

2007

Strategies to Improve Student Reaction to Group Work

L. Kriflik

University of Wollongong, Australia

Judy Mullan

University of Wollongong, jmullan@uow.edu.au

Follow this and additional works at: <https://ro.uow.edu.au/jutlp>

Recommended Citation

Kriflik, L., & Mullan, J. (2007). Strategies to Improve Student Reaction to Group Work. *Journal of University Teaching & Learning Practice*, 4(1), 17-32. <https://doi.org/10.53761/1.4.1.3>

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

Strategies to Improve Student Reaction to Group Work

Abstract

After receiving negative feedback from students and tutors about their group work experiences in a health subject, strategies to resolve these collaborative learning issues were considered. The objectives were to facilitate student ability to resolve group work issues, highlight group work as an important graduate attribute and to improve perceptions of the benefits of group work. A literature review assisted in identifying several strategies that had been used elsewhere to resolve issues similar to those raised by the students in this study. Consequently a number of support resources were designed for the revised delivery of the subject to the next cohort of students. These included a structured introduction to elements of group work and several strategies to improve the group work experience. At the conclusion of the subject students indicated that the group work experience was of value. The overall response suggested that active tuition in the elements of group work contributes positively to student understanding of both the process and group dynamics.

2007

Strategies to Improve Student Reaction to Group Work

L. Kriflik

University of Wollongong

Judy Mullan

University of Wollongong, jmullan@uow.edu.au

Follow this and additional works at: <https://ro.uow.edu.au/jutlp>

Recommended Citation

Kriflik, L., & Mullan, J. (2007). Strategies to Improve Student Reaction to Group Work. *Journal of University Teaching & Learning Practice*, 4(1). <https://ro.uow.edu.au/jutlp/vol4/iss1/3>

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

Strategies to Improve Student Reaction to Group Work

Abstract

After receiving negative feedback from students and tutors about their group work experiences in a health subject, strategies to resolve these collaborative learning issues were considered. The objectives were to facilitate student ability to resolve group work issues, highlight group work as an important graduate attribute and to improve perceptions of the benefits of group work. A literature review assisted in identifying several strategies that had been used elsewhere to resolve issues similar to those raised by the students in this study. Consequently a number of support resources were designed for the revised delivery of the subject to the next cohort of students. These included a structured introduction to elements of group work and several strategies to improve the group work experience. At the conclusion of the subject students indicated that the group work experience was of value. The overall response suggested that active tuition in the elements of group work contributes positively to student understanding of both the process and group dynamics.



Strategies to Improve Student Reaction to Group Work

Lynda Kriflik

University of Wollongong
lynda@uow.edu.au

Judy Mullan

University of Wollongong
jmullan@uow.edu.au

Abstract

After receiving negative feedback from students and tutors about their group work experiences in a health subject, strategies to resolve these collaborative learning issues were considered. The objectives were to facilitate student ability to resolve group work issues, highlight group work as an important graduate attribute and to improve perceptions of the benefits of group work. A literature review assisted in identifying several strategies that had been used elsewhere to resolve issues similar to those raised by the students in this study. Consequently a number of support resources were designed for the revised delivery of the subject to the next cohort of students. These included a structured introduction to elements of group work and several strategies to improve the group work experience. At the conclusion of the subject students indicated that the group work experience was of value. The overall response suggested that active tuition in the elements of group work contributes positively to student understanding of both the process and group dynamics.

Introduction and Background

This paper considers the question of what strategies could be developed to improve student involvement in group work processes within the Introduction to Health Behaviour Change (POP 103) subject, at the University of Wollongong (UoW), Australia. The subject required students to complete a group work task which was outlined in the subject guide and overviewed in the first tutorial. The task required students to collaboratively research a health topic; dividing the work equitably, compiling and presenting the research and then presenting this to the tutorial class with each group member participating. Students were generally assigned to groups on a random basis. The group work task was intended to assist students to attain UoW's fourth Graduate Attribute which is a capacity for, and understanding of, teamwork.

In delivering this subject in 2004, the authors of this paper, their fellow tutors and students experienced negativity in response to the group work task. This reaction was reported by all involved in teaching the subject and reflected in many of the student comments in the subject review questionnaire. Three students participated in a focus group convened to further explore the evaluation comments, thus providing a contextual perspective. The compiled responses, including that from the focus group participants, indicated that more structure was required in the group work tasks for these to be perceived as contributing to students' learning. The identified needs were clarifying the purpose of the group work, strategies to assign students to teams, assisting students to organise and share the workload, and involving students in peer assessment of group work. One of the tutors, also a lecturer in Learning Development, was involved in a university wide review of group work at UoW and used this as an opportunity to develop a scaffolded approach to group work.

