Research Article

The use of Electronic Practice Assessment Documents (ePADs) on placement: Experiences of Nursing Students

Euthan Newman[1], Marie Newman[2], Helen Ayo-Ajayi[3]

[1,2,3]School of Nursing and Midwifery, Buckinghamshire New University, 106 Oxford Road, Uxbridge, UB8 1NA United Kingdom
DOI: https://doi.org/10.24321/2455.9318.202407

I N F O

Corresponding Author:
Euthan Newman, School of Nursing and Midwifery, Buckinghamshire New University, 106 Oxford Road, Uxbridge, UB8 1NA United Kingdom
E-mail Id:
euthan.newman@bucks.ac.uk
Orcid Id:
https://orcid.org/0009-0007-6272-330X

A B S T R A C T

Background: The introduction of the ePAD was aimed at reducing the administration burden on staff and to reduce variations in practice learning. Eportfolios used with nursing students trumps the paper version by cutting down on time and storage and is ideal for assessing competency-based studies (Janssens et al., 2022). The ePAD, a version of the eportfolio, is relatively new and warrants review. The use of eportfolios in the education of student nurses offers a platform where a holistic view of nurse's achievements can be accessed in a bid to advance learning.

Aims: To determine how students were faring with their initial use of ePADs and determine meanings students attributed to their experiences with the technology.

Methods: A qualitative study using semi-structured interviews was undertaken. Thematic analysis of the transcribed responses was conducted in line with Braun and Clarke (2006)[1]. Ethical approval was received from the University Research Ethics Committee. No funding was received, and no incentives were given to participants.

Findings: Themes arising included, issues with student's introduction to the ePAD, using it in placement, and the ability of the placement professionals to use the ePAD.

Conclusion: Benefits accrued from the use of ePADs in placement must be actively maintained through effective communication, software maintenance along with specific training and development for academic staff, students and placement professionals. Further research on how placement professionals experience using the ePADs is necessary.

Keywords: ePAD, Eportfolios, Proficiency, Placement, Placement Professionals

Newman E et al.
Int. J. Nurs. Midwif. Res. 2024; 11(2)

10

Introduction

The ePAD is an electronic platform accessed online and designed to facilitate documentation of assessments of students' progress in placement. This online platform marks an evolution from the previous paper version and is facilitated by the Pan London Practice Learning Group.[2]

Placement professionals in the form of (practice supervisors and practice assessors), will have access to the student's ePAD to help authenticate students' achievements and performances. Students will be able to log their hours attending placements and placement professionals will have a login access to the student's ePAD to verify these hours. Student, academic staff and placement professional logins are facilitated by the creation of an account by the university. It is the role of the university to administer these accounts. Technical issues can be referred for support to the PLPLG who are the creators of the online platform.

Students will be continuously assessed against specified proficiencies (nursing skills), through episodes of care in their placements. A mid-point interview will be conducted and documented within the ePAD. If there are causes for concern, an action plan will be devised to help the student achieve. In addition, students are required to reflect on their learning and placement activities and document these. The practice supervisor will discuss the student's reflections and include their comments. These actions make the ePAD essential for evidencing nursing related activities in placement.

Researching nursing related activities is of specific importance as the hallmark of the profession is grounded in evidence-based practice. Evidence based practice is key to enabling continuous improvement of care services including systems of care based on systematic and trustworthy research procedures and findings.[3] This principled mandate guided this qualitative research to determine the experiences of students around their use of the ePAD whilst on placement.

Fifteen participants took part in the research through semi-structured interviews. These were first year students who had finished their first two mandated placements. Their comments reflected their experiences of how they fared from their introduction to the ePAD, on to their involvement throughout both their first and second placements. Participants age ranged from early twenties to late forties and included three males and twelve females.

Background

The ePAD is a learning based electronic folder-like app which evolved from its 'parent' paper version through to a plethora of electronic documents called eportfolios. With more technological advancement, eportfolios have been adapted and specialised and the generic term has birthed multiple variations such as the ePAD. Due to the dearth of research on this newly refined version of the eportfolio called the ePAD, much of the background literature accessed refers to the use of eportfolios. While the merits of an eportfolio over its paper-based version are apparent, there are challenges presented by the assortment of eportfolios such as the ePAD.

