Collaborative learning in practice (CLIP): Evaluation of a new approach to clinical learning

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Full Title:

Collaborative Learning in Practice (CLIP): Evaluation of a new approach to clinical learning

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Collaborative Learning in Practice (CLIP): Evaluation of a new approach to clinical learning

Key points:
- A new model of practice learning for pre-registration nurse education, the Collaborative Learning in Practice (CLIP) model was developed and piloted in one higher education institution within the East of England.
- Working in a collaborative learning practice area enables students to work more independently and to support each other.
- The CLIP model decreases the perceived quality of the relationship between the student and mentor.

Abstract
Background
There are challenges in creating positive clinical learning environments. A new model of practice learning for pre-registration nurse education was pilot-tested in the East of England. The Collaborative Learning in Practice model (CLIP) was developed from a similar model of practice learning used in the Netherlands.

Objectives
We undertook an evaluation of a new approach to clinical learning. The aims of the project were to consider the challenges of implementation; consider the perception of gains and losses of students and stakeholders experiencing the new model of practice learning; and consider the sustainability of the new model in the context of service delivery.

Methods
Mixed methods were used. Data were collected in three forms: (1) a survey of students undertaking the CLIP model and those learning within the existing mentorship model to assess the supervisory relationships and pedagogical atmosphere experienced; (2) student focus groups; and (3) qualitative one-to-one interviews with key stakeholders in the provision of practice learning environments.

Results
A total of 607 questionnaires were returned out of the 738 distributed, five focus groups of a total of 30 students were undertaken, and 13 stakeholders were interviewed. Students who had experienced CLIP reported lower supervisory relationship scores compared with those without experience (mean difference = -0.24 points, 95% CI -0.21 to -0.094, p=0.001). There was no difference in pedagogical atmosphere scores (mean difference -0.085 points, 95% CI -0.21 to 0.040, p=0.19). Analysis of qualitative data produced two themes: ‘Adapting the environment’ illustrated the importance of learning context and ‘learning to fly’ highlighted the process of students gaining greater autonomy.

Conclusion
Our findings suggest that collaborative learning in practice offers many benefits as an approach to clinical learning but with important caveats. Attention needs to be paid to particular aspects of the model such as sufficient numbers of students, and an acknowledgement of perceived losses as well as gains.
Background

Nursing is a practice-based profession with learning in practice an essential and substantial component of education programmes that lead to registration. It is through learning in practice that student nurses develop many of the skills, knowledge and abilities needed to practise effectively. Clinical learning, and how it can be enhanced, is a key consideration for the providers of all nursing programmes. Moreover, the partnerships between health services and education providers are pivotal to improving learning in clinical practice (Henderson et al., 2011). Practice placements have the responsibility to support student learning, and provide an opportunity to grow the future healthcare workforce.

Yet there are challenges in creating positive learning environments for mentoring students in clinical practice, such as busy and acute care areas, staffing shortage and skill mix variations (Henderson et al., 2010). It is important to understand how to best develop and support students in order to optimise student learning in practice (Grealish et al., 2018; Faithfull-Byrne et al., 2017) and the many factors which influence and enhance student placement experiences, such as good mentor motivation, preparation and communication (Henderson et al 2010). Factors within the workplace such as leadership and communication impact on student learning (Materne et al., 2017), as do the behaviours of nurses (Perry et al., 2018). There are also ongoing challenges to providing experienced staff to supervise a growing number of students on placement (Grealish et al., 2018). As such, it is important that clinical learning, and how it might be enhanced, is considered from multiple perspectives.

Traditional clinical learning

Currently, the Nursing and Midwifery Council (NMC) (2008) identify specific standards for learning and assessment of students while on placements. Additionally, the NMC specify the requirement that the balance of learning is 50% practice and 50% theory for pre-registration nurse education (NMC 2011). In September 2019, the supervision and assessment of students in practice will change (NMC 2019). The development and provision of successful models of practice learning are continually central to the goals for Higher Education Institutions (HEIs) and the National Health Service. A report on pre-registration nurse education commissioned by the Royal College of Nursing (Willis Commission 2012) identified a number of areas in need of strengthening in order to reinforce the value of nursing as a profession. A key theme within the report was ‘learning to nurse’, and the importance of situating practice learning as central to developing a competent and compassionate nursing workforce. The report found experiences of practice learning of ‘variable quality’ (Willis 2012.p32) yet acknowledged the difficulties of finding good quality, supportive placements for large numbers of students. This is particularly an issue in the current climate of greater skill mix and fewer qualified mentors; a perspective echoed internationally (Grealish et al., 2018).