As a starting point for addressing the issues raised by UoW students, reference was made to the literature to consider group work issues as described in other tertiary settings. This provided both a context in which to consider the concerns of the UoW students and a baseline from which to develop strategies that aimed to facilitate a positive experience of group work processes for UoW students.

Literature Review

A substantial body of literature advocates the use of group work as a cooperative learning approach which positively contributes to student learning (James, 2005; Mahenthiran & Rouse, 2000; Roberts, 2004; Rossin & Hyland, 2003). Rossin and Hyland (2003) also describe group work that is project focussed as significant in developing social and personal skills, in addition to the other skills that are more vocationally oriented. Group work as a concept has much in common with project management (Rossin & Hyland, 2003; Dyrud, 2001) and well designed projects commence with a clear and explicit brief. The corollary for those designing group work tasks is to ensure that these have a well defined structure, including a strong statement of purpose and a defined time frame. Within this structure workload management is considered by the authors of this article to be a sub element to be detailed within the task design. The need for clarity in group work design is reinforced even by those who question the similarity of group work with project management (Mutch, 1998). Academic views on the purpose of group work may differ but the literature supports group work as a context that may enhance learning, provided that consideration is given to group size, formation, skills development and assessment strategies (Baldwin & Keating, 1998; Houldsworth & Mathews, 2000; Rossin & Hyland, 2003).

There are diverse lessons that can be learnt from other investigations of group work processes. The focus here is on strategies that facilitate group membership and dynamics, and fair assessment measures, in line with UoW identified student needs. Frequently used approaches for allocating students to groups are described in Table 1 – Group Selection Options, compiled by Kriflik (2006). Table 1 draws on various approaches to group formation (Piltz & Quinn, 2005; Morgan, 2002; Houldsworth & Mathews, 2000; Mahenthiran & Rouse, 2000) and summarises these to provide a practical and accessible guide to approaches to group formation.

Method	Advantages	Considerations
Student self-selection	<ul style="list-style-type: none"> - students choose who to work with 	<ul style="list-style-type: none"> - students overlooked or rejected - inequity in skill distribution - inequity in task distribution
Selective appointment Groups formed on the basis of criteria i.e. mark aspirations, meeting times, complementary skills, specific competencies	<ul style="list-style-type: none"> - students have common goals - less pressure on low achievers - student skills recognised and rewarded as being proficient - appreciation of diversity required in group work 	<ul style="list-style-type: none"> - low achievers not exposed to higher expectations - friends with shared aspirations not accepting a newcomer - less opportunity to develop new skills in unfamiliar roles
Random selection	<ul style="list-style-type: none"> - opportunity for students to learn from new people - opportunity to enhance communication skills 	<ul style="list-style-type: none"> - students resent lack of choice - student concern about skills and attitudes of other students
Selection of topic choices	<ul style="list-style-type: none"> - students interested in topic - students working with interested others 	<ul style="list-style-type: none"> - inequity in skill distribution - student concern about skills and attitudes of other students

Table 1: Group Selection Options

As indicated in Table 1, random selection (generally lecturer nomination) often has the goal of ensuring a mix of students so as to optimise the opportunity to learn from each other. Mahenthiran and Rouse (2000) summarise this approach as attempting to avoid students being left out for academic, social or cultural reasons. Their study involved determining whether or not a level of student control over group formation had a positive impact on student performance. In a variation not described in Table 1 they found that allowing students to pair with a friend facilitated both cooperative learning and the sharing of task responsibilities. The approach also encouraged learning from the others in the group. This significant variation provides a further alternative for consideration in the formation of groups.

An area for exploration as an impact on group formation is the extent to which such friend pairing may assist cooperation between students of diverse cultural backgrounds. It has been identified that students may have negative perceptions of working in mixed culture groups, reflecting the belief by some students that such groups performed poorly (De Vita 2002). However, in contrast to these student perceptions De Vita found that "... assessed multicultural group work has, on average, a positive rather than negative effect on the individual mark of all students.." (2002 p.159).

