

# Online learning strategies to recruit and train Student Mentors: Opportunities for development and integration with face-to-face strategies

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Recruitment, training, and ongoing development strategies are critical to the success of peer assisted learning programs (PAL), whereby experienced students provide academic and social support to fellow students. Recent iterations of PAL programs incorporate online learning strategies. Online technologies provide learning and communication tools to overcome time and geographical barriers when recruiting and training students participating in PAL. Online tools, when used in conjunction with face-to-face strategies, offer flexible learning environments that can be adapted to respond to Student Mentors' developmental learning needs. At Victoria University, the Students Supporting Student Learning (SSSL) Unit has implemented blended training and development strategies in their multi campus Student Mentoring programs. The introduction of online recruitment and training processes involved several steps or stages for Student Mentors to complete, following a flipped classroom approach. Initial online training and recruitment processes assessed students' expectations and motivations to become Student Mentors, and scaffolded basic mentoring skills that were further developed in subsequent face-to-face training sessions. Ongoing development opportunities included a blend of face-to-face and online weekly sessions that emphasised active learning using reflective activities, quizzes, and multimedia resources. This paper discusses the theoretical underpinnings of a blended recruitment and learning model for students providing support in PAL programs; in particular, online learning and peer learning theoretical frameworks. It also describes the process for implementing online recruitment and learning strategies for Student Mentors at Victoria University. Recommendations on how online and blended approaches can enhance recruitment and training/development in PAL programs are discussed.

**Key Words:** peer assisted learning, training, recruitment, ongoing development, blended learning, flipped classroom.

## 1. Introduction

Peer Assisted Learning (PAL) programs are increasingly becoming key strategies to provide academic and social support to higher education students. Based on social learning and socio-cognitive theories of learning, PAL programs utilise the beneficial influence of peers – students of equal or similar ability and social standing – to enhance students' academic development, provide social and emotional support, and increase student satisfaction and engagement with their studies (Hilsdon, 2014; Topping, 2005). Strategies that employ peers as a source of support encompass a variety of collaborative learning approaches, including mentoring dyads, group mentoring, and peer-led academic study sessions, to

name a few (Falchikov, 2001). Peer learning strategies share core pedagogical principles: facilitation of knowledge and independent learning skills, mutuality of benefits (i.e. both the student who receives support and the student who provides support benefit from their participation in the program), and the existence of an open, non-judgmental learning environment (Topping & Ehly, 2001). PAL programs seek to enhance students' independent learning skills to become self-regulated learners. A valuable aspect of PAL is the existence of a myriad of cognitive, social and psychological benefits for participating students (Ginsburg-Block, Rohrbeck, & Fantuzzo, 2006). Such beneficial outcomes have attracted interest from researchers and educators, resulting in the implementation of PAL programs for diverse student cohorts. In higher education, PAL programs are frequently employed to aid student transition into tertiary education, and to assist students in the development of academic skills linked to success in tertiary studies (Colvin, 2007; Terrion & Leonard, 2007). The use of peer learning in higher education is happening in a context where universities are seeking alternative strategies to traditional academic support programs (Colvin & Ashman, 2010), and increasing numbers of students report feeling under-prepared to undertake tertiary studies (Hendricks, Andrew, & Fowler, 2014). PAL programs have gradually become central strategies within academic support units due to its cost effectiveness, ability to provide both social and academic benefits to students, and flexibility to adapt program objectives to diverse student cohorts and their needs (Topping, 1996). PAL strategies also provide students with valuable socio-psychological benefits linked to academic success, satisfaction, and retention; namely, sense of belonging, increased self-efficacy, and decreased anxiety and stress (Collings, Swanson, & Watkins, 2014; Zentz, Kurtz, & Alverson, 2014).

