

E-Learning and Teaching Style that Enhances Quality Teaching and Learning for Students of College of Health Science

Sirajo Mohammed

Department of Nursing Sciences

College of Health Sciences, Federal University Birnin-Kebbi
Nigeria

Abstract

Teaching and learning involve lifelong knowledge acquisition; it seeks to empower students with the impetus necessary for continual development and up-to-date skills and knowledge alongside competency through formative assessment and feedback. With this in mind, the aim of this study is to provide a reflective account of formative assessment and feedback conducted in an assessed session for the undergraduate student nurses college of health science Kebbi Nigeria. It will focus on formative assessment, written feedback and verbal feedback cognizant of modern technology. The study highlights the practical session in simulation practice with second year undergraduate students (Adult Nursing) during a Basic Life Support session. Formative assessment is defined as the on-going monitoring of performance that has the potential to prepare students for future assessment and practice skills. Assessment followed by feedback from the teacher helps students to bridge the gap between the current level of understanding and the intended learning. Written feedback, on the other hand, is defined as a complex process that requires understanding of competency goals and the ability to establish a medium through which to reduce the gap between the existing status and the intended state of students. Meanwhile, verbal feedback transforms the learning process, thereby enabling consistent improvement to take the learning forward. The study concludes that application of computerized and electronic manikins or models for practical demonstration as well as use of slides and other visual aids helps to meet learning needs of students thereby enhancing learning.

Keywords: Teaching, Learning, Technology, Innovation

1. Introduction

Teaching and learning involve lifelong knowledge acquisition; it seeks to empower students with the impetus necessary for continual development and up-to-date skills and knowledge alongside competency through formative assessment and feedback [1].

With this in mind, the aim of this study is to provide a reflective account of formative assessment and feedback conducted in an assessed session for student nurses college of health science Kebbi, Nigeria. It will focus on formative assessment, written feedback and verbal feedback. The study highlights the practical session in simulation practice with second year undergraduate students (Adult Nursing) during a Basic Life Support session. Formative assessment is defined as the on-going monitoring of performance that has the potential to prepare students for future assessment and practice skills [2]. Aggarwal et al. [3] indicate that assessment followed by feedback from the teacher helps students to bridge the gap between the current level of understanding and the intended learning. Written feedback, on the other hand, is defined by Budimlic [4] as a complex process that requires understanding of competency goals and the ability to establish a medium through which to reduce the gap between the existing status and the intended state of students. Meanwhile, verbal feedback transforms the learning process, thereby enabling consistent improvement to take the learning forward [3].

Studies by Dannefer et al. [5], and Koh [6] have documented that teachers require skills and knowledge to conduct formative assessment and feedback with the involvement of students as partners and key actors to enhance learning and achieve learning outcomes. Evidence from a study conducted by Holmboe et al. [7] indicates that formative assessment and feedback help to provide rich information and support towards achieving performance standards and continued improvement. However, the Quality Assurance Agency, an independent body responsible for safeguarding the quality and standard of higher education in UK, states that formative assessment provides information to the student on the current learning only, but does not contribute to the achievement of the intended learning outcome, unlike summative assessment, which is concerned with students' overall success or failure [8].

Studies by Altmiller [9], and Forsberg et al. [10]

and the opinion papers: Faber [11], Foong et al. [12] have highlighted the fundamental role that formative assessment and feedback play in the facilitation and enhancement of learning towards high achievement. Evidence from a study by Bourgault et al. [13] states that the provision of formative assessment is a routine and integral part of nursing training. However, these findings should be applied with caution to the formative assessment of undergraduate student nurses because the results cannot be generalized to the large population of students due to the small sample size. Small sample sizes lead to unrepresentative selection of participants and this affects the generalizability and external validity of the results [14]. Despite this limitation, the findings of Bourgault et al. [13] underscored the importance of formative assessment and feedback to nursing education and training.

Karadag et al. [15] documented that nursing education programmes should be directed towards the establishment of professional attitudes in nursing students through continued formative assessment and feedback. However, Karadag et al.'s study [15] has limitations because the replication of its findings is difficult, as it is a tailored intervention focusing only on a small sample. Paulsell et al. [16] opined that replication is vital to research because it helps to validate findings and promote their use in practice. Therefore, evidence from these studies has to be examined with caution; however, overall, they indicate that continued formative assessment with

feedback is indispensable towards achieving the intended aims and objectives in nursing education.