A methodological consideration in the study by De Vita was that the groups were not permitted to self-select. In another study Houldsworth and Mathews (2000) also evaluated group composition and performance, with the aim of promoting diversity within the groups. They found that heterogeneous groups performed more consistently but highlighted that group formation needed to be balanced between avoiding group conformity that may result in 'process loss' and a freedom of choice that could also be disruptive. The ideal group formation strategy would encourage students with different backgrounds and skills to learn from each other and also encourage individual responsibility to the group.

The facilitation of supportive group dynamics requires the recognition that group size influences learning and skill development. It has been suggested that an optimal size for groups is four (Kriflik 2006; Morgan 2002), though the scope of the group project would also influence group size. Considerations in determining group size include ensuring the scheduling of meetings is not onerous, that each student has a significant role in the project, and that team members communicate with and are accountable to each other. The latter is important in building group cohesion and cooperation (Rossin & Hyland, 2003), thus minimising the likelihood of disruptive factions forming within the group. An additional strategy for minimising group dysfunction is to coach students to understand that learning styles may enhance group interaction and promote peer learning strategies (Hendry, Heinrich, Lyon et al., 2005; Baldwin & Keating, 1998). This preparation may assist in pre-empting potential difficulties in group dynamics by creating greater awareness of individual learning approaches and lead to '... acceptance of others' styles' (Hendry, Heinrich, Lyon et al., 2005 p.406). In addition, a scaffolded or structured intervention that coaches students on the essentials of team dynamics, learning styles and teaching strategies could contribute to a greater understanding of assessment processes, especially between peers.

Increasingly peer assessment is being used to facilitate greater student understanding of the subtleties of assessment measures and to promote student involvement in formative measures (Falchikov & Goldfinch, 2000; Topping, 1998). Topping (1998) describes peer assessment as important to the development of "... teamwork skills and [to] promote active rather than passive learning' (1998, p.256). The value of peer assessment is that it engages students in critical reflection on the role and contribution of each member of the group. This form of active learning is described by Mezirow (1991) as a process of reassessing how we have posed and responded to problems. In group work this reflection can lead to the greater awareness of individual accountabilities within the group and a greater sense of control over performance and output ((Mahenthiran & Rouse, 2000). Alternatively, the inclusion of peer assessment within group work may raise questions for students about whether this strategy will affect their results.

An inherent contradiction in using collaborative group work processes in academic learning is the predominant competitive environment of tertiary institutions (Mutch, 1998). Group work activities involve students working toward a common goal but assessment strategies that differentiate the amount and quality of individual effort is essentially a context of students competing for results. The intention is that the results achieved are commensurate with the student's input. The literature indicates that students perceive that peer assessment can negatively affect the results achieved. On the one hand, students are concerned at the fairness and ability of peers in evaluating individual efforts and on the other, some students seek social acceptance through conforming to group expectations (Houldsworth & Mathews, 2000; Mutch, 1998). In a group situation, Houldsworth and Mathews (2000) highlight the risk of students valuing social conformity with their peers over honest and accurate feedback. To assist in overcoming this several studies have identified the importance of ensuring group members have a clear understanding of the elements of peer assessment (Dyrud, 2001; Falchikov & Goldfinch, 2000; Houldsworth & Mathews, 2000). In addition, by carefully structuring the peer assessment form, and providing an opportunity for a group review of this, it has been found that many group difficulties may be resolved (Dyrud, 2001; Falchikov & Goldfinch, 2000).

Relating University of Wollongong Student Perceptions to the Literature

Following the literature review the authors of this paper revisited the concerns raised by the UOW students and found that there was alignment with a number of the issues discussed above. The areas of dissatisfaction indicated by UOW students included; the scheduling of meeting times, the equitable completion of tasks, the belief that the language skills of international students impeded the group effort, and that their own achievements were assessed at a lower standard because of these combined factors. The forming of groups through random selection had also created issues. The experience of the academics and tutors involved was that the allocation of members to groups was a process where student resistance could be encountered, providing the genesis of dissatisfaction which carried over into a student's final and negative view of group work. This was compounded by the resentment of some individuals when assigned to a group that included diverse cultural backgrounds, a reflection of their beliefs about the academic abilities of these other group members and as reported in the literature above.

In addition to considering group work issues, the literature provided the authors of this article with a range of approaches to consider when designing strategies to address UoW student concerns about the value of group work and peer assessment. A structured approach was developed to clarify the purpose of the group work task, to elaborate on the skills required and to make clear to students what was expected of them in performing and assessing the group work. The supporting strategies were designed to facilitate a more positive response to group work, and these and the supporting resources are described below.