Research on peer learning shows that it can be a highly effective pedagogical tool to enhance students' learning and academic achievement (Boud, Cohen, & Sampson, 2000). PAL programs, however, are subject to a number of internal and external factors that can affect the quality of learning outcomes for students. Recent PAL studies have attempted to uncover peer learning processes and dynamics linked to high quality learning outcomes and satisfaction for participants, in an attempt to maximise PAL effectiveness (Arendale, 2014). Being a student-centred learning strategy - based on the establishment of learning partnerships between students - the success of PAL initiatives heavily relies on the skills of the student who provides support. Amongst factors related to learning quality and success in PAL, researchers emphasise the role of training and recruitment strategies (Tredinnick & Menzies, 2017). When PAL is intentionally planned and includes structured training sessions for Student Mentors, both students who provide support and students receiving support can benefit from their participation (Bates, 2014). Recruiting students whose expectations and attitudes towards mentoring are aligned with the objectives of the program, as well as providing them with ongoing development opportunities, is of paramount importance to ensure that PAL programs fulfil peer learning objectives (Ehrich, 2004; Harmon, 2006). In fact, learning outcomes can be diminished if Student Mentors' motivations and role expectations are not accounted for when implementing PAL (Ashwin, 2003). Likewise, PAL initiatives can prove unsuccessful if Student Mentors are not equipped with the necessary skills and knowledge to successfully navigate their roles (Brown, Nairn, van der Meer, & Scott, 2014).

Recruiting and training Student Mentors has traditionally been conducted via face-to-face strategies. These strategies, however, can be constrained by a number of factors; namely, students' increasingly busy schedules (which can prevent students from attending face-to-face sessions on a regular basis) budget limitations, and geographical barriers (of particular relevance to multi-campus or onshore/off-shore programs). Tredinnick and Menzies (2017) also argue that traditional face-to-face training for Student Mentors is usually conducted in intensive or block mode, potentially resulting in diminished opportunities for skill transferability or further development over the semester. Recent iterations of recruitment and training/development strategies for Student Mentors include online and blended learning strategies. This shift towards online training and recruitment is also happening in a context where online and blended learning pedagogies have become essential aspects of the learning experience for higher education students. Online and blended learning strategies can be adapted to respond to the needs of students and staff working within academic support and PAL programs. Online tools provide flexible

modes of delivery that can overcome time and geographical barriers (Hizer, Schultz, & Bray, 2017), as well as learning opportunities for time-poor students and/or staff. Face-to-face initial training and ongoing development strategies can also benefit from the inclusion of online learning strategies in PAL programs. An example of such strategy is the flipped classroom approach, whereby students complete online learning activities before attending face-to-face sessions (Andrade & Coutinho, 2017). PAL programs are increasingly employing online and blended learning strategies, such as the flipped classroom approach, to provide flexible and ongoing learning opportunities for Student Mentors. Online technologies can be particularly relevant for multi-campus or onshore-offshore PAL programs, as they allow staff members to recruit and train peer mentors based in multiple locations.

Current developments in the implementation of online strategies to recruit and train Student Mentors have resulted in an increased interest in researching the role of online pedagogies in peer learning. Recent peer learning publications describe training and development approaches based on online and blended learning pedagogies (for example, Tredinnick & Menzies, 2017). Despite the interest in implementing online strategies within PAL programs, little research has been published on specific online recruitment and training program aspects. Such data is critical to the development of further online learning strategies, enabling discussion on good practices, theoretical underpinnings, and integration with existing face-to-face strategies. This paper aims to advance knowledge on the role of online recruitment and training tools in PAL programs and its integration with face-to-face strategies. To do so, this paper describes the implementation of online strategies to recruit and train Student Mentors at Victoria University, and discusses the rationale behind their implementation based on relevant peer learning and online learning theories. The paper is divided into three sections: online recruitment strategies and the importance of assessing motivations and role expectations; initial online training strategies and activities based on the flipped classroom approach; and ongoing development strategies for Student Mentors using blended learning pedagogies. Examples of learning activities and online learning tools are included in each section. Further recommendations on how online learning technologies can enhance face-to-face recruitment and training strategies in PAL are also discussed. To provide a context for the training and recruitment program discussed in this paper, next section describes PAL programs at Victoria University. For consistency purposes, the term 'Student Mentor' is employed in this paper to refer to students providing support in PAL programs.

