Original Article

Graduate Nurses' Perception and Experiences of Assessment Feedback in Blended Learning Courses at the University of Rwanda

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Abstract

Background

Constructive assessment feedback is considered one of the learner-centred pillars in the blended learning mode.

Purpose

Explore graduate nurses' perceptions and experiences on assessment feedback in blended learning courses.

Methodology

Qualitative descriptive design with semi-structured interviews was used to collect data from 15 enrolled learners in a Master's Programme of Nursing at the University of Rwanda. Interviews were recorded and transcribed verbatim. Purposive sampling and thematic data analysis were use.

Findings

Eight females against seven male graduate nurses participated in this study, 67% worked in health facilities and 33% worked as lecturers in Bachelor of Nursing. The graduate nurses at the University of Rwanda perceived that lecturer in blended learning used different types of assessment feedback. They experienced the reception of assessment feedback through synchronised and asynchronised channels or via paper-based mode. Effective feedback is hindered by delays, inadequate digital infrastructure, and using marks as the only form of feedback. Accordingly, the graduate nurses perceived that learners' preparedness and involvement in the assessment feedback process are critical to establishing and enhancing deep and lifelong learning.

Conclusion

The findings revealed that different types of assessment feedback were used, while different ways were utilised to deliver assessment feedback; graduate nurses perceived and experienced that prompt and sandwich feedback are pillars of effective feedback to enhance blended learning for graduate learners.

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Introduction

Different assessment types conducted in apprenticeship processes reveal knowledge acquisition and skills construction in the learning process.[1] Effective assessment is complemented by feedback to appreciate what is well done and shows where the learner needs improvement in the learning Feedback, on the other process.[2,3] side, allows a learner to reflect on the gap encountered in the learning process to monitor and regulate his/her learning.[3] The effectiveness of assessment feedback in the learning process requires mutual partnership and ownership of both learners and lecturers.[2] Hence, the learners should have enough skills to receive feedback, and the lecturer should have sufficient skills to develop and deliver constructive feedback. [4]

Assessment feedback becomes a element of learning in the digital age, whereby the learner and lecturer are geographically separated.[5] For instance, the assessment feedback in blended learning model helped to improve the quality of education for preservice training for auxiliary nurse midwives in India's state of Bihar.[6] Blended learning offers learning flexibility primarily for inservice learners because the learning activities are taken anywhere at a convenient time for a learner.[5] In Rwanda, National Strategy for Transformation 2017-2024 (NST1) acknowledges that technology is expected to play a central role in enhancing quality education.[7] This vision becomes tremendous in nursing education, whereby blended learning has many benefits over a traditional face-to-face teaching and learning approach.[8]

In Rwanda, the blended learning mode in nursing programs started with five schools of Nursing and Midwifery and Kigali Health Institute [10] before public higher learning institutions merged to form the University of Rwanda (UR) in 2013.[9] The UR boosted the blended learning approach during the COVID-19 outbreak to all programs to ensure the continuity of learning even during the lockdown period.[10]

Thus, to highlight the importance of feedback in the learning process, some universities established policies or guidelines feedback about learners' works.[2,11-13] In our region, the Inter-University Council for East Africa highlights that "adequate feedback individualise learning process". [14] Despite the willingness of higher learning institutions to foster assessment feedback in their teaching culture, good practice of feedback at universities is not satisfactorily appreciated by learners in different corners of the world.[2,4,11,15,16] At the UR, assessment feedback is taken as comments given to the learners' work before the following formative assessment,[11,17] and should be given in a feedback sandwich mode to express appreciation, indicate the gap and/or find a positive way to enhance the learning process.[2,18]

Hence, despite the effort made by the UR to enhance the learning process through availing assessment feedback guidelines, graduate learners' perceptions and experiences of assessment feedback in blended learning have yet to be examined, especially in the context of Rwanda. The present study attempts to explore, first, the perception of graduate nurses on types of assessment feedback received from lecturers in blended learning courses; second, the perception of the way assessment feedback is conveyed and, third, graduate learners' experiences on assessment feedback practice.

Methodology

Research design

The qualitative descriptive design was used to explore the perception and experiences of graduate nurses toward assessment feedback in a blended learning course. In addition, this design was performed to gain a deep understanding of constructive feedback practices and how graduate nurses perceive and interpret them.

