2021-06

Chapter 6: Evaluation. 6.1: Plymouth University

Williamson, Graham

http://hdl.handle.net/10026.1/17107

Wiley-Blackwell

Chapter 6
Evaluation.

There have been a number of evaluations of the collaborative models in the UK and in writing the book we wanted to provide an opportunity for the study authors to provide some detail of their work without replicating the published papers. Studies were supported by funding from Health Education England for University of East Anglia and Plymouth University. In this chapter the authors provide their commentary on their own studies.

6.1 University of East Anglia

Prof Antony Arthur, Dr Rebekah Hill and Dr Michael Woodward.

Is it better than what we did before? The challenge of evaluating new models of practice learning.

There have been many calls for more research and a stronger evidence base for educational interventions in healthcare (Kalb et al., 2015). Yet there is often a sense that new ideas are rapidly rolled out on a wave of enthusiasm, leaving a trail of small retrospective studies in their wake, before the next initiative looms into view on the horizon.

CLiP^{TM} is a model of practice learning that has been the focus of more research attention than most. The work described by Williamson and colleagues in this chapter reflects that. Educational interventions are notoriously difficult to evaluate. The process of cause and effect is particularly complex in relation to learning. Kirkpatrick's model of educational evaluation (Kirkpatrick and Kirkpatrick, 2006) describes four levels of outcomes: reaction (how favourable the training/education was); learning (the depth of learning achieved);

behaviour (whether behaviour has changed following intervention); and results (the really tricky bit, which, in healthcare means patient outcomes). As the ripple effect extends further from the centre so it becomes harder to capture the effect or ascribe observed effects to the educational intervention.

The gold standard for any intervention, educational or otherwise, is the randomised controlled trial but this requires (a lot of) money, time, and expertise. It also requires a willingness to accept the end result. There may be no evidence of effectiveness of the new intervention or model, or it may be found to be worse than whatever preceded it. While a trial may not be feasible here, one of the things a trial does is require a well-described intervention – what it is, what it is not, and how it is distinct from what has preceded it. Establishing this is an extremely useful exercise.

In our own study we did not have the time or resource to undertake a trial, but we felt it important to compare those with experience of CLiP to those without. Full details of the study can be found elsewhere (Hill et al., 2019). Interestingly a number of students were unsure whether or not they had experienced CLiP, a finding also noted by Williamson et al (Williamson et al., 2020b). This perhaps suggests that at times what feels like a radically different model for educators is not perceived in the same way 'on the ground'. Both qualitative and quantitative data suggested there were losses as well as gains in the movement between a model of mentorship to CLiP. Our use of mixed methods was important – some raw statistics will often tell you something that you cannot look away from. Equally, hearing an authentic voice will bring a highly informative experience to life.

Our experience of evaluating CLiP has taught us a number of things about evaluating complex educational initiatives:

- Think about an evaluation process from the outset

- Be able to articulate the intervention and be sure that there is a shared understanding across all stakeholders.

- Be prepared to listen to the findings

- The ultimate power of research is not to 'prove things work' but to make things better.

6.2 Plymouth University

Dr Graham Williamson, Adele Kane, Jane Bunce
Background

The School of Nursing and Midwifery at Plymouth University engages with Placement Providers across Somerset, Devon and Cornwall. As part of our regional project to implement CLiP in hospital and community settings, we undertook a programme of research activity, most of which was funded by Health Education England (HEE). This chapter reports on three of the research studies in detail and briefly on a fourth. These studies were: a systematic review of the literature, two qualitative studies (one in hospital and another in community nursing settings), with a fourth examining whether or not increasing student nurse numbers in placements in CLiP makes a difference to patient safety.

It is important for nurse education placement learning that policy change has an appropriate evidence base to provide the foundation for today's nursing courses and placement learning experiences to meet the expectations of the NMC's Future Nurse Standards (NMC, 2018a). Without an evidence base, initiatives run the risk of piecemeal implementation, with certain features being adopted and others omitted, different specifications and terminology in different areas. The original conception of CLiP with related nomenclature being

implemented in the UK, and while this indicates the willingness of educational institutions and practice partners to innovate, it also makes it difficult to evaluate the success or otherwise of these initiatives. For example, the following terms are all current in the UK, with clinical areas using 'collaborative learning in clusters' (CLIC); 'the Salford Model'; 'coaching and peer assisted learning' (C-PAL; Wareing *et al.*, 2018); 'collaborative assessment and learning' (CALM); 'CLIP-style model'. All of these appear distinct from the 'Amsterdam model', CLIP's origin; and more removed from coaching approaches, which are also numerous, with distinct overlaps with CLiP. Internationally, Dedicated Education Unit (DDE) may be a similar means of placement learning, but this is speculative given the diversity of application of terminology that we found in the literature (Williamson *et al.*, 2020c). In view of these features and an emerging literature on this subject, our first study, a systematic review of the literature, was important to scope existing research.

