

PEER-ASSISTED LEARNING: PERSPECTIVES OF A FORMER STUDENT TUTOR

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ABSTRACT

Peer-assisted learning (PAL) facilitates the reciprocal development of knowledge and skill between students of similar social groupings by disrupting the traditional student-teacher relationship. As an educational strategy, PAL strikes at the core of student collaboration, engagement and satisfaction. Given the ever-expanding digital landscape and push towards online course delivery, PAL's student-centred approach bridges gaps in course content delivery where conventional teaching practices would prove ineffective. PAL programmes are flexible and adaptable to change, thus providing an attractive accompaniment to orthodox teaching methods. This paper reflects on the author's experience as a PAL participant and facilitator, then draws on key perspectives gained through these experiences and compares them with the prevailing literature on this topic. This paper then advocates for the use of student tutors as additional resources to meet the needs of adapting student cohorts and to operate alongside traditional teaching practices. This paper concludes by recommending to educators, particularly those in higher education in the discipline of taxation, an implementation strategy to adopt and utilise PAL more effectively in the classroom and beyond.

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I INTRODUCTION

Peer-assisted learning (PAL), as a pedagogical framework, originates from the work of Dr Deanna Martin in the field of supplemental instruction (SI).¹ Intended as an academic support programme, SI promotes the use of regularly scheduled, peer-facilitated, out-of-class tutoring sessions, which offer students an opportunity to discuss, process and synthesise course content. Since then, universities have developed and implemented various forms of SI or PAL programmes. Great diversity in terminology and definitions of PAL methodologies exists, largely due to the variety of approaches, historical origins, academic disciplines and countries in which PAL has been developed and implemented.² A sufficiently inclusive and instructive working definition of PAL may be, '[p]eople from similar social groupings who are not professional teachers helping each other to learn and learning themselves by teaching'.³

Chiefly, the PAL framework encourages students to learn from peers in similar social groupings to the learner.⁴ PAL tutors, typically have less expansive knowledge in a particular subject compared with professional educators.⁵ An emphasis on working collaboratively with the view to reaching a common goal is fundamental to the success of a PAL programme.

Naturally, the adoption of any PAL initiative must be balanced against the envisioned educational benefits participants and stakeholders are likely to receive.⁶ The efficacy of various forms of PAL has been comprehensively assessed by a large volume of literature.⁷

¹ Deanna Martin and David Arendale, 'Supplemental Instruction: Improving First-Year Student Success in High-Risk Courses' (1992) 7 *The Freshman Year Experience* 1.

² Michael Ross and Helen Cameron, 'Peer Assisted Learning: A Planning and Implementation Framework: AMEE Guide No. 30' (2007) 29(6) *Medical Teacher* 527.

³ Keith Topping, 'The Effectiveness of Peer Tutoring in Further and Higher Education: A Typology and Review of the Literature' (1996) 32(3) *Higher Education* 321; Alexander Olaussen et al, 'Peer-Assisted Learning: Time for Nomenclature Clarification' (2016) 21(1) *Medical Education Online* 30974. For the purpose of this article, the term, peer-assisted learning (PAL) should be widely interpreted to include: 'Peer appraisal', 'Collaborative learning', 'Peer review', 'Learning, cells/Student dyads', 'Peer-assisted study', 'Peer assessment', 'Proctoring', 'Peer tutoring', 'Students helping students', 'Peer teaching', 'Student teaching assistant schemes', 'Peer counseling', 'Student teaching/tutoring/mentoring', 'Peer-assisted writing', 'Study advisory schemes', 'Peer-supported learning' and 'Supplemental instruction'. It should be noted, however, that these terms are not necessarily wholly interchangeable, and some have other non-PAL meanings. Where relevant and instructive, the author will try to distinguish these concepts.

⁴ William Damon and Erin Phelps, 'Critical Distinctions among Three Approaches to Peer Education' (1989) 13(1) *International Journal of Educational Research* 9.

⁵ Ibid; Ross and Cameron, above n 2.

⁶ Diane Dancer, Kellie Morrison and Murray Smith, 'Measuring the Impact of a Peer-Assisted Learning Program on Students' (2007) *Academic Performance in Econometrics* 23.

