Peer mentoring for clinical educators: A case study in physiotherapy

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Abstract

Introduction: Providing placements for students within clinical and community contexts is an essential part of training future healthcare professionals. Placements enable students to understand and apply their theoretical knowledge in practice. Placement experiences are provided by clinical educators, who are qualified health professionals with little-to-no formal education in teaching. This paper is focused on a specific initiative for supporting these educators, a mentoring program for physiotherapy clinical educators.

Methods: The program design was research-informed and participant-led, an uncommon approach to initiatives in this context. The 10-month mentoring program included formal and informal meetings, either in person or online; face-to-face workshops; and case-based discussions. To evaluate the program, participating educators were surveyed during and at the conclusion of the program. After each placement, students were surveyed about their learning experience.

Results: The program resulted in better clinical placement experiences for educators and students. Students of educators who participated in the program felt that their educator spent more time with them, and they were more satisfied with the delivery, content and amount of feedback received from their educator. Clinical educators in the program reported that mentoring enhanced their ability to support learning and reflect on their role as teachers.

Conclusions: The importance of clinical education in the student learning experience provides an argument for supporting educators. This paper presents evidence that peer mentoring is a viable support strategy that demonstrates positive outcomes for educators and their students.

Keywords: clinical educators; peer mentoring; student experience; physiotherapy.

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Introduction

Accredited allied health programs require students to undertake placements as part of their university training. Primarily, placements offer students the opportunity to apply theoretical knowledge in a practice context (McKenna, Wray, & McCall, 2009; Rodger, Fitzgerald, Davila, Millar, & Allison, 2011). Placements also provide students with situations in which to practise interpersonal skills and develop characteristics essential to productive working relationships within their chosen profession. Across their placement program, students are expected to develop their professional reasoning and management skills, as well as to master techniques that develop competence at the level of a beginning practitioner. During placements, students are taught in a clinical workplace environment under the supervision of a trained practitioner, or clinical educator.

Clinical educators, in Australia and abroad, often receive little-to-no formal training in learning and teaching theory. They are appointed to educator roles with the assumption that, as registered practitioners in their discipline, they will also be able to teach students (Nguyen, Thomson, & Leithhead, 2010). Their lack of formal training has led clinical educators to feel inadequately prepared for their role, and many report using trial and error to build their understanding of effective teaching (Walker & Openshaw, 1994). Many educators desire additional support and development opportunities (McCallum, Mosher, Jacobson, Gallivan, & Giuffre, 2013), particularly to address challenges related to facilitating learning and managing their roles as clinicians, employees and teachers.

The support available to educators is dependent on their placement site priorities, managers' perceptions and how colleagues value clinical education (Baldry-Currens & Bithell, 2000; Newberry, 2007). Where support from management is provided, it may be financial rather than practical. Even in systems where support is present in the form of educator accreditation, implementation has been inconsistent. In the United States, despite the system of professional development for credentialing clinical educators in physical therapy, approximately 70% or more of physical therapy educators are not credentialled (Recker-Hughes, Brooks, Mowder-Tinney, & Pivko, 2010). This suggests a need to review existing support strategies to enhance educator engagement with them.

For placement sites, the benefits of having students include opportunities for additional patient services, staff recruitment, continuing professional development and the creation of future practitioners (Buchanan, Jenkins, & Scott, 2014). Despite these benefits, student placements can also present challenges, for example: the learning requirements outlined by the university may not align with site priorities; students add to the full workload of practitioners, affecting the pace of a site; and there can be a tension between optimum patient care and safety, and providing students with appropriate opportunities to practice and learn, leading to hesitation, anxiety and fear amongst educators (Baldry-Currens, & Bithell, 2000; Cangelosi, Crocker, & Sorrell, 2009).

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Supporting clinical educators through peer-based and informal professional learning

Research examining the nature of the support required by clinical educators tends to address one of two questions: 1) What skills or strategies would the support offer educators? and 2) What should this support look like? Before considering the first question on developing educators' skills, it should be noted that the reported needs of clinical educators have not changed in 20 years. Cross (1995) identified skills that should be included in professional development courses for educators. These include skills in facilitating learning (e.g., supporting and assessing students, counselling/mentorship and liaising with the university) and managing the dual role of clinician and educator (time and stress management, and record keeping skills). The need for support in these areas is repeated in later papers (e.g., Cutcliffe & Proctor, 1998; Greenfield et al., 2014; Hesketh et al., 2001; Higgs & McAllister, 2007; Kilminster, Jolly, & van der Vleuten, 2002; Manias & Aitken, 2005). Consequently, any support offered to educators should help them develop skills in learning and teaching, and include strategies for managing their multiple roles and responsibilities.

