

ANALYSIS OF THE EFFECTIVENESS OF THE APPLICATION OF THE UKOM ROOM APPLICATION IN PREPARING STUDENTS TO FACE THE NERS COMPETENCY TEST

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Abstract

The Indonesian government has implemented a quality assurance system for higher education in the health sector, including competency tests. The aim of carrying out competency tests is to achieve graduate competency standards that meet performance competency standards, however, the Indonesian Nurses Competency Test experiences a decline in the pass rate every period. The low percentage of students passing the nurse competency test should be an evaluation material for every nurse education institution in Indonesia. Many factors can influence or become obstacles in achieving passing the nurse competency test, one of which is a lack of understanding in analyzing and answering computer based competency test questions. The aim of this research is to analyze the effectiveness of Android-based learning applications as a medium for learning and practicing Nurse competency tests. The design used in this research is a pre post test one group design. The sample from this research is 60 students participating in the Jambi University Nurse Professional Education Study Program who will be prepared using the Ruang Ukom Application learning media to take part in the nurse competency test activities. This research instrument uses the average standard of the Nurse Competency Test TryOut before the Nurse Competency Test is carried out to measure student preparation in the Indonesian Nurse Competency Test. Students were given a pretest of 180 questions, then given training intervention for 20 meetings with a duration of 1 meeting for 2 hours, then a post test was carried out. After that the data was processed using the t-test data analysis technique with $\alpha=0.05$. The results of the study showed that students' readiness in facing the nursing school before being given intensive guidance using the Ruang Ukom application was at a mean of 34.75 (SD=2.144) and students' readiness in facing the Nursing School after being given intensive guidance using the Ruang Ukom application was at an average of 50.65 (SD=2.44) and the use of this application was proven to be effective in increasing student readiness in facing the nursing school ($p=0.000$). Exam preparation before facing the nursing competency test using the right media is important for students to increase their readiness to face UKOM so that the UKOM graduation rate can increase

INTRODUCTION

Competence can be defined as a person's ability that includes knowledge, skills and attitudes in completing a job or task with established performance standards. Nurse competency standards reflect the competencies expected to be possessed by individuals who will work in the field of nursing services (AIPNI-AINEC. (2015) (Sari Fatika Cindy, Assajad Malik Ibnu and Ansori Isa Moch, 2023).

This nurse competency will be oriented towards the quality of performance that will ensure the quality of nursing services (Nehir et al., 2016). Competency Test is one of the instruments required by the government to ensure the quality of qualified graduates (Code and His, 2024) (Ezzat Osman, El-Ansary and Hassan Mohamady, 2023). In the competency test there is a process to measure the knowledge, skills, and attitudes of health workers in accordance with professional standards (Kemenristek DIKTI, 2016) (Sulistiyowati and Supratman, 2024).

The low percentage of students passing the competency exam should be an evaluation of nursing education institutions in Indonesia (Fawaz, Hamdan-Mansour and Tassi, 2018) (Fitria and Ningsih, 2024). This should be responded quickly and appropriately, because if it is not responded quickly and appropriately it will have an impact on the quality of nursing graduates and institutions. One of the factors that cause the low pass rate of nursing students/alumni in the Ners competency test is the lack of understanding of students in analyzing and answering computer-based test competency test questions (Yoeum, Koy and Sam, 2024). In addition, they expressed complaints about the absence of information related to the competency test material grids or blueprints so that they only independently looked for examples of questions via the internet (Mackavey and Cron, 2019) (Innab et al., 2024)

One solution that can overcome these problems is the development of appropriate media (Alfaleh *et al.*, 2023) (Indriyawati *et al.*, 2022)(Li *et al.*, 2017). In previous studies, researchers have developed this media by creating android-based learning media called Ruang Ukom, the media has been developed

several times and updating the material and practice questions, so that research is needed on the effectiveness of its use in the learning process of preparing nursing students for UKNI. For this reason, researchers feel the need to examine the effectiveness of using the ukom space application in preparing students for the Ners competency test (Giuffrida et al., 2023).

