# USING GROUP WORK TO IMPROVE GENERIC SKILLS OF MANAGEMENT ACCOUNTING STUDENTS IN PREPARATION FOR THEIR ACCOUNTING CAREERS

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## ABSTRACT

This study examines the views of undergraduate management accounting students on their generic skills that were improved and those that require improvement before and after a group assignment. The study also sought to assess whether an effective leader resulted in positive group outcomes. This paper replicates parts of the paper of Dyball et al. (2007) that focused on the perceptions of students on the usefulness of assessed group work and whether the assessed group work was effective in transferring team skills. Data in this study were collected via questionnaires completed by 218 Management Accounting students enrolled in the course as part of their undergraduate studies in a Bachelor of Business degree at a Victorian university in Australia. The current study finds that group assessments can be used as an alternative to traditional assessments in Management Accounting. Students felt that group assessments were a break from formal tests and reduced their workloads as they share the tasks and could respond with better quality outputs. Students viewed group assessments as enabling them to be challenged, discuss different views and interact better to achieve more positive outcomes. The study also examines methods to improve work and to develop the role of group leaders further to ensure positive group outcomes.

**Keywords:** generic skills of management accounts, group work, accounting careers.

# INTRODUCTION

Recent studies have shown that employers and professional bodies have raised concerns over the role of universities in developing the employability of accounting students, particularly in terms of non-technical skills (Jackling and De Lange, 2009, Tarricone and Luca, 2002, Ballantine and McCourt Larres, 2009, Papadopoulos et al., 2010, Kavanagh and Drennan, 2008). Upon entering the workforce, accounting graduates are found to be well-equipped with technical skills obtained during their undergraduate studies (Gammie and Matson, 2007, Kavanagh and Drennan, 2008). However, emphasis on skills such as leadership, writing, speaking, presenting, debating, interpersonal skills, social skills, time management and critical analysis is lacking (Paisey and Paisey, 2010, Hansen, 2006).

Hansen (2006) states that 'more than 80% of organisations employ multiple types of workplace teams', and employers consider collaboration and teamwork as critical skills. Further globalisation and diverse work teams demand critical interpersonal and social skills (Mumford, 2010, Albrecht and Sack, 2000). A means of transferring team skills to accounting graduates is via group assessments (Ballantine and McCourt Larres, 2009). Studies have shown that teamwork results in several benefits, and a key benefit is the transfer of interpersonal and communication skills (Oakley et al., 2004). Group assessments can assist students in improving their writing, presentation, communication, problem solving skills as a team as well as their people skills and understanding their personal attributes, personal qualities and personal and other people's ethics (Millsand Woodall, 2004). Gammie and Mason (2007) report that academics and practitioners agree that 'developing students' transferable skills is an integral part of accounting education', and the focus should now be on enhancing these skills (Kennedy and Dull, 2008).

Accounting academics have relied on traditional teaching methods and assessments, and have generally viewed group assignments as a form of assessment in preparing accounting graduates (Sashittal et al., 2011). A problem with group assessments is that they require effort in pre-planning and administration. Evaluating group assessments also tend to be fairly subjective and time-consuming in terms of preparation. The academic staff may also be unenthusiastic or untrained to offer group assignments to their students.

This paper replicates parts of the study of Dyball et al. (2007), which focused on the perceptions of students on the usefulness of assessed group work and whether assessed group work has been effective in transferring team skills. The current study also stems from an ALTC competitive grant, *Building course team capacity to enhance graduate employability*, that focused on the perceptions of graduates, employers and academics in relation to teaching, assessment, achievement and employability across a range of discipline areas, including accounting (Oliver et al., 2010).

This study examines the views of undergraduate management accounting students on their generic skills that were improved and require improvement before and after a group assignment. The study also sought to assess whether an effective leader resulted in positive group outcomes.

The second section reviews the literature on group work, generic skills, benefits and problems associated with group work and group leaders. The third section explains the methods of data collection and research methodology. The fourth section discusses the findings and implications of the study. The final section provides the conclusions and recommendations for future studies.

# LITERATURE REVIEW

Several studies show that graduate accounting students in Australia, the UK and the USA do not demonstrate high levels of generic skills, particularly team and communication skills (Naidoo et al., 2011, Gammie and Matson, 2007, Marriott et al., 2011). Employers and professional accounting bodies have raised concerns with universities regarding the inadequate preparation for employment of accounting graduates in terms of the transfer of team skills. In an attempt to address this concern, accounting academics have introduced group assessments, which can enhance student learning and result in the transfer of essential skills such as interpersonal and communication skills (Oakley et al., 2004).

Group work is the process whereby an instructor allocates a task to a group of four to five students to collaborate, address the key issues, write a detailed report and present the completed task to be evaluated by the instructor

(Jassawalla et al., 2009). Caldwell et al. (1996) state that collaboration can be defined as a form of group work based on 'interdependence, accountability, social skills and group processing' to achieve a common goal of mastering a concept, solving a problem or accomplishing an academic task to maximise student learning. Literature tends to use the words 'group work' and 'collaborative learning' synonymously despite being implemented differently. Summers (2010) finds that the act of assigning a task to a group of students, causing them to attempt to accomplish parts of the task individually and then allowing them to merge the parts together to form a report is not collaboration but merely managing the process. In his study, video footage of 53 science university students was used to gain first-hand insight into the actual actions of the group, which he then compared with their perceptions on collaborative learning.