To respond to the second question, regarding the structure of support, we considered literature that has identified a need for improved formal professional development programs and more informal learning opportunities for clinical educators. Formal conferences, workshops and online courses were the most common forms of professional development available to educators (Recker-Hughes et al., 2010). However, these opportunities were perceived as inaccessible due to time and cost (Buccieri et al., 2006). Based on a model of the experience of being a clinical educator, Higgs and McAllister (2007) suggested several strategies for educating clinical educators. These included mentoring, peer support and working with a critical friend.

A desire for informal peer support and mentoring is present amongst educators across medical (Steinert, 2012), nursing (Gardner, 2014) and allied health (Nguyen et al., 2010) disciplines. Peer support has been identified as an opportunity for debriefing and exchanging ideas (Edgar & Connaughton, 2014) and a useful tool for building connectedness amongst physiotherapy educators, who often feel isolated in their work. There is evidence that clinicians discuss their practice with colleagues to raise issues that are complex, challenging (Iedema, Long, & Carroll, 2010), sensitive, controversial and emotional (Waring & Bishop, 2010). Therefore, informal peer support, perhaps through mentoring, is an appropriate and effective support strategy for clinical educators.

Mentors provide role models, motivation and encouragement for new clinical educators (Cangelosi et al., 2009; Steinert, 2012). Mentoring and peer support are also seen as important to educators' development, independent of whether they have had good mentoring experiences (Gardner, 2014). The benefits of mentoring include greater emotional and professional support, opportunities to reflect on practice, career rejuvenation and increased confidence (Ewing et al., 2008; Hall, Draper, Smith, & Bullough, 2008; Moles, Roberts, Diamandis, Bell, & Nichols, 2007). Physiotherapists have reported that mentoring allowed them to inject passion for the profession into newer staff and reignite their own passion; it kept them up-to-date with newer skills and ideas, promoted reflection, prompted deeper learning and provided a sense of

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community (Ezzat & Maly, 2012). The positive outcomes of mentoring, however, can be hindered by program logistics. Specifically, difficulties can result from *a priori* decisions about pairing mentors and mentees based on geography or practice areas (Ezzat &Maly, 2012).

To date, existing research on support of the educator has focused on outcomes for the educator (e.g., Gardner, 2014) and has not extended this into student learning. Although Ezzat and Maly (2012) discussed the possible benefits that extend to the profession, community and student experience, direct evidence of these flow-on effects was not collected. There is evidence that students value feedback provided by their educator (Clynes & Raftery, 2008) and that the quality of the supervisory relationship between educators and students affects student satisfaction, self-efficacy and learning outcomes (Saarikoski, Leino-Kilpi, & Warne, 2002; Warren & Denham, 2010). It follows that improving the support provided to the educator could increase the likelihood of supervisors being able to develop the desired relationship with their students and facilitate learning. Thus, in the clinical education space, there is a need for research to systematically examine the effect of educator support on the educators themselves, and on the learning experience that they provide for students.

Case study: Supporting physiotherapy placements at the University of Sydney

Physiotherapy educators working with the University of Sydney were supported through professional development workshops and one-on-one contact with a university-based physiotherapist. This university-based physiotherapist has significant clinical experience and teaching knowledge. The one-on-one contact they provided included regular phone calls, emails and visits to placement sites.

The site visits were highly valued by educators. These conversations were an opportunity to discuss situations that arose during student supervision in a timely manner with people who were both experienced clinicians and educators. This communication also enhanced the relationship between educators and the university, as educators felt more supported by the university. This relationship is an aspect of support highlighted in the literature (Edgar & Connaughton, 2014; Greenfield et al., 2014; Manias & Aitkin, 2005; Siggins Miller Consultants, 2012; Walker & Openshaw, 1994).