The new initiative involving the ePAD commenced at the University in 2021 as an online platform for tracking student's progress and to enable students to obtain valuable feedback. The ePAD is predominantly accessed online via a website, accompanied by iOS and android mobile apps which enables the students to complete documentation and record practice hours online, on a mobile device. There are several other London Universities also currently using the ePAD. Other reasons for implementation of the ePAD includes the need to reduce variation in practice learning as a means of creating excellence in healthcare practices. Research on the use of ePADs within The West [4]Yorkshire and Humber Collaboration (2018), found that students improved on their reflective practice moving on to question their own practice and seek out evidence to support decision making. The ePAD is also data secure and industry compliant.

Having an early and meaningful introduction to healthcare technology whilst learning their trade, will place nurses in an advantageous position to learn, appreciate and master the use of digital technology in care.[10] Maintains that the use of eportfolios in the education of student nurses is advantageous over the paper version as it offers a platform where a holistic view of achievements can be shared and analysed to help determine learning.[5] They also warn that the design can be both a promoter and detractor to the learning experiences of student nurses.

The rational for this research lies in the fact that the research team are academic staff at a London university who support students with their use of the ePAD, so it behoves the researchers to intentionally understand the impact of this tool. This research is important to add to the body of knowledge concerning the ePAD, especially considering the current dearth of research due to the newness of the technology.

Methodology

The research was governed by the qualitative methodology. This methodology is a powerful approach for gathering the lived experiences and the quality of said experiences via the direct expression of participants.[6]

Method of Data Collection and Sampling

Purposive sampling, participants directly targeted for the research based on relevance to the research, was

11

Newman E et al.
Int. J. Nurs. Midwif. Res. 2024; 11(2)

conducted.[7] A 'blanket email' was sent to the emailing list of the 2021 BSc Student Cohort, summarising the study and how it would be conducted. Participants were chosen on a first come, first served basis. The researchers used a sample size of fifteen students. Semi-structured interviews were used to collect the data. Interviews were recorded and transcribed verbatim by the interviewers. After the fourteenth interview it was apparent that there would be no more new information coming from participants and the researchers agreed that data saturation was achieved. However, the fifteenth participant was included to validate this decision.

Data Analysis

[1]Thematic Analysis with its defined stages and professional flexibility was employed. This included getting to know the data, generating initial codes, creating themes, reviewing, and naming the themes. This allowed the researchers to move back and forth through the stages thus lending itself to rigour through self-regulation and reflexivity between the researchers. All interview scripts were transcribed verbatim to ensure exact replication of the evidence collected.

Ethical Considerations

The University Research Ethics Committee's ethical approval was gained (UEP2022Jun02). Signed informed consent was obtained from the participants. The ethical guidelines were rigorously followed.[8] No funding was received, and no incentives were given to participants.

Findings

Since the participants were student nurses, the terms participants and students are sometimes used in this section interchangeably. Squared brackets [ ], used within the included direct quotes of participants, denotes the supplied words of the researchers. The following themes and sub-themes were realised:

Table 1.Summary of Themes and Sub-themes.

Themes	Sub-themes
Theme 1 Issues with the ePAD on placement.	How students were introduced to the ePAD
	Getting the ePAD to function.
Theme 2 Usefulness of the ePAD.	-
Theme 3 Knowledge and skills of placement professionals.	-
Theme 4 Participant recommendations.	-

As expected, there were marked differences in student's experiences between their first and second mandated placements:

"At the beginning, I was trying to figure out how to use it [the ePAD] so, it was a bit confusing, but at the end I gained a lot more confidence…" (Participant 6)

Improvements in use of the ePAD can be mostly attributed to students honing their skills on the technology as they learned, and that the reported issues were being addressed by the university and the technology provider over time.

Theme 1: Issues with the ePAD on placement.

Participants were very forthcoming around the challenges they had concerning the use of the ePAD on placement. These difficulties with the ePAD could not be divorced from how the ePAD was introduced within the university setting, technical issues with the app, and also how the technology was received by placement professionals. These comments are useful for the university in not only understanding how students fared while using the ePAD on placement but also how students made sense of the training for such usage of the technology.