Traditional learning consists of student nurses working individually under the direct supervision of a mentor with whom they have to be able to access 40% of the placement time. Drawing from the knowledge of the mentor, the student is taught and supervised on a one to one basis. The NMC stipulate that a mentor is an NMC registrant who has successfully completed an NMC approved mentor preparation programme (accredited by an approved education institution) and who meets the NMC mentor requirements of having the required knowledge, skills and competence (NMC 2008).

A new approach to clinical learning

A new model of practice learning for pre-registration nurse education, known as the Collaborative Learning in Practice (CLIP) model was introduced in Norfolk in pilot-form during May 2014. Taken from a similar model developed by staff at VUmc Amsterdam, the
CLIP model is distinct from the traditional mentorship both organisationally and philosophically. Coaching underpins the philosophy of learning, an approach to clinical learning growing in popularity (Faithfull-Byrne et al., 2017), whereby students are guided and supported to identify solutions to patient focused care, to work collaboratively alongside other students under the guidance of a coach. A coach is a mentor, who has received additional training to utilise only coaching approaches to student supervision, and who works with clusters of three to six learners within one clinical learning area. By encouraging and engaging students, the coach draws on the knowledge of the student rather than providing them with answers. Groups of students are coached to deliver care and work with other students in a placement area.

In CLIP, practice learning areas are supported by a clinical educator, employed by the placement provider, who acts to ensure that the fundamental principles of CLIP are adhered to and maintained. Key features of CLIP and the traditional mentorship model are summarised in Box 1. This study aimed to evaluate a new approach to clinical learning and compare the experiences of learners and other stakeholders undertaking practice learning within the new CLIP model, with those of the existing mentorship model.

Insert Box 1 here

Methods
Study design
Mixed methods were used to collect qualitative and quantitative data from five consecutive cohorts of nursing students at one university and qualitative data from students and other stakeholders. The evaluation was cross-sectional with experiences captured retrospectively.

Data Collection
Data were collected in three forms: (1) questionnaire data from a survey of students; (2) qualitative focus group data from student focus groups; and (3) qualitative one-to-one interviews with those considered key stakeholders in the provision of practice learning environments. Data collected from students were designed to capture their experience of both CLIP and LAU (learning as usual).

Survey of students
All students were asked to complete evaluation questionnaires relating to their most recent placement. As the CLIP model was being implemented during the time of the evaluation to 11 placement areas, the students attending placements at these areas were exposed to CLIP. To measure perception of the quality of the learning environment we used two dimensions of the Clinical Learning Environment, Supervision and Nurse Teacher scale (CLES+T) (Saarikoski et al., 2008). The tool has been extensively used and validated (Watson et al., 2014), and allows respondents to register their degree of agreement/disagreement with 14 statements relating to (i) the supervisory relationship they had experienced and (ii) the pedagogical atmosphere of the placement environment. Scores ranged from zero to four with higher scores indicating more positive views. Questions were also asked about awareness and experience of CLIP.

Student focus groups
Within the evaluation questionnaire all students were invited to register their interest in taking part in a focus group to discuss their placements. Students were purposefully selected to represent a range of nursing fields and cohorts, with each focus group restricted to students who had experience of CLIP or restricted to those who had not, hence focus groups were considered as either CLIP or LAU. Each focus group lasted approximately one hour. Eight students were invited to each group. Each focus group included two facilitators (RH and
MW), was audio-recorded and transcribed verbatim. A schedule of question areas and prompts were used to maintain the flow of discussion and focus on the evaluation questions. Areas covered included: students’ views on the key elements of a positive practice learning experience; relationships between learners and their coaches/mentors; how confidence in delivering care is built or undermined; how the model of practice learning is perceived to assist the acquisition of skills and transition to qualification; and challenges in being new members of established teams.

Stakeholder interviews
A series of individual qualitative semi-structured interviews of stakeholders were conducted. Stakeholders were individuals who have a shared interest in CLIP and have influence, managerial responsibility or oversight in its conduct, although have no direct coaching responsibilities including clinical educators and ward managers. A semi-structured interview schedule with prompts was used to explore multiple perspectives on the challenges and experiences of creating positive practice learning environments generally and using the CLIP model specifically. Areas covered included: relationships between learners and their coaches/mentors from the stakeholder’s perspective; barriers and facilitators to adopting and sustaining a new model of practice learning; and the wider context of service delivery and its interface with practice learning. Interviews lasted approximately 30 minutes, were audio-recorded and transcribed verbatim.

