

# Making Groups Work: University Students' Perceptions

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*Group work has many benefits for effective learning while also preparing graduates for future work. However, group work often elicits a mixed reception from participants. This paper explores the perceptions of final year university business students of their formal group work experiences. Information has been gathered through the collection of quantitative and qualitative data, and analysis reveals student experiences, both positive and negative. This paper also examines students' perceptions about the extent to which their experiences enabled them to achieve the university's graduate group work competencies. Finally, it reports students' own suggestions for improving the problems they encountered thus providing strategies for addressing their concerns.*

university, groupwork, perceptions, free-riding, education

## INTRODUCTION TO THE STUDY

Universities are being challenged to provide high quality education that is accessible and delivered in flexible ways. Such challenges must be met in the face of increased global competition and the pressure of diminishing resources. Group work has long been accepted as an effective learning strategy because it provides opportunities for students to negotiate meaning and manipulate ideas with others and reflect upon their learning (Fraser & Deane, 1997). Trist (1983), amongst others, believes that the solution to many complex problems requires individuals to collaborate to find solutions. Furthermore, universities are responding to the need to prepare graduates for 21st century workplaces where teamwork skills are valued (DETYA, 2000; Furnham, 2000; CIHE, 1996; Harvey et al, 1997). At the same time, group work appeals as an efficient way to teach as workloads increase and available time diminishes.

Group work is not always viewed positively, however, due to tensions that can arise as individuals meet to complete set tasks. It was the purpose of the current research to investigate final year, university business student perceptions of group work.

## RATIONALE AND AIM OF THE STUDY

The investigation was concerned with the group work experiences of students in contexts where they were given specific assignments to complete for assessment, meeting as small groups, face-to-face, to collaborate on the task.

The following questions were used as the basis for exploring student experiences in group work settings in order to gain insight into which aspects of group work led to positive perceptions, and which were viewed negatively. Such insight could guide educators in constructing, monitoring and assessing group work tasks.

- What are student perceptions of their experiences of face-to-face group work undertaken for assessment?
- What do students perceive as strategies for improve group work processes and outcomes?
- To what extent do students believe they have developed the desired group work competencies?

## ISSUES CONSIDERED BY THE STUDY

### Teamwork (group work)

Group work is not new to education. Educational theorists such as Trist (1983) believe that complex problems require input from individuals from many different disciplines, and a collaborative model has been widely and enthusiastically adopted at all levels of education in much of the Western world.

The desire of universities to develop skills for employability has also seen a drive to develop group work competencies. This drive is reflected in the University of South Australia statement that at university teamwork is emphasised and practised because it is an effective and meaningful way to learn (University of South Australia, 2000a, p.1).

### Positive outcomes

In supporting the effectiveness of a group approach to learning, Gatfield (1999) cites an empirical study conducted by Sorbral (1997) in one higher education setting which demonstrated that the students working in groups achieved a higher grade point average than those working in a control situation involving individual students. Johnson and Johnson (1991) and Baloché (1994) argue that the majority of current research indicates that group work strategies promote greater academic success through strengthened social interaction because students are placed in situations where they must cooperate with one another.

### Group work challenges

Imel explains that the group work environment is fraught with problems, however, and challenges the view that effective group skills are learned by simply giving students more opportunities to work in groups (1991)<sup>1</sup>. Tensions can arise due to concerns about assessment of group tasks (Gatfield, 1999), competition for high grades (Imel, 1991) and coping with the complexities of group dynamics (Johnson & Johnson, 1994).

The University of South Australia's research suggests that students do encounter frustration with aspects of group work in spite of its apparent popularity. For example, one graduate student, when surveyed, offered the following view:

I acknowledge the reasons for including group work as a component of a university course; however due to the nature of groups, it usually falls to one or two individuals to do the bulk of the work. As a student motivated to achieve the best results of which I am capable, I find it frustrating that not only do other students get a free ride so to speak, but that through being forced to work in groups, the task becomes more difficult than it would have been if done alone. (University of South Australia, 2001c)

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<sup>1</sup> Page numbers are not given in this online journal

Moreover, research aiming to answer the question about the effectiveness of group work has been largely confined to the primary and secondary sectors of education. According to Imel (1991), there is little empirical evidence that collaborative learning works as it relates to learning outcomes in adult education. Homan and Poel (1999) express a similar view that group work has been demonstrated to be far less effective than it should be in many cases and that students must be taught how to be effective group members.