How students were introduced to the ePAD

The process of introduction to the ePAD contrived to thwart students' efforts to maximise the value of the technology in placement. The general mood concerning the induction, was that it was challenging especially based on practicality around the number of students attending the induction:

"…it was a bit challenging and difficult because it was done collectively…" (Participant 3)

Inducting a large group of students together prevented the students from immediately trying out what they were being taught. A more hands on approach to the introduction of the ePAD seemed to be a common response denominator:

"…although we were introduced to it [the ePAD]… there was quite a significant gap, between introduction and actually being able to get in there and have a play". (Participant 10)

Although most participants presented some form of issues associated with the ePAD, a few provided a positive thrust:

"It was a fantastic program, and after the induction and the training, I was very clear how to use it". (Participant 1)

Getting the ePAD to function

Getting the ePAD to be operational seemed to be a recurrent issue among most participants:

"…it doesn't save automatically, it erases everything…so it was very stressful because you had to retype everything". (Participant 9)

"…a lot of the times it was really frustrating that the website would crash". (Participant 8)

Newman E et al.
Int. J. Nurs. Midwif. Res. 2024; 11(2)

12

Participants recounted these difficulties with much dismay especially since the resolving of such technical issues usually took some time. This was due to the fact that after reporting the problem to the university, the university had to then seek expert assistance from the Pan London Practice Learning Group who created and maintains the ePAD online platform.

Another issue was around logging in. This was mostly originating from the working environment and issues with the placement professionals not having access to student's ePAD. They would get around this by the student signing in themselves and asking these placement professionals to make their necessary input. This would later appear as if the student had inputted the information themselves. This was a predicament for some:

"…so they when they [placement professionals] complete from your login, it looks like you are cheating, even though you're not…" (Participant 2).

It must be noted that participants were not just throwing their hands in the air and giving up. On the contrary, they were actively trying to sort out the issues they faced such as initiating communication with the university in their bid for support:

"… I got help from my tutor…" (Participant 15)

Some revisited their training material on the introduction of the ePAD and rewatched instruction videos made available on the university's online learning platform. Students also sought peer support. Consequently, there was development and growth through self and peer learning:

"… a lot of people were struggling within our group so we would message each other and supported each other…" (Participant 6)

This spawned the positive outcome of teamworking amongst students, birthed from their collective frustrations with the technology.

Theme 2. Usefulness of the ePAD

The majority of the participants were accessing the ePAD regularly on their placements to log their placement hours and reflections. This was despite the challenges they faced. This placed them in a strong position to assess the usefulness of the technology from the end user's point of view. Most participants found the functions of entering hours, layout, and reflections as vital to their personal performance and key in achieving the competency requirements of the course:

"…it's lovely it charts up your hours – incredibly motivating than paper portfolios…The layout, you know, you get used to it generally quite quickly, yea I think it's pretty user friendly…" (Participant 10)

The reflective function of the ePAD was largely exonerated too:

"… it's good to reflect on what you have learnt, what's left to do and if you meet your learning outcomes". (Participant 13)

A few participants complimented the function accounting for the proficiencies:

"Definitely the proficiencies because obviously you could click to say how you completed them". (Participant 12)

Notwithstanding participant's frustrations around the issues itemised in Theme 1, the participants struggled to pinpoint specific functions of the ePAD what were not useful:

"…I didn't use them [the functions] as much maybe because I'm not at that stage because some of it was part two, part three… but there are no aspects that I didn't find useful". (Participant 8)

With the plethora of useful technological devices including artificial intelligence (AI) which are now being used within healthcare services, it is safe to say that technology within healthcare is here to stay. It is no surprise then that educational institutions facilitating nursing students are taking a leading role in introducing technology in practice.

Seemingly mindful of this, most participants were resigned to the fact that the use of technology is inevitable:

"…many universities, are now using electronic ePADS, gone are the days when we use the paper…". (Participant 4)

Theme 3. Knowledge and skills of placement professionals

Responses around the knowledge and ability of the placement professionals to use the ePAD were mixed, representing some as being helpful and others being less so. The dispensation of skilled support seemed, to hinge on two main factors- the computer aptitude of the professionals and their training. Participants took keen notice of placement professional's computing ability as it was deemed to compromise the support given:

Some participants were scathing in their assessments of placement professionals and even became noticeably irate when recounting their experiences, linking this to the lack of training of placement professionals:

"So, if I rate from zero to ten, I'll say her [placement professional] ability to use the system was zero …" (Participant 5)

A few participants defended the placement professionals at the expense of the technology:

"…they [placement professionals], are not dumb sometimes the system is just not as faultless as it is publicised." (Participant 8)

Many participants underscored the turning of the tables resulting from this extraordinary situation where the

13

Newman E et al.
Int. J. Nurs. Midwif. Res. 2024; 11(2)

student now became the master, bringing the placement professionals along with them in a quest to conquer the ePAD:

"…a lot of them are kind of depended on us to be able to manoeuvre through the ePAD because they weren't really aware of how to use it…" (Participant 6)

Theme 4. Participant Recommendations

The participants were not mutinous, they were realistic about the inclusion of the technology in their education and practice. Consequently, they were eager to contribute to the proper implementation and advancement of the ePAD. In making suggestions, participants keenly contextualised the issues while aligning their perceived ideal solutions.

