



Exploring how nursing students and facilitators view learning in the clinical environment

E Archer, BSocSci, BCur (Hons), Adv Diploma (Nursing Education), MPhil (HPE), PhD (HPE) ; R Meyer, Diploma in Nursing and Midwifery, Adv Diploma (Operating Room Nursing), BA (Health Sciences Education and Health Services Management), MPhil (HPE), PhD (HPE) 

Centre for Health Professions Education, Faculty of Medicine and Health Sciences, Stellenbosch University, Cape Town, South Africa

Corresponding author: E Archer (elizea@sun.ac.za)

Background. The complexity of modern healthcare demands that nursing students acquire a range of competencies to function within diverse clinical environments. While there are some studies on how students understand learning, there is less evidence on how they or facilitators understand their roles in this process.

Objectives. To explore how nursing students and facilitators understand clinical learning and their respective roles therein.

Methods. A qualitative methodology within an interpretivist paradigm was used. Convenience sampling was employed with nursing students ($n=16$), as well as their facilitators ($n=4$). Focus groups discussions and individual semi-structured interviews were conducted.

Results. Four themes were identified, including the role of context; the relational dimension to learning; learning as a structured process; and the dual responsibility of learning. These themes are interrelated, and while students and facilitators shared some similar thoughts about their roles, other views were clearly different.

Conclusion. The findings point to the development of curricula that encourage students to take an active role in their learning and offer some recommendations for faculty development initiatives to assist facilitators in improving learning experiences for students.

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Nursing education encompasses both theoretical and clinical components. Therefore, students in this field need to acquire a wide range of knowledge, skills and attitudes to function as competent professionals. Students are exposed to learning in different settings, such as the classroom, and simulation and clinical environments. In these environments, formal learning with predetermined learning outcomes takes place. Informal learning, which is grounded in everyday experiences and happens naturally, without fixed learning outcomes, usually takes place in the clinical environment. These settings are subject to various contextual forces that tend to influence the way learning occurs.^[1] Therefore, preparing nursing students for effective learning within these different settings requires careful planning from facilitators to ensure that students are actively engaged in their learning.^[2] Sinatra *et al.*^[3] refer to active engagement as the 'holy grail', highlighting its importance for academic success among students. Active engagement also enables students to 'learn how to learn' – essential skills for the classroom and for the clinical environment.^[4] Some activities that could engage students in active learning include small-group discussions, think-pair-share and the jigsaw. It can thus be argued that if students are expected to be actively engaged in the learning process, they need to understand how to learn and their role in learning.^[5-7]

Learning is understood in different ways and therefore the way learning takes place may also be perceived differently. Illeris^[8] argues that learning is social in nature and occurs through interaction with others in the environment. Vygotsky's social constructive theory is aligned to this, suggesting that students learn by engaging in social activities, such as interactions with peers, teachers and patients.^[8-10] Another key aspect of this theory is the idea of 'scaffolding', which refers to the support that is provided to learners as they engage in challenging activities.^[11] In the context of

nursing education, scaffolding may relate to the facilitator offering students the guidance they need to develop their clinical skills. Thus, the role of the facilitator is critical to enhancing students' learning in this context.

The role of the facilitator in the support and learning of students has been well described in the literature.^[4,11] The complex nature of a facilitator's role is further highlighted by the various roles described by Harden and Crosby,^[12] i.e. an information provider, role model, mentor, assessor, evaluator, planner and resource creator. While there are some studies on how students understand learning, there is less evidence of how they or facilitators understand their roles in this process. This gap is significant, because learning in the clinical environment is dependent on the student-facilitator relationship. In addition, role understanding influences clinical learning outcomes. When students understand their roles, they are more likely to seek out learning opportunities, and when facilitators understand their roles, they are able to better support students. This study therefore sets out to explore how nursing students and facilitators understand clinical learning, and their respective roles therein. The research question was: What are students' and facilitators' perceptions and experiences of learning in the clinical environment?

Method

This study was undertaken at a university in South Africa. Participants included fourth-year students completing an undergraduate degree in nursing, as well as facilitators responsible for teaching them. This particular student group was selected, as we felt that they would have had sufficient exposure to the clinical environment across the 4 years of their studies.

