



Peer-Assisted Learning in Accounting

A Qualitative Assessment

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The research is financed by a Learning Excellence and Development (LEAD) grant from the Division of Economics and Financial Studies, Macquarie University, Australia.

Abstract

Since 2003, Macquarie University has operated a peer-assisted learning (PAL) program in several accounting units. This paper presents the results of a qualitative assessment of that program. The data were collected via a series of focus groups with student participants and student leaders involved in the peer-assisted learning program. The focus group discussions were transcribed and analysed. The results suggest that peer-assisted learning at Macquarie generates significant academic and non-academic benefits for all those involved. The analysis did, however, reveal a number of ways in which the program could be improved. Two areas stand out in this respect: first, it is essential that the program is suitably supervised by relevant academic staff. Second, the quality of the training given to PAL leaders is crucially important.

Keywords: Peer-assisted learning, Qualitative analysis, Focus groups

1. Introduction

The peer-assisted approach to student learning has been adopted by many institutes of higher education worldwide. It is utilised to facilitate learning in various fields, including economics, accounting, bioscience, law, vocational learning and medical education (Tariq, 2005; O'Donnell, 2004; Howman, Bertfield & Needleman, 2002; Sullivan, 2002; Evans et al., 2001; Coe et al., 1999; Playford, Miller & Kelly, 1999; Topping et al., 1997). In countries such as the UK and the USA, peer-assisted learning is a popular method of assisting students with subjects such as mathematics and chemistry (Atkins, May & Marks-Maran, 2005).

In Australia, universities are providing greater support and resources to peer-assisted learning (hereafter PAL) programs as a means of coping with the increased pressures on undergraduate teaching that have arisen over the past twenty years. According to O' Donnell (2004), these pressures stem from factors such as higher enrolments, increased numbers of international students and reduced government funding. Several Australian universities, including the universities of Queensland, Southern Queensland, Wollongong and Tasmania, now have established PAL programs. At Macquarie University in Sydney, PAL has been used in a number of accounting and economics units over the past several years.

So what is PAL? According to one author, "Peer learning can be defined as the acquisition of knowledge and skill through active helping and supporting among status equals or matched companions. It involves people from similar social groupings who are not professional teachers helping each other to learn and learning themselves by so doing" (Topping, 2005, p.631).

The 'peers' who direct PAL sessions are students who have successfully completed the subject in the recent past. They have received training in non-directive leadership skills, and understand that their role is to facilitate learning, rather than to act as surrogate lecturers or tutors. Their role is not to re-teach the material covered in lectures and tutorials. The emphasis in PAL is on **how** to go about studying a particular subject. The emphasis is on thinking, reasoning, analysing, organising and problem solving (Congos & Schoeps, 1993, pp.2-3).

So while PAL does aim to help students improve their results and to 'pass the exam', the emphasis goes beyond this. O'Donnell puts it thus: "PAL programs also focus on developing a set of transferable capacities which then assist in improving grades in the targeted course and elsewhere. These competencies include independent learning, deeper learning, general problem solving, researching information, critical thinking and other generic skills" (O'Donnell, 2004, p.10).

In line with this, there is typically no prescribed content for a PAL session. Students bring along the things that they are interested in understanding. PAL leaders are meant to encourage students to formulate questions out of the things that they find confusing or unclear; this is what is meant by non-directive leadership. When a specific question has been formed, those in attendance are asked to help construct an answer. PAL leaders attempt to stimulate interaction, to use group work, and to develop problem-solving activities (Congos & Schoeps, 1993, pp.2-3).

Of course, for PAL to succeed it is necessary for academic staff to monitor the program. Indeed, Topping (2005) argues that the effectiveness of PAL often depends on whether the program is organised and implemented well. A key issue here is maintaining the right balance between the legitimate aspirations of students to pass the exam, and the broader pedagogic aims of PAL; a point that is made by O'Donnell (2004, p.10) in his assessment of the Macquarie experience. As will be seen in Section 6, this is also an important point to emerge from the research reported here. This paper contributes to the ongoing monitoring of PAL by undertaking a qualitative examination of the experience of PAL at Macquarie University.

