they enjoyed communicating with domestic students in groups. Wei (who nevertheless held other negative opinions about group work) commented: *'As students, it is important to have contacts with Kiwi students. We are learning and being able to communicate with Kiwi students is one of our learning objectives'*. *'You can meet new friends,'* stated Hua. Cho commented on the convenience of group assignments: *'We can complete our assignment in a shorter time in group work.'*

Students, however, identified drawbacks to completing assignments in groups. Wei described a situation identified by Johnson and Johnson (1998) as a 'pseudo group' where students worked together but did not achieve collaborative learning outcomes. *'Different students do different parts. It is unlike one individual assignment where you have logic and coherence. Group assignments may lack such coherence, relatedness, connections and completeness.'* Wen stated that the purpose of participating in group assignments was to meet the requirements of the lecturers and to get the assignment done. This comment demonstrates such attitudes towards lecturer-initiated group work.

*To us Chinese students, the objective of doing group work is to complete the group assignment. Of course this has nothing to do with developing communication skills, achieving group harmony. No. Not at all. They join the group for the sake of completing the assignment.*

She felt, however, that she had not learnt the interpersonal problem solving skills in tertiary groups that the lecturers had intended. This is not the outcome described in the literature where students in a group collaborate to produce an integrated outcome including the development of team skills.

A number of participants recognised the benefits of participating in a group with domestic students who could do the assignments for the group and thus allow the Chinese students in the group to have a 'free ride' and to achieve higher marks than expected. Jing claimed: *'For us Chinese, language is a big problem. We cannot get marks as high as Kiwis....In this way we can get high marks.'* Grades mattered to the students: *'I want the best grade.... Good grades can help you shorten your time of study and save money for you.'* There did not seem to be any awareness of antagonism on the part of domestic students over language problems but there was a sense of guilt on the part of some Chinese students. Jing pointed out:

*Chinese students rely almost entirely on Kiwi students.... In this way we can get high marks.... We trust them and believe they can get good marks for us. We do not have to worry about the assignments...I know it is not good to get high marks in this way.*

Again, although a reliance on domestic students was seen as an advantage by some Chinese students, it is counter to Johnson and Johnson's (1998) essential condition of the positive interdependence to be found in effective groups.

There was also awareness by students in the focus groups that language limited Chinese students' contribution to group discussion:

*At meetings it is difficult to use my poor English to express complex ideas. Kiwi students, because of their English skills, often have good ideas that can be expressed in their own language but I can not do so. Sometimes they have heated debate, it is very difficult for me to jump in (Jing).*

Language difficulties can limit the effectiveness of face to face interaction in student groups and affect the use of relevant interpersonal and small group skills; two conditions identified by Johnson and Johnson (1998) as essential to successful group functioning. This is consistent with research such as Wong's (2004) which found that language is a significant barrier for international students.

Lecturers surveyed in 2006 were generally positive in their attitudes to collaborative learning. Eighty five percent said that they enjoyed using collaborative learning techniques and 60% believed that their students enjoyed working in groups. Fifty five percent felt that their students learned more working in groups than working as individuals and 95% agreed that working in groups would be useful experience for them when they joined the workforce. Eighty five percent believed that students learned interpersonal and problem-solving skills in group work and 65% agreed that team work developed inter-cultural skills. When asked to rank the importance of outcomes of group work, lecturers ranked learning to work with others first and preparation for the workplace second.

Lecturers in the 2007 focus interview groups confirmed the generally positive attitude towards collaborative learning indicated in the 2006 survey. They expressed the view that they received higher quality work from students working in groups. 'Working in a group' stated one lecturer, 'means that students can achieve a lot more and go a lot deeper than if they do it by themselves.' 'Good groups produce better work,' opined another lecturer. They believed that as students were expected to work in groups at work, tertiary institutes had a responsibility to give them experience in teamwork. This is consistent with the research on the benefits of collaborative learning (Johnson & Johnson 1981; Feichter and Davis 1992)). Other lecturers, however, indicated that the advantages of group work were sometimes different from those identified by the literature; assessing students in groups cut down on the marking and it often meant that the pass rate in a class increased. The validity of these reasons for assessing tertiary students in groups can be questioned. Lecturers also stated that the effectiveness of cross cultural groups was sometimes limited by problems of language.