Effective transfer of team benefits can be achieved if group work is well structured and has the following five essential elements (Caldwell et al., 1996, Lancaster and Strand, 2001):

- 1. Positive interdependence Team members have mutual goals and require each other to complete the task.
- 2. Individual accountability No 'free loaders' should be present, and the task must enable team members 'learn something' and not 'do something'. The incentive is for team members to study.
- 3. Face-to-face interaction –Team members should be able to discuss the topics they are learning. They should support, encourage and assist each other to succeed.
- 4. Social skills Team members should develop communication skills, trust and leadership skills. They should manage conflict and acquire decision-making skills.
- 5. Group processing Team members should work effectively in a team, manage the processes to work with the team and evaluate the work and learning of the team.

Studies on cooperative learning environments (sometimes referred to as group work or teamwork) have been classified into five categories, namely, student involvement, group and team processes to produce effective learning, effects of cooperative learning on student performance, examples of cooperative learning, satisfaction of students with the learning process and reviews on literature on cooperative learning (Strand Norman et al., 2004). Several studies focus on student performance, and a few have been directed towards the satisfaction of students with the learning process, which is the subject of this study.

Caldwell et al. (1996) investigate structured learning in two accounting subjects and find that students were more likely to maintain a positive attitude to the subject and perform better in the subject. Dyball et al. (2007) find that students considered group work as a positive experience and as an assistant in developing transferable skills. Lancaster et al. (2001) report no significant difference in attitude or performance when using collaborative learning. Opdecam and Everaert (2012) investigate the levels of satisfaction of students with team learning and their course experience and found higher levels of satisfaction and positive course experience in team learning than in lecture-based learning.

Various benefits accrue from group work. Students gain experience in group dynamics and processes (Dyball et al., 2007, Tempone and Martin, 1999). Students gain experience in the different processes of managing the various tasks in a group assignment, together with leadership issues, conflict management, decision-making and equitable distribution of tasks. Group work can be used to simulate real life scenarios to enable students to gauge the relevance of the assignment in developing work skills (Gammie and Matson, 2007). Other benefits include improving critical and highlevel thinking, attitudes toward the subject, reflection and discussion, comprehension and retention, conceptual understanding, in-depth learning, active learning, working together, student relationship and enthusiasm when students select their own groups (Ciccotello and D'Amico, 1997, Hansen, 2006, Caldwell et al., 1996, Hilton and Phillips, 2010).

Group work can also reduce the work load of both the teaching staff and students. Teaching staff will have fewer but high-quality items to grade, and students can share the tasks, freeing their time to focus on other courses.

A drawback to this assessment is the reduction in mental activity by group members who focus solely on their tasks rather than the entire project (Jassawalla et al., 2009, Hillyard et al., 2010). Group work can help bring a diverse set of students together and aid them in forming new friendships and understanding different cultures, work ethics, capabilities and diverse skills that emerge during the brainstorming for the group task (Carlock, 2012, Cheng and Chen, 2008, Snyder, 2010, Hilton and Phillips, 2010). In contrast, Snyder (2010) states that conflicts in groups are normal, but team members view these conflicts as hostility.

Despite the number of benefits gained from group learning, several problems are associated with this type of assessment. Conflicts arise because of differences in the group members in terms of their viewpoints and their cultural and ethical backgrounds (Dyball et al., 2007;Hillyard et al., 2010; Snyder, 2010; Gammie and Matson, 2007). Another disadvantage is the matter of social loafing or free loaders that occur when some team members do not participate, contribute or interact with the rest of the team or do not contribute the barest minimum to satisfy the team(Jassawalla et al., 2009, Snyder, 2010).

Hillyard et al. (2010) stated that too many group tasks are assigned to students in different subjects, making it difficult for them to manage the many meetings and other processes in each assignment and causing them to lose interest in the assignment. A major problem with group work is the role of the instructor in preparing and presenting the generic team skills necessary for students before attempting the group task (Lancaster and Strand, 2001). Lancaster et al. (2001) find that the teaching staff are not usually trained in presenting generic group work skills and overestimate the methodology. Group work may also not necessarily be successful in all accounting units, and group work is rather time consuming and limits the available time to cover other aspects of the contents of a subject.

The reviewed literature indicates that although problems arise in group learning, the benefits of this type of assessment in transferring important employability skills, especially interpersonal and communication skills far outweigh the problems associated with it. Pressure from employers and professional accounting bodies on academics in developing the employability skills of students, emphasising on leadership skills, verbal and written communication skills, interpersonal skills and social skills has resulted in an attempt to determine a method for transferring all these skills through a single assessment: group work. Group work is all-encompassing and can develop several skills as expounded in the literature review.

This study examines three main research questions (RQ):

*RQ1.* Are the expectations of students formed at the commencement of the group work met at the end of the group work?

*RQ2.* To what extent does group work develop the generic skills of students?

*RQ3.* Does an effective group leader result in more positive group outcomes?