Also consistent with previous research (Buccieri et al., 2006), educators were interested in attending professional development workshops but were often unable to due to geographical distance from the university, staffing issues and clinical load. Any additional support provided needed to overcome access issues associated with formal face-to-face support and alter what had been established as a unidirectional relationship between educators and the university. For example, such a support strategy could encourage educators to engage with and draw on experiences of their colleagues in similar settings or practice areas.

This support strategy should also demonstrate enhanced outcomes for student learning. A review of the physical therapy literature identified variability across educators, sites and curriculum in terms of sequencing and models of clinical education (McCallum,

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Mosher, Jacobson, Gallivan, & Giuffre, 2013). Educators' student teaching load varies according to their position and the size and staffing of their facility. This, in combination with there being no requirement to complete a formal educational qualification, results in large variations in the placement experience of students.

In summary, to meet the needs of physiotherapy educators in this context, an effective support strategy would:

- provide just-in-time and as needed support
- focus on relevant and specific placement issues
- include opportunities for discussion with experienced educators.

To overcome access concerns, the support provided would not be limited to educators in the same workplace or geographical area. It would be cost effective to encourage sustainability and for it to be developed in collaboration with educators to ensure that the support provided is relevant and helpful.

A peer mentoring program designed with and trialled by clinical educators

In initial exploratory interviews with educators, mentoring was identified as a desirable support strategy. This strategy aligned with the literature on effective educator support (Edgar & Connaughton, 2014; Higgs & McAllister, 2007), and its desirability was confirmed in a survey of 167 physiotherapy clinical educators working with the University of Sydney (Nguyen et al., 2010). These educators provided advice on the preferred design of the program, the mentor–mentee pairing process and the ideal characteristics of a mentor. The structure and processes used in this program were developed in collaboration with the target audience—physiotherapy clinical educators.

The 10-month mentoring program developed from this consultation included formal and informal sessions centred on case-based discussions. These discussions were designed to support mentees' development of the skills identified by Cross (1995). A workshop on how to sustain mentoring relationships—and the opportunity to do so—was provided at the conclusion of the study. The program is summarised in Figure 1.

Physiotherapy educators working with the University of Sydney were invited to participate in the mentoring program through emails and flyers at an educator event held at the university. Thirteen clinical educators signed up as mentees and 16 as mentors. Ten participants (three mentees, seven mentors) withdrew due to time commitments or because they were not supervising students in the year of the study. This left 10 mentees and 9 mentors (one mentor had two mentees) from a mix of public and private hospitals (15), private practice (1) and community centres (2), with one educator not disclosing their site details.

As mentor–mentee pairing had been identified as a barrier to effective mentoring (Long, 1997), the program began with establishing mentoring pairs. Participants indicated their level of experience, clinical discipline and workplace. Mentees nominated their personal criteria for a mentor (e.g., work in the same geographical area, institution or physiotherapy practice area). Using this, a shortlist of mentors was created and