⁷ Brett Williams and Priya Reddy, 'Does Peer-Assisted Learning Improve Academic Performance? A Scoping Review' (2016) 42 *Nurse Education Today* 23; David Boud, Ruth Cohen and Jane Sampson, *Peer Learning in Higher Education: Learning from and with Each Other* (Routledge, 1st ed, 2001); Susan Edwards and Jane Bone, 'Integrating Peer Assisted Learning and ELearning: Using Innovative Pedagogies to Support Learning and Teaching in Higher Education Settings' (2012) 37(5) *Australian Journal of Teacher Education* 1; Phillip Dawson et al, 'On the Effectiveness of Supplemental Instruction: A Systematic Review of Supplemental Instruction and Peer-Assisted Study Sessions Literature between 2001 and 2010' (2014) 84(4) *Review of Educational Research* 609; Noreen Webb, 'Peer Interaction and Learning in Small Groups' (1989) 13(1) *International Journal of Educational Research* 21; Topping, above n 3; Maria Helena de Agrela, Gonçalves

The majority of studies report on course design, implementation procedures, participation and levels of student and staff satisfaction.⁸ An overwhelming majority of these studies relates to research conducted in the fields of nursing, medicine or degrees in relation to medicine.⁹ A range of studies have explored the relationship between a students' prior academic performance, their engagement in, or with, PAL initiatives and their final grade.¹⁰ As a corollary, a number of studies exploring the perspective of the student teacher and the inherent benefits and challenges engendered by facilitation of PAL experiences provides a useful and necessary point of comparison.¹¹ The studies indicate varying results in investigating these relationships. The general consensus, however, is that, when efficiently implemented, PAL initiatives have the potential to enhance student satisfaction, drive educational leadership and improve teaching quality.¹²

Against this background, the article will now explore the literature surrounding PAL pedagogies as they relate to teaching in the discipline of taxation. Given the scope and variation of PAL pedagogies, this article will focus primarily on peer mentoring and peer tutoring. The discussion will consider the investigated impacts of PAL from the perspective of both the student learner and student teacher. Further, the analysis will also canvass any limitations identified through the use of PAL initiatives. Where applicable, the author's own experience will be used for illustrative and comparative emphasis.

II LITERATURE REVIEW

PAL is an approach to supporting student learning that is used as a supplement to existing pedagogical practices.¹³ The basic concept is that experienced students mentor, or tutors support, incoming students in particular subjects. The use of PAL across a range of higher education settings has been found to significantly increase student understanding of course content, to contribute to cognitive understanding of course material and to contribute to students' interpersonal and social skills.¹⁴

Jardim, Geraldo Bezerra da Silva Junior and Márcia Lúcia Sousa Dias Alves, 'Values in Students of Higher Education' (2017) 8(10) *Creative Education* 1682.

⁸ Dancer, Morrison and Smith, above n 6.

⁹ Williams and Reddy, above n 7.

¹⁰ Diane Dancer, Kellie Morrison and Garth Tarr, 'Measuring the Effects of Peer Learning on Students' Academic Achievement in First-Year Business Statistics' (2015) 40(10) *Studies in Higher Education* 1808; Dancer, Morrison and Smith, above n 6.

¹¹ Elspeth Hill, Francesca Liuzzi and James Giles, 'Peer-Assisted Learning from Three Perspectives: Student, Tutor and Co-ordinator' (2010) 7(4) *The Clinical Teacher* 244.

¹² Bella Ross et al, 'Developing Educational Goals: Insights from a Peer Assisted Teaching Scheme' (2016) 21(4) *International Journal for Academic Development* 350.

¹³ Ashar Wadoodi and Joy R Crosby, 'Twelve Tips for Peer-Assisted Learning: A Classic Concept Revisited' (2002) 24(3) *Medical Teacher* 241.

¹⁴ Topping, above n 3; Keith Topping, *Peer Assisted Learning: A Practical Guide for Teachers* (Brookline Books, 1st ed, 2001); Keith J Topping, 'Trends in Peer Learning' (2005) 25(6) *Educational Psychology* 631; Wadoodi and Crosby, above n 13; Ross et al, above n 12.

Informed largely by the work of Topping et al¹⁵ in recent decades, considerable research and literature has been published reporting on the benefits of PAL initiatives for both instructor and participant.¹⁶

Colvin¹⁷ cites enhanced student and participant learning, economic savings and increased social and intellectual maturity as the primary objectives for introducing formal peer learning.¹⁸ Bandura¹⁹ notes that enhanced learning is seen as occurring on behalf of both the student and instructor as they engage in learning as a communal activity.²⁰ Astin²¹ suggests that the students learn from the modelling that takes place while the instructor learns from the opportunity to strengthen successful scholastic behaviours.²² Masters and Yelland²³ argue that modelling is successful because of the scaffolding of the learning process that takes place.²⁴ Scaffolding has been defined as, 'moving learners from their current level or zone of proximal development to a higher level of development'.²⁵ Additionally, formal peer learning has been shown to provide a structured and effective way of fostering relationships between students and instructors further supporting social and academic development.²⁶