# **RESEARCH METHOD**

# **Research Design and Data Collection**

Data in this study were collected via questionnaires completed by 218 Management Accounting students taking the course as part of their undergraduate studies in a Bachelor of Business degree at a Victorian university in Australia. All students completed a group assessment task based on sustainability as part of their studies in Management Accounting. A presentation by a representative from a leading Australian company that focus sustainability was a feature of the assignment. (Details of the assignment are provided in Appendix A).

Each group consisted of a maximum of four students, and the groups were formed by the instructor to ensure a blend of local and international students.

The research instrument was adopted from prior studies, particularly from the study by Dyball et al. (2007) on the perceptions of accounting students on the benefit of group work in developing transferable graduate skills. The questionnaire consisted of 22 questions and was modified to suit the group of students in the present study. The questionnaire was used to elicit

both qualitative and quantitative responses on group work. (A copy of the questionnaire is attached in Appendix B).

The questionnaire gathered the perceptions of students on working together as a team, views at the beginning and end of the assignment, leadership, skills that were improved as a result of the assignment and generic skills that require further development. Other information gathered included gender, mode of study (full-time or part-time), origin or residence (international or local student) and main language. Three open-ended questions, which were related to what they liked 'best' and 'least' about group work and the ways of improving group work, were also included. The questionnaire was administered by an administrative staff member to maximise the objectivity of student responses and to be consistent with ethical guidelines.

# **Descriptive Statistics**

The 218 usable responses represented a response rate of 91.2%, based on the number of students sitting for the final examination in the unit (239 students). This level of response is acceptable when using the survey method. The sample closely resembled the population of students enrolled in the accounting course at the university.

Table 1 provides details on the background characteristics of the sample. The sample consisted of 116 (53.2%) international students and 88 (40.4%) local students. Most international students (22%) indicated their country of residence as China. A total of 44% of the respondents reported their main language as non-English, compared with 47.7% of the respondents with English as their main language. The sample consisted of more female respondents (55%) than males (39.9%). Most of the respondents were full-time students (90.1%). Details on student demographics are shown in Table 1.

|                                              | Frequency | %    |
|----------------------------------------------|-----------|------|
| Residence                                    |           |      |
| Australia                                    | 88        | 40.4 |
| International                                | 116       | 53.2 |
| Missing                                      | 14        | 6.4  |
| Country of residence- International students |           |      |
| China                                        | 48        | 22.0 |
| India                                        | 1         | 0.5  |
| Korea                                        | 1         | 0.5  |
| Lebanon                                      | 1         | 0.5  |
| Malaysia                                     | 2         | 0.9  |
| Mauritius                                    | 2         | 0.9  |
| Nepal                                        | 1         | 0.5  |
| Pakistan                                     | 2         | 0.9  |
| Sudan                                        | 1         | 0.5  |
| Vietnam                                      | 9         | 4.1  |
| Main language                                |           |      |
| English                                      | 104       | 47.7 |
| Non-English                                  | 96        | 44.0 |
| Respondents ticked both                      | 3         | 1.4  |
| Missing                                      | 15        | 6.9  |
| Gender                                       |           |      |
| Male                                         | 87        | 39.9 |
| Female                                       | 120       | 55.0 |
| Missing                                      | 11        | 5.1  |
| Study Mode                                   |           |      |
| Full-time                                    | 181       | 83.0 |
| Part-time                                    | 23        | 10.6 |
| Missing                                      | 14        | 6.4  |

## Table 1: Descriptive Statistics

# RESULTS

#### Scale 1 Scale 2 Median Mean Knowledgeable about Ignorant about the topic studied 3.83 4.00 the topic studied Confident Lacking in confidence 3.69 4.00 Less flexible in thought 3.00 More flexible in thought 3.56 Independent Dependent 3.77 4.00 Competent 4.00 Incompetent 3.67 Enthusiastic Unenthusiastic 3.38 3.00 Creative Less creative 3.40 3.00

### Table 2: Feelings at the beginning of the project – (Scale 5 to 1) Question 3: 'At the beginning of the group assignment, I felt...'

Table 3: Feelings at the end of the project – (Scale 5 to 1) Question 4: 'At the end of the group assignment, I felt...'

| Scale 1                               | Scale 2                          | Mean | Median |
|---------------------------------------|----------------------------------|------|--------|
| knowledgeable about the topic studied | ignorant about the topic studied | 3.33 | 3.00   |
| confident                             | lacking in confidence            | 3.41 | 3.00   |
| more flexible in thought              | less flexible in thought         | 3.39 | 3.00   |
| independent                           | dependent                        | 3.53 | 4.00   |
| competent                             | incompetent                      | 3.54 | 3.00   |
| enthusiastic                          | unenthusiastic                   | 3.36 | 3.00   |
| creative                              | less creative                    | 3.24 | 3.00   |