A qualitative methodology within an interpretivist paradigm was used. After receiving ethical clearance, an email containing information relating to the study and the informed consent form was sent to all fourth-year

nursing students ($n=50$) and their facilitators ($n=4$) to invite them to participate. Convenience sampling was used as it was feasible, and the students and facilitators had been exposed to similar clinical placements. Sixteen students agreed to participate (this could possibly be due to it being a busy time of the year for these students in terms of their class schedules). Data were generated by two focus group discussions (FGDs), which were conducted by an independent research assistant who is trained to conduct such discussions. The FGDs were guided by an interview schedule. These prompts were piloted before data collection to determine if questions were clear. Thereafter minor changes were made to the interview schedule. The FGDs were conducted in a venue agreed upon by the student and interviewer. This ensured convenience for participants, and assisted in participants feeling more at ease ☐ potentially leading to more open and honest discussions.

Six facilitators teach the fourth-year nursing students in the clinical environment, of whom four agreed to participate. All four facilitators teach in the classroom, simulation laboratory and the clinical environment. Their years of experience in teaching range from 2 to 10 years, reflecting a good exposure to what clinical teaching would look like and what their roles as facilitators would entail. Data were generated by means of individual semi-structured interviews. The interview times and venues were arranged according to the preference of the facilitators and were conducted by the same research assistant. The venue eventually agreed upon was located at the university in designated consultation rooms.

FGDs lasted ~60 minutes each, while the interviews ranged from 40 to 60 minutes. All FGDs and interviews were audio recorded. Data collection stopped once there was a sense that information power was achieved.

Ethical approval

Ethical approval for the study was obtained from Stellenbosch University's Research Ethics Committee (ref. no. 23954). Permission for the study was granted by the Programme Committee for Nursing. Participation was voluntary, and participants were free to withdraw from the study at any point, without consequence. All interview transcripts were de-identified to ensure confidentiality. All data, including voice recordings and transcripts, are safely stored on a password-protected computer and a locked cupboard accessible to the researchers only, to prevent any compromise to confidentiality.

Data analysis

Data were transcribed immediately after the FGDs and interviews by the research assistant. A transcript-cleaning process was undertaken to ensure that the document correctly reflected the audio recordings before transcripts were loaded into ATLAS.ti software (ATLAS.ti, Germany). Thematic analysis with an open coding strategy was conducted.^[13] Thematic analysis is a useful tool 'which can potentially provide a rich and detailed, yet complex, account of data.'^[14] The data analysis was organised in three phases, as recommended by Miles *et al.*,^[15] i.e. data condensation, data display and verification. The three phases of analysis was guided by the research question.

Results

After an iterative process of analysis, four themes were identified. In the section below, the respondent number indicates the student participant number as S, e.g. S1; FGD1, and the interviews with the facilitators as F1-4.

Theme 1: The role of context

The influence of the context on learning experiences as a factor in determining the opportunities, as well as the support available for learning, was echoed across both FGDs with students and interviews with facilitators. Firstly, students felt that the busy nature of the clinical environment influenced the attitudes and availability of staff to acknowledge their presence or to teach them:

'Often the wards are too busy or the facility you've been allocated to is so chaotic that there, you know, there isn't there the opportunity for staff to orientate you, to allocate you roles.' (S8; FGD1)

'Because unfortunately in facility XX, things are so rushed they don't get to do things or show you and stuff. But also, then tasks or skills and things aren't done correctly.' (S3; FGD1)

Facilitators added to this, suggesting that learning opportunities are missed when students must function as part of the workforce:

'Students now need to act as the workforce where there is staff shortage.' (F1)

However, it appeared that there were too many students allocated to a particular clinical unit at a given time, reducing the opportunities for learning skills:

'There are too many students and too few opportunities.' (S8; FGD1)

Conversely, some facilitators felt that there is an abundance of learning opportunities and it is up to the student to make use of these:

'The learner does not wait for the clinical facilitator to come but the learner is constantly learning with whatever is available.' (F1)

Students highlighted the disparity between the simulated and clinical environments and finding ways to bridge the learning that takes place across these spaces:

'And I think that's what caught a lot of us off-guard. We would practise some of these skills in the Skills Lab and we think we know what was going on. And as soon as we get into hospital, we realize it's not like that at all.' (S4; FGD2)

Theme 2: The relational dimension to learning

This theme relates to learning as a social activity determined largely by students' interactions with the various role-players in the clinical environment. Most participants indicated that these role-players had a fundamental role in students' learning:

'When they get into the clinical environment, they work with doctors, they work with psychologists, they work with all these different kinds of multidisciplinary teams.' (F1)

'Sometimes I would ask the doctors some questions and they would actually educate me and at other times the Sister would do it or my clinical facilitator would do it.' (S6; FGD1)

'I also worked mostly or learned from doctors, registered nurses, staff nurses and physios as well.' (S2; FGD2)

Facilitators extended the idea of learning as a relational activity, suggesting that a good relationship between facilitator and student, as well as hospital staff, is necessary for learning:

'I think if you know your students very well, you know who you can probe and who you cannot probe. So, I think that that relationship with your student is very important.' (F4)

'When we leave our "kids" there, then we know that they will be looked after by their specific person. So, the hospitals' facilitators work very closely with the University.' (F2)

Theme 3: Learning is a structured process

The third theme conceptualises learning as a structured process and speaks to the question on how students and facilitators view learning. Some participants felt that learning is about gaining knowledge that one can apply:

'I would say it is the accumulation of knowledge and then to use that, to take that knowledge and use it appropriately in whatever environment you see yourself.' (F3)

'Learning is to gain knowledge and to then be able to convey or just to share it.' (S6; FGD2)

Other participants indicated that learning takes place in a sequential process, with one level building on the other:

'Getting the information, applying it, repeating it and improving our knowledge and skill basis and everything, so applying everything.' (S4; FGD2)

It was also suggested that learning is a process that precedes the performance of skills. In other words, skills are built on knowledge, and this often takes place in a simulated environment:

'And I go through a series of processes to gain that exposure and to gain information, and then practice in order to have a permanent framework of the specific skill.' (F2)

'I would rather do sessions, short sessions that build on each other like a skill. Then practice it. Then do it in the environment, a controlled environment.' (F4)

Reflection and guided practice seemed to be a more complex process in learning, followed by integration and transfer:

'It's a guided practice with them, a lot of reflecting and then basically just facilitating the thought process for them to understand why it would be better for them to do it a different way maybe.' (F4)

'... and then you have to adapt your way of thinking and how you apply this knowledge and different knowledges and so I think it's about putting everything in perspective and context.' (S4; FGD2)

Theme 4: Learning requires dual responsibility

This theme emphasises the various ways in which students and facilitators view their responsibilities in the learning process. Some facilitators viewed their role as bridging the gap for students:

'And we as facilitators or teachers then kind of just reinforce the skill and assist them with whatever gaps they have and then we send them into the learning environment.' (F2)

There was a strong tendency towards wanting to shape or influence students' thinking:

'But for me, there's nothing more satisfying as a facilitator if there's something that they've never seen before, something that they've never come across and you have that privilege to introduce such to them and their faces just light up. For me that's something that they're going to remember for the rest of their life.' (F2)

Some responses from students echoed the notion of the facilitator being primarily responsible for their learning:

'I just want to add that the facilitators play a big role in my learning because they lay the foundation of how that hospital functions. So, providing us with the basic foundational education plays a big role in my learning.' (S8; FGD1)

Conversely, there was a sense that it is the responsibility of students to drive their own learning, and that learning happens best when students are actively engaged:

'The learner is responsible for his or her own learning, so I expect that you know that the learner takes opportunities that are presented to them in terms of learning.' (F1)

One facilitator suggested that students develop more skills if left to fend for themselves:

'I think when they learning they are given even more independence because most of the time clinical facilitators are not around.' (F1)

However, it appeared it was not only about passing the responsibility of learning to students, but the idea that students need to be driven by an internal motivation to want to know more:

'I see those students that interact a lot, you know that talk and ask questions and do research on their own, they learn a lot more than those that don't ask questions.' (F4)

Nonetheless, there were many suggestions from both facilitators and students that teaching is a shared responsibility between the student and the facilitator:

'And we also involved the students a lot there where they have flip classroom where they have to come to class prepared so they are responsible for their own learning.' (F2)

'The learner does not wait for the clinical facilitator to come but the learner is constantly learning with whatever is available.' (F1)

'It's also your responsibility to take control of your own learning because if you don't know something no-one is going to come and be like oh did you go look at this?' (S2; FGD2)

Interestingly, some students did not see their facilitators as mere providers of knowledge or supporters of learning, but also as an entry point into the community:

'The role of the facilitator is to make us feel that we belong in the Facility. By knowing that a facilitator's coming we also like have a more valid reason to be there like we actually have a facilitator coming to visit us from our university, who's going to spend time with us.' (S8; FGD1)

Furthermore, the facilitator's role in learning was accompanied by ideas that the teacher also needs to learn. Facilitators highlighted that it was important for them to improve their own knowledge and skills so that they can better support students' learning:

'So, I also think that there is a lot of room for me to expand and also for me to learn and also for me to teach also what I know to the students.' (F1)

'So, it's very important for me to be up to date and it's very important for me to be relevant with the knowledge that I put [] that I give [] through to them.' (F2)

These ideas offer some recommendations for the way students and facilitators need to be prepared and supported for placements in the clinical learning environment.

Discussion

While students and facilitators shared some similar thoughts about their roles in learning, other views were clearly different. This has implications for how learning takes place in the clinical environment. When views are different, it could lead to misaligned expectations where students might expect more guidance and where facilitators expect more independence. These differing views could also create communication gaps, where both groups may not understand each other's needs and approaches.

The role of context in learning is complex and multifaceted, requiring careful consideration when designing clinical learning opportunities.^[16-18] In this study, the unpredictable and busy nature of the clinical environment was largely perceived by the students as non-conducive to learning; yet, some facilitators felt that it was exactly this context that created opportunities for learning. It is therefore important that facilitators and institutions prioritise the preparation of students before they are placed in the clinical environment. Furthermore, students need to be challenged and supported to take an active role in their learning and seize the learning opportunities available in the day-to-day activities of the busy clinical surroundings. Embracing the complexity of the clinical environment in this manner can be of benefit for students and the institutions in which they are placed.^[17]

The social dimension of learning speaks to the current literature in health professions education, where students learn by interacting with others.^[7,19] Critical to this interaction is the development of relationships that foster respect and mutuality, contributing to a more enabling environment for learning.^[20] What is clear, is that learning takes place within a community of practice, where students learn from others but may also contribute to the learning of those in that community. Considering our context, where resources are limited, curriculum planners should carefully weigh the value of including other healthcare professionals as key role-players in students' learning.^[21]

Learning in this study is also perceived as sequential and experiential. It is thus important for facilitators to provide learning opportunities that offer progressive complexity, i.e. knowledge and skills must start from simple and progress to complex. In addition, facilitators, in collaboration with other role-players, need to ensure that students receive exposure to the required learning opportunities in the clinical environment. Deliberate efforts must be made to provide hands-on learning experiences, so that students can integrate theory with practice.^[22]

The findings suggest that nursing facilitators view learning in various ways, including through active engagement and social interactions, as aligned with the socioconstructive theory. Furthermore, while some of the facilitators believe that they are primarily responsible for students' learning, others felt that it is the role of the student to take the lead. To facilitate the uptake of these opportunities by students, several strategies may be introduced, such as structured mentorship for students; collaborative learning, where students learn from other healthcare professionals; reflection and guided practice; and peer teaching and learning.^[23] However, there are instances when facilitators also need to take the lead, such as when a student enters a new ward. Ultimately, this points to the understanding that learning is a balancing act between facilitator contribution and learner

input.^[24,25] Facilitators may therefore need to be flexible and adapt their teaching strategies to meet the diverse needs and expectations of students. These facilitators should be supported through various faculty development initiatives that allow them to critically reflect on their teaching practices, and to offer ways to improve on these practices.