RESEARCH METHODS

The design used in this study was pre post test one group design. The sample of this study were 60 students participating in the Jambi University Nursing Professional Education Study Program who would be prepared by using the Ukom Room Application learning media to take part in the nurse competency test activities. This research instrument uses the standard average of the Ners Competency Test TryOut before the Ners Competency Test is carried out to measure student preparation in the Indonesian Ners Competency Test. Students were given a pretest of 180 questions then given a training intervention for 20 x meetings with a duration of 1x meeting of 2 hours then a post test was conducted. After that, the data was analyzed using the t-test data analysis technique.

RESULTS AND DISCUSSION

GRAFIC 1 Results of analysis of the effectiveness of the application of the ukom room application in preparing students for the ners competency test

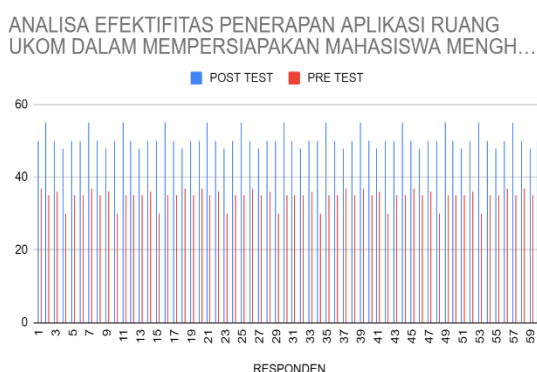


TABLE 1 Results of analysis of the effectiveness of the application of the ukom room application in preparing students for the ners competency test

VARIABEL	mean (SD)	p
pre-test	34,75 (2,144)	0,00
post-test	50,65 (2,44)	

Based on the table above, it shows that the readiness of students in facing ukom ners before being given intensive guidance using the ukom room application is at a mean of 34.75 (SD = 2.144) and the readiness of students in facing ukom ners after being given intensive guidance using the ukom room application is at a mean of 50.65 (SD = 2.44). In addition, the results of this study also prove that intensive guidance is effective in improving student readiness in facing ukom ners (p=0.000). The results showed that the readiness of students in facing ukom ners before being given intensive guidance using the ukom room application was still far from the expectation to pass ukom.

This happens because students still have not been exposed to ukom questions and have never received information about strategies in solving ukom problems, even though in the academic process students have been directed at solving cases. The low readiness of students in participating in the ukom should be a special concern by the institution, because the readiness and ability of students is highly dependent on the process of organizing education. The better the quality of the educational process, the better the quality of graduates (learning outcomes). However, the quality control system of the nursing education process in Indonesia is still improving and has not been fully implemented, especially internal quality control (Masfuri, 2012).

Student readiness in facing ukom is a problem that must be solved by the institution. The problem solving must start from the learning process during students' education. Institutions need to identify the characteristics of their students, and continue to innovate and test various effective learning methods and determine the effective learning methods and media. The learning process must also be monitored and evaluated to ensure that the learning process runs according to the provisions. Thus, the readiness and ability of students in facing ukom can be better. Students'

readiness to face the ners ukom after being given guidance using the ukom room application showed a significant increase. Exposure to vignette questions and case solving strategies provides its own understanding for students in solving cases. This is in line with the results of previous research which said that the try out previously attended by students played a role in passing the ukom. Students who pass try outs, especially national try outs organized by APINI, have a positive impact on ukom graduation (Abdillah, 2016; Lukmanulhakim & Pusporini, 2018).

Try out is one way to improve students' ability to face ukom. However, try outs are not enough, because in try outs students are only trained to do questions, not taught how to solve problems. Guidance using the ukom room application is important to be given by the institution to students before the implementation of the national ukom. Through guidance using the ukom space application, students are not only taught how to solve the cases in the problem, but also how to find and apply problem solving patterns from each department tested. Problem solving patterns are the most important thing that must be mastered by students, because each department tested has a different pattern. The effectiveness of guidance using the ukom room application on student readiness in facing ukom ners shows that there is a very significant influence on student readiness in facing national ukom.