|        |                                             |      | Paire | ed Diffe | rences |                          |        |                    |
|--------|---------------------------------------------|------|-------|----------|--------|--------------------------|--------|--------------------|
|        |                                             | Mean | SD    | SEM      |        | CI the<br>rence<br>Upper | t      | Sig.<br>(2-tailed) |
| Pair 1 | Knowledge<br>-knowledge                     | 507  | 1.057 | .073     | 651    | 363                      | -6.939 | .000               |
| Pair 2 | Confident-<br>confident                     | 269  | 1.061 | .074     | 414    | 124                      | -3.660 | .000               |
| Pair 3 | Flexible<br>thought-<br>flexible<br>thought | 170  | .940  | .065     | 299    | 041                      | -2.595 | .010               |
| Pair 4 | Independent-<br>independent                 | 222  | .897  | .062     | 345    | 099                      | -3.564 | .000               |
| Pair 5 | Competent -<br>competent                    | 141  | .811  | .057     | 252    | 029                      | -2.491 | .014               |
| Pair 6 | Enthusiastic -<br>enthusiastic              | 024  | 1.095 | .076     | 174    | .126                     | 317    | .751               |
| Pair 7 | Creative-<br>creative                       | 154  | .904  | .063     | 277    | 030                      | -2.455 | .015               |

Table 4: Paired-samples test of findings in Tables 2 and 3

Tables 2, 3 and 4 address RQ1 and show the results of the expectations of students on group work before and after the group task. Table 2 provides the mean and median before the group assignment, whereas Table 3 provides those after the group assessment. Table 4 shows an improvement in all items after the group assignment compared to those at the start of the group assignment, as indicated in Table 3.Table 4 further provides the paired-samples test on the views of students at the commencement and end of the group assignment, and confirms that these changes are significant with the

exception of the view of students on enthusiasm, which showed a slight improvement from a mean of 3.36 to 3.38.

This exception could be due to the enthusiasm that was built up prior to the announcement of the group assignment as this instance was the first time that students in Management Accounting had a group assessment that contributed to their final grades. A presentation by the Student Learning Unit on generic group skills (Synder, 2010), study supports the use of pre-group instruction to improve group work) was delivered to the students during their lecture, which would have further enhanced their enthusiasm. The slight change in enthusiasm could be attributed to the group assignment not being as 'easy' as the students perceived.

Several comments by the students indicate a strong positive experience:

- 1. Everyone completed their work on time and was keen to help out the team leader with anything extra.
- 2. Get to work with different people from different backgrounds and different ideas
- 3. Getting to know other people and understanding the real world of business
- 4. Getting to know others and sharing opinions
- 5. Improve research skills
- 6. Socialising with group members
- 7. Takes weight of the exam
- 8. The topic about environment was most positive because we love the environment. So, the topic is good.

Hansen (2006) stated that several researchers support these positive experiences, such as the development of interpersonal skills, social time management, motivation, high-level thinking and reduced workload, among other experiences.

On the other hand, the following negative comments were received:

1. Being in a team I didn't choose meant that I was in a team of people who did not understand me well enough and who were not on the same

academic level as I. Therefore, I had to do more work but would not receive a better mark than them.

- 2. Could not understand the international students I was paired with
- 3. Lack of task planning and time management
- 4. Members is not showing up, little contribution, poor time management. Had to chase them all the time
- 5. The fact that I found one of the group members extremely lazy

Negative comments were received on the pairing students with international and non-English speaking students because the group was formed by the teacher and the questions and companies were allocated by the teacher. Table 1 show that 53.2% of the students were international students and that 44% had a non-English main language, which support the negative comments from students in this regard.

A significant improvement in the views of students on being more knowledgeable about the topic studied was observed, which is in accordance with the results obtained Dyball et al. (2007) who find that the students felt the greatest improvement on knowledge on the topic after the project. The current group assignment required students to research a real company on environmental management accounting, an area that is topical and current. The lack of knowledge by students in this area and the extensive research undertaken (ranked the highest in Table 5 on improved skills) resulted in students feeling more knowledgeable.

This observation is further supported by the comments of students on knowledge:

- 1. I found the topic to be current and relevant.
- 2. Putting our knowledge together to create a better response
- 3. Research/analyse/discuss problems
- 4. Researching as a team and working in a group
- 5. Search the information and exchange ideas
- 6. The topics and questions chosen are very much related to units studied such as sustainability
- 7. Working with responsible people and improving knowledge

### Improvement and Identification of Generic Skills

|                                              | Mean | Median |
|----------------------------------------------|------|--------|
| Problem solving (11a)                        | 3.33 | 3.00   |
| Researching (11b)                            | 3.29 | 3.00   |
| Analysis of data (11c)                       | 3.33 | 3.00   |
| Presenting information in written form (11d) | 3.40 | 3.00   |
| Oral presentation (11e)                      | 3.12 | 3.00   |
| Working with others in a group (11f)         | 3.32 | 3.00   |
| Action planning and organising (11g)         | 3.30 | 3.00   |
| Time management (11h)                        | 3.42 | 3.00   |

Table 5: Because of the work I did in the group assignment, I have improved my skills in the following areas – (Scale 5 to 1) - Question 11

