

Peer-Assisted Learning Program: A Creative and Effective Learning Approach at Higher Education

Rosliza Ghazali, Merani Che Ali

Faculty of Accountancy
Universiti Teknologi MARA (Terengganu), 23000 Dungun, Terengganu, Malaysia

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ABSTRACT

The primary purpose of this article is to review the effect of Peer-Assisted Learning (PAL) program on higher education. Thus, this paper tries to explain the educational theories and concepts which support the effectiveness of the program. It also to identify the benefits and shortcomings of the program to the students who participated in the program based on the existing researches and experiences of some universities which had undertaken the schemes. The review is expected to highlight the best practices of PAL program adopted by universities. Lastly, recommendations from previous researches for a successful implementation of PAL were taken that to be used in the implementation of the program in the university, particularly for the accounting faculty.

KEYWORDS: Peer-Assisted Learning, Supplemental Instruction, Students Peer-Assisted Mentoring.

INTRODUCTION

Studying at university is not easy and can be very challenging to students especially for new students. Some students face problems associated with the university's environment and some are taking difficult university courses which require high standard, rigorous curriculum and extensive reading. Therefore, it is important for students at higher education level to have effective study strategies and methods to help them to face the challenges and be successful in their studies. Peer-assisted learning (PAL) is a learning strategy which was found to be effective among higher education students. It is due to its benefits such as informal and friendly learning experience, flexible time and able to increase the social skills and confidence of students who participated in the program. Globally, PAL program is developed and implemented systematically in many well known universities. It is a strategy to cater the problem of low-performing students and high-risk students in an individualised and positive ways. Many researchers have found that the program had brought positive impact to the students involved in terms of academic achievement, confidence and interpersonal skills.

DEFINITION

PAL is a situation in which "people from similar social groupings who are not professional teachers help one another to learn and learn themselves by teaching". It is this reciprocity of learning among other things that makes PAL such as attractive idea to educationists [1]. Practically, PAL is a process in which students work together, do discussions and practice the skills that are being taught in the classroom [2].

In some universities, PAL is a scheme that fosters cross-year support between students in the same course. It encourages students to support each other and to learn collaboratively under the guidance of trained students, called PAL leaders, from the year above [3]. Thus, it is a student-to-student support network for both academic and personal development. Volunteer second year students are trained and paid to help students in the same course in the following year. These trained PAL leader will meet regularly with small groups of students in the year below to help them improve their understanding of the subject matter, work through common problems and further develop their learning strategies [4].

EDUCATIONAL THEORY AND CONCEPTUAL FRAMEWORK OF PAL

The important feature of every PAL program is active discussion and cooperative learning among students called "peer mentor" (sometimes is called "tutor" or "peer leader") and "tutee" (sometimes is called "mentee"). The feature of PAL is using a learning mode called "horizontal" and "vertical" peer support. Horizontal peer support is characterized by students' support for one another in the same year and vertical peer support utilizes students support from the year above. Both the methods will help students in adjusting themselves quickly to university life and creating friendly learning communities which ultimately benefit the students and also the university [5].

Students' attrition is found as one problem at university and learning process by peer assistance was argued by many researchers as a solution to the problem [6]. The approach provides opportunities for students to be more involved in the teaching and learning process, thus making learning to be more effective and helpful. Furthermore, direct student's involvement in learning does have a motivating influence on their academic performance because the greater the involvement, the greater their acquisition of knowledge, development of relevant skills and likelihood of remaining at university [7].

Research suggests that supplemental instruction in the form of peer assisted learning can have a positive effect on the students' learning [8] and result in improved academic performance [9]. Another concept applied in PAL program is 'to teach is to learn twice'. Thus, this will benefit the peer mentors to understand more when they teach the mentees [10]. Additionally, the learning process in PAL program will enhance the mentors' to own learning experience. When they become facilitators or mentors, they must think through and mentally organize information before explaining the lesson to the mentee [11].