## **2. Student mentoring programs at Victoria University**

The Students Supporting Student Learning (SSSL) unit oversees the implementation and management of academic peer assisted learning programs at Victoria University, known as Student Mentoring programs. Currently, the SSSL unit administers five programs: Peer Assisted Study Sessions (PASS), Peer Assisted Tutorials (PATs), Student Writing Mentors, Trident for Engineers, and Student Rovers (based at the Library/university Learning Commons). Whilst some programs are subject-based and provide further academic support to students in specific units (e.g. PASS), other programs (such as the Student Writing Mentors or Student Rovers) aim to develop general academic literacy skills and do not operate within specific subjects. An important aspect of the work undertaken at the SSSL unit is the emphasis on connecting embedded (or curriculum-based) and stand-alone programs to maximise student engagement in PAL. An example of such interaction is the Trident program, which comprises aspects of embedded PAL programs (i.e. Student Mentors working within specific subjects and attending tutorials) and stand-alone schemes such as the provision of numeracy support in open study spaces. This approach allows Student Mentors to create connections with students when attending tutorials and encourage them to seek further support outside class time. Programs operate at five campuses in the metropolitan area of Melbourne. The SSSL unit employs between 40-50 Student Mentors each semester within the 'Students as Staff' scheme. The Student Mentor role is considered inherently developmental and, as such, all Student Mentors are required to participate in regular learning and ongoing development activities.

SSSL lecturers are in charge of recruiting, training, and providing ongoing learning opportunities for Student Mentors participating in all five programs. Student Mentors are recruited based on their academic record, ability to communicate with other students, and peer mentoring attributes (e.g. empathy, understanding of students' learning needs). All Student Mentors attend a compulsory initial training day, and participate in weekly development workshops during the semester to further enhance their peer mentoring skills. Initial training and ongoing development sessions are tailored to the specific needs and role responsibilities inherent to each Student Mentoring program. In semester one of 2017, the SSSL unit implemented a blended recruitment and training model, incorporating online strategies to recruit Student Mentors, design initial training activities, and engage mentors in weekly learning activities. The introduction of this blended approach served to unify mentoring learning resources, provided flexible and student-centred learning opportunities for Student Mentors, maximising staffing and time resources. The blended Student Mentor recruitment and training model developed by the SSSL unit consisted of the following four stages:

Stage 1. *Online recruitment phase*: aimed to ascertain students' motivations to become a mentor, basic understandings of peer learning, communication skills, and other requirements as per role (e.g. academic grades in specific subjects). Students completed an online application form which included uploading video responses to recruitment questions. Successful candidates were invited to participate in initial online training.

Stage 2. *Initial online training*: developed students' understandings of peer learning theories and their role as Student Mentors, as well as basic peer mentoring skills related to the establishment of peer learning relationships and interpersonal/communication skills. Students' responses to online activities included in initial online training were employed to further determine students' suitability for Student Mentoring roles, and to inform face-to-face initial training activities. Successful candidates were invited to participate in face-to-face initial training.

Stage 3. *Face-to-face initial training*: last stage of the recruitment process, and second stage of initial training. It aimed to further develop peer mentoring skills introduced in the previous stage, with an emphasis on role boundaries, enquiry-based and hands-on activities (e.g. role-plays).

Stage 4. *Ongoing learning and development (blended model)*: weekly development workshops conducted online and face-to-face.

The next sections describe and discuss the development of the online components of the recruitment and training program summarised above.

### **3. Online recruitment strategies: Student Mentors' motivations and expectations**

Students engage in PAL programs as Student Mentors for a variety of reasons, including intrinsic and extrinsic motivation factors. Recruiting students whose role expectations, attitudes towards peer learning, and motivations to become a mentor align with peer learning principles is a foundational aspect of successful PAL programs (Rodrigo et al., 2014). Moreover, recruiting students who can understand and adapt to the varying demands and complexity of the Student Mentor role is key to the success of training and ongoing learning strategies for Student Mentors. Even though the peer learning literature often cites successful outcomes for PAL programs, it cannot be assumed that Student Mentors will always display learning behaviours associated to effective peer learning (Ashwin, 2003). This section discusses the impact of students' motivations and role expectations on peer learning dynamics and outcomes, as well as strategies to recruit students whose motivations and expectations align with the pedagogical principles of peer learning.