The rest of the paper is structured as follows. The next section of the paper reviews the relevant literature. In Section 3 the operation of PAL at Macquarie University is described. In Section 4 the specific objectives of this study, and the methodology employed, are discussed. In Section 5 the qualitative feedback obtained from the focus groups is outlined and discussed. In Section 6 the implications of the analysis for learning and teaching at Macquarie University are examined. Section 7 offers some concluding comments.

2. Literature review

2.1 Academic benefits of PAL

Research suggests that PAL programs can produce significant academic and non-academic benefits for students and PAL leaders (Ginsburg-Block, Rohrberk & Fantuzzo, 2006; Tariq, 2005; Atkins et al., 2005; Playford et al., 1999). The University of Queensland, for example, reports having had success with peer assisted study (PASS) programs in science, economics and business subjects (Playford et al., 1999). The researchers found that students who attended PASS tutorials in a first year science subject were 87.9% more likely to obtain a grade of credit to high distinction. Their study also revealed that PASS students perceived the group study sessions as being more effective than isolated study (Playford et al., 1999).

Playford et al.'s study also provided evidence that PASS fostered a deeper understanding of the subject matter. Facilitating deep learning strategies is optimal as it enables the students to develop a superior understanding of the subject and its interconnections with associated topics (Biggs, 1993; Atherton, 2005). Peer-assisted type tutorials may achieve this by encouraging students to become more active and independent in their learning. In addition, at Macquarie University for example, the PAL program tends to focus on the most significant and important areas, relate previous knowledge to new knowledge, link theoretical ideas to everyday situations and experiences, as well as organise and structure the PAL tutorial content into a sensibly complete concept. Such methods have been theorised and defined as "deep learning" approaches (Marton & Säljö, 1976; Ramsden, 1992; Biggs, 1993).

A more recent study by Atkins et al. (2005) examined the success of a PAL-based mathematics aid program at Kingston University in the UK. The program aims to facilitate learning and understanding among undergraduate students taking a mathematics or statistics subject. The study involved interviews with students who had attended the program. Students reported that overall the program helped them to obtain higher marks in their assessments as well as a greater in-depth understanding of mathematics topics.

A study by Finlay and Faulkner (2005) also demonstrated the academic benefits of PAL in a less-structured environment. They developed several reading groups for a third year Exercises and Sports Science subject and for a Masters level Media Studies subject. Each group comprised 3-5 students. The main aims of this project were to a) encourage students to engage with a broader range of literature, b) promote critical thinking around issues specifically related to their subject area and c) to facilitate active learning through "peer-learning" and shared understandings. A survey of the students who engaged in the reading groups revealed generally positive experiences. The students expressed the view that they had gained greater critical insight and thus deeper understanding of their subject areas, as well as time management skills.

Overall, these findings suggest that PAL programs can foster significant academic progress with regards to improved grades and greater understanding of the material at hand. It would appear that students who attend PAL also have the opportunity to develop valuable skills such as deep learning strategies, critical thinking, time management and

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communication skills.

2.2 The PAL tutorial – an ideal learning environment?

The unique setting in which PAL is delivered may be a significant factor contributing to the beneficial outcomes it produces. The setting for PAL aims to be a more relaxed one than that of a formal lecture or tutorial. For students, it would appear that this stress-free and peer friendly learning environment is one of its major attractions. A recent study by Tariq (2005) surveyed 114 undergraduate bioscience students at the University of Central Lancashire in the UK. The study revealed that the majority of students found PAL to be an extremely valuable experience, with 85% stating that they enjoyed the comfortable and less formal environment of the PAL session. The students perceived that this relaxed atmosphere allowed greater freedom to ask questions than in staff-led tutorials, and this further assisted them in developing a deeper understanding of the topics being covered. The study also found that students valued the opportunity to discuss ideas and questions with students and peers who had the same level of understanding. They were pleased as well when examples of exam questions were provided as this gave them an indication of what to expect at exam time (Tariq, 2005).