Study setting

This study was conducted at the Remera campus with graduate nurses enrolled at the UR, College of Medicine, and Health Science (CMHS), School of Nursing and Midwifery. Remera campus is one of nine academic campuses of UR located in Kigali City, Gasabo District. The Remera campus hosts the UR-college of Medicine and Health Sciences, which hosts the School of Nursing and Midwifery (SoNM). The school of Nursing and Midwifery offers undergraduate, graduate, and postgraduate programs. The Master of Science in Nursing (MScN), one of the graduate programs of SoNM, has eight tracks such as Master of Science in Nursing (Critical Care & Trauma Nursing); Nursing (Medical (Paediatric Nursing); Nursing Surgical Nursing); Nursing (Nephrology); Nursing (Neonatology); Nursing (Oncology); Nursing (Education, Leadership Management) and Nursing (Perioperative). [19]

Population and sample size

The accessible population was 15 sampled graduate nurses from all Nursing trucks, who accepted and provided formal consent to participate in the study.

Sampling strategy

Purposive sampling considered two learners in each track from eight tracks of the Master of Science in Nursing, except in one track where the researcher managed to get one participant. Track leaders helped the researcher to get contacts of study participants. Additionally, graduate nurses' gender and working area were considered because the enrolled learners were from teaching institutions and health facilities.

Inclusion criteria and exclusion criteria

All nurse learners enrolled in the Master of Science in Nursing program who had completed at least one semester were eligible to participate in the study. On the other hand, those who had not yet completed at least one semester were excluded.

Data collection tool

Empirical data were collected through semistructured interviews. A related guide was developed and allowed to include probing questions. Probing questions were aligned with research questions. Some examples of probing questions are as follows:

- 1. What kind of assessment feedback did you receive from the lecturer(s) in blended learning courses?
- 2. How did you receive assessment feedback from lecturers in blended learning courses?
- 3. What do you suggest about how you should receive assessment feedback in blended learning?
- 4. What is the importance of the assessment feedback you received from your lecturer (s) in blended learning to enhance your learning progress?
- 5. When do you find it necessary to have assessment feedback, and why?
- 6. What do you think about assessment feedback which reflects on marks/ grades? And why?
- 7. How did assessment feedback help you to improve learning?
- 8. How did assessment feedback help you improve your professional development in the workplace?
- 9. How did you feel when you received assessment feedback on your work?

Trustworthiness of the study

To ensure the trustworthiness of this study. the researcher referred to four criteria [20,21]: (1) Credibility: the piloting exercise was conducted with four learners guarantee the effectiveness of the technique as well as the richness and consistency of the instrument. After piloting, the interview guide was slightly adjusted so that each research participant could easily understand the questions. At this point, the senior researchers were invited to review the interview guide. (2) Transferability criterion or the usefulness of the findings in other situations: the study settings and the fieldwork's contexts were described. (3) Dependability, the methodology used, was described to smoothen the replication of the same study by future investigators.

(4) Confirmability criterion: this study reported the findings from the participants' perspective, not the researchers' predispositions.

Data collection process

The data collection was done through a oneon-one interview with 15 nurse graduates. The participants signed an informed consent form after receiving information about the study. The researcher posed open-ended questions to spur participants' reflections and experiences in line with the research questions. In addition, probing questions were asked during the interviews stimulate further elaboration of information provided by the participants. The interview lasted between 25 and 40 minutes. The one - one interview was simultaneously recorded in the field using a voice recorder. The recorded interview was later saved on the password protected computer.

Data analysis

The data analysis used an inductive approach, and the researcher went back and forth with the data collected to get familiar with nurse learners' perceptions and experiences on assessment feedback. Emerging themes were recorded gradually, and memos were developed for in-depth analysis. Thus, data were analysed thematically through the following Six phases of thematic analysis developed by Braun & Clarke [22] as described below:

- "(1) Familiarisation with the data": through this phase, the researcher listened to the recordings and made a transcription. Afterwards, the researcher reread the transcripts and listened to the recordings for refinement.
- (2) Coding: the second phase involved attributing codes to the transcribed data. The coding process emerged from the three research questions of the study. Again, the coding was done manually.
- (3) Searching for themes: after coding the collected data, the themes and three main themes corresponding to research questions were constructed. Then, the coded data was collated with their related themes.

