

Diversity in teams – Opportunities and Challenges

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The upsurge in the requirement for team-based assessment at university has been well documented. In this paper, a first year unit, Professional Development 1: Critical Thinking and Problem Solving (PD1), at Victoria University (VU) in Melbourne, Australia, is used as a case study to examine issues concerning diversity in team-based assessment. Diversity in the classroom has been identified as a both a challenge and an opportunity for academics in Australian universities, so arguably, diversity in team-based learning presents similar opportunities and challenges. While findings from focus groups in Melbourne suggest that unintended outcomes for international students of team-based learning in PD1 include improved English language proficiency, increased confidence and opportunities to mix with local students, these outcomes are in part due to the remarkable diversity of the student cohort in Melbourne. The diversity of student teams in Hong Kong is different and does not necessarily include the linguistic and cultural diversity evident in Melbourne. Comments from Student Unit Evaluations and findings from student focus groups conducted in Melbourne and Hong Kong illustrate the student experience of diversity and teams in these different cohorts. Issues such as the fairness of team-based assessment and the capacity of team-based learning to develop student capabilities, such as the ability to work collaboratively and in a socially and culturally responsible manner, are considered.

INTRODUCTION

The importance of generic graduate skills, such as communication, problem solving and the ability to work in teams, is increasingly being emphasised by external stakeholders, along with the role of universities in their development (Bowden et al., 2002; Hager & Holland, 2006). According to the Business, Industry and Higher Education Collaboration Council (BIHECC, 2007) there is a perception that employability skills are underdeveloped and the Council has recommended identifying ways of addressing this at the higher education level. Survey findings from the Griffith Graduate Project (Crebert et al., 2004) are consistent with this and indicate that employers and graduates alike believe that generic skills and abilities, notably communication skills, problem solving, and team work skills, can be developed through degree programs provided students are given appropriate opportunities to develop them. In particular, interactive group learning that is assessed as part of the undergraduate degree was strongly recommended by respondents for development of generic skills. According to Crebert and colleagues, the weighting given to team work in the surveys and focus groups conducted as part of the project underlines the importance of teaching students how to work collaboratively. Organisations are increasingly looking for employees who can work in flexible, adaptive and responsive teams (Ellis et al., 2005). However, many graduates are not confident in their ability to work in teams when they begin employment, and are critical that more attention was not paid to developing teamwork skills throughout their degree (Crebert et al., 2004).

Developing Students' Teamwork Skills

The Faculty of Business at Victoria University (VU) has responded to feedback from stakeholders about the skills needed for work-ready graduates, by developing a professional development stream consisting of three units - Professional Development 1: Critical Thinking and Problem Solving (PD1), Professional Development 2: Analysis and Strategy (PD2) and Professional Development 3: Challenge and Leadership (PD3). These units have been designed to provide students with opportunities to develop generic skills in a highly interactive, collaborative and creative learning environment, with an emphasis on team-based learning. The three subjects are designed to be developmental, building on knowledge and skills from preceding professional development units. The PD classes are taught in 3-hour seminars of no more than 40 students, in purpose-built, technology supported teaching spaces designed to accommodate students working in teams of 4-5.

PD1 is designed as an introduction to the business environment and is the first subject in which students encounter using this innovative teaching approach. There is a heavy emphasis in PD1 on teamwork, with students required to work in teams on three tasks which together account for 50 percent of their final grade. They are also assessed on their individual reflections about the experience of working in teams. In PD 1, students organise themselves into teams of 5 while ensuring an appropriate gender balance, discipline mix, that there are no more than two speakers of the same LOTE, and that there is a mix of "types" of team members – from the online survey "What sort of team member are you?". The intention is to deliberately create intercultural and multidisciplinary groups to promote intercultural learning, avoid ethnic-specific teams and ensure that international students get an opportunity to mix with local students.