Students' role expectations may clash with peer learning program objectives, acting as a barrier to further developing students' peer mentoring skills (Mackey, Kamphoff, & Armstrong, 2010). Previous research studies show that students participating in PAL programs as Student Mentors may hold con-

flicting expectations about their role; in particular, regarding role boundaries around helping and supporting students (Capstick, 2004). Holt and Berwise (2012) argue that, despite the increasing presence of peer learning schemes in higher education, students' knowledge of peer learning pedagogical principles can be quite limited – partly due to students' inexperience as active participants in peer support programs or unrealistic representations of the Student Mentor role (Holt & Berwise, 2012). In some cases, role expectations may be unclear or non-explicit, an issue related to difficulties to define the Student Mentor role within specific role boundaries (Brown et al., 2014). Students' role expectations may also clash with peer learning principles and pedagogical foundations. For example, Christie (2014) found that peer mentors can hold expectations of themselves as context experts, resulting in content reteaching rather than knowledge facilitation in PAL programs.

In addition to role expectations, students' attitudes towards peer learning and motivations to become a mentor can also influence peer learning dynamics and outcomes. A number of motivational factors underpin students' decision to participate in PAL: personal gain and educational improvement (opportunity to improve their knowledge on subject areas) would be examples of intrinsic motivation factors, whereas money or time retributions (e.g. in the form of study credit) would illustrate extrinsic factors that motivate students to become Student Mentors (Pariser, 2012). The peer learning literature has examined the role of motivation in voluntary and paid PAL programs, assessing differences in Student Mentors' behaviours based on intrinsic and extrinsic motivation factors. PAL programs that reward Student Mentors with money or study credit can attract students with extrinsic motivations that may not always align with peer support principles. Voluntary programs, on the other hand, can be more successful in attracting students with internal motivations related to learning development and skill acquisition, albeit less successful in engaging students in long-term Student Mentoring programs (mainly due to students' other work or personal commitments). Motivation factors can affect Student Mentors' attitudes towards mentoring, choice of learning activities in PAL, persistence and program retention. For instance, Karcher, Nakkula, and Harris (2005) found that Student Mentors who hold extrinsic motivations are more likely to discontinue their participation in peer mentoring relationships.

Assessing students' motivations and role expectations prior to engaging in peer learning is a crucial aspect of the recruitment stage. This data can be used not only for recruitment purposes (e.g. to select students with specific attributes and motivations), but can also inform initial training and ongoing development opportunities. For instance, if Student Mentors share specific beliefs about the peer mentor role (or related role boundaries), PAL educators can implement activities to help Student Mentors develop role expectations better aligned with program objectives and role boundaries, or to reinforce behaviours and skills needed to maintain role boundaries within peer learning principles in complex situations. The online recruitment program described in this paper aimed to assess students' peer mentoring qualities, role expectations, attitudes, and basic understandings of peer learning. Table 1 summarises tasks included in the online recruitment stage, their connection to peer learning effectiveness, and further links to initial training and ongoing development opportunities. In assessing students' motivations and role expectations about peer learning, the online recruitment process aimed to ascertain peer mentoring affective dimensions (Ten Cate & Durning, 2007). That is, students were asked to reflect on their own reasons for embarking on peer learning. Students also learned about the basic principles and pedagogical foundations of peer learning, and were asked to elaborate on their understandings of the responsibilities and tasks inherent to Student Mentoring roles. A crucial aspect of the online recruitment process was the assessment of students' video presentations. As part of their online recruitment application, students uploaded a short video presentation of themselves, and were asked to describe previous situations when they helped someone with a learning task. These videos helped the SSSL team assess not only candidates' communication skills, but also their ability to help others and reflect on effective strategies when supporting other learners.

**Table 1.** Online recruitment tasks for Student Mentors.

<b>Task description</b>	<b>Peer learning aspect</b>	<b>Connection to training and ongoing development</b>
Watch videos on peer learning programs: philosophy and underlying principles	Set up initial expectations and understandings of peer learning	Informs training on Student Mentors' motivation and expectations
Reflect on first year students' learning needs	Understanding of students' needs and ability to establish peer mentoring relationships	Expanded in initial training and ongoing development
Describe understandings on peer learning: what makes a good Student Mentor	Assess students' role expectations and understandings of peer learning principles	Expanded in initial training and ongoing development
Student to upload video on reasons for becoming a mentor, and description of a situation when student helped others	Ascertain intrinsic/extrinsic motivations to embark on peer learning	Intrinsic motivations are role-modelled in initial training and ongoing development
	Help-seeking behaviours: ascertain students' understanding of processes involved in supporting others	Help-seeking behaviours are further developed in ongoing development activities
Student to upload video on reasons for becoming a mentor, and description of a situation when student helped others	Assess students' communication skills relevant to interpersonal communication in peer learning contexts	Interpersonal communication skills are role-played in initial face to face training, and further developed in ongoing development workshops
	Assess metacognitive awareness in student through description of processes involved in supporting others	