One key recommendation was about providing support and relevant information through timely communication especially since the ePAD was new to them and it was not yet fine tuned in their view:

"…students find it hard to communicate with the university they are struggling with the ePAD so, the university needs to learn form that…" (Participant 14)

Participants called for the training of placement professionals tasked with their supervision. Participants also recommended that they be kept in the know by the university regarding changes and be prompted through alerts while on placement:

"My first one she was good with it but my second assessor she should have training on the ePAD." (Participant 4)

"… they [the university], should give us updates… there should be that continuous communication…" (Participant 5)

Some participants responded with a visionary scope, looking out for their fellow students who maybe starting the course in the future. Their articulated recommendation for student training on the ePAD was for it to be embedded within the curriculum:

"… they [the university] need to put it [student training] as part of the course…so that they [students] get used to it [the ePAD] before they start their placement…" (Participant 3)

Such comments also signalled the notion that participants wanted to be active participators in their own learning and saw themselves as having a vested interested in the institution they were a part of.

Discussions

The inclusion of technology in its various forms within practice, including teaching and learning, is in keeping with other areas of society, and should be embraced as a means of advancing healthcare practices. Apparently recognising this, participants were generally acquiescent to the inevitable advancement of technology within their

study and practice.[9] The visionary ideals of the Nursing and Midwifery Council actively encourages student nurses to demonstrate mastery of technology used in their practice to promote positive care outcomes for patients.[10] The NHS is also committed to the use of technologies, and shares the aim of the ePAD to reduce time lost to paper documentation within healthcare practice.[11]

However, how nursing study programs are structured including experiences with placement professionals, and the impact of technology introduced can have implications on assessments of nursing students.[12] Additionally, the perceived usefulness and attitudes towards technology will affect the effectiveness of its use.[13] Research undertaken by The West Yorkshire and Humber Collaboration (2018),[4] with year 1 nursing students found that the success of ePADs is inextricably combined with an expansive application and integration of the tool within the curriculum. This serves to anchor the relevance of the tool and allow students to be aquatinted with it before it is utilised in their practice.

Issues around the functioning of eportfolio apps assigned to the provider are not uncommon hurdles besetting students relying on such technologies in their studies.[14] Providers of the technology have a duty of care to work closely with their clients to ensure that speedy updates and upgrades are undertaken after implementation. If educators endeavour to provide the required technological support for learners and solve teething issues, learners should stand a better chance of achieving positive outcomes from the introduction of technology such as the ePAD.[15] Emphasis must also be placed on how the ePAD is taught to maximise learning.

The learning environment will need to be considered so that no one is disenfranchised and the four core elements of social learning can be achieved.[16] Consequently, implementation of the ePAD should provide active communication to capture student's attention, promote usefulness for motivation, ensure purposeful teaching and learning to aid retention, and provide opportunities for practical learning to support reproduction of skills learnt.[17] The proffers that facilitating learning through teaching large groups can be convenient for reaching more students using fewer staff and sessions while saving time too. Nevertheless, such a format can compromise the ability of students to pay full attention. Besides, passive learning is promoted which can stifle motivation for learning and participating, making it difficult to retain and reproduce what has been learnt.

Bandura intimated that these four elements of learning impact one's self-efficacy- the belief in one's ability to successfully overcome obstacles and achieve. Hence, the educational package of student nurses must be holistically considered as the constituents of these studies will

Newman E et al.
Int. J. Nurs. Midwif. Res. 2024; 11(2)

14

determine the competence and confidence of student nurses to go into practice.[18]

[15]They argue that student's use of eportfolios can be useful to both students and their assessors. This usefulness should also provide opportunities for students to take responsibility for their own development. The students validated the reflection opportunities of the ePAD, a key concept of the NMC (2018a) for deriving improved practice and performance.[10] The uploading of reflections also gives immediate access to all who are involved in the education of the student and progress can be monitored and confirmed against visibly required proficiencies. Structured reflection via the technology, and even challenges faced can be means of amassing experiential learning.