Pre-registration nursing education in Nigeria has received intense attention and concern, with the relevant bodies and agencies implementing appropriate mechanisms to ensure the achievement of outcomes, competencies and proficiency within the context of accredited programmes, taking cognizance of reliable and valid assessment tools [17]. A report by the Nursing and Midwifery Council NMC. [18] Identified ten standards for pre-registration nursing education, with eighth of these components focusing on assessment. This indicates the importance of assessment to the training standard of nursing students in the UK and the relevance of the focus of this assignment. However, evidence from a study conducted by Ruesseler and Obertacke. [19] Suggests that assessment is only helpful to students if it is followed by timely provision of feedback to identify their areas of strengths and weaknesses.

This study is a critical reflection on formative assessment and feedback using current evidence. The search strategy used key words such as formative assessment, written feedback, oral feedback, reflection and summative assessment (Table 1 below). The British Nursing Index, CINAHL, PubMed, the Cochrane library and Scopus were used to extract evidence to underpin this analysis (Table 2).

The literature search returned a total of 12,567

Table 1. Search strategy

Search terms A		Search terms B		Search terms C		Search terms D
Formative assessment*	AND	Written feedback*	AND	Oral feedback*	AND	Summative assessment*
OR		OR		OR		OR
Final assessment*	AND	initial assessment*	AND	result sheet*		face-to-face feedback*
OR		OR		OR	AND	OR
Cumulative result		continuous assessment		result slip		

Table 2. Databases used and number of hits found

Database	Initial search	Search by subject heading	Final search
CINAHL via Ebisco	1559	509	511
Scopus	1160	490	190
PubMed	1058	499	209
British Nursing Index	1258	501	300
Cochrane database	1160	609	400
Embase	1200	548	406
Total	7395	3156	216
Grand total	12,567		

Table 3. Criteria

Inclusion criteria	Exclusion criteria
➤ Articles must address or research the assessment of students. ➤ Articles that identify formative assessment as a strategy for the achievement of intended learning outcomes. ➤ Articles that address research processes/methods.	➤ Articles that are not peer reviewed. ➤ Articles that are not published in English. ➤ Articles that are not related to research methods, teaching, learning or assessment.

articles, with the term ‘formative assessment’ yielding 2,934 hits, while ‘written feedback’ and ‘oral feedback’ yielded 2,420 and 2,110 articles respectively. All the articles were further refined using the inclusion and exclusion criteria set out in Table 3, below, to facilitate identification of relevant articles which are applicable to the focus of the assignment [20].

2. Reflection

Undergraduate nursing students in their second year of training attended a Basic Life Support session with a lesson plan. The session enjoyed the robust support and backing of constructivist theory. Constructivist learning theory focuses on the establishment of novice insight and understanding by means of transformational learning processes that build on existing prior experience and promote active learning [21], [36]. Ramani and Krackov [22] state that constructivist theory identifies learning as a process which seeks to define the manner in which a student establishes comprehension of a phenomenon. Constructivist theory is suitable for and compatible with this session because it can be applied via different learning styles to achieve the required outcome for each individual student [23]. Hanstrom. [24] States that constructivist education is based on three tenets that are commonly used by educators in creating formative learning experiences. The first tenet is that learning depends on the experience of the student, not the teacher [24]. Students in this session were given the opportunity to practice the CPR demonstration in order to develop confidence. The second tenet is that learning should be focused on providing new information to make judgments [24]. In this session, students were taught about the modification of CPR for pregnant women. The third tenet involves a reflection of what is learned by the student in the classroom or in clinical practice [24]. Students in this BLS session were asked to reflect after the teaching and demonstration of CPR techniques. This was in line with the aim of the session (Appendix 1), which was to ensure continued monitoring and assessment.

Formative feedback is defined by Koh [6] as a process that involves feedback comments from the teacher to take the learning process forward. This

definition has limitations because it does not incorporate the views of most of the students, who are more concerned about grades than about comments (Price et al. [26]. Students are more interested in and devoted to graded school activity [27]. Duers [2] opined that summative assessment is the preferred form of assessment because it provides judgement of students’ performance using a grading system. Despite this, formative assessment appears to have a clear benefit and relevance to the focus of this assignment: Foong et al. [12] suggests that formative feedback to the students helps them to understand their strengths and weaknesses in the learning process, while feed-forward is a two-way interaction in which the tutor is made to understand areas that need improvement in his teaching method. The concept of feedback and feed-forward was very helpful in this session because the tutor was a novice academic who accepted recommendations from students to change his delivery method [28].