Similar findings were established by Finlay and Faulkner (2005), who found that the main benefit reported by students who engaged in a peer-learning reading group was the "space" the group provided to share their ideas, knowledge and theories with one another. According to Boud, Cohen and Sampson (1999), this uniquely relaxed environment facilitates one of the most important aspects of PAL, that is, reflection and examination of the subject with peers, and the development of expressive and receptive communication skills.

The environment that PAL intends to achieve is one in which students are encouraged to engage in an active learning process involving discussions and interactions. The availability of such learning opportunities is particularly important when compared to the less engaging and passive learning environments that commonly exist in lectures and tutorials, which may in turn be directly attributed to the ever-increasing numbers of students enrolling in university.

2.3 Additional benefits of PAL

While it appears that PAL can help students achieve significant academic gains, there are also beneficial non-academic outcomes to attending such programs. These outcomes include social development, self-concept and positive changes in attitude (Ginsburg-Block, Fantuzzo & Rohrbeck, 2006; Fantuzzo & Ginsburg-Block, 1998). This is important when we consider findings from research studies that have shown that links exist between academic achievement and factors such as self-esteem, self-concept, friendship and social skills (Eccles, Roeser, Wigfield & Freedman-Doan, 1999; Parker, Rubin, Price & DeRosier, 1995). A recent meta-analysis examining the socio-emotional outcomes of PAL interventions with elementary school students found that such programs can result in positive social, self-concept and behavioural outcomes. Furthermore, significant positive associations were established between these social and self-concept outcomes and students' academic achievement (Ginsburg-Block et al., 2006).

Similar findings were established in Tariq's (2005) study examining feedback on PAL from 112 bioscience undergraduates. The study found that the majority of students not only reported PAL to be a valuable and positive learning experience (80%), but that many students also found the experience to be confidence building (69%). By the end of the program, 74% of the students felt more confident, and 82% felt more knowledgeable in regards to their numerical and problem-solving abilities (Tariq, 2005).

PAL programs may also be helpful in areas such as social integration at university. They provide an environment for students not only to discuss academic issues but to forge friendships with classmates and peers that may become long-standing and important relationships throughout life. As mentioned earlier, such factors can have significant effects on academic achievement. For international students, PAL may provide an important opportunity not only to make friends but perhaps to integrate more readily into Australian society, and share their experience with students who have previously, or are currently, undergoing the same changes and similar process.

2.4 Benefits to PAL leaders

Typically, leaders are paid to run the PAL sessions and attend weekly lectures in the subjects they are tutoring. The leaders undergo training sessions by the PAL co-ordinators regarding how to organise, open and lead sessions, as well as managing class assignments, tasks and group discussions (Playford et al., 1999; Tariq, 2005). Some studies have found that leaders also benefit greatly from the experience, for instance the sessions can provide an opportunity for them to develop an even greater understanding of the material they are tutoring. Furthermore, there is an opportunity for the leader to develop various skills such as leading a group, organising materials and sessions, time management, teamwork, monitoring student's progress, communicating and public speaking (Playford et al., 1999). Studies have also found that PAL can have positive effects by increasing the self-esteem and self-confidence of the leaders (Howman et al., 2002; Saunders & Gibbon, 1998).

3. PAL at Macquarie University

At Macquarie University, PAL has been used in the following accounting units since 2003 - ACCG105 Introductory

Financial Accounting; ACCG200 Fundamentals of Management Accounting; ACCG201 Organisational Planning and Control; ACCG251 Accounting and Information Systems; and ACCG253 Financial Management. These are all large first and second year units and can have very high failure rates. For each of these units, there are numerous PAL sessions which run at different times throughout the day and evening. Prior to the commencement of the academic year, new PAL leaders attend a two-day training course. The course is run by the Resource and Information Centre, located within the Division of Economic and Financial Studies. On the first day of the course students are trained and advised on the essential components of the program and cover topics such as: the role of the PAL leader; the PAL leader and the student; how to open, lead and close a session; and how to ensure good communication skills and provide feedback to students. The training also involves learning how to prepare and run group activities and quizzes for students, as well as how to answer questions and assist them in their preparation for exams. During this training workshop, the new leaders are also required to prepare a simple mock session. On the second day of training, experienced leaders also attend to give feedback on the new leaders' mock sessions and provide insight into aspects of being a leader, as well as to remind them of some of the basic PAL rules and responsibilities. At Macquarie University, the major responsibilities of the PAL leader include: attending pre-semester leader training session; attending leader meetings; attending at least 50% of the unit lectures; leading at least two sessions per week; being on time and prepared for each session; and maintaining student attendance rolls.