#### 4. Initial training: The flipped classroom approach

Peer learning researchers and educators identify initial training as critical to the success of PAL programs (Bates, 2014). Training provides Student Mentors with the skills, strategies and self-confidence to address students' learning needs, as well as the ability to adapt learning/mentoring strategies according to students' changing needs. Moreover, training can address specific peer mentors' expectations and attitudes that could potentially have a negative impact on learning dynamics and outcomes for students. Since many students participating as Student Mentors may have limited experiences or knowledge of peer learning, providing them with accurate depictions of the role of peer learning within academic support strategies is typically one of the main objectives for initial training programs. Most PAL schemes described in the peer learning literature emphasise the importance of training peer mentors prior to engaging in peer learning interactions; fewer studies, however, have described specific content and activities included in initial training programs. The diversity of programs that employ peer learning and peer support mechanisms has resulted in a variety of initial training programs for Student Mentors. Despite content differences in training programs, dependent upon PAL program structures, most training strategies aim to educate students in peer learning educational objectives and pedagogical principles, developing students' communication skills, ability to establish effective learning interactions with students, and techniques to facilitate knowledge acquisition rather than content reteaching (Lundmark, Paradis, Kapp, Lowe, & Tashiro, 2017).

Initial training activities directed to the enhancement of Student Mentors' knowledge of the pedagogical principles of peer learning serve as a foundation for role expectations, identity, mentoring relationships, and mentoring/ learning interactions within PAL. The peer learning literature emphasises the need for clear role expectations for both student/mentees and Student Mentors participating in PAL programs (Brown et al., 2014). In particular, Student Mentors need to develop clear understandings on how effective learning interactions with students look like, and what role expectations and role boundaries underpin successful peer learning dynamics (Holt & Berwise, 2012). In addition to role expectations and peer learning principles, Student Mentors need to develop specific skills to build effective peer mentoring relationships and engage with students in fruitful learning collaborations. Such skillset includes knowledge on students' learning needs, how to encourage independent learning skills, and role modelling of study skills and learning behaviours linked to deep learning outcomes (Garcia-Melgar, East, & Meyers, 2015).

The initial training program described in this paper followed a constructivist approach, in line with peer learning principles. Accordingly, learning activities focused on co-construction of knowledge and shared understandings of peer learning and how to effectively work with students to support their academic development. The main objective of the online initial training module was to scaffold initial peer mentoring skills, and further develop students' knowledge on the pedagogical foundations of peer learning. In addition to role expectations and boundaries (topics that were further expanded in ongoing learning development strategies), content included in the online component of the initial training program was selected based on factors related to peer learning effectiveness - as described in the peer learning literature. In particular, concepts of congruence or similarity between students (Student Mentors and students/mentees) were employed to inform online training topics and activities (Lockspeiser, O'Sullivan, Teherani, & Muller, 2008).

Congruence between students participating in PAL programs is a defining characteristic of effective peer learning relationships (Ten Cate, van de Vorst, & van den Broek, 2012). Initial training (and ongoing development strategies by extension) aimed to develop Student Mentors' skills to establish and maintain two types of congruence with students: social and cognitive. Whilst social congruence refers to perceived similarities between students - and allows for the development of trust and empathy when students learn together - cognitive congruence represents Student Mentors' ability to work within cognitive reach of students and employ language and explanations suitable to students' current cognitive development (Lockspeiser et al., 2008). Cognitive congruence relates to Vygotsky's zone of proximal development, as cognitive and developmental similarities between students allow experienced students (acting as peer mentors) to identify learning gaps in students/mentees and provide expert scaffolding - as defined by Vygotsky (Ten Cate & Durning, 2007). In this online training program, social congruence skills were enacted through interpersonal and communication skills related to the provision of empathy and a non-judgmental learning environment. Both types of congruence were developed through activities included in initial online training, namely: activities to develop students' understanding of the zone of proximal development and its application to peer learning contexts; and role modelling of interpersonal communication skills, with an emphasis on the development of trust, rapport and empathy with students.