Analysis
Mean CLES-T supervisory relationship scores and mean CLES-T pedagogical atmosphere scores were compared between students who had experienced a CLIP placement and those who had not using independent t-tests. To account for confounding, linear regression models were used with the two CLES-T dimension scores as outcome measures. Unadjusted mean differences were estimated using one model per covariate: CLIP experience (yes vs no or unsure); placement type (acute, community, other); and year of study (using a continuous measure). Two multiple linear regression models were used for adjusted estimates, one for each CLES-T dimension score using all covariates. The qualitative data from focus groups and interviews were analysed thematically, using framework analysis Gale et al. (2013)). NVIVO was used to manage the data. The key stages in the data analysis framework were: familiarisation; coding; developing and applying an analytical framework, charting data into the framework matrix and then interpreting the findings.

Ethics
This study was an educational service evaluation and considered part of the HEI provider’s commitment for ongoing quality assurance of service provision. As such, no formal ethical approval was required. Ethical principles were, however, adhered to throughout. All participants were advised about the purpose of the evaluation. Participation in the evaluation was voluntary and did not affect the students’ placements or education in any way, Neither the names of the participants or placement areas were recorded. All feedback obtained was anonymised and informed consent was sought from all participants.
CLES+T questionnaire findings

Survey of students
A total of 738 evaluation questionnaires were distributed to all students across five cohorts at the end of their placements when they were ‘classroom-based’ in January and February 2015. Of these 607 evaluation questionnaires were returned. Four were not used in analysis due to a high level of missing data. Table 1 reports the number of students who self-reported undertaking a CLIP placement and the number of students within each field of nursing. The results in table one show that around a third (n=220/603, 36.5%) of students had some experience of CLIP with the remainder without this experience being considered the LAU group. The majority of students were studying adult nursing (73.8%).

Insert table 1 here

Table 2 reports the mean CLES+T scores (supervisory relationships and pedagogical atmosphere) by whether the respondent had experience of a CLIP placement. The mean CLES+T relationships score was 3.13 points (sd 0.09) among students who had reported experiencing a CLIP placement. This was lower (p=0.014) than those who did not report prior experience of a CLIP placement (mean 3.31 points, sd 0.82). There was no statistically significant difference between mean CLES+T atmosphere scores of the two groups (p=0.41).

Insert table 2 here
Insert table 3 here

Table 3 reports adjusted and unadjusted mean differences in CLES+T scores between those who had and had not experienced a CLIP placement. When controlling for placement type and year of study, there was a significant negative mean difference between the relationships score between those who had undertaken a CLIP placement compared to those had not (adjusted mean difference = -0.24 points, 95% CI -0.21 to -0.094, p=0.0010). There was no statistically significant difference in pedagogical atmosphere score and undertaking a CLIP placement compared to a LAU placement (adjusted mean difference -0.085 points, 95% CI -0.21 to 0.040, p=0.19). For each additional year of study, supervisory relationship scores were slightly higher (adjusted mean difference = 0.12 points 95% CI 0.032 to 0.21 p=0.007) as were pedagogical atmosphere scores (adjusted mean difference = 0.090 95% CI 0.013 to 0.17 p=0.023).

Qualitative findings
Analysis of student focus group and stakeholder interviews generated two themes relating to the new CLIP model: ‘Adapting the environment’ and ‘Learning to fly’.

Adapting the Environment
A positive culture was considered the key element for CLIP to be implemented successfully; a culture which was receptive to change and educationally focused; where strong and positive leadership was perceived as essential for CLIP to be successful. A team approach was seen as beneficial, enabling CLIP to work more effectively. It was important that the entire multi-disciplinary team were well informed and involved with CLIP.
“You definitely need whole team buy-in.” (Stakeholder 10)

A number of key features were thought to be fundamental to CLIP working effectively. The main feature perceived to enable CLIP was the allocation of students in sufficient numbers at any one time; enough students to facilitate distribution of the coach’s patient workload yet not so many as to create competitiveness between students for learning opportunities.