- (4) Reviewing themes: The collated data with their corresponding themes were cross-checked to ensure they were convincing and absorbed the full story gathered about graduate nurses' perception and experience on assessment feedback in blended learning. Therefore, the researcher reflected also on the relationship between the themes to see if there were themes that could be collapsed or merged together.
- (5) Defining and naming themes: The effectiveness of assessment feedback yields from the types of assessment feedback adopted by the lecturer, the way it is conveyed to the graduate nurses, and the judgment done to the feedback given, and the way feedback was used in learning enhancement. The Figure 1 illustrates how the themes and subthemes were orchestrated during this study.
- (6) Writing up: The last step of thematic analysis is contextualising and relating the collected data to the existing literature. The analytical narratives and quotations were used to articulate information provided by respondents in a coherent story.

Ethical consideration

Before interacting with the participants, the study was authorised by the UR, College of Education and College of Medicine and Health Sciences ethics review boards with reference numbers: 03/DRI-CE/063/ EN/gi/2022 and 453/UR-CMHS/2022, respectively. As ethical consideration is paramount to the participant's rights, this study was conducted at a humanised pace whereby the morality and integrity of the researcher guided the study process from the beginning to the end. Graduate nurses participated voluntarily in the study.

The participants were guaranteed that the provided data would be kept securely, and that confidentiality would be ensured. Furthermore, the consent form was designed to explain the right of participants before, during and after data collection. Hence, the right to withdraw at any time from the study without any aftermath consequences was guaranteed.

In addition, the participants were notified that no financial payment was associated with participation in this study. Finally, the contact information of the researchers was availed to the participants.

Every participant was assigned a code that was used in the study process.

The sessions were recorded after receiving the participants' informed consent to audio record the interviews. Data collection occurred in a comfortable area where only a researcher and participant discussed dialogically. Furthermore, the names of participants were replaced by pseudonyms (for example, Learner P1) in the findings.

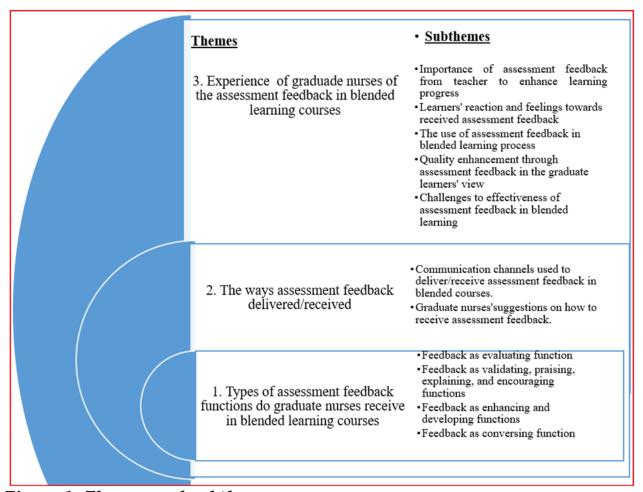


Figure 1. Themes and subthemes

Results

Characteristic of participants

Fifteen graduate learners participated in this qualitative study from eight Tracks of Master of Science in Nursing. Eight (53.3%) were females, and seven (46.7%) were males. Of these participant graduate learners, 33% were Bachelor of Nursing programs lecturers, while 67% worked at different health facilities.

Types of assessment feedback functions do graduate nurses receive in blended learning courses.

Assessment feedback functions played a pivotal role in teaching and learning

enhancement in the blended learning approach. Different types of assessment feedback functions used by the lecturers were provided by graduate nurses and were categorised under the subthemes described below:

Feedback for evaluation

The findings revealed that some lecturers considered the marks or grade feedback for in-course assessments. Learner P10 expressed: "assessment feedback is the result of the assessment done; most of the time, we receive marks, and they are considered

assessment feedback". This was affirmed by Learner P3, saying: "In Moodle, we don't receive comments; we just receive marks in the form of feedback to our learning assessment". On the other hand, learners at feedback as an evaluating function because it was intended to classify the mastery level of learning. Thus, Learner P5 highlighted: "the assessment feedback received was to assess the strength and weakness of the lecturer and give the learners the score according to how they have performed". In addition, some assessment feedback received by Graduate nurses was classified as an evaluating function because feedback was given to justify the marks attributed to the work done. Different graduate nurses voiced this. Learner P3 argued: "When we were not satisfied with the marks, we asked the lecturers to give more explanations for clarification". This statement was supported by Learner P5, saying: "When we did an assignment, lecturers gave us marks as feedback and made corrections at the same time justifying the reason behind the attributed marks". Thus, the above graduate nurses' statements conclude that some lecturers consider marks as convenient feedback to the in-course work done.

Assessment feedback for validation, praise, explanation, and encouragement

The findings showed that some assessment feedback received by graduate nurses validation conveyed а sense of acknowledgement vis-à-vis the weight attributed to the responses provided by learners. For example, Learner underpinned it in these terms: "I remember, in one course, we did the online assignment, and after doing a quiz, we received feedback on marks of what we had done. For the question that I failed, the lecturer gave me an explanation about a good answer". In addition, the findings revealed that some lecturers praised the work done by learners in different assessments. At the same time, others explained through assessment feedback the desired achievement and encouraged the learners to aim higher than their observed achievement.

Learner P9 illustrated this: "The assessment feedback is regarded as the comments given to the learner after an assessment to indicate what is good, what is bad and areas of improvement". Therefore, the lecturers who validated and praised the graduate nurses' work took the time to explain how to move from deficit to achievement through learning encouragement.

Assessment feedback for learning enhancement and development

According to the findings, some lecturers use feedback to provide guidance, indicating how learners can enhance their knowledge and skills acquisition. For example, Learner P8 reported: "The assessment feedback is a message or comments given to the learner to enhance the quality of learning". Learner P3 concluded: "I remember in one module, the lecturer showed me where I had not performed well and helped me improve. Sometimes, the lecturers commented and asked us to redo the assignment to bridge the gap". In addition, lecturers used feedback to reinforce learning, whereby the assessment feedback given may require a learner to seek assistance from his/her colleague. On this aspect learner P11 pointed out: "Feedback helps me seek further assistance and motivates me to consult different resources to understand better what I have learned". Learner P13 complemented: "assessment feedback helps me extend my view. After being given feedback, I think about it and try to research to know more about what I failed to grasp well. I use feedback to increase my knowledge". Thus, the lecturer's assessment feedback helps the learners construct their knowledge and skills through different learning approaches, such as peer learning or self-learning via Massive Open Online Learning.

Assessment feedback for negotiation of knowledge

Some lecturers used a dialogic conversation to express the gap between the current learning status and the desired target. For example, Learner P1 pointed out: "After presentations in class, we sat together, and the lecturer asked for positive points. Afterwards, the lecturer asked me to identify areas of improvement and then gave me further readings to improve where I had difficulties". The assessment feedback as negotiation of knowledge was also used in online learning as expressed by Learner P2: "On Moodle, there was a discussion forum where the lecturer gave feedback. It was given individually if the work was done individually or in the group if the work was done in groups". This dialogue between a lecturer and graduate nurses helped negotiate knowledge and achieve a mutual understanding of the best way to improve learning.

Ways assessment feedback is delivered/received.

Communication channels used to deliver/ receive assessment feedback in blended courses. The findings revealed different communication channels the lecturers used to provide feedback to graduate nurses. Learner P2 said this: "The assessment feedback was done through different channels, like email. Once I submitted my assignments via email, and the feedback was also given via email. Again, we used a discussion forum on University Learning Management System (LMS)". This learner that she received assessment feedback through the Moodle platform. She explained: "On Moodle, when the lecturer provided feedback, he/she sent a message to our class representative informing us that there is feedback for each of us". This learner continued to express other channels used to communicate feedback with the lecturer: "On special occasions, the lecturer might call a learner to have feedback in the office. Another way of providing feedback was done in groups where the lecturers invited us to meet face-to-face". Furthermore, it was revealed that video-conferencing and social media communication channels were used to deliver the assessment feedback.Learner P8 highlighted: "The virtual discussion about assessment feedback was conducted via big blue, WebEx, zoom or google meet"; while learner P4 asserted: "WhatsApp group of our class was mostly used;

once any learner had a query, he/she had to write on WhatsApp group, and the lecturer guided him/her or is guided by peers". Therefore, graduate nurses expressed how different means of digital learning were exploited, and this communication channel variability helped graduate nurses develop individualised learning styles.