While the process of team formation is designed to create diverse teams, PD facilitators acknowledge that this diversity can be both good and bad for teams. In particular, we have observed that the cultural and linguistic diversity amongst students taking PD on-campus in Melbourne Australia gives rise to some interesting outcomes. In contrast, the students who take PD in Hong Kong are a relatively homogeneous group – Cantonese-speakers of Chinese background, generally studying part-time and working full-time. The requirements for team formation for these students is therefore limited to an appropriate mix of gender, discipline and team member "types". These two cohorts represent an opportunity to investigate students' perception of teamwork and whether this differs as a function of the level of diversity amongst teams in these cohorts.

Diversity in teams

Teams are living and evolving entities, defined by what they do and how they do it (Derry et al., 1998). They function within the broader context, which includes institutional, physical and cultural contexts, which also influence their development. To be effective, teams members need to share a level of trust, where members are willing to transact with each other as long as each party behave appropriately. According to Jones and George (1998), as team members interact, conditional trust develops and members develop stable expectations of each other making the interactions more reliable and predictable.

Trust is engendered by value congruence. When team members share values, the desire to co-operate is stronger and can help overcome problems with social loafing. Trust also helps to encourage the free exchange of knowledge (Jones & George, 1998). It is very likely that the teams that form in PD1 are characterised by conditional trust, promoting co-operative behaviours that don't require significant personal cost. Usually this would be sufficient to sustain team interactions. However, as Gibson and Zellmer-Bruhn (2001) point out, people from different cultures share different views of teamwork which in turn influence how the team will work and how they will participate in the team. Thus the different cultural make up of teams in the PD1 cohort in Melbourne, which is described in more detail later, is likely to create additional challenges for these teams.

In contrast, the Hong Kong student cohort does not exhibit the cultural diversity of the Melbourne cohort. Hong Kong is a good example of how both culture and the business environment interact to create a unique set of managerial values for the region (Ralston et al. 1993). VU students in Hong Kong are Chinese and study on part-time basis, working during the day. As such they are very much aware of the region's managerial values and the expectation of Hong Kong employers. Many are already in roles where they need to exhibit the kinds of generic skills being targeted in PD1, such as team work. On the other hand, Chinese culture may influence the learning style of these students. A Confucian cultural heritage has been attributed as promoting a learning style that is passive, lacking critical thinking, reliant on simplistic rote memorisation strategies resulting in surface learning, and an unwillingness to participate in classroom discussion (Chan, 2001; Kennedy, 2002). So while these students may not have to deal with intercultural issues in their teams, the very new teaching approach used in PD1, together with the fact that these students are working full-time, may present its own set of challenges

The purpose of this paper is to report on the findings from student evaluations and focus groups conducted with PD1 students to look at the role diversity has to play in the experience of team work. As the Melbourne and Hong Kong cohorts differ naturally in their makeup, this presents an interesting opportunity to investigate diversity and how this impacts on the experience of team work for these students. As a preliminary investigation, this is an opportunity to find out what students think about teamwork as well as the impact of factors such as diversity and teaching approach on students' experience.

RESEARCH DESIGN

Data collected via student evaluations and focus groups conducted in 2009 and 2010 are reported here. A set of questions were posed to students in the focus groups to explore a range of issues relating to their experience in PD1. In particular, the focus group questions were designed to draw out aspects of team work and its assessment because it is such a strong focus of the unit. A comparison of the focus group responses of the two student cohorts was made because the cohorts are culturally and linguistically different, factors which are likely to impact on the process of team development.

Participants

Focus groups were conducted at two locations where PD1 is taught. At the Australian location PD1 students attended a focus group at the end of Semester 2, 2009. Twelve students – 6 international and 6 local students – participated in the focus group. The second location where focus groups were held was Hong Kong. Students completing PD1 in 2010 as part of a business course at the Chinese University Hong Kong made up the second group of students. Of the total enrolment for the class of 45, 15 students agreed to take part in the focus group. Two focus groups were held – one with six students and the other with nine.