The following model in Figure 1 shows the mentoring activity from [12] which describes the concept of informal learning applied in PAL program. Based on the model, peer tutors are separate from the traditional teaching, but they will help the students namely the tutees as well the lecturers and the university to achieve the same educational outcome [13].

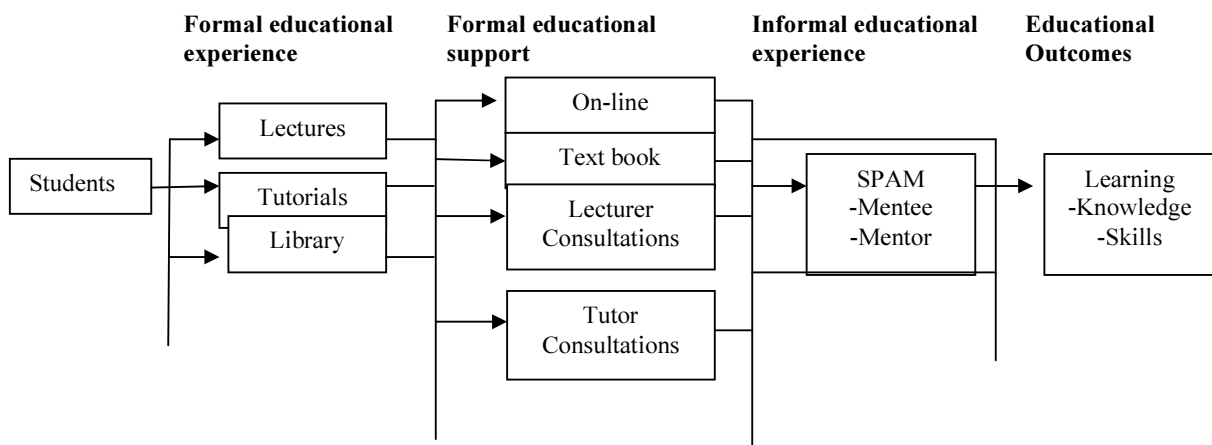


Figure 1: Model of educational aspect [12]

In [13] who presented a conceptual paper on Student Peer Assisted Mentoring (SPAM) using an intervention approach based on Supplemental Instruction Model had identified a number of benefits for both mentors and mentees which were derived from the involvement in the program. The paper supported previous research on Supplemental Instruction Model as a method to maximize the students' learning process [14], providing a student centered learning experience [15], resulting in improved academic performance [9] and producing positive differences in students' performance effectively [6].

The following model in Figure 2 shows the conceptual framework of SPAM program by [13]. According to the model, there would be three sessions conducted during a semester. During the formal session, the academic staffs such as the teaching lecturers explain specific topics to the students and the mentors will act as facilitators and assist the teaching lecturers. During the less formal session, the mentors will be actively involved with or without teaching lecturers present and the topic discussed is normally more specific than the explanation by the teaching lecturers. Lastly, during the self-help session, all students are encouraged to form study groups and the session is normally operates outside the formal education setting. This approach will create a sense of belonging and can positively contribute to the students' retention. The objective of this method is to encourage the mentees to have a deep learning process in order to understand the topic learnt. In order to achieve the objective of the program, it is very important for the selected mentors to demonstrate some desirable attributes such as possess a good academic record, competence in appropriate knowledge, commitment to the program, strong interpersonal skills, ability to share knowledge and expertise and have good communication skill.