Several different authors (Gopee [29], Hobbs [31], Porte et al. [32] maintain that reflective practice in education bridges the gap between self-assessment and other types of assessment, thereby helping to identify areas of good performance and areas that require improvement. Evidence from the study by Price et al. [26] indicates that meaningful engagement between teacher and students, coupled with effective feedback, facilitates active learning, thereby enabling student-dominated sessions. Dearnley and Meddings [33] state that effective feedback is essential in pre-registration nursing education, as it helps students towards personal and professional development. However, these findings must be applied with caution to this session with nursing students because the study participants were students from a business school in a UK university. Despite this limitation, the study highlights the importance of engaging the student as a tool towards active learning.

The desire for nursing students to achieve set objectives encourages the application of behaviourist learning theory, which involves observable behaviour Hughes and Quinn [34]; Wu et al. [35]. documented that behaviorists learning theory recognised the importance of curriculum and instruction design in such a way as to promote knowledge, skills, good clinical decision-making and professionalism through a self-directed learning process. Behaviourist theory

is concerned about change to behavior [36]; [30]. Therefore, behaviorist learning theory is relevant in this session of formative assessment because it is aimed at enhancing learning towards the behaviour and professional standards of nursing students Foong et al. [12]. However, further evidence from Dumchin [23] indicates that the nature of nursing students and their individual needs mean that behaviourist learning theory may not be compatible with BLS sessions. Constructivist theory always advocates constructive support and feedback in order to achieve learning outcomes [37]. Therefore, in this BLS session, constructivist learning theory was adopted to cater for the individual needs of the students to achieve deep learning [38]. Heid [39] states that deep learning can be achieved through the application of didactic processes (application of theory) in order to improve clinical practice and professional standards among nursing students.

3. The Assessment

One of the features of this study is to examine formative assessment, which was very helpful and encouraging to the students in conducting the basic life support scenario: as documented by Govaerts et al. [40], assessment and feedback is an effective strategy that helps to improve performance. As part of this BLS session, students were told to stay in the waiting area, with two students coming in the room at a time for assessment. This is very important because it helps to maintain the confidentiality and anonymity of the student base in line with University policy [41]. There was one student to each manikin, each with one assessor, in line with International Liaison Committee on Resuscitation guidelines [42].

Wu et al. [43] indicated that assessment needs defined standards and parameters in order to meet the standards of the nursing profession. They conducted a study of undergraduate nursing students' perspectives on clinical assessment in Singapore, a country with a tradition of preparing nursing students with a level of experience before registration for practice. Their study was an exploratory qualitative one: ethical approval was obtained from the institutional review board to overcome ethical challenges (Koonrungsomboon, et al. [44], and participants were made fully aware of the process through a participant information form. Participants were chosen via purposive sampling with inclusion criteria of final year nursing students with an age range of 21-40 years old; consent was sought via a recruitment email to allow participants to express their willingness to participate [45]. Data was collected using semi-structured interview guidelines for focus group discussions. Semi-structured interviews facilitate qualitative study (Austrian et al. [46]. The findings of the study suggested the need for valid and reliable assessment methods with specific feedback.

However, Wu et al.'s [43] study has limitations because it was carried out in a single university with a small sample. Of concern here is the issue of transferability: Boland et al. [47] state that transferability of a study is limited when the sample size is small. Despite this limitation, Wu et al.'s [43] study is relevant to the focus of this assignment, as it highlighted the importance of assessment with specific feedback in preregistration nursing education. Though not carried out in Nigeria, its findings are applicable to nursing training in Nigeria's nursing training [17].

Various studies (Helminen et al. [48]; Embo et al. [49]; Casey et al. [50]) have found that assessment is a powerful tool to help students to improve, thereby promoting safe, high quality care for patients. However, the findings from those studies cited in this BLS scenario must be applied with caution, as each study has limitations. One study (Helminen et al. [48]) concluded that high quality assessment and feedback improve performance, thereby increasing patient safety. However, the study has limitations because its sample size is small and there is no standard data collection tool. Hall et al. [51] state that if the data collection method is compromised, there is a tendency for bias to affect the final result. Another study, conducted in Ireland (Casey et al. [50]), opined that peer assessment has an impact on students' engagement in a nursing science programme. Taras [52] states that peer assessment helps to improve the capacity of nursing students. A third study Embo et al. [49], which used mixed methods for data triangulation, concluded that assessment of students is central to learning, as it takes learning forwards. Boland et al. [47] documented that triangulation of data helps to provide robust empirical evidence. Despite some limitations, these studies have provided a clear focus and direction, indicating that assessment is a strategy that helps to improve the general performance of students towards achieving practice standards.