The student cohort in Hong Kong is a relatively homogenous group, comprising local students who speak Cantonese, who are studying part-time and engaged in full-time work. Most of these students also live within relatively close proximity to each other. In contrast, the cohort of students studying PD1 in Australia is very diverse, coming from many different backgrounds. Many (over 40%; VU, 2008) report that they are from a non-English speaking background and do not speak English at home. Indeed, it is not uncommon for more than half of any PD1 class of 40 students to be from a non-English speaking background and to speak English as a second language. The cohort consists of full- and part-time students, many of who are dispersed across Melbourne.

Focus groups

A set of questions were developed for the focus groups. Students were asked to respond to these questions in each focus group, with the facilitator asking additional questions to elaborate or clarify responses. Focus groups were conducted by staff teaching in the unit and were held after the semester had finished and grades for PD1 were finalised.

The questions asked related to the following areas:

- The skills students think employers are looking for;
- Overall perceptions of PD1, what students learnt, what they liked or disliked about the subject;
- What students thought about the collaborative learning activities in PD1, whether they are relevant to future employability, and if they thought they would assist students in their future workplace;
- Perceptions of teamwork, whether it is fair, how it could be improved, whether they feel more confident and prepared to work effectively in a team;
- The effect of the learning activities in PD1 on skills such as communication, collaboration, and teamwork;
- Whether participation in PD1 helped them to become more aware of the realities of the working world and some of the challenges they may face.

FINDINGS

Australian Cohort

Comments from the evaluation of the Semester 2, 2009 offering of PD1 provide insight into what students think of the teamwork aspect of the unit, including the assessment for the three case studies completed in teams. Of the 311 students who completed surveys, 191 provided qualitative feedback in response to two open questions: "What were the best aspects of this unit?" and "What were the worst aspects of this unit?" Examination of the content of responses that mentioned teamwork specifically and other related terms such as group work, working in groups, group interaction and group assignment, revealed 63 positive comments (out of a total of 172 positive comments) related to team work / group work or interaction. There were 27 negative comments relating to team work / group work or interaction out of a total of 140 negative comments. On balance, students made more positive comments related to their experience with team work than they made negative comments.

Positive comments related to the benefits team work provided for networking and meeting new people, as well as for learning and experiencing team building. In the 14 comments that mentioned networking as a positive aspect of PD1, meeting new people and interacting with other students, particularly ones from "other countries" figured prominently. A number of students (11) also commented on the benefits of having the opportunity to experience team building. Learning about how teams work and how to work effectively in a team were common themes in these comments, as was the belief that team work was fun, that the best aspect of the unit was working in a group, and the feeling of accomplishment that they gained from working in a team.

Challenges associated with team work such as needing support for teams with underperforming members, difficulties with team members being able to meet outside of class, and that team work is inherently unfair were the focus of the negative comments. Some students referred to team work as "painful" and "pointless". A number of comments focussed on the difficulties associated with working in a group with people for whom English is a second language, reflecting concerns about making the workload fair and team members being able to make a contribution to an appropriate level. There were also calls to ensure that "fair punishment" was given to group members who continually fail to make contributions to their group work. The call for more individual assessment by some students was accompanied by the observation that "team work at this learning level is very hard".

In a focus group conducted with 12 PD1 students at the end of Semester 2, 2009 similar comments about the team work aspect of PD1 were made. Twelve students – 6 international and 6 local students – made comments that getting the team mix right was challenging, as was managing different backgrounds and language capabilities. But these students also said that working in teams gave them confidence and helped them learn skills that would help them work in teams in the future. During the focus group they discussed strategies that they either used or thought could be used to manage some of the challenges of team work. These included asking team members for evidence of their input when the peer evaluation of each member's contribution is being determined, or making the peer evaluation anonymous.

The size of teams was also raised, with the group size perceived as making it difficult to manage the team which in turn made it harder to negotiate the group contribution mark.

Overall, the comments from both the focus group and the student evaluations show that for a large number of students in this cohort, team work is a positive and beneficial experience. However, there is also a substantial number of students for whom it is problematic. This raises the question of whether there are systematic differences between students who find team work and associated assessment as positive compared with those who don't. These differences could be individual or relate to the team the student worked with. Unfortunately, no information about the make up of teams as a function of students' perceptions of team work is available at present. However, this would appear to be a fertile opportunity for future research.