Our initial training program for Student Mentors included two components: a generic online module for all Student Mentors, and a face-to-face training day specific to each Student Mentoring program. In training Student Mentors prior to commencing their roles, we followed a flipped classroom approach. Flipped learning is one of the most commonly used blended learning strategies in higher education, connecting online and face-to-face learning strategies with the objective of helping students acquire foundational knowledge and reinforce concepts through online learning activities to be completed prior to attending face-to-face sessions. Flipped learning approaches allow students to engage in more active and student-centred learning activities in face-to-face sessions, while online strategies are typically employed to establish or reinforce concepts needed to fully participate in face-to-face activities (Cheng, Ka Ho Lee, Chang, & Yang, 2017; Lyons, Limniou, Schermbrucker, Hands, & Downes, 2017).

The initial online training module – which took students approximately 3 hours to complete - further developed content previously introduced in the online recruitment stage, and aimed to equip Student Mentors with preliminary understandings of social cognitive theories underpinning peer learning, basic peer mentoring relationship skills, and the extent and boundaries of their role within academic support services in particular and the university context in general. Face-to-face training allowed Student Mentors to put into practice those skills learned during online training, develop nuanced understandings of their role and expected learning interactions, and further discuss role boundaries with fellow peer mentors. Table 2 describes content and activities included in the online component of the initial training stage, as well as activities to develop and consolidate students' knowledge, skills, and attitudes. Connections between online and face-to-face learning strategies contributed not only to the development students' peer learning knowledge (through a flipped classroom approach), but also informed content and activities to be included in face-to-face training through the analysis of Student Mentors' responses to online learning activities. For instance, we analysed students' shared expectations and beliefs about the role of peer mentors, and designed face-to-face activities that dealt with common role misrepresentations - or reinforced positive peer mentoring attributes through role-modelling and group practice. Likewise, students' responses to online activities on the applications of the zone of proximal development to peer learning (one foundational educational theory in PAL) informed face-to-face activities that employed such understandings to put peer learning theory into practice. Thus, face to face initial training activities provided Student Mentors with opportunities to practise and expand skills and knowledge covered in online initial training, or to reconsider their understandings of the peer mentor role.

**Table 2.** Content areas and examples of activities included in online initial training.

Content area	Peer learning aspect	Activity example
Facilitating knowledge: zone of proximal development	Cognitive congruence	Watch video and relate to examples of applications of the zone of proximal development to students' life/previous learning experiences
Building relationships and engaging with students	Peer mentoring relationships	Written responses to peer learning scenarios: how would they build relationships with students in different contexts? What strategies would they use in each context?
Communication skills in peer learning contexts	Social congruence	Watch video on questioning techniques; complete interactive quiz on uses of questioning in different Student Mentoring scenarios
Peer learning and practices of empowerment	Peer learning pedagogical principles	Read journal article and reflect on the role of peer assisted learning programs in higher education

## 5. Ongoing development strategies: A blended learning approach

Peer learning roles are inherently developmental; that is, Student Mentors need to develop and refine peer mentoring skills as they gain experience in constant interaction with students. The complex nature of peer mentoring also has implications for role boundaries, which may need to be defined and redefined as Student Mentors work with students. Colvin and Ashman (2010) argue that even in programs with established training programs, assumptions about how Student Mentors will enact their roles cannot be

made. Hence the need to provide Student Mentors with ongoing learning opportunities. Student/mentees' requests can also influence peer learning dynamics and, consequently, learning quality and outcomes. Such requests can be influenced by factors external to the PAL program environment, such as assessment due dates (Ashwin, 2003). As peer mentoring relationships evolve and change over time, Student Mentors are exposed to different challenges that can compromise their ability to maintain successful peer learning partnerships with students (Garcia-Melgar et al., 2015). Previous research on PAL programs shows that program deviations from learning objectives (or diminished results such as low quality learning outcomes for students) cannot be overlooked (Mackey et al., 2010). A valuable strategy to monitor and implement program changes as challenges arise is to equip Student Mentors with advanced mentoring skills to respond to such challenges. In order to provide ongoing development opportunities to accommodate Student Mentors' changing developmental needs, the SSSL unit grouped online and face-to-face ongoing learning activities into categories, following a similar approach to that described in the initial training stage. We first divided ongoing development content for Student Mentors into generic and program-specific skills. A second categorisation involved assessing content suitability to online and/or face-to-face delivery. A constructive alignment approach underpinned this process (Lueg, Lueg, & Lauridsen, 2016). Firstly, we assessed whether learning objectives would be best achieved through online or face-to-face learning activities. A second step implied considering how assessment of learning objectives would be conducted, based on students' demonstrations of skill and knowledge acquisition through practical and problem-based activities. Again, we assessed the suitability of online and face-to-face strategies in relation to Student Mentors' learning acquisition; that is, we considered what learning environment (online or face-to-face) could be employed to evaluate learning outcomes in Student Mentors.