Whilst literature concerning the impact of PAL within the discipline of taxation is fairly scarce, independent studies into complementary disciplines such as accounting, business statistics and economics have yielded some important findings concerning the effectiveness and viability of PAL initiatives. Sudhakar, Tyler and Wakefield,²⁷ Dancer et al,²⁸ and Xiang,²⁹ mirror the general benefits associated with peer learning methodologies as they relate to complementary disciplines and recognise the potential for effective implementation of PAL initiatives to enhance student satisfaction, performance and

¹⁵ Topping, *Peer Assisted Learning*, above n 14.

¹⁶ Jonathan Galbraith and Mark Winterbottom, 'Peer-Tutoring: What's in It for the Tutor?' (2011) 37(3) *Educational Studies* 321; Michael Parkinson, 'The Effect of Peer Assisted Learning Support (PALS) on Performance in Mathematics and Chemistry' (2009) 46(4) *Innovations in Education and Teaching International* 381; M Lisa Stout and Amelia J McDaniel, 'Benefits to Supplemental Instruction Leaders' (2006) 106 *New Directions for Teaching and Learning* 55.

¹⁷ Janet W Colvin, 'Peer Mentoring and Tutoring in Higher Education' in Mang Li and Yong Zhao (eds), *Exploring Learning & Teaching in Higher Education: New Frontiers of Educational Research* (Springer, 2015) 207–29.

¹⁸ *Ibid.*

¹⁹ Albert Bandura, *Social Learning Theory* (Prentice Hall, 1st ed, 1977).

²⁰ *Ibid.*

²¹ Alexander W Astin, 'Student Involvement: A Developmental Theory for Higher Education' (1984) 25(4) *Journal of College Student Personnel* 297.

²² *Ibid.*

²³ Jennifer Masters and Nicola Yelland, 'Teacher Scaffolding: An Exploration of Exemplary Practice' (2002) 7(4) *Education and Information Technologies* 313.

²⁴ *Ibid.*

²⁵ Colvin, above n 17, 209; Masters and Yelland, above n 23.

²⁶ Keith Topping and Stewart Ehly, *Peer-Assisted Learning* (Lawrence Erlbaum Associates, 1st ed, 1998); Colvin, above n 17.

²⁷ Adriel Sudhakar, Jonathan Tyler and James Wakefield, 'Enhancing Student Experience and Performance through Peer-Assisted Learning' (2016) 31(3) *Issues in Accounting Education* 321.

²⁸ Dancer, Morrison and Smith, above n 6; Dancer, Morrison and Tarr, above n 10.

²⁹ Meifang Xiang, 'Improving the Quality of Learning in Accounting through Advice and Learning Experiences from Former Students' in Timothy Rupert and Beth B Kern (eds), *Advances in Accounting Education: Teaching and Curriculum Innovations* (Emerald Group Publishing Limited, 2016) vol 18.

learning.³⁰ Notably, a study conducted by Kenny et al,³¹ exploring the efficacy of team-based learning (TBL) within the context of undergraduate taxation tutorials, displayed significantly higher levels of student preparation, engagement, participation, attendance and student satisfaction. Substantial benefits were also found for university law teachers in accounting schools.³²

Two of the most common traditional peer situations that involve students helping other students in PAL environments are peer tutoring and peer mentoring. Equally, in both these situations, studies have identified prevalent limitations to the effectiveness of PAL.³³ Topping provides a helpful distinction between the concepts of 'tutoring' and 'mentoring', stating:

Peer tutoring (PT) is characterised by specific role-taking as tutor or tutee, with high focus on curriculum content and usually also on clear procedures for interaction, in which participants receive generic and/or specific training ... Mentoring can be defined as an encouraging and supportive one-to-one relationship with a more experienced worker (who is not a line manager) in a joint area of interest. It is characterised by positive role modelling, promotion of raised aspirations, positive reinforcement, open-ended counselling, and joint problem-solving. It is often cross-age, always fixed-role, quite often cross-institution, and often targeted to disadvantaged groups.³⁴

Research conducted by Dunne and Rawlins,³⁵ using peer mentors to help students develop transferable life skills, suggests that 'one of the problems of introducing new processes of learning is that it tends to be difficult for both those that provide them and for those who should gain from them'.³⁶ Boud, Cohen and Sampson³⁷ note that limitations to PAL initiatives may be segregated into two general categories: power and differentiation. A third category, resistance, was further considered by Colvin in his study of peer tutoring situations.³⁸

Power and differentiation in the context of PAL are taken to mean the basis by which students and instructors see themselves as different from the other members of their group with respect to their perceived level of influence.³⁹ Boud, Cohen and Sampson⁴⁰ note that language, culture, gender and work experience are prominent differentiating

³⁰ Dawson et al, above n 7.