A Focus on Group Work - The Process

Several strategies were adopted to assist students in comprehending the value of group work and to support them in resolving any group issues that arose. These strategies included a handout guiding tutors and students through group work considerations as an introductory activity, a template for peer assessment and a template for student evaluation of the group work. These support resources are provided as Appendices and are explained prior to discussing student evaluation of the revised process.

Strategy One – the Introductory Activity; this clarified the aim and outcomes of student participation in the specified group work task. It was intended that the introductory explanation to be issued as a handout for students at the first tutorial meeting. Thus students had the same guidelines as the tutor, which facilitated both transparency and the consideration of the range of factors that impact on group work. This approach was designed to ensure the integration of the group work process as an activity that supported the revised subject content and furthered skill development in team work. The goal is clearly explained in the aim and outcomes within the handout (Appendix1);

Strategy Two – Assessment Process; at the same time students were issued with the template for the 'Group Presentation Marking Sheet (Appendix 2) that the tutors would complete during student presentations. Students were also advised that they had to complete a 'Peer evaluation of group project sheet'. Providing these templates at the outset ensured that students had the opportunity to consider these and ask any questions regarding the format of the assessments and their expected involvement

Strategy Three – Process Evaluation; during the last tutorial lesson at the conclusion of the session all 119 of the POP 103 students were asked to complete a group work activity evaluation (Appendix 3). The students were informed that the completion of these evaluation forms was not compulsory and that they were not required to document their names if they so wished. At the end of the class, all completed forms were collected and later collated for evaluation of the group work process.

Results

Outlined in this section are the responses of students and tutors to this more structured and student oriented approach to group work activities. It is more student oriented because students actively learn about the components of group work with tutors alerted to the need to coach students in group work skills. Students are also required to critically consider assessment criteria and the application of these. This is a participatory rather than didactic approach. The responses indicated that students perceived there was benefit in the revised approach. Their comments and evaluations reflected acknowledgement of the benefits of working with peers, and some indicated that their own performance was positively influenced by the experience. Time remains an issue that requires further consideration as students indicated ongoing dissatisfaction with scheduling in their final evaluations.

Following the completion of the tutorial sessions, POP 130 students from the six different tutorial classes were asked to complete the evaluation of the group work activity questionnaire (Appendix 3). To achieve the optimum response to this evaluation, time was set aside for students to complete and return the questionnaire during class time at the end of the session. To improve response rates, and survey reliability, students could elect to submit anonymously if preferred so as to minimise concerns about their responses being identified. Most did not provide a name and therefore the comments cited are not attributed to an identified individual. Seventy-nine of a possible 119 questionnaires were completed and returned. In addition to the students' evaluation, two tutors who had taught the same subject previously reported that, overall, the students were more positive about the subject especially with regard to the group work activity.

	Number of students who circled (1) agreed	Number of students who circled (2) slightly agreed	Number of students who circled (3) slightly disagreed	Number of students who circled (4) disagreed
Q1. Purpose of the group work was clearly explained	31 (39%)	33 (42%)	8 (10%)	3 (4%)
Q2. The group work was relevant to the subject	48 (61%)	21 (27%)	7 (9%)	2 (3%)
Q3. The work responsibilities were evenly shared	52 (66%)	17 (22%)	4 (5%)	4 (5%)
Q4. The group work contributed to my skill development				
• Interpersonal relationships	37 (47%)	37 (47%)	2 (3%)	1 (1%)
• Communication with others	41 (52%)	31 (39%)	3 (4%)	1 (1%)
• Organisation of tasks	42 (53%)	30 (38%)	4 (5%)	-
• Providing leadership/guidance for the group	34 (43%)	34 (43%)	8 (10%)	-
• Project Management	36 (46%)	34 (43%)	5 (6%)	2 (3%)
Q5. Your team worked well together	57 (72%)	16 (20%)	3 (4%)	1 (1%)
Q6. Group work skills will relate to the workplace	51 (65%)	22 (28%)	3 (4%)	1 (1%)
Q7. To what extent would you agree with the following				
• Organising group meetings was straight forward	41 (52%)	26 (33%)	11 (14%)	-
• Adequate time was given for the group work	48 (61%)	22 (28%)	8 (10%)	-
• The group worked cohesively on the report	50 (63%)	23 (29%)	4 (4%)	1 (1%)
• Peer assessment of group members worked	35 (44%)	29 (37%)	8 (10%)	3 (4%)