Graduate nurses' suggestions on how to receive assessment feedback.

The findings of this study revealed different suggestions from graduate nurses on how assessment feedback from lecturers in blended learning should be conducted. Learner P10 suggested, "The feedback should be given early to help improve when necessary. Otherwise, one may fail more than three times the same questions, which happened to me. Secondly, feedback should be more than just marks because, as a learner. I need to know what I did well and what I did not do well to improve for the next session". Towards channels to convey assessment feedback, the graduate nurses suggested maximising the online assessment feedback as was highlighted by Learner P4 "Discussion forum, first is the official way of communication to use on the platform. Secondly, from anywhere, the comments given on the assignment can be accessed. Finally, using a discussion forum is a proper way to keep the comments from lecturers for future use". On a similar but slightly different note, Learner P11 concluded "I could prefer feedback given through zoom or other video-conference applications because it can be received from anywhere at any time. For me, waiting until we meet in a traditional face-to-face class poses a challenge for some of us due to the nature of our work. When we use Webex or zoom, anyone can attend from where he/she is and receive timely lecturer's feedback".

Despite preference for online communication, the findings also revealed that some learners preferred feedback via traditional face-to-face contact as Learner P12 expressed, "For traditional face-to-face mode, there is interaction with lecturers.

Learners have enough time, and learners and lecturers do not need to worry about poor connectivity. Lecturers quickly assess the learner's weakness through face-to-face interaction and give assessment feedback to every problem encountered ".

Apparently, learners did not identify a single satisfactory means of communicating assessment; therefore, the lecturer should diversify interaction through use of different communication channels to individualise learning.

Experience of graduate nurses of the assessment feedback in blended learning courses

Importance of assessment feedback in the blended learning process

The findings of this study illustrated how the graduate nurses who participated in this study perceived the importance of assessment feedback in learning enhancement. This was demonstrated by Learner P1: "The assessment feedback shows me where I am, if I am in a good way, or wrong way, and where I must improve. I received it for improving where I am weak". Thus, the feedback helps graduate nurses to self-evaluate their learning progress.

According to the findings, the assessment feedback delivered to the learner establishes a positive relationship between learners and lecturers to orchestrate the apprenticeship process. For example, Learner highlighted: "The assessment feedback helps to learn from comments; I can improve my knowledge with the comments from the lecturer, and I feel more comfortable when interacting with the lecturer". Learner P13 emphasized this: "First of all, assessment feedback helps me realise the gaps; second, it motivates me. Third, it is an easy way of communication as the friendship between a facilitator and the learner is promoted, which will also affect the learning progress of the learners". These illustrate that the relationship between lecturers and graduate nurses anchors the apprenticeship.

Learners' reactions and feelings towards received assessment feedback.

According to the findings, assessment feedback is one of the learning parts that may cause curiosity, emotion, and feelings in the learning process. Learner P1 said, "I had the curiosity to know what I had done". Learner P3 underpinned this: "As a learner, when I failed, I could not feel happy. However, I looked at the comments to see what I had to change to improve my learning". Besides these, some graduate nurses expressed that sometimes they received destructive feedback and demotivating comments on their performance. Learner P3 added: "Some feedbacks are destructive mostly when individual feedback is given in the plenary session. "Complemented by Learner P13 in these words, "... you see some lecturers provide depressing feedback. Once I get that kind of feedback, I get depressed and angry, with negative reactions". These graduate recalled that the assessment nurses feedback awakened their affective domain of learning, which is also part of the learning success.

The use of assessment feedback in the blended learning process

The findings disclosed that learners use assessment feedback differently to enhance learning process. For example, Learner P1 reported: "feedback helps me to read more and even to seek help from a more competent colleague". P13 narrated how feedback is used in the learning process: "Assessment feedback helps me to extend my view; once the lecturer gave me the feedback, I think about it, try to research, explore more content to increase my knowledge". Therefore, the graduate nurses showed us that when the feedback is well given it enhances socioconstructivism and connectivism learning theories in apprenticeship.