4. Objectives of this study and methodology

Since its introduction in 2003, PAL has grown in popularity at Macquarie, particularly among international students. The literature reviewed in section 2 of this paper would suggest that PAL is associated with positive outcomes for both students and leaders. There has been to date one serious attempt to provide a quantitative and qualitative assessment of PAL at Macquarie, presented by O'Donnell (2004). The current paper attempts to add to this literature, in this case focusing on providing qualitative evidence. Specifically, the paper aims to provide some qualitative evidence regarding the academic and non-academic benefits of the program at Macquarie. Qualitative data was collected via focus group sessions with PAL students and leaders. The transcripts were analysed for themes, feedback and overall ideas with regards to the benefits of the program, its strengths/weaknesses, and where it can be improved.

Three focus group sessions were held with students who had attended PAL in Semester 1 of 2007. Participation was voluntary and students were informed that the aim of the focus group was to gather feedback regarding their experience as well as information to identify the direct and indirect benefits. Overall twelve PAL students participated. The focus group sessions ran for 25 – 40 minutes depending on the size of the group. The first group comprised three students, while the second and third focus group comprised seven and two students respectively. The students were asked the following questions: 1) What do you think are the goals of PAL? 2) How did PAL help you with your learning? 3) Would you recommend that other students come to PAL sessions? Why/Why not? 4) How do you think PAL can be improved?

A separate focus group was also held with several PAL leaders to obtain feedback regarding their experiences and to gain insight into the possible benefits of participating as a leader in the program. The leaders were asked the following questions: 1) What do you think are the goals of PAL? 2) What are your overall thoughts about the usefulness of PAL to students who participate in it, and to you as a PAL leader? 3) Do you feel that the training you received prior to your becoming a PAL leader was adequate? In what ways, if any, could the PAL training be improved? 4) What benefits did you personally gain from your involvement in PAL? 5) How do you think PAL can be improved?

5. Findings from the focus group sessions

5.1 Student focus group sessions

5.1.1 Academic benefits of PAL

Most students made statements that suggested they had an understanding of, and an agreement with, the broad pedagogic aims of PAL. Most students stated that it aims to facilitate learning and a deeper understanding of the subject matter. The following quote is typical of the responses of many students to this question: "I think the PAL is to help the student when learning the difficult subjects and in tutorial and lectures there may not be enough time to ask questions or understand more clearly but PAL can help them to in-depth learning the subject". Students stated that they believed the program aims to clarify their understanding of the topics by providing extra help in addition to the standard lecture and tutorial. The development and practice of problem-solving skills was another benefit perceived by most students in the context of deeper learning: "In the PAL session they give questions and help us to solve the problem and in that way students can learn more and better than in the lecture".

The majority of students stated that PAL helped them to learn mainly by allowing for question time, which is often unachievable in large lecture and tutorial sessions. This was noted clearly in several student statements: "In tutorial and lectures there may not be enough time to ask questions", and, "When I participate in a tutorial I don't have time to ask questions". Consequently many students choose to attend PAL because "there is more opportunity to ask questions" and

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they feel "free to ask any question". An additional point many students mentioned was that the leaders were generally able to create a friendly, warm and relaxed environment wherein students feel comfortable asking questions and the leader can address and, "outline the difficulties that most students face". Many students further stated that they felt they could relate to the leader due to the leader's student versus academic status. That the program creates an environment in which students have the time and the confidence to ask questions and engage in discussion with leaders and fellow students, was a consistent theme in the transcripts. It seems that much of its positive impact is due to this.