Some students seemed to view learning as a personal responsibility. These students appear to be self-regulated learners who take initiative in seeking new information and resources. The findings are also consistent with the literature on self-regulated learning, where it is suggested that students' level of motivation influences their learning experiences.^[26,27] Therefore, ways to enhance students' motivation are needed. These can be enabled through the provision of a supportive learning environment, offering engaging learning activities, promoting autonomy, enhancing self-efficacy and confidence through goal-setting and achievement, and providing constructive feedback.^[28] Furthermore, learning is about co-regulation, where students self-regulate their learning with others in the environment.^[7] There is a need to foster more collaborative learning environments through interprofessional learning and peer teaching. Co-regulation can also be integrated into assessments, where students receive feedback from facilitators and peers, and engage in self-assessment to reflect on their progress and gaps in their learning.^[29]

While this study contributes to the conversations on learning in the clinical environment, there are limitations and opportunities for future research. Firstly, this study focused on a group of fourth-year nursing students who have experience with clinical learning. Their perceptions would possibly be different to those of junior students who are still adapting to the clinical environment. Research exploring junior students' perspectives may inform strategies for how facilitators can enhance support for the range of students in the clinical settings. Secondly, the study included a small group of facilitators in a single institution. Exploring the perceptions of a larger cohort across various institutions might highlight contextual influences on how facilitators understand their roles in clinical learning.

Conclusion

In this study, we extend scholarship about learning in the clinical environment from the role of students and facilitators. The areas of alignment and divergence between the two groups highlight the potential gaps or misalignments in perceptions, which have implications for the quality of learning experiences. This points to the reviewing of curricula so that students are encouraged to take an active role in their own learning. Furthermore, we highlight the need for innovative ways to deal with challenges while purposefully striving to achieve students' learning outcomes. We therefore offer some ideas and suggestions to assist facilitators in supporting students' learning in resource-constrained clinical environments, while encouraging them to become self-regulated learners.

Data availability. The authors confirm that data generated or analysed during this study are included in this article. Any additional data are available from the authors upon reasonable request.

Declaration. Artificial intelligence (AI)-assisted technologies have not been used in the production of the submitted work.

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Conflicts of interest. None.