Quality enhancement through assessment feedback in the graduate learners' view

The tight relationship between Lecturer and Learner

The findings revealed that the relationship

between lecturer and learner is critical to establishing a conducive learning environment. Learner P1 said: "Feedback should be conducted in a friendly way to remove the fear of interacting with lecturers". The learning environment should shun any intimidation to smooth the learning process. Learner P2 reported: "In my view, assessment feedback should be individual. The feedback given in public may make me a little discomfort". The established link between lecturers and graduate nurses increases the digestibility of feedback given.

Time to deliver assessment feedback

Graduate nurses reported the time deliver assessment feedback as a central point of effective feedback. Learner P5 said: "Feedback should be timely conducted and planned to indicate how each unit will be assessed. And the lecturer should respect the time of providing assessment feedback". In other words, Learner P7 stressed it in this way: "I should get the feedback earlier so that I plan how to arrive where I am supposed to be in the learning process". The study finds effective feedback to be the one that is given during the course as underscored by Learner P12, "The assessment feedback should not take a long period; it must be given before the learners forget the content; lecturers should provide the feedback so that learners can use it to improve the learning process". Consequently, these graduate nurses retell that the time to deliver feedback is pivotal in the learning process.

Learner P13 showed how time to deliver feedback is crucial to promote learning in blended learning, "From my experience, when it comes to blended learning, it is fruitful when feedback comes earlier; after two or three days, but not more than five days". The findings also revealed that timely assessment feedback connects past assessment situations with the desired achievement. Learner P14 explained: "For me, it could not be more than five days or one week because this is the ideal duration when the questions the lecturers asked, and the answers provided are still fresh on my mind.

In addition, hastened feedback will help me to recall easily what I have done and relate that to the feedback from the lecturer". These explain how graduate nurses are more sensitive to prompt assessment feedback in their learning process.

Learner P2 evoked the link between prompt feedback and the learning continuum: "Learning is done step by step; you cannot understand the second unit if you have not received feedback on the work from the previous unit. Once you get feedback early, as a learner, it helps to step up over other activities". Therefore, Learner P13 expressed how the delayed feedback negatively impacts learning continuity: "when feedback delays, the learners may forget what they have done before. For example, when we are learning any module and the lecturer comes with the assessment and the feedback comes two weeks later, the learners may be in another module/course within these two weeks. They may not have time or opportunity to use the feedback from the completed one". Therefore, the time to deliver assessment feedback should be shortened as much as possible to ensure learning continuity.

Feedback delivery and quality of learning in blended learning for graduate nurses

The findings revealed that how feedback is delivered to graduate nurses may influence the effectiveness of the learning process, positively or negatively. Learner expressed: "It could be better if the lecturer used videoconferencing like zoom or WebEx; I take it as a face-to-face learning style because it is interactive. You have time to ask questions and get feedback instantly". This learner continued by reiterating how digital learning can help them in their working area: "When we use Webex or zoom, anyone can attend from anywhere and receive feedback from anywhere at any time. Furthermore, the session is recordable and can be re-used in self-study". University Learning Management systems (LMS) and social media were also looked at as channels that can improve the learning progress's effectiveness.

Learner P2 expressed this: "Creating a platform where the chat can be used synchronously and asynchronously to provide feedback helps to interact efficiently with our lecturers". The quality of assessment feedback and the way to deliver it in digital learning constitutes a significant parameter of feedback usability by graduate nurses.

the Despite advantage of technology integration in education, the principles of learning through different body senses should not be ignored. Learner P9 said it in this way: "Feedback should be face-toface. When it is face-to-face, body language may help to understand better". Whereas Learner P4 said: "For me, I may say the feedback could be given through both oral and written channels. This means that after giving written feedback, the lecturers should reserve the time for oral feedback to confirm the reception and digestion of the comments given". The learning process differs from one learner to another. The graduate nurses suggest combining different approaches to attract all learners in their comfortable learning style.