#### Table 6: Because of the work I did in the group assignment, I have identified the following areas requiring further improvement – (Scale 5 to 1) - Question 12

|                                              | Mean | Median |
|----------------------------------------------|------|--------|
| Problem solving (10a)                        | 3.32 | 3.00   |
| Researching (10b)                            | 3.64 | 4.00   |
| Analysis of data (10c)                       | 3.47 | 4.00   |
| Presenting information in written form (10d) | 3.41 | 3.50   |
| Oral presentation (10e)                      | 2.80 | 3.00   |
| Working with others in a group (10f)         | 3.38 | 3.00   |
| Action planning and organising (10g)         | 3.44 | 3.50   |
| Time management (10h)                        | 3.43 | 3.00   |

Tables 5 and 6 answer RQ2 with regard to the extent that group work developed the generic skills of students. Table 5 shows that the greatest skill improvement was in researching (mean = 3.64), followed by analysis of data (mean = 3.47), action planning and organising and time management. These results differ from those of Dyball et al. (2007), who indicated that working with others was the greatest skill that students improved on. A possible reason for the perceived improvement by students on their skills in researching, analysis of data and action planning and organising is the nature of the assignment question that demanded extensive research and the analysis of a considerable amount of available data.

# **Skills That Require Improvement**

In Table 6, students have identified that time management skills and the skill of presenting information in written form required the most improvement. The least important skill that required improvement was oral presentation, which is consistent with the group assignment question as an oral presentation was not required. These results are different from those of Dyball et al. (2007), who indicated that students needed to develop in all skills. In Table 7, a correlation analysis was conducted to examine the correlation between the improved skills of students (Question 11) and the skills that required development (Question 12).

 Table 7: Correlation matrix for question 11 (skills developed)

 and question 12 (skills identified as requiring development)

|      | 12a.   | 12b.   | 12c.   | 12d.   | 12e.   | 12f.   | 12.g   | 12h.   |
|------|--------|--------|--------|--------|--------|--------|--------|--------|
| 11a. | 0.553* |        |        |        |        |        |        |        |
| 11b. |        | 0.401* |        |        |        |        |        |        |
| 11c. |        |        | 0.437* |        |        |        |        |        |
| 11d. |        |        |        | 0.385* |        |        |        |        |
| 11e. |        |        |        |        | 0.404* |        |        |        |
| 11f. |        |        |        |        |        | 0.325* |        |        |
| 11g. |        |        |        |        |        |        | 0.325* |        |
| 11h. |        |        |        |        |        |        |        | 0.338* |

\* Correlation is significant at the 0.01 level (two-tailed)

The result indicates significant positive correlations between improved skills and those that required improvement.

Students agree that they improved their skills in working with others in a group (mean = 3.38). In working with each other in a group, the formation of the group and group dynamics are important. Even though Hilton et al.(2010) found that student who selected groups did not indicate any differences in the grades of the groups, several benefits were seen in allowing the students to select their own groups, including similar feelings of ease, comfort and trust, quicker project start, greater participation and shared work. Hilton et al. (2010) further stated that group experience affects positively on subsequent performance in individual tasks.

Group dynamics and the management of teams are important in developing team skills (Pieterse and Thompson, 2010). Pieterse et al. (2010) mention that social loafing occurs because weaker students are grouped with students of significantly higher abilities; and hence, weaker students are unprepared to manage the team tasks or work in a team. They suggest pre-training in group skills, which was part of the process in this study.

Student-selected groups, which are heterogeneous, especially with respect to the abilities of students, are more effective in student learning and the development of skills than instructor-selected groups(van der Laan Smith and Spindle, 2007). A group-writing method of instruction should be used to ensure that students can produce better quality report and can use writing time more efficiently(Winter and Neal, 1995). Teaching group-writing skills will help reduce group conflicts.

Kavanaugh and Drennan (2008) stated that students are motivated if they perceive that the acquired skills are relevant to their careers. Although employers and students believe certain skills are important, they rank them differently. For example, both believe that oral skills are important, but academic courses emphasise written skills.

As to the qualitative data, the following positive comments were received from students with regard to their skills development:

- 1. Advancing my writing skills.
- 2. Communication with other members. Working with other members of the group.
- 3. Discussions and meetings. Problem solving.
- 4. Improve research skills.
- 5. Made me get into research earlier than I might have if I had to work independently.
- 6. Putting our knowledge together to create a better response.
- 7. Problem-solving between members.
- 8. To do our individual work and then put them together with \*\* communication.
- 9. Wider range of skills than those of my own. Many resources were needed to complete the task.

The following negative comments were received regarding the conflict of the groups that resulted in students not being able to improve their skills:

- 1. Could not understand the international students I was paired with.
- 2. Communication problems.
- 3. Difficulty in finding relevant information to answer questions.
- 4. Even though everyone was given work, there was a lot of confusion, and no one completed their bit on time.
- 5. Help each other to solve the problems.
- 6. I did not like the one guy in our group who would not do the research even though we gave him the dot points on what he had to write on.
- 7. Improve my knowledge by reading, researching and communicating more.
- 9. More conflict of ideas between team members.
- 10. Research was hard to find at times.
- 11. Some members were unorganised, and less commitment was given than others.
- 12. The amount of theory and research involved. Researching two companies instead of one.
- 13. The group allocation –it is better to pick names at random instead of allocating based on the order of the last names...The tutor assigned group members, not us.
- 14. The whole assignment in teams was a waste of time.
- 15. Working in a team with people who did not have adequate communication skills (written or spoken).