There were, however, a number of comments which indicated that some students viewed PAL's goals more narrowly: "Because there are a lot of exercises in the book but PAL can highlight which one is the important one so you don't have to study the whole material". Students also noted that it provides information on "how to answer questions during examinations", as well as opportunities to gain, "examples and extra practice for exam questions". Another illustration of how some students perceive the goals in more narrow terms came when students were asked how the program could be improved. In response to this, some students suggested that the sessions should be "more structured" with "more sample answers to exam questions". It is not surprising that students who attend PAL may want both deep learning as well as practical help with content and technique aimed at improving their grades. The effectiveness depends, however, as O'Donnell notes, on getting the right balance between these objectives. If the balance were to shift away from the broader pedagogic aims of PAL, towards the shorter term goal of improving results in the unit at hand, the sessions could be, "reduced to tutorials or cram sessions" (O'Donnell, 2004, p.10). Maintaining the right balance is a real challenge for the program and for the leaders, who are at the coalface of the program. This is perhaps the single most important finding of this paper.

Interestingly, when students were asked whether PAL had helped improve their grades there were mixed reactions. Some students stated that they were unsure as to whether or not it directly influenced their overall mark, but were confident that it helped them with regards to studying and understanding the material; for example one student stated: "I don't think that PAL can help me to get a higher grade but to some extent it really helped me in my study. I think to get a higher grade or not it really depends on yourself". This highlights the fact that most of the students interviewed believed that intrinsic motivation plays a key role in doing well at university. Students need to study, and prepare for exams, and by just attending PAL a student will not pass the unit or get a high mark. This was also noted by another student who commented that he knew, "some students who do good in PAL and still fail". On the other hand, some participants were certain that it had a direct effect on their grades, particularly in their second year accounting units: "Yeah, we thought we would only get a pass grade but we got above credit and distinction grades ... yeah ... so we think it's (PAL) great!"

When asked whether they would recommend PAL to others, all twelve students stated that they would definitely recommend it and that many of them already had done so. A few stated that they would specifically recommend it if they knew someone who was struggling with the unit and coursework. Some of the main reasons that students gave for recommending PAL included: the close/friendly environment makes it easier to speak up; small-group learning facilitates question time and student discussions compared to large tutorials and lectures; the group leader is approachable and friendly, and you can discuss and communicate like friends; and the leader can also see problems from a student's perspective.

5.1.2 Non-academic benefits of PAL

Throughout the focus groups students also mentioned several non-academic benefits of PAL. They stated that one of the benefits is that it is a good place to get to meet new friends: "Yeah, I met three new friends from last semester's PAL group and we still keep in contact". This suggests that such a program can play a positive role in the integration of students into university life, helping students to form long-term friendships and bond with one another, as noted by one student who said that when she and her friend are at a PAL session they, "like to make some friends and enjoy conversation and discussing problems". Interestingly, all of the students who attended these focus group sessions were of Asian background and classified themselves as "overseas" students. This suggests that PAL may be of particular importance to students who attend Australian universities from other countries as it provides a significant opportunity not only to develop their knowledge in particular subject areas, but also to build friendships and share their experiences with others. The PAL session may also help international students integrate more successfully into Australian society through their interactions with the leaders, who are usually local students. Many students noted that their, "PAL leader is just like a friend".

5.1.3 Suggestions to improve PAL

Students were quite forthcoming with regards to providing suggestions and ideas on how the PAL program can be improved at Macquarie University. The most popular ideas included having such a program for third year units and increasing the length of the session. As already noted, many students also suggested that the sessions should be more structured with more sample answers to exam questions and more theoretical-based questions. Another popular suggestion was that all the sessions should run at the same level and should keep up to date with the material being

covered in current lectures. Several students also suggested that the leaders receive more training that focuses on areas such as teaching skills, language and communication and leadership skills.