Hong Kong Cohort

In the two focus groups conducted with PD 1 students in Hong Kong, improved teamwork, collaboration, communications and presentation skills were among the skills that students reported learning through their experience of PD1. To complete the team assessment tasks successfully, students said they needed to work together co-operatively, communicate effectively, be considerate and manage their time well. Several students commented on how, for part-time students, the time pressures associated with the regular assessment in the unit forces them to be organised and efficient. As they have difficulty meeting to work on the team tasks, they made greater efforts to ensure they completed as much as possible in class. Since face-to-face meetings were preferred, the students did not rely on using the learning management system to communicate with other groups members. However, they did use email when necessary. From these students' comments, it seems that they adopted a very pragmatic approach to completing these team assessment tasks. However, they did also comment that they felt that this effected the quality of their work output, which one student described as "rough". There were also comments that the time pressures associated with teamwork resulted in students taking on particular roles or tasks for all of the team assignments. Although this was seen as effective and efficient, students did acknowledge that it meant that opportunities to learn and practice new skills were limited and students tended to adopt specialised roles within the team.

This pragmatism about the subject is also reflected in comments such as students saying "one of the main objectives in studying PD1 is (to get a) pass". One student commented:

"To me, I think PD requires you to engage in completing all tasks in team and then you can get pass without any examination. And that's why I prefer PD rather than traditional way of learning. You know, if we are required to take part in final exam in addition to doing so much team work, I will give up this subject."

Other students endorsed this comment, saying that if you commit yourself to completing the team work activities it is possible to get a pass in the subject easily. Another student said that having no final exam in PD1 was important as final exams are stressful. However, students did acknowledge that for many of them the teaching approach in PD1, with its emphasis on teamwork, was a shock to them and took some adjustment. The differences in

teaching approaches between PD1 and what students refer to as the “traditional approach” was noted by students in both the Hong Kong focus groups. One student commented:

“In other subjects, even though there are group discussions, majority of time are lectures and facing the whiteboard. Teammates may not always be sitting together. However, there is an advantage in PD1, i.e. teammates are required to sit together and all activities are team-based. Even though low-profile students are forced to express their opinions and participate in team work.”

The physical set up of the classroom, together with the nature of the learning activities and assessment tasks, seem to have had interesting consequences for these students. For example, students commented on having to actively participate in PD1 classes, as opposed to catching up on sleep as they did in other classes – *“To be honest, less sleep in PD1. You know, traditional teaching learning, we used to sleep in class as we are very tired after daytime work but PD1 does not allow us to do so.”* However, students could see the benefits of this teaching approach. As one student noted, *“This type of course is better than traditional lecture as the latter is boring.”*

In response to the question about whether teamwork is fair, most students indicated it was and gave as an explanation for this the opinion that students are more committed and mature in their approach to their study. Since most students are studying part-time and working, their motivation and commitment to study is high. Dividing the work evenly amongst the team is important for fairness, with tasks delegated based on an individual’s ability and experience. An issue that was highlighted for this group was the use of peer evaluation as a strategy for ensuring fairness in assessment of teamwork. Although there is the option to vary the percentage contribution of individual students, most teams in the Hong Kong cohort do not attempt to vary this due to concerns about team harmony and future co-operation. This may be more of an issue with this cohort as the numbers taking the subject are smaller and the cohorts tend to progress together through PD1, 2 and 3. So there is greater likelihood that these students may have to work together in the future.

When asked what they would do if they had to work in a team with people they do not know, these students said that this would not worry them and that they would use a range of strategies to try and get the team working effectively quickly. These include nominating a team leader, setting up team rules and responsibilities and understanding team members’ strengths, possible roles etc. They also commented that when faced with conflict in a team that they would try and resolve this by methods such as discussing different view points and seeing if a solution can be reached. Failing this, students try voting on a resolution, or leaving it up to the team leader to decide on the course of action. They also mentioned that the teacher could be asked to intervene if necessary.