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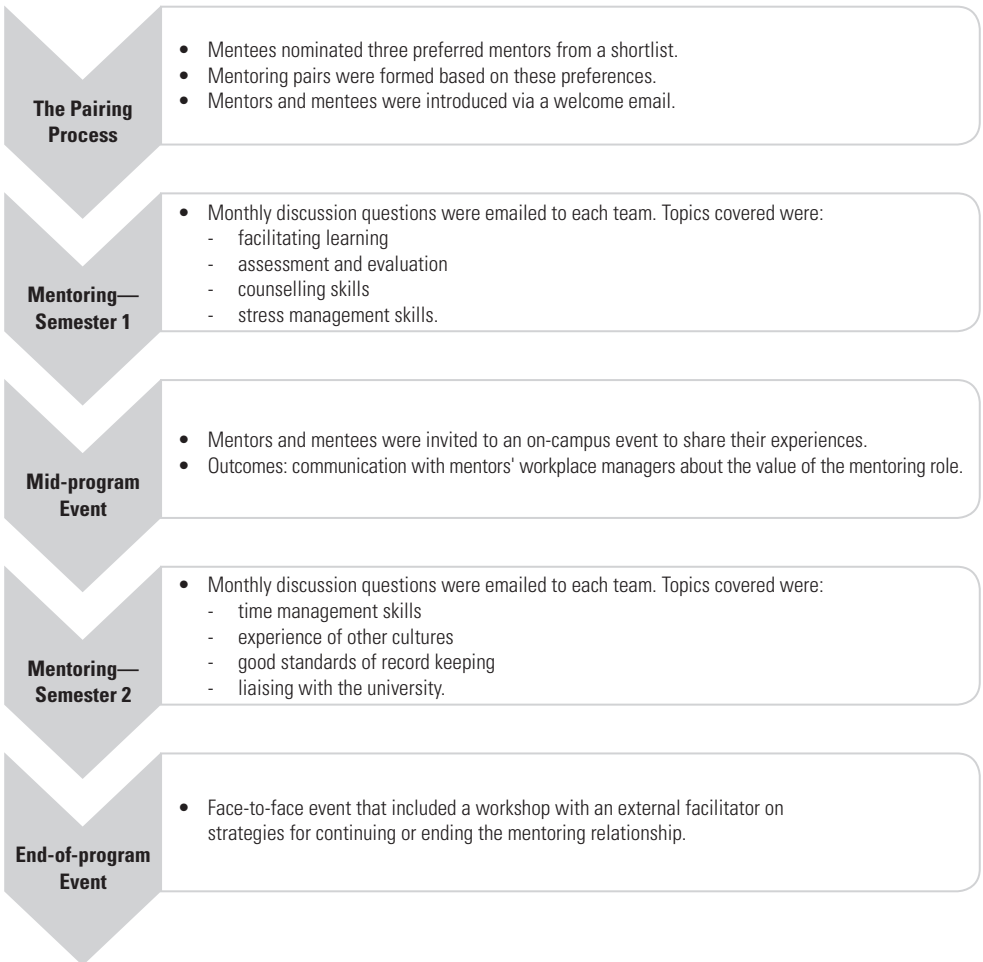

Figure 1. Summary of the peer mentoring program provided to clinical educators.

emailed to mentees. Mentees submitted their top three preferences for mentors, and the mentoring program coordinators paired mentors and mentees based on these preferences. Each pair was sent a welcome email containing contact details of the other person, information about how the program would run and a mentoring agreement to help structure their first meeting.

Eight sets of discussion questions were emailed to mentoring pairs once a month over two semesters. The discussion questions were intended to support new educators to develop their: 1) ability to facilitate learning, 2) assessment skills, 3) counselling/ mentorship skills, 4) stress management skills, 5) time management skills and 6)

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relationship with the university. The use of these questions by mentoring pairs was optional; they were designed to help prompt discussions and structure the conversation between mentors and mentees.

Between semesters, participants were invited to a mid-program event that coincided with university-run professional development programs for educators. Rural and regional participants were provided with financial support to attend. At this event, participants discussed their mentoring experiences to date, in smaller groups. This provided mentors with an informal network of support for their role (in addition to formal support provided by the program coordinators). Mentors identified a need for their workplace managers to recognise their mentor role. Consequently, program coordinators wrote to the managers of each mentor outlining the benefits of the mentor's commitment to the program and requesting the manager's support for mentors to attend upcoming events.

To conclude the program, participants were invited to a workshop about concluding or continuing the mentoring relationship led by an external facilitator. Educators were also presented with feedback from students about their placement experience and findings from the end-of-program evaluation.

Project aims

This study aimed to examine the effectiveness of mentoring on improving educators' confidence in their ability to facilitate learning and balance their dual roles as teacher and practitioner. It extends existing research about support of clinical educators by examining the effects of educator support on student learning experiences. It is hypothesised that educators will demonstrate significant improvement on each of Cross's (1995) skills at the conclusion of the mentoring program. Moreover, students of educators who had participated in the program would be expected to report an enhanced learning experience while on placement compared to students of educators who had not participated in the program.

Method

Participants

All 19 mentors and mentees were invited to participate in two surveys. To preserve the anonymity of the survey participants in this small sample size, we did not ask for demographic information with the survey responses.

To examine the effect of supporting clinical educators on the student experience, all physiotherapy students (n = 590) were surveyed at the end of their placement block.