There are several reasons why group work can result in less than positive participation and outcomes for the participants. Among them are competition, group dynamics, assessment and poor group work organisation.

### ***Difficult group dynamics***

Working collaboratively means making significant changes to conventional learning styles as learners come to grips with the dynamics of group work. Bosworth and Hamilton point out that this is not an easy task:

Collaborative learning requires students to participate actively and perform cognitive and social tasks that are new and often difficult. It is not surprising that students do not always greet this experience with unalloyed enthusiasm. (Bosworth & Hamilton, 1994)

Miller et al. (1994) assert that group work can force tensions to emerge and as a result students may well experience confusion and even anxiety about the work in a collaborative classroom and about how they will be evaluated. Mutch (1998) also observes, ironically, that the tension students experience as they work in groups often, in fact, foreshadows what they will experience in the workforce; and Finnegan and O'Mahony (1996) cite Nour and Yen's (1992) finding that group decision making in organisations demands increased levels of communication, coordination and collaboration and that this form of decision making generally takes longer.

Such observations serve to focus attention on the fact that group work can be hard work emotionally and intellectually; and that this fact is sometimes overlooked by group work advocates and practitioners. Individuals thrust into the demanding activity of working with other individuals, sometimes strangers, need to have time, skill and motivation to work through the stages of 'forming, norming, storming and performing' (Mutch, 1998) to which group work gives rise. Faced with difficult group dynamics caused by conflicting personas, a group may never reach the stage of successfully performing a task through a unified effort.

### ***Assessment and competition***

Universities are by nature competitive and much importance is placed on the awarding of academic grades. Gatfield states that:

One of the major difficulties of group work projects is the awarding of marks by the lecturer or tutor for each member's contribution. The marker normally does not have access to the understanding of the contribution of each group member across all aspects of the project. Yet, the group has a much clearer understanding of the relative contribution of each member. (Gatfield, 1999)

### ***Group work organisation***

Most often there is an implicit assumption that group skills will be learned by just being part of a group and regrettably no formal or informal instruction related to group behaviour or interpersonal dynamics is provided (Johnson & Johnson, 1991). Moreover, it is likely that groups will be formed with little consideration given to personality, life experience, ability or aptitude, so that a successful mixture of individuals is more likely to be achieved by happy accident rather than design.

Paying adequate attention to the mastery of group work skills requires explicit treatment and teaching in much the same way that other areas of skill and knowledge are addressed (Mutch, 1998).

## **CONDUCTING THE STUDY**

Fraser and Deane (1997) encourage the development of relationships between university staff and students in which there is an honest discussion of teaching delivery and strategies for learning and that staff take into account student learning preferences. It is important therefore that student opinions are sought. Allowing students to individually reflect on their group work learning experiences provided an opportunity for the research participants to take a self-reflective view of their experiences and describe those experiences (Schon 1983).

The use of a questionnaire with both closed and open-ended questions supplied quantitative and qualitative data for analysis. Students were asked to express in their own words their perceptions of the best and worst aspects of their group work experiences and to explore their own ways of addressing these perceived issues. In this way, descriptive information was obtained and was available for interpretation and elaboration of the feelings behind the statistics.

### **The survey instrument**

A pilot investigation (Burdett 2000) using interview-based research with four business students gave valuable preliminary insight into student perceptions of group work, both positive and negative. The University of South Australia's (2000c) course evaluation responses from students also provided information. It was clear from these sources that while benefits were acknowledged, some difficulties were encountered with formal group work which resulted in student frustration and, at times, deliberate avoidance of this form of collaborative work. The themes which emerged from the pilot study and evaluation data assisted with the formulation of questions for more in depth research to be conducted via a survey instrument.