Table 2: Summary of the 79 Completed Responses Received for the 'Student Assessment of Group Work Practices' Questionnaire (Appendix 3)

According to the results in Table 2, over 81% (64) of the students responded that the purpose of the group work was clearly explained and 88% (69) believed that the group work was relevant to the subject. Paramount to the success of the group work was the equitable sharing of work responsibilities by students and the responses indicated that 88% (69) of the students agreed that this was significant to their achievement. Over 85% (67) of the students believed that the group work activity contributed to the development of each of the following skills; intrapersonal relationships, communication, organisational, leadership and project management skills. A similar proportion of students, 83% (66) also believed that that these skills would prove to be beneficial for their future workplace environments.

Importantly, over 80% (63) agreed that their group had worked together effectively and that they had managed to successfully organise meeting times and work cohesively together in the allocated timeframe. The aspect of timing that students' viewed negatively was the scheduling issue referred to above, which related to the allocated group presentation time. Because presentations were scheduled during weeks 3 to 10 of the session, some earlier groups only had 2 weeks preparation time, whereas other groups had more time to prepare their work. This was perceived to be a disadvantage by students and a number of comments were made about the fairness of this schedule, as encapsulated by the following statement. 'The group assignment time, some have a lot more time than others to prepare'. This comment was made in reference to constraints on student's own performance and as well as being a limitation that may have impacted on the quality of presentations earlier in the session.

Student appraisal of the whole process was reinforced with students asked to critically review the contribution of fellow group members through the peer assessment form. The evaluation responses indicated that students agreed that the peer assessment of the group had worked effectively. One student commented that 'Knowing that we were going to be assessed by our peers made me put forth a bit more effort'. This contrasted with the response of a student from the one tutorial group that did not receive the peer assessment sheets from their tutor (which was an oversight by the tutor), 'If someone in the group chose not to work there was no avenue to address this problem or adjust marks accordingly'. In general, the students who used the peer assessment form acknowledged the importance of positive group dynamics to the production of quality work.

Related to group dynamics and the impact of peer assessment were comments about the composition of the groups. Numerous students identified the factors that contributed to the formation of good groups. These included all group members as 'being keen', 'working well' together, 'living in the same area', and 'being with friends'. Geographical proximity was regarded as important to facilitating convenient and timely meetings. In the same way being with friends also ensured that difficulties were resolved with a minimum of fuss. However, other students disagreed with this, and made comments such as the following, '... people should be put into groups by the tutor and not select their own group. This will encourage more of a mix in the way of presenting.' Repetition in presentation styles was identified as an issue stemming from the self-nomination process. However, the addressing of such issues within the group was indicated as potentially difficult 'It's good doing group work but it's hard to say "you're wrong and it would suck if you had bad group members"'.

Overall students perceived the group work activity as positive, even 'essential', and this encouraged quite a few of them to make more of an effort in contributing to the group's outcomes. They were also very aware of both real and potential difficulties that had to be overcome to achieve the desired goals and made concrete suggestions to resolve such issues. It was evident that the presentation scheduling was the difficulty most beyond their control and this resulted in expressed frustration.

Discussion

The positive response of students to the revised group work task confirms the importance of structuring such activities to ensure that the purpose is clear, that there is equity in student workload and that students are involved in the assessment process. The student evaluations underscore the extent to which they value having a significant influence on the group work structure and process.

Similar to the findings of Rossin and Hyland (2003), the majority of the students believed that the group work activity further developed their social, personal and career oriented skills. In contrast to the students in Mutch's study (1998), the cohort reported here identified the essential nature of such skills, including intrapersonal relationships, communication, organisational and management skills, as crucial not only during their student years but also as professionals once their tertiary education has been completed. Thus the students' view that group work activities are relevant aligns with the findings in the literature that advocate that group work positively contributes to student learning (James, 2005; Mahenthiran & Rouse, 2000; Roberts, 2004). The UoW students desired a group work context that combined genuine challenge with positive group dynamics and these expectations can be addressed through academic and interpersonal skills development (Baldwin & Keating, 1998; Madariaga, Evans et.al 2006).