Materials

Clinical educator mentoring program evaluation

A custom 12-question survey asked participants to rate the extent to which mentoring enhanced their clinical education skills as identified by Cross (1995). Responses were on a 5-point Likert scale, where lower numbers indicated greater agreement. Educators could also comment on the aspects of mentoring that were helpful or that could be improved.

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Student practicum evaluation

Students commented on their placement experiences in a custom 23-item survey. Students were asked about their preparedness for the placement, the orientation they received, supervision and caseload, feedback received from their educators and their experiences of the assessment. A 5-point Likert scale (higher numbers indicated greater agreement) was used to rate the extent to which students agreed with statements about their clinical experience. Open response questions allowed comment on the best aspects of placement and the areas that required improvement.

Procedure

Ethical approval was granted by the University of Sydney Human Research Ethics Committee. Educator surveys were administered twice to provide mid- and end-of-program evaluation. Mid-program evaluation was conducted using paper and pencil. Final-program evaluation was administered online through Survey Monkey (http://www.surveymonkey.com). The student practicum evaluation was also hosted on Survey Monkey. Students were emailed an invitation to participate at the end of their placement.

Analysis

To examine the effect of participating in mentoring on the educators, comparisons were made between participants' perceptions of their clinical education skills at the mid-program and end-of-program time points using 95% confidence intervals for responses to each survey question. Comparing confidence intervals provides a conservative test of significance appropriate for the data in this study.

To examine the effect of participating in mentoring on the student learning experience, Mann-Whitney U tests were conducted. These compared responses on the student practicum evaluation survey of students who were supervised by a mentor/mentee in our program with responses of students supervised by clinical educators not in the mentoring program. A non-parametric test was used as there were unequal group sizes (n = 32 had supervisors in the mentoring program; n = 208 were supervised by clinical educators not in the program).

Results

Clinical educator experience

Fifteen out of 19 participants (79%) responded to the mid-program evaluation and 10 (53%) to the final program evaluation. The 10 responses include 3 (of 9) mentors and 7 (of 10) mentees.

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At the conclusion of the program, the majority of participants agreed or strongly agreed that participating in mentoring was beneficial for their role as educators (90% agreement) and enhanced their abilities to facilitate learning (60% agreement), liaise with the university (70% agreement) and develop their counselling/mentorship skills (80% agreement) (see Figure 2).

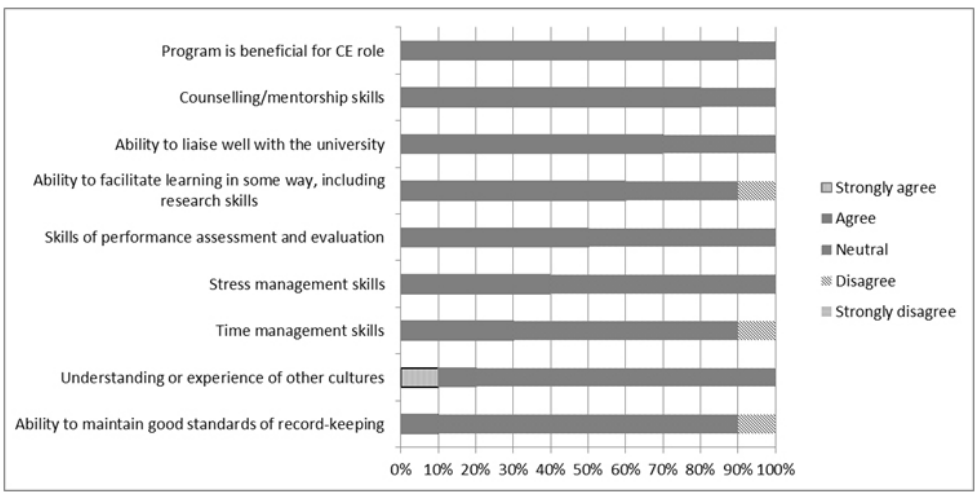

Figure 2. Extent to which participants agreed that participating in this program enhanced particular skills.