These comments indicate that despite some students managing to develop and identify group skills, others found the problems associated with group work to be overwhelming, and improvements in these skills were impeded by conflict within the groups because of communication issues, social loafing and the mixture of groups with international non-English speaking students.

### **Effective Leadership and Positive Outcomes**

# Table 8: Influence of Leader (as identified in question 7)on the Results for Questions 5, 6, 8 and 14

### **Group Statistics**

|                                                             | 7. Leaders    | N   | Mean | Std.<br>Deviation | Std.<br>Error<br>Mean |
|-------------------------------------------------------------|---------------|-----|------|-------------------|-----------------------|
| 5. The group worked together as a team                      | Not effective | 42  | 2.21 | 0.976             | 0.151                 |
|                                                             | Effective     | 173 | 3.31 | 0.980             | 0.074                 |
| 6. How did you rate the outcome of group assignments?       | Not effective | 40  | 2.65 | 0.921             | 0.146                 |
|                                                             | Effective     | 174 | 3.30 | 0.717             | 0.054                 |
| 8. How much did you learn about your group members from     | Not effective | 42  | 1.95 | 0.731             | 0.113                 |
| conducting this group activity?                             | Effective     | 174 | 2.65 | 0.789             | 0.060                 |
| 14. To what extent would you like to work in the same group | Not effective | 41  | 1.76 | 0.830             | 0.130                 |
| on another project?                                         | Effective     | 165 | 2.56 | 0.879             | 0.068                 |

| Independent Samples Test                                    | Ŀ         |                                                  |                              |             |                    |                    |                              |                                                                |                                    |     |
|-------------------------------------------------------------|-----------|--------------------------------------------------|------------------------------|-------------|--------------------|--------------------|------------------------------|----------------------------------------------------------------|------------------------------------|-----|
|                                                             |           | Levine's<br>Test for<br>Equality of<br>Variances | ie's<br>for<br>ty of<br>ices |             |                    | t-test fo          | t-test for Equality of Means | Means                                                          |                                    |     |
|                                                             |           | Sig.                                             | t                            | df          | Sig.<br>(2-tailed) | Mean<br>Difference | Std. Error<br>Difference     | 95% Confidence<br>Interval of the<br>Difference<br>Lower Upper | fidence<br>of the<br>ence<br>Upper |     |
| 5. The group worked                                         | Var<br>eq | .419                                             | .518                         | .518 -6.518 | 213                | 000                | -1.098                       | .168                                                           | -1.430                             | 766 |
| together as a team                                          | Var<br>ne |                                                  |                              | -6.533      | 62.618             | 000                | -1.098                       | .168                                                           | -1.434                             | 762 |
| 6. How did you rate                                         | Var<br>eq | 5.048                                            | .026                         | -4.922      | 212                | 000                | 655                          | .133                                                           | 917                                | 392 |
| assignments?                                                | Var<br>ne |                                                  |                              | -4.211      | 50.386             | 000                | 655                          | .155                                                           | 967                                | 342 |
| <ol> <li>How much did you learn about your group</li> </ol> | Var<br>eq | 2.602                                            | .108                         | -5.212      | 214                | 000                | 697                          | .134                                                           | 961                                | 433 |
| members from conducting<br>this group activity?             | Var<br>ne |                                                  |                              | -5.460      | 66.048             | 000                | 697                          | .128                                                           | 952                                | 442 |
| 14. To what extent would you like to work in the            | Var<br>eq | .022                                             | .882                         | -5.282      | 204                | 000                | 801                          | .152                                                           | -1.101                             | 502 |
| same group on another<br>project?                           | Var<br>ne |                                                  |                              | -5.468      | 64.179             | 000                | 801                          | .147                                                           | -1.094                             | 509 |

Table 9: T-tests for Non-significant Differences

Tables 8 and 9 answer RQ3 on whether having an effective leader resulted in more positive outcomes. Table 8 shows the differences between groups with an effective leader and groups with an ineffective leader. Table 9 presents the results of the t-tests for the same data as in those in Tables 8 and 9. The results show significant differences for all questions regarding leadership. Students with an effective team leader perceived the group as working well (mean = 3.31, t-value = 6.518; DF=213;p<0.05) compared to those with a leader who was perceived to be ineffective (mean = 2.21). When asked as to the extent to which they would work with the same group on another project, students with an effective leader indicated they probably would work with the same group, whereas those without an effective leader indicated that they were not so keen to work with the same group again.

Electing a leader was mandatory for the assigned task. The group leader was responsible for overall coordination of the assignment and submission of the final report. Several positive comments were received in this regard:

- 1. A great leader can help me to understand what we are doing and how we can work out the problem.
- 2. Being the team leader.
- 3. Everyone completed their work on time and was keen on helping the team leader with anything extra.
- 4. I liked how there was a leader for every group. I also liked how the groups were chosen by the tutor.
- 5. I was the leader, and I feel that if I was not the leader, then the task would not have probably been completed.
- 6. Like the leader good monitor.
- 7. Meeting new people. Leader organising and following up on other group members.
- 8. The team leader was organised and helpful.

Only two negative comments were observed on group leaders:

- 1. Most of the work was left to me because our group leader did nothing!
- 2. The leader ruled the group. He/she did not collaborate.