The findings from the interviews with Chinese born academics were that, although teamwork is highly valued in Chinese industry, these skills are not learned through cooperative learning in educational institutes. The requisite interpersonal and teamwork skills are learned through socialisation very early in a Chinese child's life; the academic area is seen as one where competition and the achievement of high marks are of paramount importance. Chinese students hold a teacher in high regard and expect the teacher to show teaching competence by delivering highly structured, high quality teaching sessions. They do not expect to learn from their peers in groups. In industry staff are expected to have "a vision of one" and an individual staff member loses face if he or she steps outside this vision. (M Li 2007, pers. comm., 22 July) This perhaps indicates that using collaborative learning groups as preparation for teamwork in the workplace is not a priority for Chinese students; the 2006 survey showed that working with others and achieving high marks were more important reasons for working in groups.

Chinese students therefore bring with them their cultural understandings and perceptions of the significance (or insignificance) of group assignments and their roles in them. Their attitudes to collaborative learning and their behaviour in group communication is heavily influenced by their cultural conditioning and prior learning experiences (M Li 2007, pers. comm., 22 July). The following comment by Ying is a reflection of such cultural influences.

*I think cultural upbringing is also an issue.... Chinese students do not want to disagree with others, even if we think they are wrong. I would wait until the last moment when there is a consensus that he/she is wrong, then I begin to voice my correct views. Chinese students tend not to voice their views. Our educational system has cultivated our personalities.*

Although Chinese students expressed appreciation of the social benefits of working in groups in the 2006 survey the subsequent focus groups showed a general dissatisfaction with the culturally unfamiliar group work as a learning technique: *'We learn slowly. It is time wasting.'* (Huong) *'Group work has always been a headache; it is a waste of time.'* (Hua) It was an unfamiliar concept to most Chinese students beginning a Western education: *'I studied at a university in China, but we never did any group work.'* (Cho) *'Chinese appreciate individualism more than teamwork.'* (Hua) *'An individual contribution rather than teamwork is stressed in China,'* pointed out Hua. *'Outstanding achievers can get bonuses, allowances, and reputation ... there is no teamwork culture in China.'* This is consistent with the research that states that most Chinese students prefer a competitive rather than a collaborative learning environment (Campbell & Li 2006; Phuong Mai Cees & Pilot 2006).

### Implementation of collaborative learning

Chinese students in the 2006 survey and in the focus groups were asked about the preparation they had been given for collaborative learning. Sixty three percent of Chinese students surveyed in 2006 considered that they had been given strategies for dealing with group problems and 62% said that they were familiar with procedures for working in groups. The open-ended questions, however, contradicted these responses and this was confirmed by the Chinese students in the 2007 focus groups who showed no awareness of the educational benefits of group work and little idea of how to deal with group problems.

Fifty five percent of lecturers surveyed in 2006 stated that they gave students procedures for dealing with group problems. Time, or lack of time, was identified as a major factor that determined the amount of time spent preparing students for group work by lecturers in the 2007 focus groups. Lecturers whose programmes included learning about groups and about cultural differences spent time at the beginning of the programme talking about these issues and how students could deal with them. Other lecturers were unable to spend this time because of the pressure of material that had to be covered and the most they covered, if that, were basic ground rules. One lecturer commented, *'I don't want to know about it; I'm busy enough'*. Lecturers spoke of the 'cultural flare ups' that sometimes occurred and some made the observation that domestic students tried to avoid working in groups with Asian students because 'they pull us back' but Asian students were usually keen to be in groups with domestic students. Some lecturers reported problems with international students' attendance at group meetings: *'International students' timekeeping is elastic.'* The view expressed by one lecturer was that it was up to the group to make sure that everyone pulled their weight and that the group should not go to the tutor if there were problems. Other lecturers saw themselves as the final arbitrators if there were problems and sometimes split the group up if the problems were insurmountable or if 'meltdown', as they put it, occurred. One lecturer said, *'I hide'* if there are problems. Very few lecturers in the 2007 focus groups had been trained in using collaborative learning or cross-cultural collaborative learning. This is consistent with the low proportion (45%) of lecturers taking part in the 2006 survey who had received training in collaborative learning methods.