The iconic reflective learning cycle promotes the idea that knowledge is acquired and accumulated from the process of experiential learning and structured reflection.[19] However warns in that order to avoid reflection being approached as an idealistic exercise to only show off positive achievements, such exercises need the guidance of placement professionals. This is to help student nurses highlight weaknesses as a means of seeking improvements.[20] Further maintains that along with being an effective assessment tool, eportfolios can provide fruitful opportunities for student nurses to develop criticality of thought when approaching problems.

They found a high acceptance of nurses towards the use of technology in practice.[9] Clearly, since this ePAD research did not include nurses in practice as participants, it would be progressive idea to get this side of the equation researched in future to determine how practice professionals make sense of the ePAD in practice. The surprising findings around participants using peer support to overcome common issues can be the focus of further research around the implementation of the ePAD too.

Implication for practice

They argue that by adopting technological advancements the nursing profession can benefit from the public's perception that the profession is in step with society and is keen to stay abreast with technological advancements.[20] While it is impossible to shield students from every form of hardship, academic institutions must endeavour to be proactive in mitigating any potential form of stress that can befall students.

Strengths / limitations of Study

The researchers endeavoured to follow the methodological principles in the approach and undertaking of this research and have shown how the research process was carried out so that readers can see how conclusions were drawn.[6] The researchers achieved data saturation which provides an indication that they have gathered and detailed the

available responses representative of the cohort. This topic is a contemporary one, and one that relates directly to many higher educational institutions. The research can add to the body of knowledge on the issue, provide evidence-based recommendations which can be tried and tested and serve as a significant means of addressing the concerns of students.

Due to the localisation of the study and the small sample size, it may not be able to generalise across different populations. However, lessons can be learnt and transferred to other similar settings, and this can trigger similar studies for other institutions.

Recommendations

An initial digital literacy survey should be undertaken with all incoming students to determine their baseline digital status. Necessary programs can be undertaken by the university student support teams to upskill students who are deemed below the required threshold linked with technological success on their nursing program. Student representation and taking on board what students want from the ePAD must be included in implementing the ePAD and ePAD training should be embedded within the curriculum.[4] Students should be upskilled in their training to be able to offer peer support for other students having difficulties with the ePAD. This should be organised and intentionally fostered.

A more purposeful partnership approach (including training), needs to be promoted between the university and placement professionals to ensure theory and practice benefit from the integration of the ePAD.[21] An online support forum could be introduced to help.

Further research is recommended to determine the experiences and needs of placement professionals supporting student nurses on placement. Research on how peer support can be utilised in fostering continuous proficiency in using the ePAD is also recommended. Follow up research to evaluate recommendations is advised too.

Conclusions

Nursing staff are at the forefront of safeguarding the health of the nation and must be equipped to utilise required technology both in training and practice. The ePAD is one such technological device that has proved itself a worthy tool for supporting the teaching and learning activities of student nurses especially when determining competency and supporting reflective practice. Implementation of this technology is not without challenges. The implementation of the ePAD must be intentionally undertaken to ensure that student's initial encounter with the device adds purpose and helps to motivate the learner. Purposeful training for students and placement professionals on the workings of

15

Newman E et al.
Int. J. Nurs. Midwif. Res. 2024; 11(2)

the ePAD is essential for positive outcomes to be realised. The communication between stakeholders must be open to ensure trust and professionalism. A review of actions and recommendations must be undertaken to determine their effectiveness. Continued research on the effectiveness of the ePAD must be undertaken to ensure proactiveness and not reactiveness regarding the use of the ePAD on placements.

Author's Contribution

HAA and EN: Contributed to the conceptualization of the study. Data curation was performed by EN. Formal analysis was carried out by EN, MN, and HAA. The investigation was conducted by EN and MN. Methodology was developed by MN, HAA, and EN. Project administration was handled by EN. Resources were provided by HAA. Validation was conducted by EN. Visualization was prepared by MN. The original draft was written by EN, and the writing—review and editing—were done by MN and HAA.