The lack of negative comments and statistical data both support RQ3, which states that an effective group leader results in positive outcomes.

The assessment must make a group leader, whether teacher-assigned or group-assigned, mandatory to ensure positive outcomes. A leader has an important role to play in any team and can ensure more positive outcomes, especially when a leader is involved in directing, coaching, supporting and delegating tasks (Carlock, 2012).

The group performs better when leaders of groups are incentivised (Ferrante et al., 2006). Ferrante et al. (2006) report that incentivised leaders can minimise dysfunctional teamwork, help reduce social loafing (team members not contributing to the team) and take responsibility for the group project. Team members are motivated to participate actively and view their inclusion and the fairness of their leader as incentives to perform.

# **CONCLUSIONS AND FUTURE DIRECTIONS**

This study explored the views of students before and after a group assignment, their perceptions on generic skills that were improved and required improvement and whether an effective leader resulted in positive group outcomes in a second-year undergraduate management accounting unit of study.

Ensuring that the staff are trained and that students receive the necessary generic group skills before the project are important to making certain that group work results in positive outcomes (Lancaster and Strand, 2001). Hillyard (2010) further believes this step should be a campus-wide initiative or departmental effort. The student learning unit delivered a presentation on generic group skills because this instance was the first time students in Management Accounting conducted a group assignment.

This presentation as well as one less test to study for had created a sense of enthusiasm in the students. However, because of the problems experienced during the assignment, this enthusiasm was short lived. Therefore, it is recommended that when generic skills are presented to students, emphasis should be placed on problems or conflicts that may arise during the group work, such as social loafers, lack of cooperation, communication problems, language and cultural differences and differences in ideas and opinions.

Students felt more knowledgeable on the topic after the project. This finding corresponds to the improvement of their research skills. The topic on environmental management accounting is a current and actual topic that required substantial research and reading. Students were able to relate this topic to their careers, and hence they were motivated to complete a quality assignment. The guest speaker from the industry further convinced the students of the relevance of the topic. The following can be learned from these occurrences: the topic given to students must be real, current and relevant to their future careers.

A skill that students perceived to have improved is their research skills. This skill required students to access the website and financial statements of the company, gather and analyse data, and then communicate the information in a written report. Several skills are developed in the research process, and writing skills are the key to generating a quality report. The assignment did not include an oral component because of insufficient time to assess this type of test; the marks allocated to this type of assessment could not justify its inclusion. Hence, reduction of future assignment tasks or topics covered in the assignment is suggested as well as an increase in the mark component to enable oral presentations to be included.

The results also indicate that an effective team leader yields more positive outcomes. Although leaders were appointed by the group, they were not effective because they did not have the necessary skills. In future assignments, leaders should also receive special support from the learning support unit. This suggestion will equip them to better lead a team.

This study has shown that group assessments can be used as an alternative to traditional assessments in Management Accounting. Students view group assessments as a break from formal tests that reduce their workloads as they share the tasks and are able to respond with better quality outputs. They feel that group assessments enable them to be challenged, discuss different views and interact better to achieve more positive outcomes.

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# **APPENDIX 1**

The purpose of this survey is to provide information about the effectiveness of the learning experience of the group activities in BAO2204 'Management Accounting' in developing effective team skills. All information will be treated as strictly confidential, and your answers to these questions will be seriously considered in planning improvements for this unit.

#### QUESTION 1. Please indicate your tutorial number, day and time: \_

# QUESTION 2. For each of the statements below please indicate your views about working <u>together</u> as a team on the group assignment:

(For each item, please tick <u>one</u> box on the scale below)



### QUESTION 3. At the beginning of the group assignment, I felt...

(For each item, please tick one box on the scale below that best represents your views)



| Less flexible in thought |  |  | More flexible in thought |
|--------------------------|--|--|--------------------------|
| Dependent                |  |  | Independent              |
| Incompetent              |  |  | Competent                |
| Unenthusiastic           |  |  | Enthusiastic             |
| Less creative            |  |  | More creative            |

**QUESTION 4.** At the end of the group assignment, I felt... (For each item, please tick one box on the scale below that best represents your views)

| Ignorant about the topic studied |  |  | Knowledgeable about the topic studied |
|----------------------------------|--|--|---------------------------------------|
| Lacking in confidence            |  |  | Confident                             |
| Less flexible in thought         |  |  | More flexible in thought              |
| Dependent                        |  |  | Independent                           |
| Incompetent                      |  |  | Competent                             |
| Unenthusiastic                   |  |  | Enthusiastic                          |
| Less creative                    |  |  | More creative                         |