The draft survey tool was trialled with four graduate business students from the University of South Australia. Peer feedback from three academics in the field of education was also sought. Amendments were made to the inclusion, wording and order of survey questions based on feedback from both groups.

The survey instrument, a questionnaire, consisted of 43 items and was divided into four sections. The first section contained demographic questions to gain information about the student's age, year level, program, fee status and the number of times they had participated in group work for assessment, as well as the average number of students in those groups.

The 25 questions contained in the second part dealt with general issues of group work such as participant experiences, group work processes, (see Table 1 questions 1-11) and prior learning and work experience. Items relating to prior learning and work experience are excluded from analysis as they were not a focus of this paper. The third section contained eight items relating to competencies, with items on issues such as task management, problem solving and conflict resolution (see Table 1, items 12-19). Students were asked to rate their own performance in terms of the statements of competency for group work compiled by the University of South Australia as part of its Graduate Qualities Statement (2000b). Sections two and three were responded to on a 5 point Likert type scale and analysed using the statistical software package, SPSS version 9.

Finally, in a fourth section, three qualitative items asked respondents for their perceptions of the best aspects and the worst aspects of their group work experiences and also for actions they believe could be taken to address the worst aspects.

### Participants

The population for this study comprised 344 final year business degree students at the University of South Australia. Final year students were chosen because they were more likely to have the richest experience on which to base overall perceptions, having engaged in formal group work over the period of their degree studies. The mail out did not differentiate internal from external students, as many students do not complete their whole degree through only one mode. It is quite possible that final year external students have studied on campus in years one or two of their degrees. In total, 105 questionnaires were returned, giving a response rate of 31 per cent.

Ages of the students ranged from 19 to 56 years ( $M = 27$ ,  $SD = 7.8$ ). Seventy percent (70%) were female and 91 per cent were onshore HECS-based students. The average number of times they had participated in assessable group work over the course of their degrees was eight times, and each group had an average of three members. Group size ranged from two to 10 members.

### FINDINGS

Participant responses to the survey questions are summarised in Table 1 and discussed in the following section.

**Table 1. Distribution of agree and disagree responses to selected items**

N = 105	% Disagree	% Agree
<b>Experiences of group work</b>		
1 My experiences of formal, assessed group work have been positive.	26	57
2 Generally, the groups worked well.	23	63
3 I did not enjoy working on group assignments.	46	36
<b>Group processes</b>		
4 I often assumed a leadership role.	20	56
5 Generally, I did most of the work.	40	25
6 Working in groups requires less work of myself.	61	24
7 Problems often arose when doing group work.	27	52
8 Problems that arose were solved by the group.	22	52
<b>Outcomes</b>		
9 I achieved better outcomes working alone.	23	40
10 Marks awarded were generally fair.	18	58
11 Peer assessment was generally fair.	19	53
<b>Competencies gained</b>		
12 I learned to negotiate with other group members	6	84
13 I learned to build positive relationships in groups	8	73
14 I learned to manage tasks effectively	13	72
15 I learned to share responsibility	9	76
16 I learned to use rational argument to persuade others	9	71
17 I learned to solve complex problems	14	57
18 I learned to resolve conflict	10	61
19 I learned to develop a shared vision for the group	12	58

### Positive perceptions of group work

Quantitative data reveal that the majority of students feel positive about their group work experiences. The survey data responses (see Table 1) show 57 per cent agreement with the statement that *experiences have been positive* and 63 per cent agreement with the statement *groups worked well*. Analysis revealed that students who found the experience of working in groups to be positive were also more likely to believe that:

- the workload was fairly shared ( $r = 0.56$ ,  $p < 0.01$ ) (see Table 2)
- they could not have achieved better outcomes when working alone ( $r = 0.62$ ,  $p < 0.01$ )
- that marks awarded were generally fair ( $r = 0.40$ ,  $p < 0.01$ ).

Students who felt positive were less likely to believe they held a leadership role ( $r = -0.25$ ,  $p < 0.01$ ) or that they did more work than other team members ( $r = -0.50$ ,  $p < 0.01$ ).

The majority of final year students rated themselves highly (Table 1, items 12-19) on the achievement of competencies for group work stipulated by the University (2000a).