Hangstrom [38] documented that while summative assessment appears to be static, formative assessment is always changing to accommodate changing trends, societal perspectives and values. Formative assessment has been very important and supportive to this BLS scenario because it enables the students to develop more confidence and competency in cardio-pulmonary resuscitation techniques [1]. It also enables students to prepare for the next assessment at the end of the semester, which is a summative assessment; hence, there is a relationship between formative and summative assessment [52], and they are both relevant in this assignment.

4. The Provision of Written Feedback

The students were enrolled in this session supported by constructivist learning theory to promote

effective engagement and active learning. Assessment and prompt feedback facilitate and enhance student engagement [50].

Studies with a variety of methodological approaches Agius and Wilkinson [53]; Price et al. [25] have documented that the provision of feedback plays a vital role in the learning process and helps students to acquire skills and knowledge in accordance with their learning outcomes. However, the extent to which the evidence from those studies can be applied in this session is limited, because one study Agius and Wilkinson [53] is a narrative literature review to explore nursing students' expectations regarding written feedback, and the other two Price et al. [26] focus on samples of non-nursing students. However, theoretical papers Webster et al. [54]; Chang et al. [55] have highlighted that the provision of timely feedback is a creative and logical process that needs to be given priority in order to achieve the set objectives of the training programme. In light of this, the provision of written feedback in this session was in conformity with constructivist theory, designed to help students to achieve an effective learning process [37], [68]. Provision of written feedback after this BLS simulation practice scenario was possible because computerised and electronic manikins were used, and as such, a printout (written feedback) was issued to each student assessed. According to Sinclair and Ferguson [56], the adoption of clinical simulation appears to receive unprecedented patronage in nursing education and training. In this scenario, as a novice academic, the author of this assignment asked students for self-evaluation either verbally or through email in order to identify any areas in need of improvement. Students were happy to provide evaluation of the entire performance, with some commendations and emphasis on the sustenance of the teaching style. Foong et al. [12] state that when students explain their positive and negative experiences of a teaching method verbally or via email to the team of clinical tutors, this has a beneficial effect on the novice tutor because it helps to improve his or her method of teaching.

Feedback should be a bilateral process in which both the teacher and the students interact with each other [36]. The formative feedback prepared students in this CPR scenario for the future assessment, as they demonstrated familiarity with the automatic external defibrillator [1]. One issue of concern here is that one student in this BLS scenario stated before the assessment that receiving only written feedback was not enough for her, as she might misplace the paper. Tuveson and Borgin [57] suggest that provision of written feedback, unlike verbal feedback, involves additional skills, as the tutor requires additional training for meaningful communication. Therefore, the strategy adapted in this session was to use printed feedback complemented by face-to-face feedback, for better understanding of the written feedback [34].

The importance of providing written feedback to students after an assignment, exam or practice scenario cannot be over-emphasised, as it leads to effective feeding-forward[34]. In light of this, the use of written feedback in combination with oral feedback for the second year undergraduate student nurses in this Basic Life Support scenario was constructive. Weaver [58] states that good feedback is characterised by being constructive and non-judgmental.

5. Provision of Oral Feedback

Studies with various methodological approaches Gorlick, et al. [59]; Naylor et al. [60] have emphasized the benefit of verbal/ face-to-face feedback, indicating that students can be confused by written feedback, especially in the clinical setting. However, these studies have limitations. In the study conducted by Gorlick et al. [59], the small sample size was of concern: Wilson [65] states that small sample sizes affect the generalisability and application of a study's findings. In Naylor et al. [60] study data was collected by means of a focus group and e-mail communication. This involves triangulation of data, which causes difficulties in data collection because it requires large amounts of data, potentially leading to disharmony and bias [61]. Despite the limitations of the above studies, the relevance of assessment and feedback was highlighted.