As outlined in the process above, it is evident that clearly explaining the task and the skill development implications of this for each member of the group assisted students to identify the key elements of successful group work. This does not equate with the desired level of coaching in learning styles that Hendry et al (2005) identify as significant to improving group processes. While it is agreed that such coaching would benefit students in their university studies and future employment (Baldwin & Keating, 1998), a formally structured coaching intervention was not possible given the course and time parameters in this instance. The approach outlined in Appendix 1, however, provided guidance to tutors on the skills required in group work so that they could assist students to enhance these if development was needed. Further, this study indicates that task clarity, involvement in the assessment and prior knowledge of the expected outcomes of the group work helped students to avoid and resolve some of the problems that the previous cohort had encountered. Two indicators in particular evidence this. Firstly, there was minimal demand on the subject tutors to mediate conflict between group members, which is in contrast to past experience. Secondly students themselves referred to resolving issues and to performing to higher levels as a result of group expectations. Such reflections demonstrated students' critical thinking about their own performance and those difficulties that they were able to positively influence.

The students' critique of group formation illustrated that students also actively considered the factors affecting group dynamics. While working with friends was viewed as making the process more manageable UoW students also recognised that friendship groups stifled diversity and promoted a level of conformity, a finding that aligns with research conducted by Houldsworth & Mathews (2000). This gives credence to the adoption of the approach suggested by Mahenthiran & Rouse (2000) whereby a balance is achieved by forming groups on the basis of friendship pairs. Thus paired friends from disparate backgrounds could work together, with support available from the friend while enhancing the opportunity to learn from others. This would facilitate the level of control over group formation valued by students, as reported in this study and in others (Mahenthiran & Rouse, 2000), whilst facilitating synergistic group dynamics. The other advantage of groups comprising of two sets of paired friends is that it may assist in overcoming UoW students' perception that mixed culture groups negatively impact on the group's performance. This student perception is fallacious, as noted by De Vita (2002), and is an important one to counter in the UoW context of a high intake of international students. A further advantage of this group formation strategy is that it may render the process of peer assessment less fraught for students who

conform to avoid perceived negative social impacts related to the peer assessment process (Houldsworth & Matthews, 2000).

For most students the peer assessment process was perceived to be valuable in influencing and evaluating the input of others in their group. The inadvertent situation of one tutorial group not being informed of the peer assessment process and thus not completing the peer assessment form contrasted with the generally positive response of the cohort. The non-informed group was the most negative about the group work activity and most of the difficulties were ascribed to the non-performance of peers. How to constructively comment on peer efforts both during the process and at the conclusion emerged as an area that students also needed more support in. Here the authors of this paper concur with Topping (1998) that students need to be mentored in the skills required to be effective peer assessors, including the provision of honest and constructive feedback, and the ability to counter intimidation by more dominant personalities. These are the areas that the students in this study struggled with. For this reason the more comprehensive peer review form that Dyrud (2001) suggested and trialled successfully, has informed the redesign of the peer review form used by the authors of this study (Appendix 2). This more structured peer review format assisted students to identify and evaluate the behaviours that underpin successful group work. Further the tutors were available to coach those groups requiring additional skill development, though this was on a 'needs' basis rather than as a formal intervention.

Another crucial component of group work is time management. Students recognised this and indicated that they had dealt with this within their groups in an appropriate manner, based on the survey outcomes. A separate but related issue that concerned students was related to the timing of their presentations, with those scheduled later in the session having more preparation time. This was viewed as an equity issue with the potential for disadvantage for groups presenting early in the session. This was very much beyond student control or influence and thus represented an area of frustration. It is an issue that requires resolving if the purpose of group work is to foster and encourage collaborative effort, and to overcome the perception that academic learning must be competitive (Mutch, 1998). The authors of this paper will be reviewing further literature and consulting peers to identify strategies that facilitate both greater equity and student involvement in the scheduling of assessment events.

Reflection on teaching practice and students' reactions resulted in the refining of teaching and assessment strategies to ensure that these better supported students. In this instance, the focus was on students being able to work collaboratively, as they will be required to do this in a range of contexts - including and beyond their studies. Greater support for students in managing group processes was offered through clear group task instructions, peer assessment, and restructured assessment tools.

Conclusion

The student evaluations and professional observations of lecturers and tutors in this subject indicate that clarifying the group work activity assisted students to perceive the benefits of such activity. In particular, the resources developed to support group work (provided as appendices) specified the key academic and interpersonal skills required for a successful collaborative effort. This assisted students to respond to the complexity of tasks involved in the project. For example, the evaluation tool provided at commencement enabled students to critically consider and monitor the contribution of group members, and to identify areas for improvement. The outcome was a positive response by students to the group work, with students indicating that the responsibilities had been equally shared and that they had worked together cohesively. This contrasted with the negativity of previous cohorts and highlights the value of the structured appendices.