### Negative perceptions of group work

Thirty-six percent (36%) of students did not enjoy working on group assignments. Those students who did not perceive their group work experiences as positive (26%) (see Table 1) tended to:

- agree with the view that they would have achieved better outcomes working alone ( $r = 0.53$ ,  $p < 0.01$ ) (see Table 2)
- perceive that they did most of the work ( $r = 0.46$ ,  $p < 0.01$ ) and that the workload was not shared fairly ( $r = -0.42$ ,  $p < 0.01$ )
- feel disgruntled overall with the fairness of marks awarded ( $r = -0.30$ ,  $p < 0.01$ )
- question the fairness of the peer assessment process ( $r = -0.37$ ,  $p < 0.01$ ).

An examination of relationships in Table 2 shows that in particular those who took on leadership roles were more likely to feel that their group work experiences had not been positive ( $r = -0.25$ ,  $p < 0.01$ ).

**Table 2. Correlations of items reflecting attitudes to group work roles and processes**

N = 105	Experiences of group work positive	Groups worked well	I Did not enjoy group work	Often assumed leadership role
Experiences of group work positive	-			
Groups worked well	0.80**	-		
Did not enjoy group work	-0.61**	-0.56**	-	
Often assumed leadership role	-0.25**	-0.28**	0.23*	-
Workload was shared fairly	0.56**	0.52**	-0.42**	-0.20*
Generally I did most work	-0.50**	-0.48**	0.46**	0.35**
Achieved better outcomes working alone	-0.62**	-0.60**	0.53**	0.30**
Group work requires less work of myself	0.21*	0.13	-0.32**	-0.18
Marks awarded were fair	0.40**	0.37**	-0.30**	-0.07
Peer assessment fair	0.41**	0.48**	-0.37**	-0.22*

Note: \* $p < 0.05$ , \*\* $p < 0.01$

## QUALITATIVE ANALYSIS

Qualitative data were gathered through open ended questions asking participants to identify the best and worst aspects of their group work experience, and to suggest remedies for the worst aspects. These responses were coded, grouped and categorised as connecting themes emerged. The number of comments relating to each theme, as well as the percentage of total comments made, is provided to indicate the significance of the response.

### Findings and Discussion

#### *Best aspects of group work*

The 120 written comments about the best aspects of group work fell into five main categories:

- generating ideas and sharing views
- meeting people and building friendships
- improved learning processes
- sharing of workload
- improved grades.

In addition, one student commented that the admiration from his/her peers was very satisfying.

**Generating ideas and sharing views.** The contribution of many different perspectives builds knowledge and understanding that working alone may not provide for many students. This has long been accepted by educators as one of the major benefits of students working collaboratively. In a group environment, new ideas are formed and shared.

The most significant category was the largest category, given the number of comments made that related to the aspect of sharing views and ideas through collaboration in group work situations (43%, 52 comments). Qualitative data, therefore, reflected the benefits of working cooperatively and collaboratively with peers, where opportunities arose to make new friends and form supportive networks in the pursuit of improved outcomes and greater academic success (Baloche 1994).

Comments from students included: *We got a broader range of knowledge. Three opinions usually made for a better assignment.* Another student indicated that there were benefits in *brainstorming and hearing others' views that [they] would never have thought of*; and others appreciated *the opportunity to learn new things from peers that [they] did not know before and gaining different perspectives.*

Another student observed that *members had excellent ideas, skills, knowledge, and motivation that brought out the best in me.* Not only was the collective knowledge improved, but also the environment was motivating as evidenced by the comment: *Working in a group motivated and inspired me to present my best work to benefit the whole group.*

**Meeting people and building friendships.** Meeting people and building friendships and networks (28%, 33 comments) were considered to be the second most positive aspects of group work. Comments such as *getting to know others that I probably wouldn't have met otherwise, developing good friendships* and *meeting other students to form study networks* reflect the value students placed on social aspects of university life.

**Improved learning processes.** Improved learning comments (16%, 19 comments) were related more to learning about group work processes than to learning about content. Such comments as *learning to be assertive, learning to become diplomatic and learning to work*

*with others and compromise; able to build my leadership skills; helps me in learning communications skills; and teaches me better teamwork* reflect this and students' appreciation of the importance of such skills.