The increase in students' ability after being given guidance using the ukom room application means that guidance using the right media is very important to be given to students before participating in the national ukom. This is in accordance with what is mandated by AIPNI that every institution that organizes nurse education to provide guidance to students to prepare their ability to face ukom, both in the form of practice questions and others (APINI, 2018; APINI Regional XI, 2018).

Various methods or ways can be taken by institutions to increase student pass rates from the national ukom. One way that has proven effective is to provide guidance using the right media. The more complex the cognitive abilities of students, the more appropriate media is needed. The media in question is media that provides stimulation in

the form of questions and is discussed in class through a comprehensive approach. The media must contain material and questions developed by lecturers who are experienced in making ukom questions. So that the content can be more focused and more in-depth.

CONCLUSIONS

The national nurse exam is a competency standardization for nurses in Indonesia. The very low pass rate triggers various problems. Therefore, the ability of students to take part in ukom must be prepared from the beginning, namely when students are still studying. However, if after students have completed their education and this is deemed insufficient, other preparations can be made. One way that can be taken is to provide guidance using the ukom room application. Guidance using the ukom room application has been proven to increase student readiness in facing the national nurse ukom.

ADVICE

Nursing education institutions have a big responsibility in supporting the graduation of their students from ukom. So that institutions are expected to be willing and able to develop media and methods in providing guidance to their students in order to increase the ukom graduation rate and improve the quality of graduates.

REFERENSI

- Ajat Rukajat. (2018). *Teknik Evaluasi Pembelajaran* (1st ed.). DEEPUBLIS, Sleman.
- Al Farisi, S., Endah, M., Sri, Mulyani, H. (2017). Rancang Bangun Aplikasi Try Out Uji Kompetensi Tenaga Perawat. *JUST TI*, 9, 75–82.
- Alfaleh, R., East, L., Smith, Z., & Wang, S. Y. (2023). Nurses' perspectives, attitudes and experiences related to e-learning: A systematic review. *Nurse Educ Today*, 125, 105800. <https://doi.org/10.1016/j.nedt.2023.105800>
- Code, C., & His, H. L. T. (2024). *Global Perspectives on Nursing and Midwifery History Section I: Course Overview Section II: Instructor & Course Details*.
- Ezzat Osman, N., El-Ansary, E. S., & Hassan Mohamady, S. (2023). Effect of Competency-Based Education on Interns Nursing Students' Performance Regarding Active Management of Third Stage of Labor. *International Egypt Journal of Nursing Sciences and Research*, 3(2), 342–362.
- Fawaz, M. A., Hamdan-Mansour, A. M., & Tassi, A. (2018). Challenges facing nursing education in the advanced healthcare environment. *International Journal of Africa Nursing Sciences*, 9, 105–110. <https://doi.org/10.1016/j.ijans.2018.10.005>
- Febriana, R. (2019). *Evaluasi Pembelajaran*. Jakarta Timur.
- Fitria, R., & Ningsih, D. A. (2024). Faktor-Faktoryang Berhubungan Dengan Kelulusan Uji Kompetensi Nasional Pada Mahasiswa DIII Kebidanan Dan DIII Keperawatan. *Jurnal Ners*, 8(1), 279–285. <https://journal.universitaspahlawan.ac.id/index.php/ners/article/view/23106>
- Giuffrida, S., Silano, V., Ramacciati, N., Prandi, C., Baldon, A., & Bianchi, M. (2023). Teaching strategies of clinical reasoning in advanced nursing clinical practice: A scoping review. *Nurse Educ Pract*, 67, 103548. <https://doi.org/10.1016/j.nepr.2023.103548>
- Goodchild, T. (2018). Does technology really enhance nurse education? *Nurse Educ Today*, 66, 69–72. <https://doi.org/10.1016/J.NEDT.2018.04.005>
- Indriyawati, N., Yuwono, D., Sugiharto, P., Martono, M., Muchsin, M., Setyorini, Y., et al. (2022). Systematic Review Nursing Students Engagement In The Classroom And Clinical Practice. *Jurnal Keperawatan Global*, 7(2), 875–889. <http://jurnalkeperawatanglobal.com/index.php/jkg%7C125https://doi.org/10.37341/jkg.v0i0.661>
- Innab, A., Almotairy, M. M., Alqahtani, N., Nahari, A., Alghamdi, R., Moafa, H., et al. (2024). The impact of