As in the 2006 questionnaires, students in the 2007 focus groups generally showed anger at the marking methods used by lecturers for group assignment; they were generally considered to be unfair. Wen commented, *'For us Chinese students, marks are very important. Our parents have set a high standard for us.'* There was anger at the "free rides" enjoyed by some students, Chinese and domestic, and the "risky" dependence on other people in the group. The following statement from Wen demonstrates the concern felt by some Chinese students about the marking criteria of group assignments: *'When we write some business reports, our writing is filled with our subjective stuff.'* Hua was more scathing:

*It is weird that they [lecturers] may give you an A if you can talk rubbish.....you just talk rubbish, write pages and pages, you will be sure to get an A because the lecturer sees that you have written a lot....*

This suggests that Chinese students are not adequately prepared for the different requirements of the New Zealand educational system. Some Chinese students felt powerless because they had to complete their group assignments in order to pass even though they could not see any value in this form of learning. To them, however, the lecturer's authority should not be challenged. *'You cannot say if you don't want to do it. Lecturers have supreme authority and there is little room for negotiation.'* (Hua)

Some lecturers in the 2007 focus groups stated that they structured group projects so that sections could be divided up among the group members. They were aware, however, that students must have an overview of the whole project so sometimes had a test question at the end of the project or incorporated a reflective review analysing the overall learning. Most tutors, except those teaching papers where this was a requirement, did not incorporate group processing into the group requirements, but there was a general agreement that students should keep a record of attendance at meetings. Although this record was intended to be an assessment tool to adjust marks for non-attenders and non-contributors, this was rarely used. One lecturer expressed the view that

assessment should be on output rather than input so attendance and contribution issues were irrelevant. There was a concern for some lecturers that some students achieved significantly better marks for work that was completed in groups than for their individual work and that this often occurred for Chinese students. These comments highlight the importance of appropriate structuring of assessments and of regular group processing, as identified by Oakley et al (2004) and Johnson and Johnson (1998).

## Discussion

### Perceptions of collaborative learning

It is clear from the data presented in this paper that Chinese students generally have a different view of the value of collaborative learning from that held by their New Zealand lecturers. Chinese students are positive about the social benefits of working in groups but often do not see its educational value promulgated by Western educational philosophy. They bring with them to Australia and New Zealand their prior learning experiences from the Chinese educational system with its emphasis on respect for the teacher, knowledge, competition and the importance of high grades (M Li 2007, pers. comm., 22 July) but find that in New Zealand they are expected to question the lecturer, work cooperatively, and share marks with other students. There seems to be very little attempt on the part of New Zealand lecturers to prepare Chinese students for the disorientation that can result from these cultural differences and mismatched educational values.

Although the literature shows that in time Chinese students can adapt to collaborative learning techniques and, in some cases prefer it to the traditional Chinese system, this research project shows a disturbing lack of appreciation of the benefits of this type of learning by many Chinese students. There was an appreciation of the social benefits and of the language benefits of having domestic students in their groups, but little awareness of improved skill in interpersonal problem solving. Chinese students generally felt helpless having to do what they perceived to be meaningless and senseless tasks as shown in this statement by Wen: *'To be honest my friends and I would feel a headache when we heard that there was to be a group assignment!'* There was a reluctant acceptance that they had to be assessed in groups even if they did not want to: *'For us international students we have to learn the ropes....you cannot say if you don't want to do it. Lecturers are the supreme authority and there is little room for negotiation.'*