**Sharing workload.** Positive views about the benefits of a shared workload comprised 10 per cent of comments (12 comments). Working with those whose standards and willingness to contribute to the task were similar made for satisfying experiences. Analysis made it apparent that choice was seen as an essential requirement for achieving a fairer workload. For example: *[The best groups are] when you can choose your own members and being able to choose people whose standards and outlook were similar.*

**Improved grades.** Only three per cent (4 comments) of the best aspect comments related specifically to actual improved learning outcomes evidenced by the achievement of high grades. While students commented on positive experiences from sharing knowledge, only a small percentage of students made specific claims regarding better learning outcomes in the form of higher marks: *Group assignments helped me get good grades and I got better results.*

### ***Worst aspects of group work***

From the 147 comments about the worst aspects of group work, the following categories emerged:

- unequal distribution of effort
- difficulties of accommodating different work schedules for meeting times
- lack of staff support.

**Unequal distribution of effort.** Comments by participants (59%, 86 comments) reflected the frustration of dealing with inequalities of effort among group members and the conflicts that resulted. These comments indicated that group work was viewed as an experience involving individuals offering varying levels of motivation, commitment, effort and contribution to completing assignment tasks.

Students expressed annoyance with the laziness and 'free riding' on the part of group members who were able to benefit from the compensatory effort of others. Inequality was apparent *when people [didn't] participate and [rode] on the back of others* and where groups had to deal with *free riders and loose cannons. Lazy group members who [allowed] others to do all the work* and who were *not pulling their weight* created an inharmonious group environment. Another student commented on how the impact of just one free rider had the power to *drag the whole group down* and lack of cooperation meant that *usually [they] left it so that one person does all the work at the last minute.*

Free riders, therefore, are individuals who fail to contribute to the activities of the group, but who benefit from the contributions of others who they believe can and will provide for task success. They often fail to attend meetings, are late or difficult to contact. Free riding is most likely to occur when one group member is capable and willing to provide for group success (Chapman & Arenson, 1993). Conversely, students who take on such leadership roles are more likely to believe that they do most of the work (Table 2).

Free riders (Table 2) and free riding are troublesome when collaborating on group work tasks. Not only does the unfair sharing of workload annoy students, but often free riders benefit from higher grades achieved by the efforts of other group members. As one student remarked: *When one person doesn't do any work but still gets the same mark as the rest of the group*, the individual is unfairly rewarded. Such sentiments were reflected in the words of another student who related an incident where: *In the worst example, two days before the*

*assignment presentation the other group members still hadn't come up with a draft. I had to take a day off work to complete the whole assignment. They contributed nothing but still got 80 per cent.*

In his theory of deindividuation, Zimbardo (1996), cited by Furnham (1997), suggests that being in a large group provides people with a cloak of anonymity and diffuses personal responsibility for the consequences of one's action. Students are likely to work less efficiently when in large groups, particularly when individuals work with strangers (Furnham, 1997; Johnson & Johnson, 1991). Working in a group can, therefore, engender 'social loafing' or laziness, and the effort an individual exerts when working collectively is less than the effort an individual exerts when working alone (Chapman & Arenson, 1993).

Occasions where inequality of effort had resulted in more serious forms of conflict were related by students. Comments ranged in strength and severity from those amounting to *personality clashes* to one case where a student claimed to be the victim of *bullying* by other group members.

Other comments reflected the difficulties of dealing with differences in attitudes and motivations of full-time versus part-time students, as well as younger students with *other interests*. This required negotiation and compromise that was often unsuccessful, to the detriment of the group's progress. *Working with students who don't share the same work ethic* caused problems and created negative repercussions for group cohesion and output.