Participants were asked to indicate the extent to which mentoring was beneficial to their role as clinical educators. This changed significantly from the mid- (95% CI [1.70, 2.16]) to end-of-program (95% CI [2.20, 2.60]) evaluation. There were no significant changes in the effect of mentoring on specific educator skills between the mid- and end-of-program evaluation. Open-text responses showed that, for participants, in addition to "discussing topics, relating ideas [and] information exchange" (P006), mentoring provided an opportunity for educators to:

- receive peer support—with one participant commenting on mentor availability, "having an experienced mentor who could be easily contacted for advice, and knowing also that that contact will still be happy to continue to provide support as needed after the program is finished" (P003)
- engage in personal reflection—"The focus questions made me think about and consider my practice, which sometimes I take for granted" (P001)
- rethink their assumptions about education—"The program in itself identifying that educating is a skill that is learnt and that can and should be improved upon, rather than just something you do naturally that is never talked about" (P001).

These responses suggest that the benefits of participating in this program for educators may have extended beyond those intended (and measured).

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Student experience

Two hundred and sixty students responded (response rate of 44%), and 20 were excluded due to incomplete responses. This left 240 student responses in the final analysis.

Students of clinical educators who participated in this mentoring program reported higher levels of satisfaction with their learning experiences while on placement, including time with their educator and amount and delivery of feedback. Figure 3 shows the median ratings for each group along six dimensions of placement learning experiences.

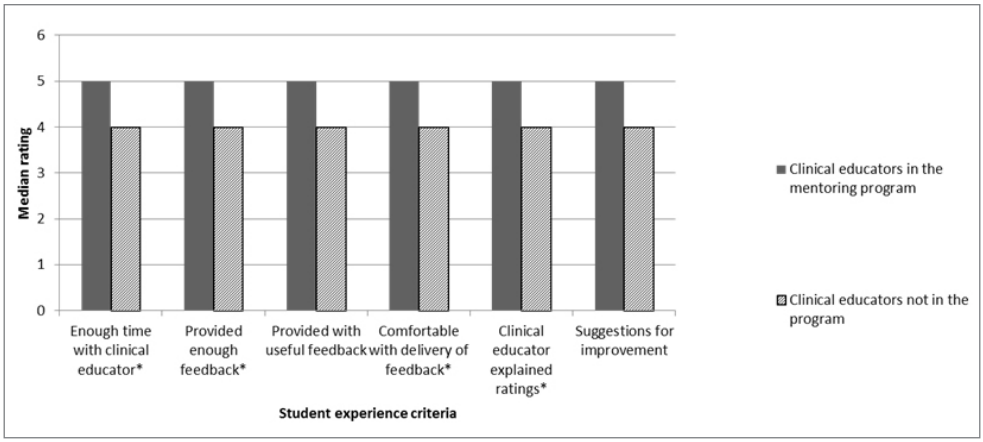

Figure 3. Student experience of clinical educators.
*indicates significant at the 0.05 level

Students whose educators participated in the program were significantly more satisfied with the amount of time they spent with their educator ($U = 2547.5$, $p = 0.02$), amount of feedback received ($U = 2578$, $p = 0.03$), delivery of the feedback ($U = 2532.5$, $p = 0.02$) and the explanations provided for grades/ratings at the time of assessment ($U = 2313.5$, $p = 0.03$). There were no significant differences in the perceived usefulness of feedback ($p = 0.06$) or the extent to which students agreed that clinical educators provided them with suggestions for improvement ($p = 0.06$).

Discussion

Educator experiences of mentoring

Educators who participated in the program, either as mentors or mentees, felt that they were better equipped to perform as an educator as a result of this participation. One participant commented, "I find it useful to hear comments from someone much more experienced than myself and am sure these improve my performance as an educator" (P002). Ninety percent of participants agreed that mentoring was beneficial for their

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educator role, and 60% of participants agreed that it developed their ability to facilitate learning. Despite this, participants' self-ratings on each of Cross's (1995) specific skills did not improve from mid to end of program. One explanation is that participants' skills had improved by midway through the program and then plateaued. As we did not collect a baseline measure of participants' perceptions of their skills, we cannot confirm this. It is also possible that participating in the program led educators to develop a more complex understanding of these skills, and consequently, their self-efficacy for these skills has decreased (Bandura, 1997).