Challenges to effectiveness of assessment feedback in blended learning

study revealed some challenges disturbing the effectiveness of assessment feedback in blended learning for graduate nurses. The most reported challenge is connectivity and Information internet Communication Technology infrastructure. For example, learner 1 said: "when I am learning from home, I read the feedback later; the main barrier is internet connectivity". Learner P4 complemented with the idea of challenges of LMS whereby it was stated: "The Platform we use does not help us to implement efficiently the assessment in the given time, and then the lecturer may give feedback which does not reflect the degree of learners mastery because the learners did not express clearly their thoughts". Therefore, the accessibility of internet connectivity and stability of LMS is paramount to the success of blended learning; otherwise, blended learning can upset the learners.

Assessment feedback given as marks was also highlighted as a challenge to learning progress. Learner P7 said, "You get the marks, but you are not guided to know where to improve. Unfortunately, some lectures give marks as feedback. However, online assessment mostly uses Multiple Choice Questions, where the provides marks without any other comment or explanation". Learner P9 concluded: "Assessment feedback given as marks is wrong. It does not help the learner to know what to improve. In learning progress, the lecturer should look beyond marks and think about how the learner could be facilitated to progress". These show how graduate nurses consider the feedback given as marks because it does not help them to improve.

The time elapsed between assessment and feedback was revealed as a significant challenge to the continuity of learning. Leaner P14 expressed this barrier: "The first challenge is the feedback delay. For example, if the learners are assessed on the first of May, and the lecturer gives them the feedback in July, this feedback is not constructive and cannot help them anymore". The unpunctuality of the lecturer to deliver assessment feedback creates discomfort for Graduate nurses in their learning continuity.

Discussion

This study aimed to explore graduate nurses' perceptions and experience of assessment feedback in blended learning courses. To this end, this study attempted to answer the following questions: a) What type of assessment feedback do graduate nurses receive in blended learning courses? b) How do graduate nurses receive assessment feedback in blended learning courses? c) How do graduate nurses experience assessment feedback from the lecturer in blended learning courses? In summary, the following are the key findings of this study:

- Assessment feedback plays different functions, including evaluation, validation, praise, encouragement, learning enhancement and development, and negotiation of knowledge.
- Assessment feedback is delivered through different means like the traditional written way or via digital communication tools such as the LMS, email, video conference, and social media.
- Prompt feedback helps to achieve mastery of learning and identify current learning gaps and how to address them in the future or enhance learning.
- Partnerships between lecturers and learners enhance learning continuity and deep and lifelong learning in the apprenticeships process.
- Effective feedback is challenged by different factors like poor internet connectivity, lack of time to deliver feedback, and feedback understood simply as grades.

This study reveals different types of assessment feedback functions lecturers use to deliver assessment feedback, such evaluation, validation, praise, encouragement, learning enhancement and development, and negotiation of knowledge. Therefore, the variability of feedback functions increases graduate nurses' selfesteem, acts as a learning stimulus, and contributes not only to the improvement of their performance but also to selfconfidence in their working environment. These are similar to what has been revealed by different scholars in different studies. [2,3,13] However, feedback as evaluation was criticised by graduate nurses because it does not indicate the gap between current achievement and desired achievement. Assessment feedback functions identified in this study converge with the typology of the comments set up.[2] Other scholars argue that feedback received as marks or grades does not lead to desired learning achievement.[11,23] Similar scholars, [24,25] technological channels were used to deliver assessment feedback, including the University LMS, emails, videoconferencing such as

Zoom, Google Meet, WebEx, and social media (e.g., WhatsApp and Facebook). Thus. all these channels can convey communication with lecturers' their learners in the digital age. Bates advises lecturers to use "digital wisdom" pertaining to aligning available and accessible means of communication with the learners.[5] The lecturers in digital age are recommended to scan different technological tools in learners possession and use them as an opportunity to deliver assessment feedback.