**Unequal effort not reflected in marks.** Despite the numerous benefits of cooperative learning, many existing assessment practices act to undermine the goals of peer learning and lead students to reject learning cooperatively (Boud et al., 1999; Gatfield, 1999; University of South Australia, 2000c; James, cited in Morris, 2001). The use in universities, for example, of norm-referenced assessment implies competition against others rather than cooperation and tends to de-emphasise the collaboration fostered in peer learning (Kohn, 1992 cited by Boud et al., 1999). In addition, the Western cultural bias toward competition and individualism can undermine collaborative efforts (Imel, 1999). Students are encouraged to maximise individual grades and achievements, and can resent others benefiting from the results of their hard work.

Participant comments suggest that frustrations with the unequal effort of group members were exacerbated by the fact that this was not reflected in the marks awarded. The desire to work individually is more likely to be preferred by students who assume leadership roles (see Table 2); and research conducted by O'Malley and Scanlon (1990) found that 75 per cent of 80 students surveyed preferred to work alone rather than work collaboratively in groups.

**Difficulties of accommodating different work schedules for meeting times.** Over one third, 37 per cent (55) of the comments relating to the worst aspects of group work talked about problems of negotiating times to meet as a group and the added problems of a lack of commitment to meeting on the part of some group members. Finding common times that suited all members, particularly times that accommodated both full-time and part-time students with non-university work commitments, was a considerable challenge.

Several comments reflected the frustration arising from dealing with different work and study arrangements. One participant said: *Group work generally takes a lot more time due to organising tasks, agreeing on the approach, and this is difficult for those working full-time.* Another student wrote: *Making times to meet was difficult as I work full-time and work 1 hour away from the city.* One student was annoyed at having to give up a number of weekends for work on assignments to accommodate the commitments of part-time students

during the week, saying: *My weekends were ruined because I had to go to meetings with part-time students.*

Inconsistent attendance, lack of punctuality, and the costs of additional travel were also raised as problems that detracted from group work satisfaction. These present barriers to group efficiency even before the task is tackled.

**Lack of staff support.** Of the 147 comments, four per cent (6) related to negative attitudes of academic staff to group work. Comments referred to students' perception that assignments were poorly designed, and that staff were unaware of the complex demands of group work.

Furthermore, students perceived that inequality of effort was being neither acknowledged nor addressed as a matter of concern by academics, and was not being reflected in the assessment process. Research participants believed that closer, ongoing monitoring of group progress was needed so that problems could be dealt with in a timely way. One comment suggested cynically that group work had not been designed to improve learning outcomes but was more a *work avoidance strategy* on the part of academics and another claimed it was a *substitute for tutorial classes* and *to mark fewer assignments*. Staff were at times perceived negatively as not caring if *work is unequal or if there is conflict* and *staff don't want to hear complaints about lazy students*.

Resolving these inequities to everyone's satisfaction is not an easy matter as alternatives have benefits and limitations (Bourner et al., 2001). Boud et al. (1999) conclude that the key concern is not compromising assessment practices for the sake of peer learning, but making assessment tasks friendly to peer learning.

### ***Addressing Group Work Issues***

A total of 104 comments from participants about how to improve group work were grouped into categories reflecting common themes. In order of frequency of comments these were:

- improving time management and communication
- better assessment practices
- increasing arbitration by staff
- more effective allocation of students to groups
- allowing choice of group members
- making group work optional
- restricting group size.

Generally, the remedies suggested by participants were aimed at overcoming the frustrating and disabling inequities they associated with formal group work.

#### **Improving time management and communication**

The most important initiatives for resolving problems were associated with communication and totalled 28 per cent (29 comments). These were related to inequities of commitment to the group and problems associated with establishing effective means of collaborating with each other. Students suggested that: *[We communicated] better with others by email or phone and chose tasks that [could] be performed via email as trying to get together physically [was] difficult.*

Other students realised that to an extent it was their responsibility to deal with problems themselves saying they needed to *discuss problems in the group rationally and calmly which is harder if you have too many people in the group* and *[we] need to find ways to communicate within the group to negotiate and solve differences.*

A student comment highlighted the different level of commitment between conscientious and lazy students: *It was hard to find times to meet with people, [to ensure] that they did see it as a priority, [but] all they wanted to do is pass, so they didn't need to put much effort in.*

Another student's lack of confidence in communicating was revealed as a barrier to his/her ability to deal with problems: *If only I had the courage to open up I am sure we could work things out in a better way.* This lack of confidence can manifest itself in ways that can be misunderstood by others as laziness and unwillingness to contribute.