5.2 PAL leaders focus group session

5.2.1 Goals and benefits of PAL

The leaders were in agreement that the main goal of PAL is to facilitate a deeper learning and understanding of the subject at hand, and also to achieve better grades. The leaders saw their role as being to provide direction based on their own past experiences and to help students develop basic skills, such as problem solving and answering exam questions successfully. The leaders noted that the major benefit of the program was that it made a level of discussion and question time available that is often not available to students in lectures and tutorials. The leaders noted that it is very much student-driven and, as noted by one leader: "We try to have more discussions and more questions and what makes it so special is that people sometimes ask quite basic questions ... that they don't really dare to ask in tutorials or lectures". The leaders stated that it is through group learning and group discussions that the main goals are achieved. The leaders also agreed that attending PAL can improve student grades and their self confidence with regards to their knowledge. The leaders also noted that their role was a crucial one. As one leader put it: "PAL leaders are sort of that link between the tutor and the lecturer and the subject".

When questioned about the personal benefits they gained from their involvement in PAL, the leaders stated academic, social and emotional benefits. It enabled them to make friends, and they found it an enjoyable and relaxing experience. Some leaders stated that it helped build their confidence as well as developing key skills such as presentation and communication, including with people from different backgrounds and cultures: "I have a lot of new friends, I present much better than before and I speak much better English and now I am more confident too!" The leaders also stated that it provided an opportunity to refine their knowledge of the subject and key topics: "Another useful thing for me is refining topics and key points that I may have forgotten about when I was studying the unit". Two of the leaders felt strongly that the experience looks good on their resumés and job applications. Overall the student leaders were very pleased with the benefits and outcomes of the program for them.

5.2.2 Suggestions to improve PAL

While all of the leaders who attended the focus group were happy with the PAL program and its past and current achievements, they were in agreement that certain improvements need to be implemented to ensure it will be even more efficient and successful. The training received by the leaders was a major issue. Three of the leaders had attended a PAL leaders' training workshop two years previously and were not satisfied with the level of training provided. They stated that the workshop was too short, did not allow enough time for practice via mock sessions and they were not provided with enough feedback from superiors with regards to their performance: "We did have some small exercises but we didn't have enough time to prepare for them". The leaders also stated that during the training too much time was spent going over policies and procedures. They expressed the view that, "It would be better if they increased the time for mock sessions rather than going through the policies and procedures".

Interestingly, the PAL leader who had been trained last year stated that his "experience was so much different" from the other leaders. The training this leader had received involved a three-hour focus group that included discussions addressing particular issues, such as what the leaders will experience during their sessions; how to deal with shy and quiet students versus talkative and active students; what you should and should not do; as well as tips on how much time the leader should spend on materials and how to direct questions and raise discussions. This leader stated that he found this training "quite useful and practical". There was not much time spent talking about policies as the leaders were expected to read the handbook on this material. Overall, the leader believed that the three hours of training were spent quite well.

The contrast in these two training methods is clearly obvious. While the more recent method of training PAL leaders at Macquarie University seems to be more useful and practical, there is still much room for improving the training procedure and all of the leaders were in general agreement with how to implement such changes. The leaders suggested that more comprehensive training is definitely needed. Additional workshops, a greater level of feedback as well as more opportunities to practice and do mock sessions were other suggestions. The leaders also agreed that a helpful activity would involve having a superior/teacher sit in on their sessions occasionally to provide feedback to the leader regarding their tutoring skills and knowledge of the subject, with a view to highlighting the areas needing improvement.

The leaders stated that another challenge is the availability of rooms for the sessions. A lack of rooms can limit the number of sessions, resulting in bigger class sizes, which defeats the program's small-group learning strategy. The leaders also felt that additional sessions are definitely needed for certain units, for example some accounting units can have up to 1 000 enrolled students resulting in large PAL sessions. Three of the leaders strongly believed that the sessions should be longer and ideally extended by half an hour: "Like an hour and a half maybe, an hour for the exercises and thirty minutes for the discussions, that would be ideal". This was something that students also asked for.

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The leaders also suggested that the program needs to be better advertised, as this is usually done via the first few lectures of each semester – those students who choose not to attend lectures (opting to listen to lectures via the internet) may be completely unaware of the PAL initiative. Some of the leaders also believed that as well as attending lectures, attending tutorials should form part of a leader's responsibilities. One leader stated that the rationale behind this idea is that attending tutorials further enhances the leaders' understanding of the material/topics they are required to cover in their sessions.