³¹ Paul Kenny et al, 'Improving the Students' Tax Experience: A Team-Based Learning Approach for Undergraduate Accounting Students' (2015) 10 *Journal of the Australasian Tax Teachers Association* 43.

³² See also, Larry K Michaelsen and Michael Sweet, 'The Essential Elements of Team-Based Learning' (2008) 116 *New Directions for Teaching and Learning* 7. Team-based learning involves independent out-of-class preparation for in-class interactive learning in small groups that is aimed to improve the application of learned material. The majority of face-to-face time is used for group work and group assignments, which aim to develop self-managed learning teams.

³³ Colvin, above n 17.

³⁴ Topping, 'Trends in Peer Learning', above n 14, 632.

³⁵ Elisabeth Dunne and Mike Rawlins, 'Bridging the Gap between Industry and Higher Education: Training Academics to Promote Student Teamwork' (2000) 37(4) *Innovations in Education & Training International* 361.

³⁶ *Ibid* 369.

³⁷ Boud, Cohen and Sampson, above n 7, 92.

³⁸ Colvin, above n 17.

³⁹ *Ibid*.

⁴⁰ Boud, Cohen and Sampson, above n 7.

factors that need to be carefully considered and managed prior to – and throughout – a PAL initiative.⁴¹

Resistance, as discussed by Colvin, argues that students are not passive recipients of power or culture – they have the power to accept or reject classroom practices, even if this occurs in practices that are largely hidden to the instructor or others in power.⁴² Further, Colvin notes that peer mentors and tutors cannot automatically expect peer interactions in the classrooms to be met without resistance.⁴³ To this end, Colvin's study suggests that instead, students wait to assign positional power to tutors or mentors until the mentor or tutor helps the student in a way the student wants to be helped. If this does not happen, students disregard the instructor.⁴⁴

Overreliance on the student tutor by the participants, and potentially ineffective teaching or delivery styles of the instructor, are additional concerns that have been flagged by the literature as risks or challenges to consider when introducing or engaging in a PAL initiative.⁴⁵ From the student perspective, the issue of the tutor not understanding the material, presenting it in a confusing way, or giving instructions other than what the lecturer had intended presented major risk. Concerns regarding the adequacy of delivery, relationship building and reputation were the primary risks voiced by instructors.

A majority of the literature addresses the risks or challenges associated with PAL by drawing the reader's attention to the importance of communication.⁴⁶ One of the most important elements of any peer situation is the relationship that comes from the interactions between peer mentors/tutors, students and lecturers.⁴⁷ Communication is key to fostering these relations and as such should form the focus of implementing any such programme.

Commensurate with the theme of communication, clarification for all parties could help establish and promote the role of peer tutors or mentors more clearly and alleviate confusion.⁴⁸ Clarification of instructor and student roles are likely to lead to further participation and continued success within a PAL programme. Hence, PAL programmes embedded with continued training can help increase the chances of success by pre-emptively addressing the challenges of power differentiation and resistance.

As illustrated above, traditional PAL strategies are well established and flourishing in higher education.⁴⁹ Nevertheless, the prevalence of eLearning and online PAL initiatives

⁴¹ Ibid.

⁴² Colvin, above n 17, 222.

⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Kenny et al, above n 32; Colvin, above n 17; Helen Watts, Makis Malliris and Olivia Billingham, 'Online Peer Assisted Learning: Reporting on Practice' (2015) 8(1) *Journal of Peer Learning* 85; Yvonne Hodgson, Robyn Benson and Charlotte Brack, 'Student Conceptions of Peer-Assisted Learning' (2015) 39(4) *Journal of Further and Higher Education* 579.

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Watts, Malliris and Billingham, above n 46.

is widely recognised, hosting additional opportunities, benefits and challenges for educators and students alike.⁵⁰

Turney et al⁵¹ advocate for the use of eLearning platforms that are said to offer students, teaching staff and institutions flexibility in terms of the times, places and pace at which learning and teaching may occur. Alexander's⁵² extensive study of the use of eLearning in Australian higher education settings suggested that the use of technology itself does not necessarily improve student learning. Rather, it was indicated that students were more likely to report engaging uses of the technology when it was associated with opportunities to interact with other students and lecturers.⁵³ Alexander's findings regarding the social use of technology to support learning, mirror those arguments emerging from the literature associated with face-to-face PAL, whereby the social aspects of peer learning are argued to support student participation, enhance social connections and increase learning.⁵⁴

Huijser et al⁵⁵ suggest that online PAL promotes a range of benefits for students such as providing a less intimidating learning environment, aiding motivation and enabling the provision of flexible and timely responses to questions.