Ten percent (10%) of participant suggestions (10 comments) referred to formal scheduling of group time in the same way as tutorials to assist with getting together, either in tutorials or during an additional hour after a tutorial to assist face-to-face collaboration.

**Strategies: Time management and communication.** Given the evidence of significant student frustration and conflict arising from unequal effort on group tasks and assessment, ways to counter the effects of loafing and free riding should be considered if group work experiences are to improve.

**Building confidence and cooperation.** Even though most students perceived that they had achieved competence in group work, qualitative data suggested that more inclusive practices need to be encouraged so that all are involved, and the confidence of less assertive students is improved. This may contribute to more equal participation and the sharing of workload. Attention must be given to explicit development and mastery of group work skills in much the same way as other areas of skill and knowledge are developed. An adequate level of competence in dealing with group tasks and processes must be achieved through the curriculum before students begin working in groups.

**Scheduling group meetings.** A significant number of students identified the problems associated with the management of meetings and finding a mutual time suitable for part-time and full-time students with varying work commitments to meet. There are two possible responses to this. Firstly, as students suggest, it may be possible for a set, timetabled slot to be allocated in the weekly contact timetabled hours for a course to accommodate group meetings. This has problems in that it would force students in particular tutorial groups to work together whereas the ability to choose groups is seen by students as desirable after the first year of study. Secondly, enabling students to collaborate asynchronously online during group work assignments has the potential to overcome difficulties with communication where groups cannot meet face to face.

### **Better assessment practices**

The second greatest number of responses related to assessment and comprised 23 per cent (24) of comments overall. Comments dealt with ways to address the inequities of assessment and argued for a more accurate recording of individual effort so that this was properly acknowledged and rewarded. Students thought that those who had not made an equal contribution should not benefit from the mark achieved by the efforts of others in the group.

Students identified the need to divide tasks so that each person was assessed on their individual effort, and that assessors *should mark relative to each person's input* and another participant thought staff should *find a better way of individually allocating marks*, and that *each group member should be able to assess the other's work effort.*

One student thought that *to break the assignment into parts so that members can be given their own part* would lead to improvements in group work. Students also acknowledged the dilemma in this solution, pointing out that if the group became too divided and

*individualistic*, then members would be overly focused on their own component with the *final product (being) too disjointed*.

**Strategies: Assignment design and assessment.** One strategy to address group work problems would be to design group work assignments so they relied equally on the input of each individual for success (in contrast to disjunctive tasks). This would make it more difficult for free riders to avoid contributing and would make individuals more accountable for the consequences of work avoidance. This may also assist markers in recognising individual group member's efforts and achievements in completing a task for which every member is responsible (Johnson & Johnson, 1991).

### **Increasing arbitration by staff**

Where problems could not be solved by the group, arbitration by staff members was suggested in 15 per cent (16) of the comments. Such 'arbitration' comments referred to greater monitoring of group progress on tasks by academic staff and suggestions that students should seek advice when problems arose. For example: *Advise staff to step in if necessary; talk to staff for assistance; contact the tutor so they are aware of the situation; progress sessions (with a tutor) to check equality of workload; lecturers to intervene if there's a complaint*.

One student focused on increasing group member skills by *instruct[ing] groups on how to share responsibility*. But one student was not sure that relying on outside parties would be helpful: *It's up to us – it's part of group work to solve problems. Academic staff are not interested in solving our problems*. Another student cited the case where: *A teacher refused to give different grades although the work comparisons were obviously varied - they said it was too bad*.

Said another student: *In a work team there is a process of mediation, support and review which doesn't happen at university*; while another student observed: *There is no accountability for group members who do not want to participate*.

**Strategies: Greater arbitration and monitoring.** Group work is one way in which the University of South Australia attempts to prepare students for the demands of teamwork in the wider community. Qualitative comments referred to the significant differences between group work at university and teamwork in the workplace. The absence of a system of accountability for those group members who chose not to make the effort or lack of assistance for groups encountering trouble were seen by some students as deficiencies of the university model.