Content included in ongoing learning activities aimed to develop Student Mentors' skills to provide shared learning guidance when interacting with students and, eventually, enhance independent learning. In a shared learning guidance context, students retain responsibility for their own learning as they progressively develop more complex skills with the support of the Student Mentor (Ten Cate, Snell, Mann, & Vermunt, 2004). A shared learning guidance model can prevent situations where Student Mentors may re-teach concepts or become too directive when providing support, diminishing opportunities for self-regulation and independent skills acquisition in students receiving support. Shared guidance, however, can fluctuate during peer learning relationships as challenges arise, and student requests change due to external pressures such as looming assessment dates. Student Mentors need to be skilful in detecting variations in the shared guidance/facilitation of knowledge continuum, and address deviations that could result in learning behaviours less conducive to deep learning outcomes in student/mentees. In order to enhance Student Mentors' ability to develop and maintain shared learning guidance environments, weekly development workshops (conducted both face-to-face and online) focused on developing skills to assess students' previous knowledge, employ a myriad of questioning techniques, and build role boundaries around knowledge facilitation. In addition to strategy-building, blended learning workshops developed Student Mentors' skills to support students within affective (e.g. enhancing students' intrinsic motivation to learn) and metacognitive domains (role-modelling effective study and learning skills). For example, some online workshops taught Student Mentors about motivation theories and how different motivation factors can affect students' attitudes towards learning. Student Mentors then had the opportunity to practise strategies to support students with different learning motivations in subsequent face-to-face sessions.

Face-to-face and online learning activities included in weekly development workshops were based on active learning principles and co-construction of knowledge. Problem-based and enquiry-based learning were foundational to most activities. For instance, Student mentors were presented with real situations or challenges present in peer learning contexts, and were asked to role-play or provide reflections on how they would react through the application of skills and knowledge learned in face-to-face and online workshops. Enquiry and problem-based learning approaches enhanced opportunities to apply communication and pedagogical skills, and maximised opportunities for knowledge transfer and application to

other learning situations by Student Mentors. Online learning strategies included in weekly workshops also emphasised the creation of online communities of learning and knowledge sharing, together with students' individual reflection processes. In this regard, Student Mentors shared their experiences in weekly online discussion forums (relevant to the topic covered each week; for example, learning styles), or were asked to submit individual reflections on their experiences with students that demonstrated how they had applied skills learned in developmental workshops.

Table 3 describes examples of content and activities included in this blended learning approach to further developing students' skills and knowledge, indicating relations to peer learning theories or PAL effectiveness and examples of activities.

**Table 3.** Content areas and examples of activities included in online development workshops.

Content area	Relationship to effectiveness/ peer learning theories	Online activity example(s)
Interpersonal and communication skills	Social congruence	Students complete interactive module on communication skills based on person-centred approach to teaching and learning. Students then upload video role-playing communication skills learned in workshop
Learning theories	Cognitive congruence, facilitation	Students assess own learning styles (as a concept to understand students' learning needs and potential preferences) using multi-response quiz, reflect on how to adapt peer learning strategies to students' needs and preferences
Understanding students' learning needs	Social congruence, empathy, development of peer learning relationships	Students read article on low SES students and respond to short answer questions on impediments to learning and how PAL can enhance student achievement and engagement
Motivation and help-seeking behaviours	Motivations to participate in PAL	In groups, students develop strategies to encourage help-seeking in specific student cohorts (either face to face, or using online discussion forums)
Role boundaries	Student-mentees' role-expectations, challenges	Students are presented with different scenarios that can compromise role boundaries, and asked to provide strategies (synchronous or asynchronous task). Scenarios are presented as mini-workshops.
Facilitating knowledge and questioning techniques	Cognitive congruence and shared learning guidance	Students watch video on questioning techniques used in the classroom, and develop their own questioning techniques to respond to peer learning scenarios. Students then evaluate/provide feedback on other students' strategies.
Metacognitive awareness	Role-modelling	Students complete an online module on motivation to learn, and attributional styles and beliefs. Students then use discussion forum to report on motivation factors and styles observed when interacting with students.
Peer learning theories	Understanding importance of role	Students find and read journal articles on peer learning in higher education.
Career development	Transferability of skills, further opportunities, student satisfaction	Students read examples of key selection criteria responses, identify skills developed in Student Mentoring role to draft cover letter and key selection criteria responses