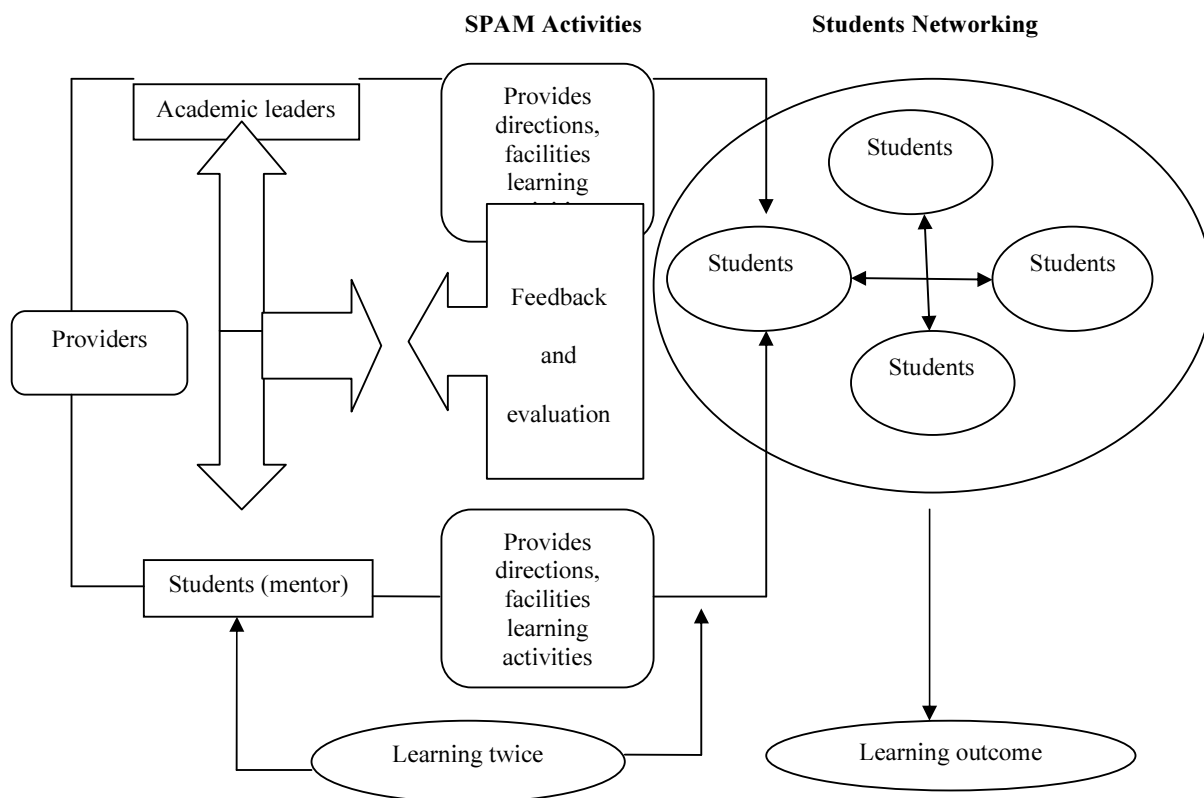


Figure 2: Conceptual framework of the SPAM model [13]

IMPLEMENTATION OF PAL PROGRAM

In various PAL programs that were implemented at many universities around the world, the program could be regarded as an opportunity for struggling students to learn from advanced students in small groups. There are various program descriptions being used by the universities but the conceptual framework used is quite similar. Table 1 shows some examples of universities that implementing the PAL program and the summary of the program descriptions.

Table 1: Universities and implementation of PAL program

Name of university	Program description
1 University College of London	Student-to-student support network by volunteer basis. Tutors and tutees are from the same course and tutors from second year students who are trained and paid. Also help in adopting new university life.
2 Bournemouth University	More advance students help less advanced peers in adjusting to university life and developing study skills. Lecturers meet them every 2-4 weeks to offer guidance and obtain feedback.
3 Glasgow University, UK	PAL leaders work in pairs or threes. The group is split according to different topics. Lecturers encourage students to attend the PAL program and suggest topics or issues for discussion.
4 Peking University, Beijing, China	One-to-one session meeting with language tutor with a meeting duration of 3 hours per week.
5 Duke University of North Carolina	Free tutoring provided by trained tutor to undergraduates done at any convenient public location in campus such as empty classrooms, library or dorm common areas.
6 University of Minnesota, Minneapolis, USA	Students who enrolled in difficult university courses are required to join peer-led team learning in order to help them to in the courses.
7 University Malaysia Kelantan, Malaysia	Group leader or coordinator is not allowed to teach and, unlike lecturers, they develop a climate of trust and support within the PAL group. An open line of communication was established in which first year students are encouraged to participate, share ideas and join in discussion.