Study 1: Collaborative learning in practice: A systematic review and narrative synthesis of the research evidence in nurse education (Williamson et al., 2020c).

We conducted a thorough, rigorous systematic review of the literature on Collaborative Learning in Practice to discover whether there was a research evidence base for claims relating to peer support, accelerated learning and improvements in registered practice.

The question this systematic review sought to answer is 'What is the evidence for effectiveness of CLiP models?' The search strategy was derived using PICO: Population was 'student (undergraduate, baccalaureate) nurses'; Intervention was 'CLiP models'; Comparison was 'other models of placement learning'; Outcome was 'any relevant'. We deliberately sought to include research studies from any methodology. This systematic review protocol was registered with PROSPERO (CRD42018106838).

A comprehensive search was undertaken between October and December 2018 using a variety of search terms that followed on from the PICO. We will not report the process in its entirely here because it is covered in the full paper (Williamson *et al.*, 2020c). Searches were undertaken in CINAHL, MEDLINE, ERIC, NICE, EMBASE, COCHRANE, CRD, JBI, Grey Literature (including manual Search and SINGLE), US clinical trials.gov, ISRCTN registry of clinical trials, Ethos, Google Scholar. This initial work garnered 1335 hits, which were narrowed down by scrutiny for relevance to 204. These were read in detail, which left 18 papers for quality appraisal independently by the research team, who scored the papers, discussed and agreed those to be included in the synthesis. This process left 14 papers for inclusion.

The results of the literature search indicate that there is no body of literature relating specifically to the use of CLiP models. Only one study (Hill, Woodward & Arthur, 2016) discusses systematic evaluation of CLiP but that was unpublished at that time in a peer reviewed journal, although this has subsequently been rectified (Hill, Woodward & Arthur, 2020). The 14 papers we found were about the Dedicated Education Unit (DDE) concept, and we conducted a narrative synthesis of them. Key findings support the assertions related to Collaborative Learning in Practice, albeit in different models of placement learning.

Since this review was completed, a number of other teams have published important research in this area. For example, a team from University of East Anglia (UEA; Hill, Woodward & Arthur, 2020) have published data from their seminal study from 2015, which was included in our review as a report (Hill, Woodward & Arthur, 2016). This was previously only available in report form. Their findings are expertly summarised in their paper and, as we will see below, chime with our own analyses. Hill, Woodward & Arthur (2020) use a mixed methods design, with data from the Clinical Learning Environment Inventory (CLEI; Shivers, Hasson & Slater, 2017), and found students who had experienced CLiP reported lower

supervisory relationship scores compared with those without experience, a similar pedagogical atmosphere in placements with two themes emerging form the qualitative data ('Adapting the environment' and 'Learning to fly'). They report CLiP to offer many benefits as an approach to clinical learning but note that attention needs to be paid to ensuring sufficient numbers of students, potential losses as well as gains. Working with UEA colleagues, Harvey & Uren (2019) implemented CLiP in Somerset, and provide some preliminary evidence from one clinical area, indicating that support for placements and clear leadership were essential for gains to be made in CLiP placements.

In summary, our systematic review and subsequent attempts to identify research have proved mostly fruitless and there is little formal evaluation at the time of writing. Conference attendances have indicated that this model is growing in popularity but areas have not yet begun to publish their findings beyond presentations and posters at conferences.

Study 2: 'Thinking like a nurse'. Changing the culture of nursing students' clinical learning: Implementing collaborative learning in practice (Williamson et al., 2020b)

This study reports issues concerning the implementation of Collaborative Learning in Practice models at University of Plymouth School Nursing and Midwifery, with in-hospital practice partners across the South West of England. We conducted four focus group interviews with 40 students with experience of Collaborative Learning in Practice placements, and two focus groups with eight clinical practice staff with responsibility for implementing and supporting such models in their areas. Data were transcribed and analysed using the Framework Method (Ritchie *et al.*, 2014). Key themes were 'Real time Practice of Collaborative Learning Implementation', 'Collaborative Learning as Preparation for Registrant Practice', and 'the Student/Mentor Relationship'.