While suggestions for greater intervention through monitoring and arbitration have merit, it is obvious that this requires more of an academic's time to manage group activity and monitor progress. Given pressures on limited staffing resources, such intervention and arbitration may be difficult to achieve.

Moreover, intervention implies greater structure and control over learning in direct contrast to the tenets of the student-centred learning environment being promoted by the University of South Australia. Ideally, students should be encouraged to take greater responsibility for their learning and group work is one way of providing such opportunities.

It may be reasonable to argue, however, for greater academic intervention in group work in the first year of study followed by a move to the more student-centred model in the years following when group work skills have been sufficiently developed.

### **More effective allocation of students to groups**

The category of 'allocation' contained 11 per cent (12) of comments and referred to forming groups based on part-time and full-time study modes. This was seen as a way of overcoming problems of scheduling common times to meet and that specific tasks should be allocated to individuals within the group, once again presenting the concept of the individual within the group. Comments such as: *Put people together who share similar time constraints & work commitments* and *Put people from same workload together* (e.g. working full-time) or *Put part-time students with other part-time students* were typical of the suggestions students made with regard to allocation of students to groups to bring about greater homogeneity.

### **Allowing choice of group members**

The importance of group composition was supported in 10 per cent (10) of comments suggesting that it would be beneficial for students to have choice about group membership. One student warned *that group members should be chosen carefully* and another advised that academics *should allow students to choose their own group members*. It was recognised however that *this is difficult if you don't know anybody*.

**Strategies: Group membership.** Responses show the importance of students being able to choose their own group members. Presenting choice to students at first year level may not be effective in the early stages of study when students are unlikely to know enough about their colleagues to make informed choices.

However, Williams (1981), cited in Houldsworth and Mathews (2000), claims that giving students the choice of members is an important contributor to group success, arguing that when students have the opportunity to work with their friends, then social loafing is less likely to occur.

### **Making group work optional**

Eight per cent of student responses (8 comments) suggested that group work should be optional: *Give students the option to work individually or in a group* and *Group work should be optional, especially for people working full-time*

### **Restricting group size**

Five per cent of comments (5 comments) suggested that the number of members in a group should be carefully managed because *groups of six are too large* and *effectiveness would increase if groups were kept small*.

Johnson and Johnson (1991) point out that individual accountability can be achieved where groups are kept to a small number; 'the smaller the group the greater individual accountability could be' (p.20). Thus personal responsibility is increased. Furthermore, groups should comprise either two or four individuals and the shorter the amount of time available to complete a task, the smaller the group should be.

## **SUMMARY**

This research has explored and revealed student experiences in formal group work settings. Such insights provide valuable information to educators in constructing, monitoring and assessing group work tasks seen as an essential part of student learning, social development and preparation for life beyond university.

The majority of respondents expressed a positive view of their group work experience and appreciated its value as part of their university learning. Such positive perceptions come from an ability, when faced with tasks, to generate ideas and different views with others.

Forming networks and friendships and to a lesser extent improved learning processes were also recognised. For some students, sharing of workload was a positive aspect.

Despite these positive aspects and perceptions of competence, this research has highlighted student concerns with aspects of formal group work processes and outcomes. The majority of concerns relate to student frustrations associated with perceived unfair assessment practices and the difficulties related to coordinating meeting times with group members.

Feedback from students was sought in order to formulate ideas aimed at correcting negative aspects of group work. Responses suggested a priority should be the consideration of an effective means of assisting groups to meet and communicate. Improved assessment practices, ongoing monitoring of progress, and the structure and composition of groups were other notable themes.

On the basis of this feedback, possible avenues to examine to overcome obstacles include more effective management of group composition and formal timetabling of group meetings. Online collaboration which alleviates the need to meet face to face offers the potential to reduce the problems of coordinating meeting times. In addition, thought needs to be given to the design of assignments and assessment practices in order to reduce the likelihood of work avoidance by some and overload for others. Strategies to assist positive group interdependence and accountability for all members are essential for achievement of fairness and equity in processes and outcomes.

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