### Implementation of collaborative learning

It is clear from the data that lecturers are not implementing collaborative learning in the way recommended by researchers such as Johnson and Johnson (1998), and are not addressing the problems identified by Chinese students. Most lecturers do not have the time to carry out the five prerequisites identified by Johnson and Johnson; this creates problems for all students but particularly for Asian international students. The findings suggest that in classes where lecturers have not prepared students sufficiently for working in groups there is no feeling of positive interdependence. Chinese students feel dependent on domestic students for their English skills but this is not positive interdependence. Domestic students rarely feel dependent on Chinese students (Clark & Baker, 2006). There is face-to-face interaction, but sometimes this is disturbed by poor attendance and by inadequate language skills. Challenging and questioning each other on sophisticated concepts in Diploma and Degree programmes is beyond the linguistic capabilities of many international students. There is often no individual accountability in groups. Many lecturers said that they required minutes showing attendance and contribution to be handed in with the work and told students that the marks would be adjusted accordingly. Very few lecturers, however, actually did this. The reason is probably that adjusting marks is difficult to do and requires some expertise on the part of the lecturer, but the result is that Chinese students have little confidence in the fairness of the marks. The 2006 questionnaires showed that students believed that they learned to get on with others in collaborative learning assignments, but subsequent qualitative findings show that students generally, including the Chinese students, demonstrated poor use of interpersonal and small group skills. Collaborative groups rarely perform group processing, as Johnson and Johnson (1998) stipulate. In fact it was obvious from the lecturer focus groups that most lecturers were unfamiliar with the concept. It is not surprising that groups do not function well when most do not meet these basic collaborative learning prerequisites.

Although in recent years there has been more emphasis on intercultural training in adult education programmes there is still a significant gap with lecturers who were trained some years ago and who are now dealing with multi-cultural classes. There is a drive in tertiary institutes to retrain lecturers in bi-cultural education with Maori students but little impetus to retrain lecturers in multi-cultural education with Chinese students. Ward et al (2005) state that 78% of teachers agree that teachers should be trained in cultural differences in learning styles to help international students to reach their potential and points out that recommendations have been developed in

New Zealand by researchers such as Baker (2002) and Holmes (2005). Little of this seems to be reaching the classroom lecturer and even current lecturer training seems to cover little of the specific skills needed by lecturers using assessed collaborative learning. This is unfortunate given Ward et al's expert opinion that 'training, rather than on the job exposure is a more powerful predictor of positive teaching outcomes.' (Ward 2006, p. 31) It is possible that most lecturers do not even know that they need training. The 2006 questionnaire found that while 90% of the lecturers answered that they structured their group assignments clearly and logically, only 48% of the students surveyed agreed with this.

The other issue identified by lecturers is lack of time. The findings showed a clear difference between lecturers who were teaching subjects such as Applied Management or Communication, where a requirement of the prescription was that students had to learn to work in groups, and lecturers teaching subjects such as Law or Accounting, where the prescription was so full that there was no time to spend preparing students for group work at all, let alone dealing with the special needs of Chinese students. 'Pseudo groups' (Johnson & Johnson 1998) were the inevitable result of lack of preparation: students simply divided the work up and handed it in as one assignment. They have learned to work efficiently in terms of time, but they have not learned any team skills.

Language has also been identified in this research project as an issue in the successful implementation of collaborative learning in culturally mixed groups. Volet and Ang (1998), researching culturally diverse groups in Australia stated that students preferred to work in 'their own' groups because of cultural connectedness, pragmatism, negative stereotypes and language difficulties. It is a practical problem that language limits the contribution of students who are not proficient in English: many cannot express sophisticated concepts in English and many are aware of the possibility of "losing face" if they have difficulty in communicating. It is safer to be quiet.

Assessment issues have been identified as a major problem with lecturers, domestic students, and international students (Clark & Baker 2006). All groups are concerned about the perceived unfairness of group assessment. Chinese students, additionally, have had no prior experience of group assessment techniques such as peer or self assessment and can be totally bemused by the assessment system. Campbell and Li quote Tani's study which showed that, "it was the anxiety and lack of understanding of the system of reward and punishment as demonstrated from group assignments that brought about Asian students' silence" (Campbell & Li 2006, p. 5).

It is perhaps significant that lecturers believed that the most important outcomes of collaborative learning were learning to work with others and preparing students for the workplace while Chinese students rated learning to work with others and the achievement of high marks as the most important outcomes. Marks are very important to Chinese students, particularly if they are trying to get into a university from a polytechnic. Confusing group assessment is not helpful to these students.

A research project such as this is limited by the size of the sample. There is always a limit on the number of students or staff who are willing to participate and on the time of the researchers. There is always some doubt, also, on the openness of the responses. Although anonymity was guaranteed, some staff are always reluctant to admit to problems with teaching. Student focus groups were led by a Mandarin speaking facilitator and were held off campus; this meant that most participants seemed to speak freely. It did mean, however, that there was some contradiction in the findings; Chinese students were much more positive about collaborative learning when filling in a questionnaire than they were in speaking to a Chinese born facilitator. This perhaps indicates that some of the questionnaire answers should be treated with caution.