“There needs to be a critical mass to make that difference...in the end to actually make CLIP run properly you have to have a rough idea that the third year [student] can take at least four, if not six patients and then the second year might be able to do three, just to actually work the numbers out.” (Stakeholder 9)

Both students and stakeholders felt that insufficient student numbers often made CLIP unviable. When student numbers were small, the traditional mentoring model became the default. Additionally, the stage the students were at in their programme was also perceived to be important, to achieve a group with ‘the right mix’ of experience. The allocation of a combination of students which included third, second and first years not only facilitated optimal distribution of the coach’s patient workload but also encouraged peer support and learning, a facility valued by most. Furthermore, it was essential to all students that they were well prepared for CLIP and were supported whilst on placement, since these factors better enabled coaching.

Staffing levels within placement areas were considered by both students and stakeholders to be the single most important factor in ensuring the role of the coach was effective. All felt that in order for CLIP to work, a coach had to be allocated exclusively to a learning bay each shift with staffing levels sufficient to allow this. Absence of a dedicated coach resulted in students resorting to peer teaching as the only form of support or guidance, leaving students feeling unsupported.

The Clinical Educator role was perceived to be essential to the success, or otherwise, of CLIP. The level of engagement with students and support of coaches were fundamental features since the clinical educators were able to reinforce the principles of coaching.

“What the clinical educators need to do is focus on up-skilling the mentors. Not necessarily the students and I think that has, not in all cases, but in some areas, got a little bit lost.” (Stakeholder 7)

It was important to the students that coaches were well prepared and understood the expectations of their role and that of the students. Students reported that coaches that were poorly prepared, unsupported or uncommitted to CLIP had a tendency to resort to mentoring or be very remote.

“I think it very much depends on the coach themselves and their understanding of CLIP and their role and how perhaps that might differ for them being a coach as opposed to a mentor. I think some people were really on board with it and really sort of took that, and you could feel the difference between someone who was still stuck in that mentor sort of phase, people that were really into coaching and other people that weren't really quite sure.” (CLIP student)

Learning to Fly

CLIP was thought to hold a number of advantages for student development. Seeing it as an improvement to traditional training, CLIP had distinct benefits for skills development, transition to staff nurse, team membership, ability to act as a role model and leadership. CLIP was thought to enhance professional development, skills, abilities, knowledge and confidence. Students all felt better prepared for practice as a registered nurse.
“My confidence has dramatically improved, that’s the best way I can describe it really, I think from the CLIP that it’s made transitioning to a qualified nurse much easier” (CLIP student)
“It’s a better way to prepare students and to involve students and therefore when they qualify they will be more ready to practice.” (Stakeholder 4)

Students felt overwhelmingly that they had experienced increased levels of responsibility, peer support, confidence, autonomy and involvement in a patient’s journey; gaining valuable understanding of the role of a registered nurse. By contrast, the experiences of many LAU students centred on providing personal care; many felt overlooked and perceived no significant development in their professional skills or abilities. Most described wanting more responsibility, but not given the opportunity to do so.

“My mentor had things to do and I just watched over it all. I was always behind her, my mentor.” (LAU student)

It was apparent many LAU students felt frustrated by the lack of opportunity to work more autonomously; knowing there to be skills, knowledge and abilities they had not yet developed or experienced.

Coaching, rather than traditional mentoring, was perceived as progressive and as a superior approach to professional development. Students appreciated being given the opportunity to practice independently when supported by a coach. The enhanced levels of responsibility the students experienced signified, to them, that the coach had trust in their skills, knowledge and ability.

“I could take on more ownership, ... instead of being told this is how you should do it, you could develop your own way of doing things as well, you didn’t necessarily have to follow in somebody else’s footsteps or pick up the ways in which they did it, you were able to kind of develop those skills yourself and do things in your own way.” (CLIP student)

Students were frequently placed with several other students in a learning bay, a feature not previously experienced. Peer coaching was seen as beneficial; as an opportunity to teach and to learn, to support and to be supported, enabling students at a later stage of their programme to develop as role models for those at an earlier stage.