The mentoring program did not appear to have an effect on administrative and self-management skills. This could be due to the nature of mentoring itself. As a form of support that is based on relationships, mentoring is likely more conducive to enhancing relationship skills such as counselling. The desire amongst educators to acquire teaching skills from such a program would have also influenced mentor–mentee discussions to focus more on the learning and teaching aspects of being an educator than strategies for managing the dual educator–clinician roles (e.g., Gardner, 2014; Walker & Openshaw, 1994). This explanation is supported by the open-ended responses provided by participants. Educators highlighted the emotional support provided by mentoring and how these conversations challenged them to rethink their assumptions about education and to engage in critical reflection. The value of mentoring, it seems, is in the development of the teacher. This is also consistent with research identifying the gaps in educator support. Baldry-Currens and Bithell (2007) found that educators desired more support for developing their skills as educators in addition to the support that management provided for balancing the teacher–clinician roles.

It should also be acknowledged that because responses could not be matched at the two time points, we used a conservative test. There could have been an improvement in these skills that was not detected by the test we used. It is likely that further research in this area would work with a larger sample size, enabling statistical comparisons between mentor and mentee responses across time. We also suggest matching responses so that inferential tests could be conducted. Repeated measures and independent-samples tests of significance would be appropriate if the data from each time point were matched and the groups were independent.

This mentoring program assisted educators with the development of their teaching skills and helped to strengthen their relationship with the university. Building clinical educators' skills as teachers and fostering their connection with the university are important achievements, as these can contribute to improvements in students' experience of placements.

Effect of mentoring program on student learning

Students who were supervised by educators participating in the program were more satisfied with their clinical experience than their peers who had non-mentored educators. This difference was significant for satisfaction with factors known to be important for student learning, such as feedback and explanations provided for grades (e.g., Higgins, Hartley, & Skelton, 2002). We realise that program participation was voluntary, so

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these educators may differ from non-participants. They may be more conscious of their role as educators and more aware of what they did or did not know and more receptive to learning what they did not know.

There were no significant differences between students of mentors/mentees and students of non-participants on the perceived usefulness of feedback or suggestions for improvement. Students highly value feedback provided during clinical placement (Clynes & Raftery, 2008; Neary, 2000). It is likely that students' perceptions of the importance of feedback were not affected by whether their placement was supervised by a more supported educator. Instead, mentoring provided educators with communication and relationship skills that helped them identify the amount of feedback and how to deliver feedback to better support student learning. This idea is consistent with educators' responses about the benefits of participating in mentoring and their students' responses regarding the time that their educators spent with them, the amount of feedback received, and explanations from their educator about their performance. This reinforces research that links the quality of the supervisory relationship with student satisfaction, self-efficacy and learning (Saarikoski et al., 2002; Warren & Denham, 2010).

Conclusion and future directions

Participating in this mentoring program developed clinicians' perceived competence in their educator role and led their students to be more satisfied with their placement experience than students of non-participants. Specifically, educators noted the role of mentoring in providing them with just-in-time peer support and advice, opportunities for critical reflection and a deeper understanding of their role as teachers. This led to better learning experiences for their students. Students of educators who participated in this program felt that they received enough time with their educator and feedback that was delivered appropriately. They also felt that sufficient explanations for their ratings were provided. The program's achievement of its intended outcomes is attributed to its design, which aligned with existing research and was participant-led.

It is important that future research address one of our limitations and collect baseline data for clinical educators and students to investigate the longitudinal effects of mentoring programs. Using baseline data would ensure that program outcomes are not the result of participants being more conscientious as educators than non-participants. Another source of data that could measure the impact of programs is changes in student results from placement to placement. Future mentoring programs could also provide more detail on the roles of feedback on learning and the supervisory relationship from the perspectives of educators and students.

The mentoring program was both cost effective and sustainable; it was also linked to improvements in students' placement experience. In addition, the program's process of consultation to enable tailoring for the target audience could be used in other institutional and disciplinary contexts. For example, ideas from this program were used to design and implement a faculty-wide student mentoring program. Our guide to establishing a mentoring program (available for download as a pdf from http://www.itl.usyd.edu.au/cms/files/Developing%20a%20mentoring%20program%20for%20

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clinical%20educators.pdf) provides advice on the consultation process and may be useful to others seeking to establish tailored mentoring of their own. Our findings reinforced the potential for mentoring to support the development of educator skills and, by extension, student learning. Therefore, initiatives for supporting clinical placement should also include strategies for informal support of the educators themselves.

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