## **Recommendations**

This research project, and the literature on the subject, indicates that there is an urgent need to train New Zealand tertiary lecturers in effective collaborative learning techniques. It seems apparent that Chinese students adapt to collaborative learning methods in time and learn to value them (Volet & Renshaw 1995), but this research indicates that the adaptation could be much quicker and much less painful if the following measures were carried out.

The researchers recommend that all lecturers teaching international students be familiarised with the work of overseas researchers such as Johnson and Johnson and New Zealand and Australian researchers such as Ward, Holmes and Volet. Current lecturer training needs to be adapted to include practical advice on preparation of all students for collaborative learning assignments and practical advice on the particular needs of international students. Chinese students, for instance, need to be given a clear explanation of the educational rationale for



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using collaborative learning in New Zealand. Lecturers who were trained before the development of the export education industry in New Zealand require retraining to help them understand the educational cultural differences of their current international students. Lecturers need training in structuring collaborative learning assignments effectively and in assessing collaborative assignments logically and fairly.

Chinese students in this research project have shown that they are usually not given adequate preparation in working collaboratively. This should be done before they form groups; for instance they should be given practical strategies for any potential interpersonal or cross-cultural problems that might arise. They should be given practice in the techniques of questioning others' views and of giving feedback. It would be helpful if international students were required to attend workshops explaining the cultural differences they will contend with in the New Zealand classroom before they begin their programmes. Consideration could be given to running week-long compulsory orientation programmes for international students covering the differences students will find in the New Zealand classroom and the educational rationale for these differences. This research shows that tertiary institutes also need to address the language issues of international students; consideration, for instance might be given to developing language programmes aimed at particular language needs.

As constraints of class time has been identified as an issue by this research, tertiary institutes should consider using collaborative learning only for subjects where the development of group skills is a specific part of the prescription. Tertiary institutes certainly need to develop a consistent philosophy for collaborative learning assignments that is understood by all lecturers.

There is an urgent need for further research with a larger sample that includes students and lecturers from a wider geographical area. New Zealand educationalists should be able to build on the positive attitudes of Chinese students to informal group work to develop assessment programmes which are considered fair and which produce the interpersonal outcomes that overseas research has found is possible. It is important that future research concentrates on the solutions to the problems of collaborative learning in multi cultural classrooms rather than simply restating the problem.

## Conclusion

This study records the collaborative learning experiences of Chinese students at three New Zealand tertiary institutions. The study finds that Chinese students are often ill prepared for success in an unfamiliar culture and learning environment. It recommends that Chinese students are given appropriate preparation in working collaboratively and are given a clear explanation of the educational rationale for using collaborative learning in New Zealand. It further recommends that New Zealand lecturers are trained to understand the educational cultural differences of their current international students and to design group assessment programmes that are pedagogically sound and culturally accommodating.

## References

- Baker, T 2002, Practical Guidelines for Matching the Expectations of New Zealand Tutors and Asian Students, In: Proceedings of the New Zealand Applied Business Education Conference, Christchurch, 25-27 September 2002.
- Campbell, J & Li, M 2006, 'Asian students' perceptions of group work and group assignments in a New Zealand tertiary institution', In: Proceedings of the EDU-COM 2006 Conference 'Engagement and Empowerment: New Opportunities for Growth in Higher Education', Nong Kai, Thailand, 22-24 November 2006.
- Clark, J, & Baker, T 2006, Collaborative learning in diverse groups: A New Zealand experience, In: Proceedings of the 17th ISANA International Education Conference [CD ROM], 5 – 8 December 2006, University of NSW, Sydney, Australia. Sydney: Conference Organising Committee for the 17th ISANA International Education Conference.
- Cuseo, J. 1990, *Co-operative learning and college instruction: Effective use of student learning teams*, California State University, California.
- Earley, PC 1997, *Face, harmony and social structure: An analysis of organizational behavior across cultures*, Oxford University Press, New York.