**QUESTION 5. The group worked together...** (Please tick one box on the scale below that best represents your views).

| Poorly                                                                                                                                                                                    | Not too well                                                        | Satisfactorily | Well        | Very well          |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------|-------------|--------------------|--|--|--|--|--|
|                                                                                                                                                                                           |                                                                     |                |             |                    |  |  |  |  |  |
| -                                                                                                                                                                                         | 5. How did you rate<br>e box on the scale b                         |                | 0 1 0       |                    |  |  |  |  |  |
| Very poorly                                                                                                                                                                               | Poorly                                                              | Satisfactorily | Highly      | Very highly        |  |  |  |  |  |
|                                                                                                                                                                                           |                                                                     |                |             |                    |  |  |  |  |  |
| group assignm                                                                                                                                                                             | 7. Looking back, ho<br>nent?<br>e box scale below th                |                |             | ted leader for the |  |  |  |  |  |
| Not et                                                                                                                                                                                    | fective                                                             | Effective      |             |                    |  |  |  |  |  |
|                                                                                                                                                                                           |                                                                     |                |             |                    |  |  |  |  |  |
| QUESTION 8. How much did you learn about yourself regarding your team skills in conducting this group activity? (Please tick one box on the scale below that best represents your views). |                                                                     |                |             |                    |  |  |  |  |  |
| Hardly anythin                                                                                                                                                                            | g A lit                                                             | tle A t        | fair amount | A great deal       |  |  |  |  |  |
|                                                                                                                                                                                           |                                                                     | ]              |             |                    |  |  |  |  |  |
| this group act                                                                                                                                                                            | <b>D. How much did yo</b><br><b>ivity?</b><br>e box on the scale be |                |             | _                  |  |  |  |  |  |

| Hardly anything | A little | A fair amount | A great deal |
|-----------------|----------|---------------|--------------|
|                 |          |               |              |

# QUESTION 10. Please use the scale to indicate the extent to which you disagree or agree with the following statements:

|                                                                                     | Strongly<br>Disagree |  | Strongly<br>Agree |
|-------------------------------------------------------------------------------------|----------------------|--|-------------------|
| The group assignment developed my problem solving skills.                           |                      |  |                   |
| The group assignment sharpened my analytical skills.                                |                      |  |                   |
| The group assignment helped me develop my ability to work as a team member.         |                      |  |                   |
| As a result of the group assignment, I feel confident tackling unfamiliar problems. |                      |  |                   |
| The group assignment improved my written communication skills.                      |                      |  |                   |
| My group assignment helped me to develop the ability to plan my own work.           |                      |  |                   |

# QUESTION 11. Because of the work I did in the group assignment, I have improved my skills in the following areas:

(Please use the scale to indicate the extent to which you disagree or agree)

|                                        | Strongly<br>Disagree |  |  |  | Strongly<br>Agree |  |
|----------------------------------------|----------------------|--|--|--|-------------------|--|
| Problem solving                        |                      |  |  |  |                   |  |
| Researching                            |                      |  |  |  |                   |  |
| Analysis of data                       |                      |  |  |  |                   |  |
| Presenting information in written form |                      |  |  |  |                   |  |
| Oral presentation                      |                      |  |  |  |                   |  |
| Working with others in a group         |                      |  |  |  |                   |  |
| Action planning and organising         |                      |  |  |  |                   |  |
| Time management                        |                      |  |  |  |                   |  |
| 136                                    |                      |  |  |  |                   |  |

# QUESTION 12. Because of the work I did in the group assignment, I have identified skills that I need to develop further in the following areas:

(Please use the scale to indicate the extent to which you disagree or agree):

|                                        | Strongly<br>Disagree |  | Strongly<br>Agree |
|----------------------------------------|----------------------|--|-------------------|
| Problem solving                        |                      |  |                   |
| Researching                            |                      |  |                   |
| Analysis of data                       |                      |  |                   |
| Presenting information in written form |                      |  |                   |
| Oral presentation                      |                      |  |                   |
| Working with others in a group         |                      |  |                   |
| Action planning and organising         |                      |  |                   |
| Time management                        |                      |  |                   |

QUESTION 13. In your opinion, if your group will conduct this group assignment again, in what ways do you think your group could do it differently?

(Please rank in order from 1 to 5, where 1 = most important and 5 = least important)

| More planning                                 |
|-----------------------------------------------|
| Better time management                        |
| Investigate the theory further                |
| Better division of labour among group members |
| More group meetings                           |

# QUESTION 14. To what extent would you like to work in the same group on another project?

(Please tick one box on the scale below that best represents your views).

| Not at all     | A little                | A fair amount          | Very much indeed |
|----------------|-------------------------|------------------------|------------------|
| QUESTION 15. V | Vhat did you like best  | about the group assign | nment?           |
|                |                         |                        |                  |
|                |                         |                        |                  |
| QUESTION 16. V | Vhat did you like least | about the group assig  | nment?           |
|                |                         |                        |                  |
| QUESTION 17. I | n your opinion, how co  | ould the group project | be improved?     |
|                |                         |                        |                  |

#### Using Group Work to Improve Generic Skills

| QUESTION 18. Are you male or female?                                      | Male      | Female                            |  |
|---------------------------------------------------------------------------|-----------|-----------------------------------|--|
| QUESTION 19. What is your Australian postcode?                            |           |                                   |  |
| QUESTION 20. What is your current university enrolment load?              | Full time | Part time                         |  |
| QUESTION 21. Are you an international student?                            | Yes       | No                                |  |
| If yes, what is your country of permanent residence?                      |           | <br>                              |  |
| QUESTION 22. What is the main language you speak at your current address? | English   | Language<br>other than<br>English |  |

Thank you for completing the survey.