“I did really enjoy the chance to work with other students, I really enjoyed passing on my knowledge - it helped my confidence because I realised that I did know things, because I could teach them.” (CLIP student)

Discussion

CLIP provided nursing students with a different learning environment which meant that students spent time developing supervisory relationships to traditional mentorship environments. The new environment enabled students to take ownership of their work, support each other, and take greater responsibility thereby better preparing them for work as a registered nurse. The benefits of clinical coaching have been reported elsewhere (Faithfull-Byrne et al., 2017). However, such an approach requires careful implementation, training, development, and ongoing support for the benefits of coaching to be achieved, as previously suggested by Tee et al., (2009).
Preparation was found to be key to the success of CLIP for both student and stakeholders; a finding echoed in previous studies. Nelson et al. (2004) recognised the importance and necessity of preparing coaches so they might work effectively as a coach whilst Henderson et al. (2010) found that student and staff preparation increased engagement. For coaching to be effective, there has to be willing engagement by students and coaches (Narayanasamy and Penney, 2014). Our findings suggest that preparation of students and coaches in the implementation phase of CLIP was sometimes lacking. Greater standardisation of preparation might better facilitate coaching, increase engagement and enhance student experiences of CLIP.

Key to the successful implementation of CLIP was the planning invested in the allocation of students. An `appropriate number` of students is that which allows for effective distribution of the coach’s patient workload, hence facilitating the provision of a dedicated coach. Consequently, the allocation of students needs to be calculated on an individual placement basis according to the placement staff to patient ratio.

Allocation of students from different cohorts provided a range of student experience, which our findings suggest facilitates peer support, teaching and learning. Although peer support is appreciated by students, it is not a substitute for coaching. It is known that students can find clinical practice stressful (Li et al., 2011) the peer learning and support achieved in CLIP placements could have a beneficial effect on reducing student stress. However, this evaluation suggests that while adequate supervision remained paramount, peer learning is a useful strategy for student support when supervised, but holds the potential to mask poor supervision.

The role of the clinical educator, available to those students on CLIP placements, was perceived as highly beneficial for clinical learning. However, the presence of a clinical educator has been found to be effective in other studies, suggesting this is not specific to coaching or CLIP (Henderson and Tyler, 2011). There is a lack of empirical evidence for the effectiveness of the clinical educator role yet the literature maintains the role is important for the development of nurses (Pollard et al., 2007). Our findings revealed that clinical educators can sometimes focus on students, rather than the coach, and that coaches welcome this. Henderson and Tyler (2011) similarly found registered nurses working with students will hand over responsibility for the student to a clinical educator when they are available, rather than engage with students and embrace opportunities to increase their own ability to teach during clinical practice. A shift of focus of the clinical educator’s role towards the coach rather than the student, has the potential to improve the experience of both students and coach.

The many positive experiences of students undertaking CLIP placements is encouraging, consistent with Clarke et al. (2018). Coaching as a strategy can enhance clinical learning. Coaching is said to facilitate the highest form of learning and can be transformative (Narayanasamy and Penney, 2014), as such, it is essential that such a powerful approach is developed correctly. The use of coaching in practice learning needs to be clearly articulated, and, if coaching is to be used to support and develop learning in practice, it needs to be evaluated formally (Kelton, 2014). Longitudinal research considering the impact of CLIP placement on student achievement such as attrition, assessment of practice grades and degree classifications is recommended; as well as consideration of patient perspectives.

The quantitative finding that students perceive their relationship to their mentor/coach as slightly (but significantly) less positive when experiencing CLIP compared with LAU is perhaps understandable. Student’s previous experience has been exclusively with a traditional mentoring model of practice that has become ingrained in their understanding of practice learning and assessment. Students perceive a loss of the individual relationship with a mentor, and relationships were widely dependent on the mentor or coach. The importance of
the relationship between the staff and student and quality of student learning has been established previously (Grealish et al., 2018; Henderson et al., 2010). Perhaps experience of traditional models of mentoring and assessing meant students felt that CLIP had a detrimental impact on their relationship with their mentor and the amount of individual attention they received. Yet it is important to remember that mentoring itself is far from being a problem free area within nurse education (Grealish et al., 2018; Beecroft et al., 2006).

The findings from this evaluation highlight many positive experiences of CLIP. Both student and stakeholder perspectives reveal a range of benefits from the new model. Facilitation of practice learning has historically been difficult, with a number of constraints contributing to the challenge (Henderson and Eaton, 2013). Within the UK, coaching is an expanding developmental approach that is believed to facilitate individuals to maximise their own potential (Faithfull-Byrne et al., 2017). The benefits coaching holds for promoting the professional development of nursing skills, knowledge and abilities are supported here ((Faithfull-Byrne et al., 2017; Narayanasamy and Penney, 2014). Both student and stakeholders perceived increases in student responsibility, confidence levels and skill development while CLIP experience was also perceived to aid the transition to registered practitioner, enhance peer support and team membership, increase leadership skills and enhance the ability to act as a role model; all important traits for enhancing subsequent student experiences (Materne et al., 2017; Henderson et al., 2011).