One issue relating to preparation was the perception of change and the need for that to be actively managed. The capacity of CLiP placements increased from perhaps one or two student nurses, up to in some cases 12. Many School of Nursing staff conducted preparation and support activities, including visits to areas where CLiP was already up and running successfully, local workshops, on-line materials and teaching sessions for placement staff and students. CLiP was much more successful when clinical staff engaged with this and were prepared to actively manage it:

> *The wards put themselves forwards to be chosen for CLiP so there was the buy-in from the start. We had one clinical area who bought into having a Practice Educator to support as a secondment, one day a week. Staff were quite engaged about it.* (A staff member).

However, despite introductory sessions provided for students in university and placement locations, these processes appeared not to be remembered as students described staff and themselves as not aware of the meaning or practice of CLiP:

> *I had no idea what CLIP was about at all, so going into it, I didn't know what was to be expected of me and likewise, the staff members didn't know what was expected of them or so, I think there was lack of communication about what the whole procedure was and what was expected of everyone.*

It was curious that this response was so widespread amongst students and some staff given the extent and nature of the preparation activities that took place, almost a 'collective amnesia', which has been noted to be prevalent amongst nurses (Moreland *et al.*, 2015). However, it does indicate that change is difficult, close facilitation is necessary at ward/department level, and no doubt when areas have run CLiP more than once staff would understand it better.

Another area of notable success concerned team working. Students articulated greater problem solving skills by working together and learning from other students, forming lasting friendships:

Seeing the process for us it really does [work]…*me and a third year…it gives us a chance to problem solve* [for ourselves]. (A second year student).

Staff made similar remarks about students' collaboration:

I think it worked really well … supporting each other … it's lovely to have them 'cos they really look out each other. If one [has] *a problem, the others are all there sorting it out for them and…they're all interested in each other.* (A staff member).

Some students and staff explored the differences between mentoring and coaching, saying:

In the old mentoring style, you're the Mentor and the student's behind you, you're protecting them from the work that needs doing but now with CLIP, you're putting the student in front of you and expecting them to do their job, and it's come as a shock to some of them … A 2nd year Student said to me [at the beginning of a CLIP placement] *"They've given me a patient to look after"; I said "yeah, that sounds like a really good idea".* (A staff member).

Whist a student noted:

[My mentor] *said "I've got to learn to stand back and let you just get on with it" … it's a new thing for them as well, sometimes they forget and so have to remind themselves to stand back. It's hard 'cos they're used to just getting on with it themselves.* (A student).

Our findings in this first empirical study indicate that the key issues were how CLiP facilitated students' learning through 'Real time' practice, helped them to prepare for

registrant practice, and altered the student/mentor relationship to one more akin to coaching and the assessor/supervisor relationship in the revised NMC (2018b) standards. Our 'real time' theme resonates with the work of others (Hill, Woodward & Arthur, 2020), and will contribute to greater 'work readiness' at point of registration (Wolff, Pesut & Regan, 2010).

Study 3: Investigating the Implementation of a Collaborative Learning in Practice Model of Nurse Education in a Community Placement Cluster: A Qualitative Study. (Williamson et al., 2020a)

Attracting new graduate nurses to work in the community is problematic, and this has contributed to shortages in this sector in the United Kingdom and internationally. With this in mind, we trialled CLiP in a pilot study in our region, with the intention to increase placement capacity, introduce students to this sector, and accelerate their learning and development of key skills and behaviours. We were specifically interested in the views of student nurses and the staff supporting them on placement about their experiences of implementing CLIP, because community settings are so different from in-hospital settings and we were keen to learn lessons that might have an impact on future development of placements and placement capacity in the community. In this study, students were placed in three settings: three nursing homes (although one withdrew), two hospices and two general practitioner (GP) health centres with GP nurses.

We conducted four focus group interviews between winter 2018 and spring 2019, with 31 staff and students in two English counties in the South West of England. These were transcribed and analysed using the Framework Method; themes were discussed and agreed by the research team. What we found was quite interesting, and was both similar and different to the previous study (Williamson *et al.*, 2020b), which was conducted in-hospital. Three

themes emerged: 'Peer support', which concerned the benefits of being in placement with other students; 'Developing and learning', which was about the acquisition of skills including leadership; and 'Organisation', which related to issues and concerns involved in the preparation and daily management of the CLiP experience. There were some positive quotes about peer support, for example:

> *Peer learning has been quite beneficial because the second years taught the third years some stuff as well and you know, just because everyone has different placements so I think that's been really beneficial just learning from each other and different experiences and you know, different ways to change dressings and things*. (A student).