Programmes selected for in-class PAL emphasise the importance of personal qualities, such as trustworthiness, sincerity, transparency, self-awareness, generosity, and authenticity.⁵⁶ Other programmes focus on the importance of nimbleness or being responsive and adaptable to needs, learning styles, and size of groups.⁵⁷ In the context of online PAL, there is no reason that these skills are less likely to be needed. The challenges of online PAL comparative to their in-class counterparts are therefore consistent. Therefore, it stands to reason that similar strategies to those described above may be employed to meet or erode pervasive risks.

A challenge unique to online PAL delivery stems from the use of technology. One prevalent issue was that of poor content coverage coupled with the impersonal nature of content delivery, which was identified as contradicting the philosophies of PAL programmes. Additionally, software, connection and lag issues may create a distraction for the participant, and were flagged among the major drawbacks associated with online PAL.⁵⁸

As noted by Huang et al, although more investigation needs to be conducted, the consensus within the literature is that online PAL programmes can be used as an instructive complement to existing in-class PAL and traditional teaching pedagogies,

⁵⁰ Edwards and Bone, above n 7.

⁵¹ C S M Turney et al, 'Using Technology to Direct Learning in Higher Education: The Way Forward?' (2009) 10(1) *Active Learning in Higher Education* 71.

⁵² Shirley Alexander, 'E-learning Developments and Experiences' (2001) 43(4/5) *Education + Training* 240.

⁵³ Ibid.

⁵⁴ Kellie Morrison, 'Peer Assisted Study Sessions: Supporting Quality Learning and Student Engagement in Economics and Business' (2006) 24 *Institute for Teaching and Learning* 3.

⁵⁵ Henk Huijser, Lindy Kimmins and Peter Evans, 'Peer Assisted Learning in Fleximode: Developing an Online Learning Community' (2008) 1(1) *Australasian Journal of Peer Learning* 7.

⁵⁶ Colvin, above n 17.

⁵⁷ Dawson et al, above n 7.

⁵⁸ Tairan Kevin Huang et al, 'Internet-Based Peer Assisted Learning: Current Models, Future Applications, and Potential' in Yu (Aimee) Zhang (ed), *Handbook of Mobile Teaching and Learning* (Springer, 2015) 811-826.

'further extending the benefits of student peer learning and social exchange with the convenience of technology'.⁵⁹

III DISCUSSION

A culture focused on enhancing the quality of the student learning experience whilst improving teaching quality is the goal of higher education.⁶⁰ From the literature, we can observe that traditional or online PAL initiatives provide an attractive vehicle for institutions to achieve these goals despite their limitations.

As a point of introspection, the article will now briefly discuss the author's experiences in PAL in an attempt to contrast and advocate for the use of these practices.

Having had the opportunity to work closely with students as a tutor in an undergraduate taxation law unit at the University of Western Australia and as part of the 'New to Curtin Mentoring Program',⁶¹ I mirror the benefits attached to the PAL literature as discussed above.

As a student tutor, I was given the opportunity to guide student discussion in relation to tutorial questions, and facilitate understanding through the use of examples and worked solutions. Class sizes ranged from 15 to 20 students and discussions were conducted over the course of an hour-long tutorial for the period of 13 weeks. Training in the form of online activities as well as a three-hour seminar at the beginning of the semester, prior to tutorials commencing, was offered to all new tutors.⁶² Of particular value was the seminar, which provided an opportunity to meet and connect with fellow student tutors and experienced educators. Tutors were expected to revise structured lesson plans, flag queries with the unit-controller and provide online assistance where applicable. In each of the activities, communication, trust, time-management and preparation were, in my reflection, key to success. Tutors received financial compensation for their efforts in addition to formal recognition by the employment contract and university staff status.

As a 'New to Curtin Mentor' within the discipline of business, I was tasked with assisting and advising a selection of 10 students new to Curtin Business School (CBS) with a variety of study-related and personal queries. The student cohort was diverse, which presented its own challenges with respect to delivering and adapting information. The programme spanned the course of one semester. The programme was largely conducted online, with minimal face-to-face interaction. Though intended to be more direct, scheduling complications and engagement seemed to necessitate an online approach. Time commitment was variable, but a minimum contact point of one email to the cohort per week was desirable. Mentors were offered a range of online courses to assist their performance and given the opportunity to attend a number of networking and

⁵⁹ Ibid 812.