Positives from the experience in PD1 for these students included improved communication, presentation and teamwork skills, together with increased confidence. While individual learning activities and assessment tasks were noted to help in these areas, students generally felt that it was the overall experience and requirements for PD1, which was unlike other units they had studied, that made such a difference.

DISCUSSION

Hong Kong students made comparisons to Australian students, suggesting that maybe the structure of PD1 was more suited to the Australian context. They commented that some of the topics, particularly those designed to raise students' cultural awareness, may not be suitable or relevant to Hong Kong students. They also felt that PD1 is more suited to full-time students and had the perception that most students studying PD1 in Australia would be studying full-time. This is not necessarily an accurate perception, particularly as a number of PD1 classes are scheduled in the evenings to cater for students in Australia working full-time and studying part-time.

The PD1 cohort in Hong Kong appears to be much more homogenous, consisting of local students who are working full-time and studying part-time. The cultural and linguistic diversity that characterises PD1 classes in Australia is not present in this group. Consequently, for the Hong Kong students the challenging part of PD1 related to the teaching and assessment approaches, which are unlike what these students would normally experience in Hong Kong. However, even though team members share similar backgrounds, they still have to cope with team dynamics, including managing conflict, work allocation, social loafing and time constraints. Both cohorts of students report increasing their communication, presentation and teamwork skills through their experience with PD1. For the cohort of students studying in Australia, this achievement seems to be amplified – both positively and negatively - in the context of the cultural and linguistic diversity that exists in many PD1 teams. This may explain why the learning activities designed to increase students' cultural sensitivity are less relevant to the Hong Kong PD1 cohort – since there is little or no cultural and linguistic diversity in this group, the need to be aware of and sensitive to this diversity is not as important. Instead, these students appear to focus on managing the very different teaching approach used in the subjects, which presents them with a different set of challenges.

For the Australian cohort of students, cultural and linguistic diversity appears to impact on teams in two predictable ways – conflict and tension that interferes with teams from achieving their desired goals or encouragement and mutual inspiration that facilitates learning (Van Der Zee et al., 2004). Anecdotally, experience facilitating teams in PD1 has shown that for some teams in the Australian cohort, when the task requires consideration of cross-cultural issues the cultural diversity in the team becomes more relevant and salient. This in turn helps to avoid a dominant rhetoric emerging and fosters co-operation and team effort. The notion of a “cognitive apprenticeship” can also be observed in some teams (Derry et al, 1998), where the prevailing western educational culture at VU is seen as having more relevance and students who do not ascribe to that viewpoint seek to engage with ones who do. This in turn can lead to a mentoring relationship, where local students assist international students with aspects relating to team work, with the international students reciprocating with effort, application and insights from their own cultural perspective and experience. Of course, in other teams the members are unable to overcome the difficulties associated with the diversity in the team. In particular, where there is surface level diversity – overt characteristics such as language skills – this can pose problems for team formation and bonding (Staples & Zhao, 2006). Depending on the other members of the team, these overt characteristics can present significant barriers that are difficult to overcome. For these

teams, assistance, guidance and support is needed for them to develop as a team and achieve their tasks.

FUTURE DIRECTIONS

The informal nature of this research limits the conclusions that can be drawn about teams and diversity. However, there does appear to be an opportunity for further research to better understand the impact of diversity on the experience of team work and the development of team work skills. The benefits of such research would include being able to predict and manage teams with members from diverse backgrounds and facilitate development of team work skills and cultural sensitivity. Not all diverse teams had positive experiences with their teams, but neither did all have negative experiences. Understanding more about the factors that contribute to whether team work is a negative or positive experience would be valuable in managing, guiding and supporting students in their teams.

Although there are rigorous research paradigms described in the literature for researching team diversity, these may not be appropriate for this context. Rather an approach could be used where team diversity is measured using a recognised instrument and data collected from teams about their experience across the life of the team. This would provide useful information about how team diversity impacts on team formation, development and outcomes which could be used by facilitators to inform their practices in managing teams in PD1.