Staff and students both commented that CLIP enhanced the preparation to registration. Given the expressed doubts over newly qualified nurses being fit for purpose or fit for practice (Jewell, 2013; Ousey, 2009; Whitehead et al., 2013) this is potentially a real strength of the model. Many newly qualified nurses feel unprepared for the reality and responsibility of registered practice, lack confidence in their own abilities and feel their clinical skills are underdeveloped (Monaghan, 2015). Yet it is essential behaviours that enhance clinical learning and accountability are understood (Perry et al., 2018). These findings suggest CLIP might hold promise for better enabling the transition from student to staff nurse.

Coaching as a teaching and learning strategy for nursing practice education could enhance mentorship regardless of placement. Coaching is a positive approach for individual professional development but also for that of a team; Johnson et al. (2011) demonstrate enhanced team skills development in nurses through coaching. The advantage coaching brings, as an approach to professional development, should be embedded throughout the undergraduate programme; a recommendation echoed by others (Faithfull-Byrne et al., 2017).

The findings reported need to be considered in the context of the evaluation methodology. The trustworthiness of results has been enhanced by a number of features including the triangulation of research methods; the use of an established analytical framework; cross-checking of conceptual findings by two researchers; and, for the survey a sample size that allowed for precise estimates of effect. Using a mixed methods evaluative design has enabled us to gain both breadth and depth in our understanding of how the new CLIP model has been perceived by students and other stakeholders. By using a comparative design we have been able to directly compare student experiences. The use of a validated measure strengthens generalisability, but the CLES-T may more successfully capture elements of the more traditional mentorship model of learning rather than the potential (and specific) strengths of CLIP. We did not include patients in this evaluation which is a limitation that should be addressed in any future evaluation. While ultimately any new model of practice learning should benefit users of a service, the point at which that benefit is likely to be felt is anticipated to be after learners become registered nurses.
Conclusions
Students and other stakeholders believe that the CLIP model better prepares students for the reality and responsibility they will ultimately face as qualified nurses. The model is highly dependent on the balance of staff, patients, and students available on any one shift and the mix of students allocated. The mentor–coach–student relationship is complex although the mentor/student relationship is perceived to have weakened. Coaching is a strength of the model but for it to thrive it needs to permeate learning environments (both practice-based and classroom-based) and the key stakeholders (students, coaches, and clinical educators) need to be adequately prepared.
References


NMC., 2019. Standards for student supervision and assessment

NMC., 2011. Standards of proficiency for pre-registration nursing education

NMC., 2008. Standards to support learning and assessment in practice


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Conflict of interest statement

No conflict of interest has been declared by the authors.

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Word count

4455 excluding tables.
Box 1: Summary of the key features of the traditional mentoring style of practice learning and the Collaborative Learning in Practice (CLIP) model.

<table>
<thead>
<tr>
<th>Key features</th>
<th>LAU</th>
<th>CLIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning philosophy</td>
<td>• Supervision underpins the approach to mentoring.</td>
<td>• Coaching underpins the philosophy of learning</td>
</tr>
<tr>
<td>Learning approach</td>
<td>• Mentoring draws on the knowledge of the mentor.</td>
<td>• Coaching draws on the knowledge of the student</td>
</tr>
<tr>
<td></td>
<td>• The mentor shares expertise and offers answers and solutions (tells and teaches).</td>
<td>• The coach engages in inquiry to guide students (questions and supports student to learn).</td>
</tr>
<tr>
<td>Learning organisation</td>
<td>• Students work under the direct supervision of a mentor in a one to one relationship.</td>
<td>• Students work collaboratively alongside other students under the guidance of a coach.</td>
</tr>
<tr>
<td>Learning responsibility</td>
<td>• Mentors take responsibility for the students learning</td>
<td>• Students are supported to take on greater responsibility for their own learning.</td>
</tr>
<tr>
<td></td>
<td>• No Clinical Educator</td>
<td>• Students identify solutions to patient-focused care.</td>
</tr>
<tr>
<td></td>
<td>• No formally defined learning resources</td>
<td></td>
</tr>
<tr>
<td>Learning support</td>
<td>• No Clinical Educator</td>
<td>• Clinical Educators support and reinforce coaching in practice</td>
</tr>
<tr>
<td></td>
<td>• No formally defined learning resources</td>
<td>• Students complete learning logs and have protected learning time</td>
</tr>
</tbody>
</table>

Table 1: Experience of CLIP and nursing field of survey sample (n=607).