2007 ISANA International Conference "Student success in international education", 27-30 November, Stamford Grand, Glenelg, Adelaide, Australia

Feichtner, S B, & Davis, E A 1991, Why some groups fail: A survey of students' experiences with learning groups, *The Organizational Behavior Teaching Review*, vol. 9, no. 4, pp. 75-88.

Hofstede, G 2003, *Culture's consequence: International differences in work-related values*, 2<sup>nd</sup> edn, Sage Publications, Thousand Oaks.

Holmes, P 2005, 'Teachers' perceptions of and interactions with international students: A qualitative analysis, in C Ward (ed), *Interactions with international students*, pp. 86-119, CACR and Education New Zealand, Wellington

Johnson, D W, Johnson, R T 1998, Cooperative learning and social interdependence theory, viewed 17 July 2007, < <http://www.co-operation.org/pages/SIT.html>>

Johnson, D W, Johnson, R T, & Stanne, M E 2000, *Cooperative learning methods: A meta analysis*, University of Minneapolis, Minnesota.

Kagan, S 1994, *Cooperative learning*, Kagan Cooperative Publishing, San Clemente.

Li, M, Baker, T & Marshall, K 2002, Mismatched expectations: A case study of Asian students in New Zealand, In: Proceedings of the New Zealand Applied Business Education Conference, Christchurch, 25-27 September 2002.

Meng, R 2005, 'Cooperative learning', *US-China Foreign Language*, vol.3, no. 9, pp. 79-81.

Oakley, B 2003, 'It takes two to tango', *Journal of Student Centred Learning* vol. 1, no. 1, pp.19-28.

Oakley, B, Felder, R M, Brent, R, & Elhadj I 2004, 'Turning student groups into effective teams', *Journal of Student Centred Learning*, vol. 2, no. 1, pp. 9-34.

Phuong-Mai N, Cees, T & Pilot, A 2006, 'Culturally appropriate pedagogy: The case of group learning in a Confucian heritage culture context', *International Education*, vol.17, no. 1, pp.1-19.

Skon, L, Johnson, D W & Johnson, R 1981, 'Cooperative peer interaction versus individual competition and individualistic efforts: Effect on the acquisition of cognitive reasoning strategies', *Journal of Educational Psychology*, vol.73, no.1, pp. 83-92.

Slavin, R 1990, *Cooperative learning: Theory, research and practice*, Prentice Hall, New Jersey.

Tani, M 2005, Quiet, but only in class: Reviewing the in-class participation on Asian students. Paper presented at the HERDSA Conference 2005, Higher Education in a changing World, 3-6 July 2005, viewed 27 July 2007 <[http://conference .herdsa.org.au/2005/pdf/non\\_refereed/030.pdf](http://conference.herdsa.org.au/2005/pdf/non_refereed/030.pdf)>

Tiong, K M, & Yong, S T 2004, Confucian heritage culture learners' and instructors' expectations and preferences in collaborative learning: Convergence or divergence? Paper presented to HERDSA 2004 conference, Miri, Sarawak, 4-7 July 2004, viewed 15 July 2007, <<http://herdsa2004.curtin.edu.my/Contributions/NRPapers/A055-jt.pdf>>

Tjosvold, D, Zi-you, Y, & Su, S 2004, 'Cooperative learning: Potentials and challenges for Chinese management education', in C Wankel & R DeFillippi (eds), *The Cutting Edge of International Management*, pp. 223-242, Information Age Publishing, Connecticut.

Volet, S, & Ang, G 1998, 'Culturally mixed groups on international campuses: An opportunity for intercultural learning', *Higher Education Research and Development*, vol. 17, pp. 5-33.

Volet, S, & Renshaw, P D 1995, 'Cross-cultural differences in university students' goals and perceptions of study settings for achieving their own goals', *Higher Education*, vol. 30, pp. 407-433.

Ward, C 2006, *International students: Interpersonal, institutional and community impacts*, Wellington, New Zealand Ministry of Education.

Ward, C, Masgoret, A-M, Ho, E, Holmes, P, Newton, J, Crabbe, D, & Cooper J 2005, *Interactions with international students*, Report for Education New Zealand, 19pp.

Wong, J K-K 2004, 'Are the learning styles of Asian international students culturally or contextually based?', *International Education Journal*, vol. 4, no. 4, pp. 154-165.

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