The Royal College of Nursing [62] states that the medium of communication in oral feedback is equally important when it comes to the provision of feedback. However, it has been argued Nicol, [63] that providing feedback in written form is considered as the most important aspect in the learning process in higher education institutions. Evidence from research by Vosper et al. [64] and Wilson-Medhurst [65] reveals that learning strategies such as the provision of oral feedback promote students' participation, thereby achieving the expected learning outcome. These findings should be applied with caution, however, because one study Vosper et al. [64] involved pharmacy students whose knowledge of basic nursing responsibilities is ineffective, while the other Wilson-Medhurst [65] was a small-scale exploratory study that recruited only a small number of participants. Despite these limitations, the findings of these studies underscored the importance of oral feedback as a strategy in achieving good learning outcomes. Therefore, findings of the cited studies are applicable to this BLS session because students were supported with oral feedback after assessment to enhance learning and achieve learning outcomes [66].

Bastable [36] and Hughes and Quinn [34] state that verbal feedback can take place in person or via a telephone call or podcast and that some students are happy to have their oral feedback discussed in the presence of other students and members of staff, while

others prefer one-to-one dialogue because they do not want others to know their scores. In this study, all of these issues were taken into consideration: students' consent was sought in compliance with the institution's ethical principles [67]. Rees [66] highlighted that teachers have an ethical responsibility and obligation to provide student nurses with full information about the impact of a teaching and assessment method to enable them to make informed decisions and consent. Consequently, students in this session agreed to have verbal feedback for better understanding of the written feedback that they had been given to improve their subsequent practice. This is in line with the behaviourist and constructivist principle of involving students in decision-making and consent [36]; [37]; [68].

The author's mentor, who supervised the basic life support scenario, as well as the mentor's moderator, left the room shortly before the provision of feedback to the students in order to adhere to the university's policy of confidentiality and anonymity Anonymised University [41] and to avoid unfair treatment of students [69]. Furthermore, all students in the scenario were asked to remain in the waiting room and called into the practical room one at a time for their assessment and feedback. This helped to ensure effective one-to-one oral feedback, thereby protecting the rights and dignity of each student in relation to the University policy on anonymity and confidentiality [41].

The studies, opinion papers and books discussed above have indicated that students may easily misinterpret written feedback. The findings suggested the need for verbal feedback to improve students' understanding of the written feedback. Therefore, students in this BLS session were provided with individualized face-to-face feedback in line with constructivist and behaviorist theory [68]; [37].

6. Conclusion

This work has provided a reflective account of an assessed session of BLS, which focused on formative assessment, written feedback, and oral feedback. The session went as planned, imparting knowledge to the undergraduate student nurses on Basic Life Support underpinned by constructivist theory [22]. A clear focus on effective feedback, feed-forward and engaging the students through reflection was maintained throughout the session. Professional, ethical, legal and cultural issues were considered and maintained throughout the session, to comply with the institution's policy [67].

All possible factors that might interfere with successful assessment and feedback in this BLS scenario were identified beforehand. Those factors include but are not limited to the author being a novice academic and not very familiar with assessment and feedback in BLS practice. Therefore, two expert and

experienced clinical tutors (staff) were asked to conduct the assessment to ensure compliance with the guided policy and the constructivist approach [38].

At the end of the session, which culminated in feedback to the students, the author of this assignment also received feedback from both the expert clinical teachers who collaboratively ran the session and from his mentor and his mentor's moderator. Furthermore, students provided the author with their evaluation of his handling of the session. The clinical teachers commended the author for his ability to engage the students in the scenario and also for the confidence exhibited, which contributed to meeting the aims of the session, despite being a novice academic. The author's mentor, while providing face-to-face feedback, also expressed satisfaction in relation to the handling of the students and housekeeping in the session. He emphasised that next time, the author should take control as a leader of the team in the CPR scenario. He also urged the author to consider the use of slides and other visual aids, as some students have additional learning needs. All of these points were lessons learned by the author for improvement in future sessions.

Finally, the issues highlighted in this study in relation to the comparison between written and oral feedback and between formative and summative assessment appear to be complex, and remain as points of debate, discussion and deliberation. I hope that this study will serve as a pacesetter to encourage more studies and discussions to that effect.