The refinement of group work strategies as reported in this paper is an ongoing process and the implemented revisions as well as planned modifications will be monitored for impact and contribution to student learning. An acknowledged limitation is the subject specific focus of the revised strategies. The trial of the support resources by other faculties of UoW will provide feedback that will inform further development. Ultimately, it is intended to publish the appendices as templates, allowing that these may also need modification to suit the academic context. The goal is to have a dynamic suite of resources that assist in developing the group work skills of our diverse student populations while at the same time enhancing the integration of the strategies within academic disciplines.

It should be noted that this paper was written retrospectively and the literature review that informed initial explorations has continued, with the authors investigating and refining approaches to group work teaching practices. This includes coaching tutors so as to increase their ability to support students in achieving academic goals, and further exploration of combined friendship pairs in group dynamics.

References

- Baldwin, M. and Keating, J. (1998). "Innovative Team Building Practices for Professionals: Developing Inter-Group Skills to Enhance Effective Performance." *Innovative Higher Education* 22(4): 291-309.
- De Vita, G. (2002). "Does Assessed Multicultural Group Work really pull UK Students' Average down?" *Assessment and Evaluation in Higher Education* 27(2): 153-161.
- Dyrud, M. (2001). "Group projects and peer review." *Business Communication Quarterly* 64(4): 106-113.
- Falchikov, N. and Goldfinch, J. (2000). "Student Peer Assessment in Higher Education: A Meta-Analysis Comparing Peer and Teacher Marks." *Review of Educational Research* 70(3): 287-322.
- Hendry, G., Heinrich, P., Lyon, P., Barratt, A., Simpson, J., Hyde, S., Gonsalkorale, S., Hyde, M. and Mgaith, S. (2005). "Helping Students Understand their Learning Styles: Effects on study self-efficacy, preference for group work, and group climate." *Educational Psychology* 25(4): 395-407.
- Houldsworth, C. and Mathews, B. (2000). "Group composition, performance and educational attainment." *Education and Training* 42(1): 40-53.
- James, D. (2005). "Are Four Minds Better Than One? A Study on the Efficacy of Group Work." *College and University* 80(3): 47-48.
- Kriflik, L. (2006) *Resolving Group Work Issues*, University of Wollongong, http://edsnet.cedir.uow.edu.au/ld_cases/ld_cases_new.aspx [accessed 2/5/06]
- Madariaga, M., Evans, A., Wahab, B., Phillips, M., Lo, E., Katayoun, R., Schwartz, D., Trenholme, G., & Weinstein, R. (2006) "Learning by doing: developing fellows' academic skills through collaborative research" *Medical Teacher* 28(1): 77-80
- Mahenthiran, S. and Rouse, P. (2000). "The impact of group selection on student performance and satisfaction." *The International Journal of Educational Management* 14(6): 255-264.
- Mezirow, J., Ed. (1991). *Fostering Critical Reflection in Adulthood; A Guide to Transformative and Emancipatory Learning*. San Francisco, Jossey-Bass Publishers.
- Morgan, A. (2002). "Enhancing Experiences of Group Work", University of Technology Sydney, <http://www.iml.uts.edu.au/learn/teach/enhance/groupwork/index.html> [accessed 6/9/05]

- Mutch, A. (1998). "Employability of learning? Groupwork in higher education." *Education and Training* 40(2/3): 50-56.
- Piltz, W. and Quinn, D. (2005). "Working Collaboratively: Introducing the wheel model for understanding group function", University of South Australia. <http://www.unisanet.unisa.edu.au/wheel/> [accessed 6/9/05]
- Roberts, T., Ed. (2004). *Online Collaborative Learning: Theory and Practice*. Hershey, Information Science Publishing.
- Rossin, D. and Hyland, T. (2003). "Group Work-based Learning within Higher Education: an integral ingredient for the personal and social development of students." *Mentoring and Tutoring* 11(2): 153-162.
- Topping, K. (1998). "Peer Assessment Between Students in Colleges and Universities." *Review of Educational Research* 68(3): 249-276.

Appendix 1

Group Work – Providing A Structured Approach

Aim: the intention of the group work activity is to individually investigate and then share the findings of research to build a concise and cohesive research presentation.