For the Hong Kong students, the homogeneity of the teams means that they do not experience the positives and negatives that can arise from culturally and linguistically diverse teams. In the increasingly global world in which these students are working, this could be argued to be a disadvantage. In contrast, the Australian students taking PD1 gain early experience of what it is likely to work in teams where members are drawn from different backgrounds. It may be worth considering strategies for introducing diversity into teams for the Hong Kong cohort to assist with developing the ability to work in cross-cultural teams. This might include having PD1 teams in Australia and Hong Kong collaborate on tasks using computer mediated communication methods.

CONCLUSIONS

Despite the limitations of this research, it does have implications for practice. In particular, it highlights some of the common problems that students experience with team work, which seem to occur regardless of the cultural and linguistic diversity of the team. These include issues with time management and member contribution. It also highlights that diversity in teams can have positive and negative outcomes and that some teams need assistance and guidance in order to be able to achieve the desired learning outcomes. It also highlights the need for further research to better understand dynamics within teams to ensure students are develop the skills they need to be work-ready on graduation.

REFERENCES

- BIHECC. (2007) Graduate Employability Skills. Retrieved October 17, 2007, from http://www.dest.gov.au/sectors/higher_education/programmes_funding/programme_categories/key_priorities/documents/graduate_employability_skills_pdf.htm
- Bowden, J., Hart, G., King, B., Trigwell, K. and Watts, O. (2002) Generic Capabilities of ATN University Graduates, retrieved 26 November, 2008 from www.clt.uts.edu.au/ATN.grad.cap.project.index.html
- Chan, V. (2001) Readiness for Learner Autonomy: what do our learners tell us?, *Teaching in Higher Education*, 6(4), 505 – 518.
- Crebert, G., Bates, M., Bell, B., Patrick, C. and Cragolini, V. (2004) Developing generic skills at university, during work placement and in employment: graduates' perceptions, *Higher Education Research & Development*, 23(2), 147 - 165.
- Derry, S.J., Du Russel, L.A. and O'Donnell, A.M. (1998) Individual and distributed cognitions in interdisciplinary teamwork: A developing case study and emerging theory. *Educational Psychology Review*, 10(1), 25 – 56.
- Ellis, A.P.J., Bell, B.S., Ployhart, R.E., Hollenbeck, J.R. and Ilgen, D.R. (2005) An evaluation of generic teamwork skills training with action teams: Effects on cognitive and skill-based outcomes. *Personnel Psychology*, 58, 641 - 672.
- Gibson, C.B. and Zellmer-Bruhn, M.E. (2001) Metaphors and meaning: An intercultural analysis of the concept of teamwork, *Administrative Science Quarterly*, 46(2), 274 – 303.
- Hager, P. and Holland, S. (2006) *Graduate Attributes, Learning and Employability*, Springer Netherlands, retrieved 27th November, 2008 from www.springerlink.com/content/kv6805k751750368/fulltext.pdf
- Jones, G.R. and George, J.M. (1998) The experience and evolution of trust: Implications for cooperation and teamwork. *The Academy of Management Review*, 23(3), 531 – 546.
- Kennedy, P. (2002) Learning cultures and learning styles: myth-understandings about adult (Hong Kong) Chinese learners, *International Journal of Lifelong Education*, 21(5), 430 – 445.
- Ralston, D.A., Gustafson, D.J., Cheung, F.M. and Terpstra, R.H. (1993) Differences in Managerial Values: A Study of U.S., Hong Kong and PRC Managers, *Journal of International Business Studies*, 24(2), 249-275.
- Staples, D.S. and Zhao, L. (2006) The effects of cultural diversity in virtual teams versus face-to-face teams. *Group Decision and Negotiation*, 15, 389 – 406.
- Van Der Zee, K., Atsma, N. and Brodbeck, F. (2004) The influence of social identity and personality on outcomes of cultural diversity in teams, *Journal of Cross-Cultural Psychology*, 35(3), 283 – 303.
- Victoria University (2008) *2008 Annual Report*. retrieved March 10 2010 from www.vu.edu.au/sites/default/files/mcd/pdfs/VU-Annual-Report-2008.pdf