7. References

- [1] Vnuk, A., Owen, H., Plummer, J. (2006). Assessing proficiency in adult basic life support: student and expert assessment and impact of video recording. *Journal of Medical Teacher* 28 (5), pp. 429-434.
- [2] Duers, L. E. and Brown, N. (2009). An exploration of student nurses' experiences of formative assessment. *Nurse Education Today*. 29 (2009), pp. 654-659.
- [3] Aggarwal, M., Singh, S., Sharma, A., Singh, P., and Bansal, P. (2016). Impact of structured verbal feedback module in medical education: A questionnaire and test score- based analysis. *Int J Appl Basic Med Res*. 6(3), pp. 220-225.
- [4] Budimlic, D. (2012). Written feedback in English teachers' practices and cognition. https://brage.bibsys.no/xmlui/bitstream/handle/11250/270313/613094_FULLTEXT01.pdf?sequence=1 (Access Date: 30 October 2016).
- [5] Dannefer, E. F. and Prayson, R. A. (2013). Supporting students in self-regulation: use of formative feedback and portfolios in problem-based learning. *Medical Teacher*. 35 (8), pp. 655-660.
- [6] Koh, L. C. (2009). Academic staff perspectives of formative assessment in nurse education. *Nurse Education*

in Practice.10 (2010), pp. 205–209.

[7] Holmboe, E. S., Sherbino, J., Long, D. M., Swing, S. R., and Frank, J.R. (2010). The role of assessment in competency-based medical education. *Medical Teacher*.32 (8), pp.676–682.

[8] Quality Assurance Agency for Higher Education, (2006). Code of practice for the assurance of academic Quality and standards in Higher Education. Second edition. QAA. Gloucester.

[9] Altmiller, G. (2016). Strategies for providing constructive feedback to the students. *Nurse Educator*. 41 (3), pp. 118-119.

[10] Forsberg, E., Ziegert, K., Hult, H., and Fors, U. (2015). Assessing progression of clinical reasoning through virtual patients: An exploratory study.*Nurse Education in Practice* 16 (1), pp. 97-103.

[11] Faber, K. (2012). Knowing how to use formative assessment strategies. *British Journal of School Nursing*. 7 (3), pp. 154.

[12] Foong, C. C., Hassan, H., Lee, S. S. and Vadivelu, J. (2015). Using students' formative feedback to advocate reflective teaching.*Medical Education*. 49 (4), pp. 513-541.

[13] Bourgault, A. M., et al. (2013). Comparison of audio vs. written feedback on clinical assignment of nursing students.*Nursing Education Perspectives*.34(1), pp.43-45.

[14] Gheorghe, A., Roberts, T., Hemming, K., and Calvert, M. 2015.Evaluating the generalisability of trial results: Introducing a centre- and trial level of generalisability index.*PharmacoEconomics*. 33(11), pp. 1195-1214.

[15] Karadag, A., Hisar, F., GocmenBaykara, Z., Caliskan, N., Karabulut, H., and Ozturk, D. 2015.A longitudinal study on the effect of tailored training and counseling on the professional attitude of nursing students. *Journal of Professional Nursing*. 31 (3), pp. 262-270.

[16] Paulsell, D., Del Grosso, P., and Supplee, L. 2014. Supporting replication and scale-up of evidence-based home visiting programmes: assessing the implementation knowledge-based.*American Journal of Public Health*.104 (9), pp. 1624-1632.

[17] Stacey, G., Stickley, T., and Rush, B. 2011. Service user involvement in the assessment of student nurses: A note of caution. *Nurse Education Today*. 32 (5), pp. 482-484.

[18] Nursing and Midwifery Council. 2010. Standards for pre-registration Nursing Education. London: Sage. <https://www.nmc.org.uk/globalassets/sitedocuments/standards/nmc-standards-for-pre-registration-nursing-education.pdf> (Access Date: 6 Feb 2016).

[19] Ruesseler, M. and Obertacke, U. 2001. Teaching in daily clinical practice: how to teach in a clinical setting. *Eur. Journal of Emergency Surgery*.37 (3), pp. 313.

[20] Aveyard, H. 2014. Doing a literature review in health and social care: a practical guide. 3rded. New York: Open University Press.

[21] Kala, S., Isaramalai, S.A., and Pohthong, A. 2010. Electronic learning and constructivism: A model for nursing education. *Nurse Education Today*. 30 (1), pp. 61-66.

[22] Ramani, S. and Krackov, S.K. 2012. Twelve tips for giving feedback effectively in the clinical environment. *Medical Teacher*.2012 (34), pp. 787-791.

[23] Dumchin, M. 2010. Redefining the future of perioperative nursing education: a conceptual framework.*AORN Journal*.92(1), 87-100.

[24] Hanstrom, F. 2006. Formative learning and assessment.*A Journal of Communication Disorders Quarterly*.28 (1), pp. 24-36.