BENEFITS AND SHORTCOMINGS OF PAL

Currently, there is sufficient research that evidences the benefits of PAL program as a supplement to traditional teaching. The main benefit of peer teaching is the tutees will gain greater understanding on the subject learnt due to the direct interaction with the tutors. Many researches done on the topic shown that peer

tutoring had been found to result in academic achievement. This is because active learning will happen here, as tutees find more comfortable interacting with tutors as compared to the lecturers. Social integration of the students also increases in the sessions which indirectly improve the communication and social skills of the participating students [16].

Academic performance of participating students in the program was analyzed in many programs of PAL. In many studies, the result shows that PAL participants earned higher course grades than nonparticipants [17]. In other studies, some researchers have analyzed the result of PAL on students who attended the program. It is proven that participating students in PAL program where attendance was mandatory earned higher grades than those who do not participate. Further qualitative study of PAL leaders (also known as facilitators) then identified five positive outcomes in their experience in the PAL program; enhanced the students' personal learning and study skills, increased group facilitation and decision making skills, increased students' self-confidence and enjoyment during learning, created positive relationships among the students and lastly, the sense of community in helping others tend to grow. In addition, the PAL leaders also perceived changes among their PAL mentees (also known as tutees) in the form of increased analytical skills, increased confidence and risk taking behavior, increased importance and effectiveness of working in small groups, increased comfort when engaging and sharing ideas with other students and increased academic autonomy diversity of study strategies and self-reliance [18].

A quantitative and qualitative study of PAL program at University of Minnesota Minneapolis USA validates the effectiveness of PAL with a higher final grade, thus contributing to improved academic performance of participating PAL students in the program [19]. An additional insight about PAL experience with facilitator and participants had been studied and it was found that there was a growth in academic engagement, confidence, interpersonal skills and critical thinking skills areas [20]. Academic growth ranges from the more concrete learning and re-learning of information and vocabulary to higher order critical thinking skills such as applying, explaining, and evaluating the material. The facilitators described growth with self-perception as leaders and experience as a facilitator often initiated or confirmed vocational interest in teaching among the facilitators [21].

Despite its benefits and popularity, PAL program had been criticized by some researchers. Some parties complaint that the selected tutors are sometimes not experts at the subject taught, thus the issue of credibility in teaching is questionable. Furthermore, some mentees feel inferior when they are put under the program (that is the issue of "student's hesitancy"). Lack of confidentiality and times and schedule conflicts also cause the program being complained by the students and researchers.

The following Table 2, 3, 4 and 5 show the detailed some benefits and shortcomings of PAL program implemented at Bournemouth University for the study session of 2002/2003. The study involved 620 students, 34 PAL leaders and 15 courses. The result of the study was analyzed from the perspective of students' participation in the program [3].

Table 2: Benefits of PAL for first year students (mentees or tutees)

Benefit	Characteristics
Adjusting to university life	New students are advised on university life such as awareness of the initial course and university expectations. They also will get to know other students and enhancing their social skills.
Understanding the course	Tutees gain more understanding on the 'basics' as well as 'difficult' parts of the course, thus increasing their confidence in certain topics.
Preparation and completion of assessed work	Tutees gain awareness of assessment requirements and have the chance to improve marks through discussion approaches with the tutors.
Development of more self-confidence	Sharing of problem with others can reduce worries among tutees and develop confidence to 'speak up'.
Openness/informality	The feature of informality in the program encourages open and admission of misunderstanding by the tutees. Thus, encourages them to ask questions and promote positive attitudes among them.
Cooperative learning	The cooperation between tutors and tutees enhancing understanding through exchange of ideas through informal discussions with different approaches.
Study skills	The study skills of the tutees improved when they begin to understand how to structure work, enhance presentation skills and improve examination skills.
PAL leader advice	Student-friendly language and methods used by the PAL leader assist the tutees. Advices and experiences given encourage progression among the tutees.