⁶⁰ Ross et al, above n 12.

⁶¹ Curtin University, *Mentoring for New Students* (8 May 2015) <<http://life.curtin.edu.au/new-to-curtin/new-students-mentoring.htm>>.

⁶² The University of Western Australia, *Tutor Training Resources* <<http://www.business.uwa.edu.au/learning/tutoring>>.

information seminars. Participation in the programme afforded participants extracurricular recognition in the form of an annotation on their transcripts.⁶³

As a point of comparison, the below table represents the author's subjective recollections of his experience as both a mentor and a tutor and compares the results with the literature on this topic.

Table 1: Introspective comparison

	Benefits	Limitations	Literature
Tutoring	Aptitude for teaching and learning. Sense of value and motivation to succeed. Increased understanding and appreciation of Australian taxation law.	Participation resistance and disengagement. Low class attendance. Class size.	Literature mirrors both benefits and limitations of tutoring. See Topping and Ehly; ⁶⁴ Dunne and Rawlins; ⁶⁵ Topping (1996, 2005); ^{66,67} Boud, Cohen and Sampson; ⁶⁸ Colvin; ⁶⁹ and Huang et al. ⁷⁰
Mentoring	Aptitude for personal growth and development. Sense of value and motivation to succeed. Multiculturalism: increased understanding and appreciation of various customs and traditions.	Participation resistance and disengagement. Low class attendance. Class size.	Literature mirrors both benefits and limitations of mentoring. See Topping and Ehly; ⁷¹ Dunne and Rawlins; ⁷² Topping (1996, 2005); ^{73,74} Boud, Cohen and Sampson; ⁷⁵ Alexander; ⁷⁶ Huijser, Kimmins and Evans; ⁷⁷

⁶³ Curtin University, *Student eServices, Curtin Graduations – Curtin Extra Certificate* (9 April 2010) <<https://graduations.curtin.edu.au/graduate/curtinExtra.cfm>>.

⁶⁴ Topping and Ehly, above n 26.

⁶⁵ Dunne and Rawlins, above n 35.

⁶⁶ Topping, 'The Effectiveness of Peer Tutoring', above n 3.

⁶⁷ Topping, 'Trends in Peer Learning', above n 14.

⁶⁸ Boud, Cohen and Sampson, above n 7.

⁶⁹ Colvin, above n 17.

⁷⁰ Huang et al, above n 58.

⁷¹ Topping and Ehly, above n 26.

⁷² Dunne and Rawlins, above n 35.

⁷³ Topping, 'The Effectiveness of Peer Tutoring', above n 3.

⁷⁴ Topping, 'Trends in Peer Learning', above n 14.

⁷⁵ Boud, Cohen and Sampson, above n 7.

⁷⁶ Alexander, above n 52.

⁷⁷ Huijser, Kimmins and Evans, above n 55.

			Turney et al; ⁷⁸ Colvin; ⁷⁹ and Huang et al. ⁸⁰
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The above discussion demonstrates a clear correlation between the benefits and limitations of PAL, as examined earlier in this work, and the experiences of the author. Given the perceived strength of PAL to support traditional teaching pedagogies and the inherent benefits provided to all stakeholders, the article will now turn to recommending an implementation structure to incorporate PAL into – and beyond – the classroom.

IV IMPLEMENTATION STRATEGY

A large volume of literature exists in respect of preparing, orienting, implementing and evaluating PAL initiatives.⁸¹ The recommendation in this part is confined solely to the structure and implementation of PAL programmes to meet the needs of the adapting and technically savvy student. Further, the recommendation is largely based on the works of Huang et al⁸² and Watts et al,⁸³ and draws heavily on their findings.

The implementation of PAL programmes in higher education institutions can have a number of structural arrangements.⁸⁴ As an instructive point of reference, Huang et al (see Appendix 1)⁸⁵ illustrate some of the arrangements that can be made to utilise an internal and online-based PAL programme to support formal teaching pedagogies and enhance student learning.

A noticeable issue with on-campus PAL and teaching activities is that some students can find attending on-campus programmes difficult due to timetabling issues, or work or personal conflicts. To this end, including an online session will benefit these students, particularly those managing persistent work commitments.

For the institution, integrating on-campus and online PAL programmes offers learning potential for all stakeholders.⁸⁶ Informed by the work of Watt et al,⁸⁷ it is recommended that a number of steps are considered during the implementation phase. For ease, these steps have been tabled with a short description provided.