The leaders also felt that more coordination is needed between the actual lecturer in charge of the unit and the PAL leader with regards to what material is presented to students in the sessions and what topics/areas should be covered: "Coordination between the PAL leaders and the lecturer is needed and that the materials given out to students (in PAL sessions) are properly controlled ... what I mean by control is that it's actually correct because sometimes there tends to be materials that are issued out to students that aren't entirely the right answers!"

6. Implications for learning and teaching

While PAL has been very well received by both leaders and students, it is clear that there is room for improvement and development in certain areas of the program. The two major areas worthy of further investigation relate to the monitoring of the program by academic staff, and the training of the leaders. We turn first to monitoring. To the best of our knowledge, a formal protocol for monitoring PAL by academic staff does not exist. The first task in relation to this is to conduct research about what actually happens in relation to this vital function. The research reported in this paper suggests that good monitoring is essential for two reasons: first, there is an ongoing need to ensure that the right balance is maintained between the competing objectives that students have for PAL. Without active involvement in the program by academic staff, there is an implicit expectation that it is up to the leaders to "get the balance right". This would be an unreasonable expectation. Second, the research reported here suggests that both students and leaders are asking for more staff involvement in PAL as a means of ensuring the quality of the program. The leaders in particular are asking for more supervision, feedback and general quality control. Again, it seems reasonable to expect that in the absence of appropriate monitoring by academic staff the overall quality of the program could suffer. We believe that it may be necessary to make the involvement of staff in the program more formal, and that a proper protocol should be developed for monitoring PAL. In recognition of the importance of this role, and of the added workload that it will entail, we think consideration should be given to including this monitoring work in the Department and Divisional Workload Models.

Several suggestions were made by leaders regarding the training they receive; these suggestions have merit and should be addressed. In addition, in light of the discussion about maintaining the right balance between the various expectations that students have for the program, it is clear this is something that should be given extra emphasis in the training sessions. Some additional implications of the research reported in this paper include giving consideration to extending PAL sessions to other units, particularly at the third year level. The way the program is advertised should be explored as well to see if the current practice is optimal. Both the students and leaders requested that the sessions run for ninety minutes, which could be explored further.

Much has been learned from the opinions and feedback provided by the students and leaders who participated in this study. The findings from this paper will be presented to the appropriate learning and teaching committees, the Dean of the Division, as well as Heads of Departments.

7. Conclusion

Overall the focus group sessions revealed that PAL has both academic and social benefits for students and leaders. Both groups believed that the main goal is to facilitate learning and understanding among students through group learning and discussions in a relaxed student-friendly environment. For students, the main academic benefits of PAL included the development of a deeper understanding of the subject, basic problem-solving skills and insights into how to successfully answer exam questions. For the leaders, an additional academic benefit included the development of communication, language and presentation skills. Both students and leaders stated that it also provides an invaluable opportunity to ask questions and discuss issues with classmates, which is often not available in the large lectures and tutorials. All of the students and leaders agreed that this question time is perhaps one of the most important aspects of the PAL program. There were a number of leaders and students who believed that it improved their confidence and self-esteem and was generally very beneficial. Many students and leaders also stated that it provided an opportunity to build friendships and this suggests that the program may play an important role in facilitating the integration of students into university life as well as with the transition from high school to tertiary education.

The research reported in this paper highlighted several areas where improvement could be made to the Macquarie University program; nevertheless, it gives rise to a general sense of accomplishment. This is perhaps best expressed by the fact that every student who participated in this project stated that they would happily recommend the program to other students. Furthermore, ten of the twelve students who participated in this project expressed their desire for more sessions, especially for their third year units. This strong demand for such programs within the Division of Economics

and Financial Studies at Macquarie University suggests that other divisions and departments within the university, indeed at other institutions, may benefit from instigating these programs. It is also clear that feedback should continuously be obtained from students and leaders. Such feedback can then be analysed as part of an effort to ensure the availability of an effective PAL program.

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