Table 3: Benefits of PAL for PAL leaders (mentors or tutors)

Benefit	Characteristics
Revision of first year course	Reviewing the knowledge of first year material assists the tutors to understand more.
Personal development	Increase in the level of confidence, skills of speaking, communication, presentation, leadership and interest in teaching.
Utilising the experience	PAL has helped obtain placements in interview as it can be put as evidence in the CV.
Social aspects	Tutors can know new students when they involve in this program.

Table 4: Shortcomings of PAL for first year students (mentees or tutees)

Shortcoming	Characteristics
Negative perception	Some students perceived that they do not need help when they enter university.
Unhelpful	Some students perceived that the program is ineffective and not helpful.
Initial misconceptions	Some students expect tutors to re- teach them, thus they expect for 'superior' PAL leaders.
Less efficient study sessions	Some tutees feel not enjoyable due to under-preparedness of the tutors. Too informal also can cause the students put low priority towards the program especially when there is less serious attitude to study.
Structure of PAL sessions	Tutees found problem when there is lack of session formats, preparation and clarity about future session content given by the tutors.
Inappropriate advice	Some tutors give incorrect advice such as in the preparation of assignment which cause problem to the tutees.
Insufficient time	Some tutees ask more time for PAL session as the current sessions are not sufficient.

Table 5: Shortcomings of PAL for PAL leaders (mentors or tutors)

Shortcoming	Characteristics (as expressed by PAL leaders)
Lack of cooperation from tutees	Some tutees do not give good response, too depending on the leader and need excessive direction from the leaders.
Limits of powers	Tutors find difficulty in keeping students interested in the sessions, difficult to teach everything especially when the tutors have the inability teaching.
Problem of "difficult students"	There are problem of lack of motivation from students for example when the tutees are not interested to involve in the sessions.
Misconceptions about the program	Some tutors have wrong conception towards the program such as the amount of teaching to be made. The program is perceived as lacking importance.
Time limit	The program demands time from tutors to be spent which affects their own study time.
Course changes	Some tutors do not aware of the changes in the current course contents.

SUGGESTIONS FOR A SUCCESSFUL PAL PROGRAM

Based on a review of some researches on effective PAL program, a few suggestions are made. The first important feature to ensure the effectiveness of the program, the tutees must be matched strategically with high-performing tutors. Research found that mixed-ability pairs is more effective rather than with low-performing students [22].

Secondly, evaluations on some PAL programs suggest that tutors should be given proper training by the lecturers or academic staffs to ensure they are able to use direct instruction, promote higher-order thinking, give positive reinforcement and sustain a positive and supportive relationship with the tutees. The training process should include the instructions to tutors on explaining the program directions, designing work for extra practice, watching and correcting mistakes and giving positive feedback and encouragement. Tutors also need to be taught to give feedback to tutees whenever suitable. Importantly, the feedback should be genuine and praise should be given to tutees for every correct response made by them. This positive feedback will motivate the tutees to participate and increase their self-esteem and self-confidence [23].

Thirdly, frequent monitoring of participants' behavior by the academic staffs during the PAL session maintains fidelity to the structure of the program. Any inconsistent tutoring practices and behaviors done by the participating students can undermine the effects of the program which directly affect students' achievement in the program [17].

Lastly, a suitable reward system should be used in the program in order to encourage participation and on-task behavior of the participants in the program. Research comparing PAL program with and without a reward system has shown that offering students' positive reinforcement in the form of reward even though small treats can boost the students' motivation [24].

CONCLUSION

A review of researches around the PAL program demonstrates a lot of information and research in this developing area of higher education teaching and learning. Guidance has been offered by many researchers for implementing PAL program in any education institution [25]. In recognition of this, some researchers emphasize the flexibility in approach and appreciation of each setting's own requirements as key to successful implementation of PAL program in university. Obviously, there is no fix model for implementing PAL program, what has worked for one university may not work in other universities. In conclusion, PAL program is a program which intended to complement regular classrooms instructions, not to substitute the class taught by the lecturers. The best learning technique is a blend of peer and lecturer's teaching.

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