⁷⁸ Turney et al, above n 51.

⁷⁹ Colvin, above n 17.

⁸⁰ Huang et al, above n 58.

⁸¹ Boud, Cohen and Sampson, above n 7; Edwards and Bone, above n 7; Dancer, Morrison and Tarr, above n 10, 1808; Watts, Malliris and Billingham, above n 46; Masters and Yelland, above n 23; Parkinson, above n 16; Hodgson, Benson and Brack, above n 46; Astin, above n 21.

⁸² Huang et al, above n 58.

⁸³ Watts, Malliris and Billingham, above n 46.

⁸⁴ Huang et al, above n 58.

⁸⁵ Ibid 822.

⁸⁶ Ibid; Watts, Malliris and Billingham, above n 46.

⁸⁷ Watts, Malliris and Billingham, above n 46.

Table 2: PAL implementation tree

Implementation step	Description
Scope	The scope of on-campus and online PAL initiatives concerns the size and scalability of the service. Consideration should be given to the type of PAL service offered, ie, e-mentoring, group sessions, one-on-one online sessions. ⁸⁸
Planning and delivery	Extensive pre-planning of PAL courses is recommended. Directions as to content, structure and desired outcomes should be clearly articulated. ⁸⁹
Promotion, recruitment and attendance	Consideration should be given to the type of promotional activities that will need to be undertaken to inspire attendance and participation in the initiative. ⁹⁰
PAL leaders – recruitment, training and preparing	Recruitment methodology and ongoing training should also be thoroughly examined to ensure that PAL leaders have the required skill and knowledge base necessary for success in the programme. ⁹¹
Scheduling	Synchronous, asynchronous or multi-model offerings should be considered in light of student availability. ⁹²
Evaluation	An appropriate evaluation methodology should be adopted to measure the outcomes of the PAL initiative. ⁹³

By way of example, using the implementation tree above, the author has constructed a template of what a PAL programme in the context of a taxation law unit might look like. It is anticipated that this document will be used as a working model with a view to performing a pilot in this unit at a later date (see Appendix 2).

V LIMITATIONS

This article is limited by several factors. First, the article relies on the subjective perspective of the author and their experience. In this way, the lack of objectivity and supporting quantitative data calls in to question the authority of a great number of the propositions explored within the text. An opportunity exists to evaluate the effectiveness

⁸⁸ Ibid 95.

⁸⁹ Ibid 99.

⁹⁰ Ibid 95.

⁹¹ Ibid 96–8.

⁹² Ibid 97.

⁹³ Ibid 100.

of the implementation structure described above in an attempt to respond to many of the perceived biases in this work.

A second limitation is that the context of this article was confined to an exploration of one teaching discipline: taxation. Expanding the examination to other disciplines and institutions may be valuable in assessing the transferability and accuracy of the assertions made in this work. However, the literature could further benefit from future research that focuses more specifically on the outcomes of PAL relative to students, instructors, and mentors in the context of taxation.

Additionally, given a general predominance of research that examines the effect of PAL on academic performance only, there would be benefit in examining the process and dynamics that exist within the PAL sessions to support student growth and development. Further research in this area would be valuable as it may help explain why PAL may be more effective on a social level and is likely to contribute more broadly to those aspects of peer learning that assist the observed gains in academic performance.

VI CONCLUSION

Overall, employing PAL initiatives appears to be an effective strategy to meet the demands of various student cohorts. Additionally, the benefits of PAL can be seen to extend beyond academic performance. PAL's focus on developing learning strategies fosters critical thinking skills that form a foundation for life-long learning.⁹⁴

The literature shows that both the student and instructor are better placed towards grasping and applying the underlying concepts and ideas associated with course content when engaging with PAL. Notable benefits are also associated with the development of students' interpersonal and communication skills.

Although there are some shared findings – ie, increased student participation or academic performance – PAL experiences remain variable, and responses to these experiences differ depending on myriad social and psychological factors. The utility associated with the implementation strategy and other assertions proposed in this work remains to be seen and will certainly be faced with many challenges. What is true is that there currently exists no optimal solution to determine the effectiveness associated with PAL. Each initiative will face its own hurdles and continue to inform and advise on further and better PAL strategies. Such is the quest for innovation.

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⁹⁴ Topping and Ehly, above n 26.