> *I've learnt from the third years. I've learnt an awful lot from the third years not as "this is how you do this" and not communication skills, but management and you just learn from each other don't you.* (Another student).

However, there were some negative comments from the nursing home setting about conflicts with students, and these came from staff as well as students.

> *We kept getting told that they'd had students previously and they stopped having them for a*
>
> *while because they were "too posh to wash" and so… we felt we had to prove ourselves as*
>
> *HCAs (which is not what we're there for) and we were worried to complain because*
>
> *obviously, you don't want to be seen as reluctant to do the basics. But that's all very*
>
> *well but we were like "come on you've got to start giving us more to do, more learning"* [to
>
> progress towards registration]. (A student).

Staff also noted potential conflict in one setting:

> *There were a couple of instances where the students, the power of numbers, they become quite intimidating amongst themselves – they were quite forceful, it made them quite forceful characters… we've had a couple of instances where we've had to address that and challenge that and I don't think that would've happened in a traditional mentor-student*
>
> *model*. (A staff member).

Overall, this study was successful in addressing its primary aim, which was to investigate issues related to the implementation of CLiP in the community sector, specifically nursing homes, hospices, and GP practice settings. This is an important study internationally because it relates to the exposure of student nurses to community nursing, including increases in placement capacity, which may go some way to ameliorate nursing shortages in that sector. We note that staff and students' perceptions of CLiP concepts differed according to the area in which they were working. Students and staff working in the nursing home sector were generally more negative in their perceptions, with students struggling to connect their nursing care activities with potential registrant practice, and staff reporting conflicts and difficulties. Students in the GP and hospice placements had more of a focus on the clinical skills they developed, the opportunities for complex care (with sick patients in the hospices, and including social prescribing in the GP practices) and activities such as seeing patients in clinics independently (in GP practice, with supervision available but at a distance) and venepuncture. The GP setting's supervision most clearly resembled a coaching model in this respect. Students in this study clearly identified positive views on the extent to which CLiP offered peer support, friendship, and opportunities for peer learning.

Study 4: Student nurses, increasing placement capacity and patient safety. A retrospective cohort study.

This study is currently in review with a journal. We were was concerned with identifying whether having additional students on placement made any difference to patient safety as defined by metrics from NICE (2014) guidance on safe staffing on falls, pressure ulcers and medications errors. Logically it may seem that having more students in placement ought to help with patient safety issues, but concern had been raised in our focus groups (Williamson *et al.*, 2020b) that more students equated to less effective supervision with the potential for errors in care, and some placement staff were unhappy about that potential.

To investigate this issue, using routinely collected audit data on falls, medications errors and pressure ulcers, anonymised at source from four trusts in our region, we computed risk ratio, mean differences and correlations to compare outcomes between when placements were running CLiP with three or more students. We received data on 5532 adverse events from 15 clinical areas in four NHS trusts, with 996 students on placement between January 2018 and August 2019. The risk ratio for adverse patient events was favourable when CLiP was operating (RR=0.9842; 95%CI 0.9604-1.008), meaning that overall there were 73 less adverse patient events when CLiP was running compared to when it was not. There was a favourable and statistically significant difference in mean adverse patient events (p=0.01, mean difference 279, 95%CI 213-346) when CLiP was running compared to when it was not. There was no statistically significant correlation between increased student numbers and increased adverse patient events, meaning that having additional student under CLiP did not make patient safety worse on these indicators. Based on this analysis, we conclude that having increased numbers of student nurses in placement during CLiP enhanced patient safety and did not worsen it.

Summary and key messages

We conclude that CLiP utilising models of coaching and peer support, offers benefits to students who are exposed to the reality of nursing practice from the beginning of their placement experiences, enabling them to take greater responsibility and experience heightened peer support than under other previous 'mentoring' arrangements. There are likely to be benefits for nurses supervising and assessing students because these burdens are spread more widely than under 1:1 mentorship models. The potential for developing supportive friendships with other students is important and should not be underestimated as a factor helping students to stay on programmes of study (Williamson, Health & Proctor-Childs, 2013): it is axiomatic that where a placement area has several students learning together, this potential is increased. This was a similar message in hospital and community settings. We had not anticipated the less positive finding concerning the potential for 'horizontal violence' about which we speculated in relation particularly to nursing home placements (Williamson *et al.*, 2020a).