[25] Price, B. 2007. Practice-based assessment: strategies for mentors. *Nursing Standard* 21 (36), pp. 4956.

[26] Price, M., Handley, K., Millar, J., and O' Donovan, B. 2010. Feedback: all that effort, but what is the effect? *Assessment and Evaluation in High Education*. 35 (3), pp. 277-289.

[27] Brown, S., 2008.A respect for marks.*Times Higher Education* 867 (1), pp.39–41.

[28] Welsh, M.M. 2007. Engaging with peer assessment in post-registration nurse education.*Nurse Education in Practice*.7 (2), pp.75-81.

[29] Gopee, N. 2010.*Practice teaching in health care*. London: Sage.

[30] Gopee, N. 2011.*Mentoring and supervision in health care*. London: Sage.

[31] Hobbs, V. 2007. Faking it or hating it: can reflective practice be forced? *International and Multidisciplinary Perspectives* 8 (3), pp. 405-417.

[32] Porte, M.C., Xeroulis, G., Reznick, R.K., and Dubrowski, A. 2007. Verbal feedback from an expert is more effective than self-accessed feedback about motion efficiency in learning new surgical skills. *The American Journal of Surgery*. 193 (1), pp. 105-110.

[33] Dearnley, C. and Meddings, F. 2007. Student self-assessment and its impact on learning- A pilot study. *Nurse Education Today*. 27(4), pp.333-340.

[34] Hughes, S.J. and Quinn, F.M. 2013. Quinn's principles and practice of nurse education.6th edition. Singapore: Senglee Press.

[35] Wu, W-H., Chiou, W., Kao, H., and Huang, S. 2012.Re-exploring game-assisted learning research: the perspective of learning theoretical bases.*Computers and Education*.59 (4), pp.1153-1161.

[36] Bastable, S.B 2014.*Nurse educator*. 4th ed. Burlington: Jones and Bartlett.