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APPENDIX 1⁹⁵

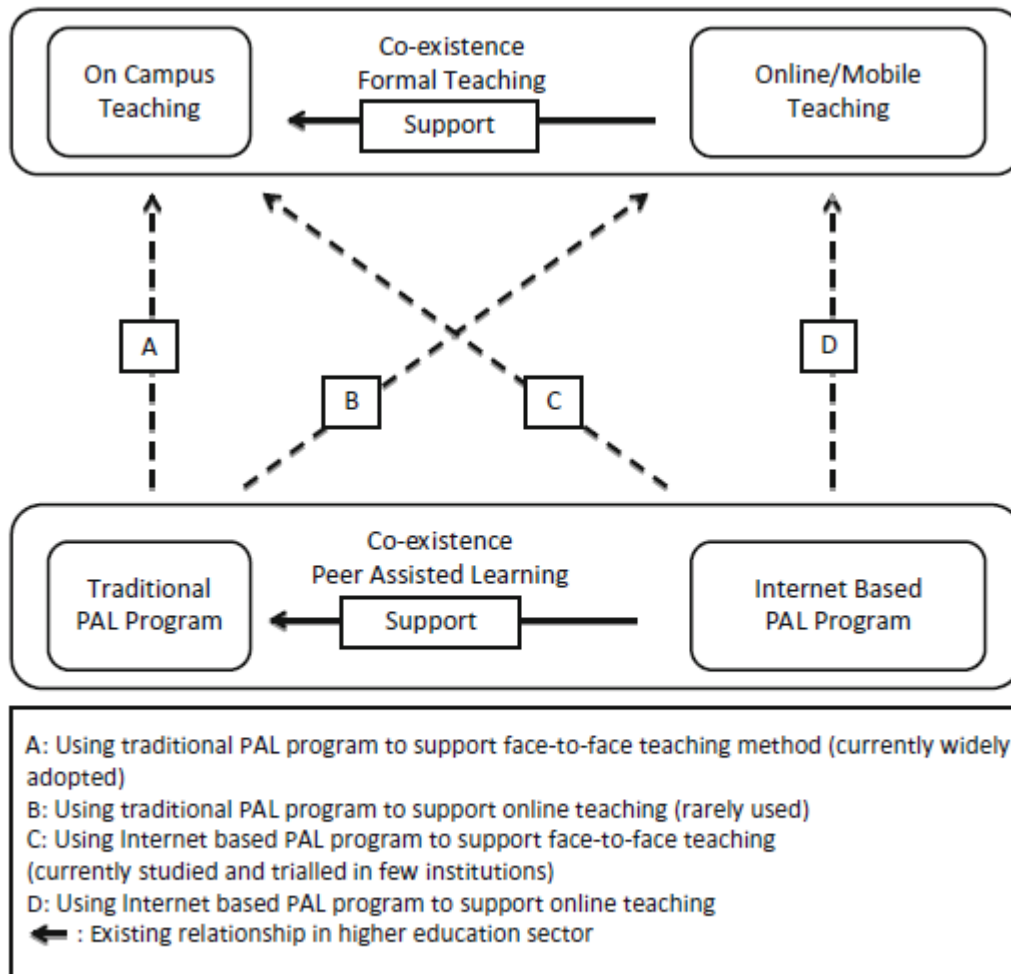


Fig. 1 Implementation structure

⁹⁵ Huang et al, above n 58, 822.

APPENDIX 2: PRINCIPLES OF AUSTRALIA TAXATION LAW – PAL IMPLEMENTATION TEMPLATE

Implementation step	Description
Unit details and description	<p>Intent: This introductory unit is intended to promote understanding of the Australian taxation system from a legal perspective.</p> <p>Years active: 3 (commenced 2016).</p> <p>FTSE: 13 (2018).</p> <p>Structure: 2-hour lecture, 2-hour tutorial – on-campus. No online availability.</p> <p>Assignments: Oral presentation, written assignment and exam.</p>
Scope	Introduce the use of on-campus and online PAL utilising the skill set of former students who have successfully completed the unit and display an aptitude for teaching and learning.
Planning and delivery	Preparation of PAL tutorial guide with suggested answers and worked examples. PAL leaders to schedule availability with students once per week prior to the lecture. Use of online delivery recommended. Forums such as Blackboard Collaborate or Skype may be attractive solutions.
Promotion, recruitment and attendance	Promotion, attendance and recruitment rely heavily on the relationship between former students and educator. Lecturer to facilitate introduction and confirm roles.
PAL leaders – recruitment, training and preparing	Online application followed by an interview. Training will be ongoing with lecturer as need be. Incentive may be monetary or participatory.
Scheduling	Variable pending availability of students.
Evaluation	Qualitative survey and eValueate.