CLiP is the subject of multiple assertions concerning potential benefits. Our qualitative research supports some of these assertions in some areas, but more work needs to be done to quantify them. We have shown that patient safety is enhanced with additional students; we need to establish if there are any links between CLiP and patient care improvements; research which we are currently planning. Other researchers are also beginning to publish about their CLiP experiences, illustrating benefits for students including leadership skills development, exposure to the real world of nursing, and a greater sense of autonomy for decision making (Harvey & Uren, 2019; Hill, Woodward & Arthur, 2020). We are hopeful, therefore, that this method of placement learning will develop a strong evidence base to inform and support future implementation.

References

Harvey, S. & Uren, C. D. (2019) 'Collaborative learning: Application of the mentorship model for adult nursing students in the acute placement setting'. *Nurse Education Today*, 74 pp. 38-40.

Hill, R.,Woodward, M. & Arthur, A. (2016) *Collaborative Learning in Practice (CLiP): Evaluation Report.* University of Easy Anglia and Health Education East of England.

Hill, R., Woodward, M. & Arthur, A. (2020) 'Collaborative Learning in Practice (CLIP): valuation of a new approach to clinical learning'. *Nurse Education Today*, 85 pp. 104295.

Kalb KA, O'conner-Von SK, Brockway C, Rierson CL, Sendelbach S. Evidence-Based Teaching Practice in Nursing Education: Faculty Perspectives and Practices. Nurs Educ Perspect 2015 36:212-9. 10.5480/14-1472

Kirkpatrick DL, Kirkpatrick JD 2006. Evaluating training programs, San Francisco, Berrett-Koehler.

Moreland, J. J., Ewoldsen, D. R., Albert, N. M., Kosicki, G. M. & Clayton, M. F. (2015) 'Predicting Nurses' Turnover: The Aversive Effects of Decreased Identity, Poor Interpersonal Communication, and Learned Helplessness'. 20 (10), pp. 1155-1165.

National Institute for Health and Care Excellence (2014) *Safe staffing for nursing in adult inpatient wards in acute hospitals.* Safe staffing guideline [SG1] NICE London: National Institute for Health and Care Excellence.

Nursing and Midwifery Council (2018a) *Future nurse: Standards of proficiency for registered nurses.* London: Nursing and Midwifery Council.

Nursing and Midwifery Council (2018b) *Realising professionalism. Standards for education and training. Part 2: Standards for student supervision and assessment.* London: Nursing and Midwifery Council.

Ritchie, J., Lewis, J., Nicholls, C. M. & Ormston, R. (2014) *Qualitative Research Practice: A Guide for Social Science Students and Researchers.* Second edn. London: SAGE.

Shivers, E., Hasson, F. & Slater, P. (2017) 'Pre-registration nursing student's quality of practice learning: Clinical learning environment inventory (actual) questionnaire'. *Nurse Education Today*, 55 pp. 58-64.

Wareing, M., Green, H., Burden, B., Burns, S., Beckwith, M. A., Mhlanga, F. & Mann, B. (2018) '"Coaching and Peer-Assisted Learning" (C-PAL) - The mental health nursing student

experience: A qualitative evaluation'. *Journal of Psychiatric and Mental Health Nursing*, 25 (8), pp. 486-495.

Williamson, G. R., Bunce, J., Kane, A., Jamison, C. & Clarke, D. (2020a) 'Investigating The Implementation of a Collaborative Learning in Practice Model of Nurse Education in a Community Placement Cluster: A Qualitative Study'. *The Open Nursing Journal*, 14 (1), pp. 39-48.

Williamson, G. R., Health, V. & Proctor-Childs, T. (2013) 'Vocation, friendship and resilience: a study exploring nursing student and staff views on retention and attrition'. *The Open Nursing Journal*, 7 (1), pp. 149.

Williamson, G. R., Kane, A., Plowright, H., Bunce, J., Clarke, D. & Jamison, C. (2020b) ''Thinking like a nurse'. Changing the culture of nursing students′ clinical learning: Implementing collaborative learning in practice'. *Nurse Education in Practice*, 43 pp. 102742.

Williamson, G. R., Plowright, H., Kane, A., Bunce, J., Clarke, D. & Jamison, C. (2020c) 'Collaborative learning in practice: A systematic review and narrative synthesis of the research evidence in nurse education'. *Nurse Education in Practice*, 43 pp. 102706.

Wolff, A. C., Pesut, B. & Regan, S. (2010) 'New graduate nurse practice readiness: Perspectives on the context shaping our understanding and expectations'. *Nurse Education Today*, 30 (2), pp. 187-191.