<table>
<thead>
<tr>
<th>N (%)</th>
<th>CLIP Experience</th>
<th>Field of Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No or Unsure</td>
<td>Adult</td>
</tr>
<tr>
<td>383 (63.5)</td>
<td>367 (73.8)</td>
<td></td>
</tr>
<tr>
<td>220 (36.5)</td>
<td>52 (10.5)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>44 (8.9)</td>
<td></td>
</tr>
<tr>
<td>34 (6.8)</td>
<td>34 (6.8)</td>
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</tr>
<tr>
<td>110</td>
<td>110</td>
<td></td>
</tr>
</tbody>
</table>
Table 2: Mean CLES+T relationships and atmosphere scores by prior experience of CLIP.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Experience of CLIP?</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No or unsure</td>
<td>P value*</td>
</tr>
<tr>
<td>Supervisory relationships</td>
<td>N = 219</td>
<td>N = 383</td>
<td>0.014</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>3.13 (0.09)</td>
<td>3.31 (0.82)</td>
<td></td>
</tr>
<tr>
<td>Pedagogical atmosphere</td>
<td>N = 220</td>
<td>N = 383</td>
<td>0.41</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>3.21 (0.78)</td>
<td>3.26 (0.72)</td>
<td></td>
</tr>
</tbody>
</table>

* Independent t-test
Possible scores range from 0 to 4. Higher scores indicate a more positive response.
Table 3: Unadjusted and adjusted mean difference in CLES+T relationships and atmosphere scores by prior experience of CLIP, placement type and study year.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unadjusted Mean difference (95% CI)</th>
<th>p value*</th>
<th>Adjusted Mean difference (95% CI)</th>
<th>p value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisory relationships</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CLIP (yes vs no + unsure)</td>
<td>-0.18 (-0.32 to -0.04)</td>
<td>0.014</td>
<td>-0.24 (-0.38 to -0.094)</td>
<td>0.001</td>
</tr>
<tr>
<td>Placement type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community vs acute</td>
<td>0.060 (-0.10 to 0.22)</td>
<td>0.47</td>
<td>0.083 (-0.076 to 0.24)</td>
<td>0.30</td>
</tr>
<tr>
<td>Other vs acute</td>
<td>-0.072 (-0.35 to 0.20)</td>
<td>0.60</td>
<td>-0.082 (-0.35 to 0.19)</td>
<td>0.56</td>
</tr>
<tr>
<td>Year of study</td>
<td>0.10 (0.016 to 0.19)</td>
<td>0.020</td>
<td>0.12 (0.032 to 0.21)</td>
<td>0.007</td>
</tr>
<tr>
<td>Pedagogical atmosphere</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLIP (yes vs no + unsure)</td>
<td>-0.052 (-0.18 to 0.072)</td>
<td>0.41</td>
<td>-0.085 (-0.21 to 0.041)</td>
<td>0.19</td>
</tr>
<tr>
<td>Placement type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community vs acute</td>
<td>0.022 (-0.12 to 0.16)</td>
<td>0.76</td>
<td>0.025 (-0.12 to 0.17)</td>
<td>0.73</td>
</tr>
<tr>
<td>Other vs acute</td>
<td>0.071 (-0.17 to 0.31)</td>
<td>0.56</td>
<td>0.090 (-0.15 to 0.33)</td>
<td>0.47</td>
</tr>
<tr>
<td>Year of study</td>
<td>0.084 (0.0090 to 0.16)</td>
<td>0.028</td>
<td>0.090 (0.013 to 0.17)</td>
<td>0.023</td>
</tr>
</tbody>
</table>

* From linear regression models.
Possible scores range from 0 to 4. Higher scores indicate a more positive response.
Student year of study - 1st, 2nd and 3rd year students
Placement types:
Community – placement with primary care district nursing team
Acute – placement in secondary acute care hospital ward
Other – non-NHS placements or Nursing homes.
Placement duration:
Placements last for 12 week periods.