- comprehensive licensure review on nursing students' clinical competence, self-efficacy, and work readiness. *Heliyon*, 10(7), e28506. <https://doi.org/10.1016/j.heliyon.2024.e28506>
- KEMENDIKBUD. (2022). Statistik | Registrasi Online Uji Kompetensi NERS [WWW Document]. https://ukners.kemdikbud.go.id/pages/statistik_lulus
- Lawrence, J. E., & Tar, U. A. (2018). Factors that influence teachers' adoption and integration of ICT in teaching/learning process. *Journal of Educational Technology*, 55, 79–105. <https://doi.org/10.1080/09523987.2018.1439712>
- Li, K. C., Lee, L. Y. K., Wong, S. L., Yau, I. S. Y., & Wong, B. T. M. (2017). Mobile learning in nursing education: catering for students and teachers' needs. *Asian Association of Open Universities Journal*, 12(2), 171–183.
- Mackavey, C., & Cron, S. (2019). Innovative strategies: Increased engagement and synthesis in online advanced practice nursing education. *Nurse Educ Today*, 76, 85–88. <https://doi.org/10.1016/J.NEDT.2019.01.010>
- McDonald, E. W., Boulton, J. L., & Davis, J. L. (2018). E-learning and nursing assessment skills and knowledge – An integrative review. *Nurse Educ Today*, 66, 166–174. <https://doi.org/10.1016/J.NEDT.2018.03.011>
- Mumtaz, S. (2000). Factors affecting teachers' use of information and communications technology: A review of the literature. *Journal of Information Technology for Teacher Education*, 9, 319–342. <https://doi.org/10.1080/14759390000200096>
- Nehrir, B., Vanaki, Z., Mokhtari Nouri, J., Khademolhosseini, S. M., & Ebadi, A. (2016). Competency in Nursing Students: A Systematic Review. *International Journal of Travel Medicine and Global Health*, 4(1), 3–11.
- Oktarina, Y., Rudini, D., Studi Keperawatan, P., Kedokteran dan Ilmu Kesehatan, F., & Jambi, U. (2022). Pengaruh Model Pembelajaran Project Based Learning (PJBL) Terhadap Motivasi Mahasiswa Keperawatan. *Jurnal Ners*, 6, 11–16. <https://doi.org/10.31004/JN.V6I2.5882>
- Player-Koro, C. (2012). Factors Influencing Teachers' Use of ICT in Education. *Education Inquiry*, 3, 93–108. <https://doi.org/10.3402/EDUI.V3I1.22015>
- Rudini, D. (2021). Aplikasi Pembelajaran Untuk Persiapan Uji Kompetensi Ners Berbasis Android.
- Sari Fatika, C., Assajad Malik, I., & Ansori Isa, M. (2023). Kompetensi Individu (Individual Competence). *Jurnal Ilmiah dan Karya Mahasiswa*, 1(4), 201–214.
- silalahi, T. (2020). *Evaluasi Pembelajaran - Tauada Silalahi* - Google Books.
- Sony, M., Qadafi, M., & Nasihin, M. (2018). Aplikasi Web Try Out Uji Kompetensi Kebidanan Berbasis Intranet (Studi Kasus: AKBID Aisyah Pontianak). *JEPIN (Jurnal Edukasi dan Penelitian Informatika)*, 4, 156–162. <https://doi.org/10.26418/JP.V4I2.26036>
- Sulistiyowati, N., & Supratman, S. (2024). The relationship between nurse competence and patient satisfaction. *Jurnal EduHealt*, 15(1), 474–480. <https://ejournal.seaninstitute.or.id/index.php/health>
- Yoeum, B., Koy, V., & Sam, R. (2024). Factors associated with clinical competency of nursing students. *International Journal of Research in Medical Sciences*, 12(4), 1232–1241.