- Meyer R, van Schalkwyk SC, Archer E. The influence of context on the teaching and learning of undergraduate nursing students: A scoping review. *Afr J Health Professions Educ* 2020;12(3):124-129. <https://doi.org/10.7196/AJHPE.2020.v12i3.1373>
- Ramnanan CJ, Pound LD. Advances in medical education and practice: Student perceptions of the flipped classroom. *Adv Med Educ Pract* 2017;8:63-73. <https://doi.org/10.2147/AMEPS109037>
- Sinatra GM, Heddy BC, Lombardi D. The challenges of defining and measuring student engagement in science. *Educ Psychol* 2015;50(1):1-13. <https://doi.org/10.1080/00461520.2014.1002924>
- Dornan T, Conn R, Monaghan H, Kearney G, Gillespie H, Bennett D. Experience based learning (ExBL): Clinical teaching for the twenty-first century. *Med Teach* 2019;41(10):1098-1105. <https://doi.org/10.1080/0142159X.2019.1630730>
- Edmunds R, Richardson JT. Conceptions of learning, approaches to studying and personal development in UK higher education. *Br J Educ Psychol* 2009;79(2):295-309. <https://doi.org/10.1348/000709908X368866>
- Vermutten JD, Vermutten YJ. Patterns in student learning: Relationships between learning strategies, conceptions of learning, and learning orientations. *Educ Psychol Rev* 2004;16:359-384. <https://doi.org/10.1007/s10648-004-0005-y>
- Bransen D, Govaerts MJ, Sluijsmans DM, Driessen EW. Beyond the self: The role of co-regulation in medical students' self-regulated learning. *Med Educ* 2020;54(3):234-241. <https://doi.org/10.1111/medu.14018>
- Illeris K. *How we learn: Learning and Non-learning in School and Beyond*. 1st ed. Oxford: Routledge, 2007. <https://doi.org/10.4324/9780203939895>
- Vygotsky LS. Interaction between learning and development. In: Cole M, John-Steiner V, Scribner S, Souberman E, eds. *Mind in Society: The Development of Higher Psychological Processes*. London: Harvard University Press, 1979:79-91.
- Cleland J, Durning SJ. Education and service: How theories can help in understanding tensions. *Med Educ* 2019;53(1):42-55. <https://doi.org/10.1111/medu.13738>
- Chun J, Cennamo K. A theoretical model of peer learning incorporating scaffolding strategies. *Int J Teach Learn High Educ* 2022;33(3):385-397.
- Harden RM, Crosby JR. The good teacher is more than a lecturer – the twelve roles of the teacher. *Med Teach* 2009;22(4):334-347. <https://doi.org/10.1080/014215900409429>
- Henning E, van Rensburg W, Smit B. *Finding Your Way in Qualitative Research*. Pretoria: Van Schaik, 2004.
- Braun V, Clarke V. *Thematic analysis: A practical guide*. Thousand Oaks: Sage, 2021.
- Miles HB, Huberman AM, Saldaña J. *Qualitative Data Analysis: A Methods Sourcebook*. 3rd ed. Thousand Oaks: Sage, 2014.
- Henderson A, Twentyman M, Heel A, Lloyd B. Students' perception of the psycho-social clinical learning environment: An evaluation of placement models. *Nurse Educ Today* 2006;26(7):564-571. <https://doi.org/10.1016/j.nedt.2006.01.012>
- Archer E, Govender L, Meyer R, Nadkar AA, Smit L. Praxis-informed pointers: A student guide for optimizing clinical learning in a resource-constrained setting. *Teach Learn Med* 2023;1-7. <https://doi.org/10.1080/10401334.2023.2237480>
- Hartigan-Rogers JA, Cobbett SL, Amirault MA, Muise-Davis ME. Nursing graduates' perceptions of their undergraduate clinical placement. *Int J Nurs Educ Scholar* 2007;4(1). <https://doi.org/10.2202/1548-923X.1276>
- Gruppen L, Irby DM, Durning SJ, Maggio LA. Interventions designed to improve the learning environment in the health professions: A scoping review. *MedEdPublish* 2018;7:211. <https://doi.org/10.15694/mep.2018.0000211.1>
- Wenger E. *Communities of Practice: Learning, Meaning, and Identity*. Cambridge: Cambridge University Press, 1999.
- Gillespie M. Student-teacher connection in clinical nursing education. *J Adv Nurs* 2002;37(6):566-576. <https://doi.org/10.1046/j.1365-2648.2002.02131.x>
- Murray R. An overview of experiential learning in nursing education. *Adv Soc Sci Res J* 2018;5(1):1-6. <https://doi.org/10.14738/assrj.51.4102>
- Khanna P, Roberts C, Lane AS. Designing health professional education curricula using systems thinking perspectives. *BMC Med Educ* 2021;21(20). <https://doi.org/10.1186/s12909-020-02442-5>
- Leaver CA, Stanley JM, Veenema TG. Impact of the COVID-19 pandemic on the future of nursing education. *Acad Med* 2022;97(3S):S82-S89. <https://doi.org/10.1097/ACM.00000000000004528>
- Telio S, Ajjawi R, Regehr G. The 'educational alliance' as a framework for reconceptualizing feedback in medical education. *Acad Med* 2015;90(5):609-614. <https://doi.org/10.1097/ACM.0000000000000560>
- Bowen L, Marshall M, Murdoch-Eaton D. Medical student perceptions of feedback and feedback behaviors within the context of the 'educational alliance'. *Acad Med* 2017;92(9):1303-1312. <https://doi.org/10.1097/ACM.0000000000001632>
- Ballouk R, Mansour V, Dalziel B, McDonald J, Hegazi I. Medical students' self-regulation of learning in a blended learning environment: A systematic scoping review. *Med Educ Online* 2022;27(1). <https://doi.org/10.1080/10872981.2022.2029336>
- Jud J, Karlen Y, Hirt CN. Linking teachers' and students' motivation for self-regulated learning: Is there a signal and how is it transmitted? *Metacognition Learn* 2024;19:939-965. <https://doi.org/10.1007/s11409-024-09393-y>
- Andrade HL, Brookhart SM, Yu EC. Classroom assessment as co-regulated learning: A systematic review. *Front Educ* 2021;6:751168. <https://doi.org/10.3389/educ.2021.751168>

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