Therefore, the effectiveness of assessment feedback results from the way it is delivered and how the learners are prepared to receive and use it. Firstly, graduate nurses suggested that assessment feedback needs to be delivered on time. This is confirmed in the findings of study conducted at University of Rwanda, explaining that learners argued that delayed assessment feedback does not help to enhance learning.[11] Secondly, graduate nurses suggested that oral and written feedback offered through face-to-face interaction and online, synchronously and asynchronously, are effective for learning enhancement and improvement. Different scholars support this statement, saying effective constructive feedback should be delivered in multisensory and comprehensive connections with learners [24,26] to facilitate learning flexibility.[27]

This study indicates that prompt assessment feedback helps the learners to position their mastery level, graduate nurses underpinned that instantaneous assessment feedback motivated them to become active learners. On the other hand, graduate nurses asserted that active learning participation increased understanding and achievement of intended learning outcomes as defined in the curriculum. They also affirmed that their active participation contributed to improving their performance. Further, according to graduate nurses, assessment feedback should illustrate appreciation of work done and a gap and provide a way to improve.

scholars and UR guidelines recommending using a "feedback sandwich" approach while the lecturer provides the assessment feedback.[2,18] In this vein, the graduate nurses showed that the feedback sandwich approach was used by some lecturers whereby they provide feedback appreciation words, gaps to be addressed and how to improve for future learning. The findings of this study show that the preparedness and involvement of graduate nurses in the assessment feedback process are critical to establishing and enhancing deep and lifelong learning. In the 21st century's education trends, learners are partners, and the education ecosystem should respond to their needs, particularly for adult learners like graduate nurses.[5] According to graduate nurses, the education ecosystem should consider different quality aspects of assessment feedback like friendship, time respect to delivering feedback, tone, and way used to deliver feedback. The UR guidelines state that assessment feedback offered in inadequate time disturbs apprenticeship.[18] Thus, both lecturers and learners should cater for effective feedback for high-risk professions like nursing while assessment feedback is planned to be delivered.[26,28]

This point is also underpinned by different

Even if assessment feedback plays a prominent role in learning enhancement, effectiveness faces challenges apprenticeship. Graduate nurses revealed different challenges to the effectiveness assessment feedback. including internet connectivity and inadequate ICT infrastructure. These are common challenges to integrating ICT in education worldwide, mostly in rural areas.[15] Similarly to the findings showed that the time elapsed between assessment and feedback was also highlighted as the major thorn in the effectiveness of assessment feedback.[11] Graduate nurses mentioned that assessment feedback delivered marks or grades was also challenging. They claimed that assessment feedback as marks did not help them to bridge the current gap

with the desired learning outcomes. The **UR** regulations indicate constructive feedback "(a) address the topic, (b) address response, (c) discuss particular errors, (d) provide examples that work, (e) provide gentle guidance, and (f) provide an opportunity for review".[29] Consequently, the findings of this study converge with the UR regulations to explain that lecturers who provide marks only as assessment feedback discredit the core value of the UR to deliver quality education.

Study Limitations

Even though this study has the potential contribution to the enhancement of blended learning, this study has some limitations to mention. The study was conducted with graduate nurses whereby some of them are also lecturers in undergraduate programs, therefore, their perception and experience may be influenced by the knowledge they have in the blended learning. Furthermore, this study was conducted with graduate learners whereas the University of Rwanda has also undergraduate learners. Thus, the perception and experience of Undergraduate learners towards blended learning may be different from the perception and experience of graduate learners.

Conclusion

This study suggests effective feedback should be seen as a mechanism to improve blended learning and teaching in higher learning institutions. Thus, this study revealed that different types of assessment feedback were used to cater for individual education. Different ways to deliver assessment feedback to graduate nurses facilitate knowledge construction and skills acquisition. Even if assessment feedback in blended learning is seen as a pillar of effective, deep, and lifelong learning, this study reveals some challenges that must be addressed to strengthen effective blended learning for Graduate nurses. This study's findings can inspire learners and lecturers to take advantage of assessment feedback, as well as learning institutions, researchers, and curriculum

designers and specialists to set up strategies and curricula that foster best practices for assessment feedback in blended learning and teaching. Therefore, this study described different types of assessment feedback graduate nurses judged as effective for learning enhancement. They highlighted effective communication channels lecturers could use while conveying assessment feedback. Furthermore, the study revealed different experiences graduate nurses accounted in assessment feedback which may help to improve apprenticeships. These outcomes are critical for working-based graduate programs like Masters of Nursing and other graduate programs whereby the learners are employed.

Authors' contribution

All authors have contributed to this study.

Conflict of interest

None

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