Outcomes: *at the end of the activity students will be able to demonstrate*

- Equal involvement of the group members in the group tasks ie
 - o will have located and evaluated appropriate literature
 - o analysed this literature for relevance to the topic
 - o worked cohesively to produce a structured presentation
 - o produced a summary as a report to the tutorial group
- Correct citation of the literature
- Knowledge of how to apply the given model to other health issues
- A capacity to tell an audience about the key findings of the set task

Group allocation; groups of 3 will be formed on the basis of either what each member is good at or the skills that a person needs to further develop by undertaking the task.

Activity: ‘challenge versus complementarity’ – students write down 3 skills they are good at, then 3 skills they want to improve. Students take a minute to discuss ways of improving these skills. Groups are then formed on the basis of either

- the skills each member can bring to the group ie writing ability
- the skills that individuals want to improve ie presentation

Form groups.

Working As A Group – A short activity

Task	Minutes
1. Students brainstorm the benefits and problems of group work	3
2. Each group takes one of the identified problems and considering ways of resolving the problem	5
3. Each group presents their resolution and class comments on this	7

Handout Group Task, *explain this*

Scheduling of Group Work Meetings

- what time needed outside of tutorials?
- what time available within tutorials?

Group Work Assessment: *tutor to discuss the allocation of marks*

Peer evaluation of group project, *discuss how this works*

Group Presentation Marking Sheet, *explain this NB: draw attention to restrictions on number of OHTs and the strict requirement re the size of font used on the OHT*

Evaluation of Group Work by Students

A survey will be distributed to students to obtain their comments on the group work activity.

Appendix 2

Assessment Tools

1a) Group Presentation Marking Sheet (worth 10%)

Criteria	Presenter 1	Presenter 2	Presenter 3	Presenter 4
Content (/ 4) 1 2 3 4 Poor Fair Good Excellent				
Complementary and well sequenced information (/ 3) 1 2 3 Poor Fair Good				
Clarity of verbal communication (/ 1) 0 1 Poor Good				
Engagement with the audience (/ 1) 0 1 Poor Good				
Timing (/ 1) 0 1 Poor Good				
Total per presenter (/ 10)				
Average Group Mark				

Peer Evaluation of Group Member Contribution:

Please note: Individual student marks may be adjusted depending on their reported contribution to the task.

- **Fill** out a separate sheet for each group member.
- **Write** the names of each group member, including your own name. Rate each member's workload and contribution to the group project by considering the criteria. **Work** out an average ranking to determine the final peer assessment for each individual. **NB.** This is for the whole assignment, not just the presentation.

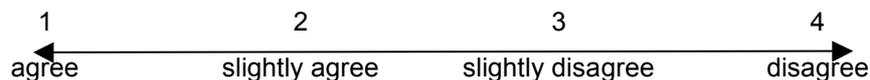
Consider the criteria, right and then rank each person's overall contribution	Contribution to the Group (Scale)			
	1 less than others	2	3	4 more than others
Name (group member)	Person 1	Person 2	Person 3	Person 4
- attended meetings				
- actively participated in group activities				
- helped others with activities				
- had positive attitude and respected other people's views				
- helped to keep to the task timeframe				
- contributed to the final presentation				
Rank:				
Comment:				

Appendix 3

Student Assessment of Group Work Process

Name: _____

Please circle on the scale the number which most applies to this item for you as per this scale



1. Purpose of the group work was clearly explained	1	2	3	4
	←			→
2. The group work task was relevant to the subject	1	2	3	4
	←			→
3. The work responsibilities were evenly shared	1	2	3	4
	←			→
4. The group work contributed to my skill development in:	1	2	3	4
• Interpersonal relationships	←			→
• Communication with others	1	2	3	4
	←			→
• Organisation of tasks	1	2	3	4
	←			→
• Providing leadership/guidance for the group	1	2	3	4
	←			→
• Project Management	1	2	3	4
	←			→
5. Your team worked well together	1	2	3	4
	←			→
6. Group works skills will relate to the workplace	1	2	3	4
	←			→
7. To what extent would you agree with the following:				
• Organising group meetings was straightforward	1	2	3	4
	←			→
• Adequate time was given for the group work	1	2	3	4
	←			→
• The group worked cohesively on the report	1	2	3	4
	←			→
• Peer assessment of group members worked	1	2	3	4
	←			→

Any other comments/suggestions???

Thanks