- [37] Gould, J. 2012. Learning theory and class room practice in the lifelong learning sector. Second edition. London and Thousand Oaks: Sage publications and learning matters Ltd.
- [38] Harrison, C.J., Konings, K.D., and Dannefer, E.F. 2016. Factors influencing students' receptivity to formative feedback emerging from different assessment cultures. *Perspective of Medical Education*. 5 (5), pp. 276-284.
- [39] Heid, C.L. 2015. Fostering deep learning: An on-line clinical postconference pilot study. *Teaching and Learning in Nursing* 10 (3), pp. 124-127.
- [40] Govaerts, M. J., Van de Wiel, M.W., Schuwirth, W.T., Van der Vleuten, C.P. and Muijtjens, A.M. 2012. Workplace-based assessment: Raters' performance theories and constructs. *Advances in Health Science Education*. 18 (3), pp.375-396.
- [41] Anonymised University. 2012. Senate guidelines on structure and design of taught programmes of study, Anonymised University: Anonymised City.
- [42] International Liaison Committee on Resuscitation (ILCOR) 2000. Part 3 adult basic life support. *Resuscitation* (46), pp.29-71.
- [43] Wu, X.V., Wang, W., Pua, L.H., Heng, N., and Enskar, K. 2015. Undergraduate nursing students' perspectives on clinical assessment at transition to practice, *Contemporary Nurse*, 51 (2-3), pp.272-285.
- [44] Koonrunsesomboon, N., Junjira, L., and Juntra, K. 2016. Ethical considerations and challenges in first-in-human research. *The Journal of Laboratory and Clinical Medicine*. 177 pp. 6-18.
- [45] Morse, R.J. and Wilson, R.F. 2016. Realising informed consent in times of controversy: lessons from the support study. *Journal of Law, Medicine and Ethics*. 44 (3), pp. 402-418.
- [46] Austrian, K., Muthengi, E., Mumah, J., Soler-Hampejsek, E., Kabiru, C.W., Abuya, B., and Maluccio, J.A. 2016. The adolescent girls initiative-kenya (AGI-K): study protocol. *BMC Public Health*. 16 (210), pp. 1-14.
- [47] Boland, A., Cherry, G., and Dickson, R. 2013. Doing a systematic review: A students' guide. London: Sage.
- [48] Helminen, K., Coco, K., Johnson, M., Turunen, H., and Tossavainen, K. 2015. Summative assessment of clinical practice student nurses: A review of literature. *International Journal of Nursing Studies* 53, pp. 308-319.
- [49] Embo, M., Driessen, E., Valcke, M., and Van der Vleuten, C.P. 2015. Integrating learning assessment and supervision in a competency framework for clinical workplace education. *Nurse Education Today*. 35 (2), pp. 341-346.
- [50] Casey D., Burke, E., Houghton, C., Mee, L., Smith, R., Putten, D.V., Bradly, H., and Folan, M. 2011. Use of peer assessment as a student engagement strategy in nurse education. *Nursing and Health Sciences*. 13(4), pp. 514-520.
- [51] Hall, W.J., Chapman, M.V., Lee, K.M., Merino, Y.M., Thomas, T.W., Payne, B.K., Eng, E., Day, S.H., and Coyne-Beasley, T. 2015. Implicit racial/ethnic bias among health care professionals and its influence on health care outcomes: A systematic review. *American Journal of Public Health*. 105 (2), pp. 60-76.
- [52] Taras, M. 2010. Students' self-assessment: process and consequences. *Teach. High. Educ.* 2010 (15), pp. 199-209.
- [53] Agius, N.M. and Wilkinson, A. 2013. Students' and teachers' views of written feedback at undergraduate level: A literature review. *Nurse Education Today*. 34 (2014), pp. 552-559.
- [54] Webster, B.J., Goodhand, K., Haith, M., and Unwin, R. 2011. The development of service users in the provision of verbal feedback to student nurses in a clinical simulation environment. *Nurse Education Today*. 32 (2), pp. 133-138.
- [55] Chang, A., Chou, C.L., Teherani, A., and Hauer, K.E. 2011. Clinical skills-related learning goals of senior medical students after performance feedback. *Medical Education*. 45 (9), pp. 878-885.
- [56] Sinclair, B. Ferguson, K. 2009. Integrating simulated teaching/ learning strategies in undergraduate nursing education. *International Journal of Nursing Education*. 6 (1), Art. 7.
- [57] Tuveson, H. and Borgin, G. 2014. The challenge of giving written thesis feedback to nursing students. *Nurse Education Today*. 34 (2014), pp. 1343-1345.
- [58] Weaver, M.R. 2006. Do students value feedback? Student perception and tutors' written responses. *Assessment and Evaluation in Higher Education*. 31 (3), pp. 379-394.
- [59] Gorlick, M. A., Giguere, G., Glass, B., Nix, B.N., Mather, M., Maddox, W.T. 2013. Attenuating age-related learning deficits: emotional valenced feedback interacts with task complexity. *American Psychological Association*. 13(2), pp. 250-261.
- [60] Naylor, S., Marcus, J., and Elkington, M. 2015. An exploration of service user involvement in assessment of students. *Research*. 21 (3), pp. 269-272.
- [61] Thumond, V. 2001. The point of triangulation. *Journal of Nursing Scholarship*. 33 (3), pp. 253-258.
- [62] Royal College of Nursing (RCN). 2007. Guidance for mentors of nursing student and midwives: An RCN Toolkit. London: RCN.
- [63] Nicol, D. 2010. From monologue to dialogue: improving written feedback process in mass higher education. *Assessment and evaluation in Higher Education*. 35(5), pp. 501-517.
- [64] Vosper, H., Brown, A., Mackenzie-Fraser, M., Goodhand, K., Joseph, S., Diack, L. and Gordon, R. 2013. Simulation as a tool for supporting teaching, learning and

assessment within an undergraduate pharmacy programme' in Clark, R., Andrews, J., Thomas, L., and Aggarwal, R. eds., *Compendium of effective [practice in higher education volume 2*, York: The Higher Education Academy. Pp. 174-177.

[65] Wilson-Medhurst, S. 2013. Enabling belonging and engagement through activity-led learning. *The Higher Education Academy. 2*, pp.132-135.

[66] Rees, C.E. 2009. Medical students' attitudes towards peer physical examination. *Advances in Health Sciences Education: Theory and Practice. 14* (1), pp. 103-121.

[67] Delany, C. and Frawley, H. 2011. A process of informed consent for student learning through peer physical examination in pelvic floor physiotherapy practice. *Physiotherapy. 98* (1), pp. 33-39.

[68] Light, G., Cox, R., and Calkins, S. 2009. *Learning and teaching in high education: the reflective professional* second edition. London: Sage.

[69] Silverman, D. 2010. *Doing qualitative research*. 3rd ed. London: Sage.