An important aspect underpinning the design of blended developmental learning strategies for Student Mentors was the need to respond to students' varying needs over the course of each PAL program. Consequently, content was scaffolded and adapted to Student Mentors' needs in specific weeks of the semester, as mentoring relationships evolved or student/mentees' requests changed in response to the university learning environment (assessment tasks being a clear example). Such scaffolding contributed to the integration of generic and program-specific skills, as well as online and face-to-face activities. This blended learning approach provided the necessary flexibility to adapt learning activities to Student Mentors' busy study schedules, allowing SSSL staff to select content topics and activities based on what peer learning skills would be most necessary during specific semester times. Generic peer learning skills were particularly relevant during the first weeks of the semester, whilst program-specific skills suited Student Mentors' learning needs during central weeks of the semester (once Student Mentors had developed clear understandings of their role). Later in the semester, online learning strategies provided the flexibility that mentors needed when they became busier with their own academic studies.

## **6. Conclusion and further recommendations**

Online learning strategies and online communication tools have the potential to enrich and transform PAL programs. In addition to breaking down time and distance barriers when training and recruiting Student Mentors, online technologies offer PAL educators new opportunities to develop valuable skills and knowledge in students providing peer support. This paper has described the process of implementing online learning strategies to recruit and train/develop Student Mentors at Victoria University, discussing links to relevant online learning and peer learning theories. Online recruitment strategies aimed to assess students' motivations to become a peer mentor and their understandings of the Student Mentor role; as such, the online recruitment stage also established initial expectations in Student Mentors and helped develop basic understandings on the role of peer learning within academic support units in higher education. Initial training strategies were based on a flipped classroom approach, allowing more practice time in face-to-face sessions as the initial online training module introduced content on communication skills, peer learning theories, and other relevant aspects of the Student Mentoring role. In this regard, online initial training served to alleviate time constraints during initial face-to-face training, and allowed Student Mentors to develop basic skills to fully participate in the face-to-face component of their initial training. Weekly development workshops followed a blended learning approach, and provided the flexibility to adapt content to Student Mentors' developmental needs over the semester. Encouraging students' active participation was a key element of the online development workshops described in this paper, as students participated in enquiry-based activities that required the application of problem-solving skills specific to peer learning contexts.

This paper has discussed how peer learning and online learning theories can be integrated to provide Student Mentors with a cohesive online training and recruitment program. A central element of this program was the connection between recruitment and training/development stages (e.g. recruitment responses were used to inform training activities) and the progressive scaffolding of peer learning skills as Student Mentors gained experience in the role. Suggested areas of improvement relate to student engagement with online learning and the integration of online strategies with face-to-face learning activities. To improve students' engagement in the online components of training and recruitment programs, PAL educators and researchers could employ synchronous online learning technologies to provide Student Mentors with real-time hands-on activities based on peer learning scenarios. As for the integration of online and face-to-face learning strategies, PAL educators could experiment with the implementation of diverse online and face-to-face learning pathways. For example, Student Mentors could complete an online interactive module, then attend a face to face session to practice relevant skills and, finally, post an online reflection on how they had applied or planned to apply those skills to actual peer learning contexts. Such approach could also increase Student Mentors' engagement with the online component of the training program, allowing for more opportunities to learn and practise core skills in online and face-to-face environments. Further research on online recruitment and training/development

strategies could document how Student Mentors engage in online and face-to-face activities, how these contribute to achieving differential learning outcomes, and what program elements contribute to Student Mentors' engagement in online learning.

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