Declaration of Generative AI and AI-Assisted

Technologies in the Writing Process: None

References

1. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative research in psychology. 2006 Jan 1;3(2):77-101.
2. PLPLG (2024) Introduction to the Pan London ePAD. Available at: https://plplg.uk/pan-london-epad/. Accessed on 12 March 2025.
3. NICE (2023), Into practice guide. https://www.nice.org.uk/about/what-we-do/into-practice/resources-help put-guidance-into-practice. Accessed 20 November 2023.
4. The West Yorkshire and Humber Collaboration (2018) The West Yorkshire & Humber Electronic Practice Assessment Document (E-PAD) Project: Partnerships, Pedagogy and Perspectives. NET 2018 Conference, Cambridge. https://www.advance-he.ac.uk/knowledge-hub/net-2018-conference-west-yorkshire and-humber-electronic-practice-assessment-document Accessed 22 November 2023.
5. Tickle N, Creedy DK, Carter AG, Gamble J. The use of eportfolios in pre-registration health professional clinical education: An integrative review. Nurse education today. 2022 Oct 1;117:105476.
6. Creswell JW, Poth CN. Qualitative inquiry and research design: Choosing among five approaches. Sage publications; 2016 Dec 19.
7. Lewis J. Qualitative research practice a guide for social science students and researchers.
8. BERA (2018). Ethical Guidelines for Educational Research. (4th ed.). https://www.bera.ac.uk/researchers-resources/publications/ethical-guidelines for-educational-research-2018. Accessed 22 November 2023.
9. Tsarfati B, Cojocaru D. Introducing computerized technology to nurses: A model based on cognitive instrumental and social influence processes. InHealthcare 2023 Jun 17 (Vol. 11, No. 12, p. 1788). MDPI.
10. NMC (2018a) Future Nurse: Standards of proficiency for registered nurses. https://www.nmc.org.uk/globalassets/sitedocuments/education-standards/future-nurse-proficiencies.pdf. Accessed 22 November 2023.
11. NHS England, (2023) Digital transformation. https://www.england.nhs.uk/digitaltechnology/. Accessed 20 November 2023.
12. Williamson GR, Rowe LM, Knowles S, Kane A. Preparation and support for students in community placements: A mixed methods study. Nurse Education in Practice. 2020 Mar 1;44:102747.
13. Lai, C., Lee, T., Lin, S., & Lin, I. (2022). Applying the Technology Acceptance Model to Explore Nursing Students' Behavioral Intention to Use Nursing Information Smartphones in a Clinical Setting. CIN: Computers, Informatics, Nursing. 40(7), 506-512. https://doi:10.1097/CIN.0000000000000853. PMID: 35120371.
14. Chang CP, Lee TT, Mills ME, Hsieh YP. E-portfolio functional requirements for the final semester baccalaureate practicum course: A qualitative research study. Journal of Professional Nursing. 2019 Sep 1;35(5):405-11.
15. Chang CP, Lee TT, Mills ME, Hsieh YP. E-portfolio functional requirements for the final semester baccalaureate practicum course: A qualitative research study. Journal of Professional Nursing. 2019 Sep 1;35(5):405-11.
16. Bandura, A. (1977), Social Learning Theory, Upper Saddle River, N.J.: Prentice Hall.
17. Saiyad, S., Mishra, S. K., Rimal, H., George, C., & Kaur, G. (2018). Teaching and Learning through Large and Small Groups. Journal of Research in Medical Education & Ethics. 8 (Special Issue), pp-S24-S29. https://doi.org/10.5958/2231-6728.2018.00048.3
18. Ersoy, E., & Ayaz-Alkaya, S. (2024). Academic self efficacy, personal responsibility, and readiness for

Newman E et al.
Int. J. Nurs. Midwif. Res. 2024; 11(2)

16

professional practice in nursing students: A descriptive and correlational design. Nurse Education Today, 132, https://doi.org/10.1016/j.nedt.2023.106007.

19. Kolb, D. A. (1984). Experiential Learning: Experience as the Source of Learning and Development. Englewood Cliffs, N. J.: Prentice-Hall.

20. Sabetsarvestani, R., Geçkil, E. & Köse, S. (2022). Electronic-portfolio: A tool for nursing students' evaluation. Genel Sağlık Bilimleri Dergisi. 4(1), 62-67. https://doi.org/10.51123/jgehes.2022.44

21. Berndtsson, I., Dahlborg, E. & Pennbrant, S. (2020). Work-integrated learning as a pedagogical tool to integrate theory and practice in nursing education – An integrative literature review. Nurse Education in Practice, 42, https://doi.org/10.1016/j. nepr.2019.102685