Improving Students' Ability to Solve National Midwifery Competency Test Questions Using Google Sites Learning Media

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Article Info	Abstract
	The D-III midwifery study program at the Maluku Health Polytechnic in 2021 has a passing percentage of >60% for First Takers. This study aims to determine the increase in students' ability to complete midwifery competency exam questions using Google sites learning media as a student step in facing midwifery competency exams. This study used the Quasy Experiment method with a pretest-posttest design, where a sample of 15 people was tested using the sample T-test to assess the increase in students' abilities before and after participating in learning. The results showed that there was an increase in students' abilities with a P-value of 0.00, an increase of 63%, which means that students' ability to answer midwifery competency exam questions increased. So that this media can be the best solution for students to prepare themselves early for midwifery competency exams.
Info Artikel	**Abstrak**
	Prodi D-III kebidanan Poltekkes Maluku tahun 2021 memiliki presentase kelulusan >60 % untuk First Taker. Penelitian ini bertujuan untuk mengetahui peningkatan kemampuan mahasiswa menyelesaikan soal ujian kompetensi kebidanan menggunakan media pembelajaran google sites sebagai langkah mahasiswa dalam menghadapi ujian kompetensi kebidanan. Penelitian ini mengunakan metode Quasy Experimen dengan rancangan pretest-posttes, dimana sampel ada 15 orang pengujian menggunakan *uji sampel T test* menilai peningkatan kemampuan mahasiswa sebelum dan setelah mengikuti pembelajaran. Hasil menunjukan bahwa ada peningkatan kemampuan mahasiswa dengan nilai P-value 0,00 meningkat 63% yang berarti kemampuan mahasiswa dalam menjawab soal ujian kompetensi kebidanan meningkat. Sehingga media ini dapat mejadi solusi tebaik bagi mahasiswa untuk mempersiapakan diri lebih awal dalam menghadapi ujian komptensi kebidanan.

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1. INTRODUCTION

Health workers must have competencies in accordance with their respective fields, the current development of globalization has had a huge impact. Health workers, especially midwives, are required to be able to become agents of change in society, especially women's welfare, where midwives are able to play a role in reducing maternal and infant mortality rates and increasing their health status.(Chalid, 2016)Therefore, to ensure the quality of competency, midwives throughout Indonesia have the same competency and are considered capable of providing competent services. Quality midwifery services are something that is very important and has an effect on the quality of midwifery services so that it becomes a challenge for every educational institution throughout Indonesia to produce competent midwifery graduates. This is proven by the passing of students at an educational institution in taking the national midwifery competency exam. Competency exams are exams held for prospective health workers, including midwife health workers. In 2013, the initial implementation of UCOM participants was that those who had completed the education process and obtained a Registration Certificate (STR) which was used to obtain a license from the government in carrying out their duties were required to take a competency exam and be declared competent in carrying out their duties.

According to the exit exam regulations, it is regulated in Permenristekdikti No. 12 of 2016 concerning competency tests for health workers. This policy was then revised with Permendikbut number 2 of 2020 concerning procedures for competency testing for students in the health sector, which regulates the percentage of passing academic scores of 60% and 40% so that as long as the student has not passed the competency exam, it is still the university's job.(Regulation of the Minister of Education, Culture, 2022)In line with the development and implementation of regulations and policies in 2020, the government implemented an exam exit system for health workers, namely health workers who are studying are required to pass the midwifery competency exam before going to Judicial and Graduation and if the education period has been 5 years and in fact they have not passed it, then it will be declared DO (Drop Out). This means that the achievement of passing the competency exam is still low. For the D-III Midwifery study program, which is listed on the accreditation form for the midwifery study program itself, the percentage of passing the Midwifery Competency Exam in 2020 is <30% and in 2021 <60%. The percentage of passing the Midwifery Competency Examination is far from the target percentage of passing, namely 100%.(Health & Maluku, 2020)

Based on the questionnaire that was previously distributed to 15 students who did not pass the national competency exam, they experienced problems in terms of not being able to analyze the questions and answers well 70%, running out of time 10%, not knowing the material 10%, not being able to concentrate during the exam 10%. Guidance is carried out in the final semester with a very short time compared to the exam schedule. Guidance is carried out by distributing questions. Midwifery Competency Exam for students to study independently, supervisors are held at most twice and there are some supervisors who don't even carry out guidance because of time, while thorough preparation of exam participants can increase the readiness of exam participants.(Fitria, 2021)The impact that will arise if this is not immediately addressed and improvements or changes are made is that students will make this competency test something scary, many students will be delayed in carrying out the judiciary and graduation, parents will also worry about the fate of their children, and this will arise. DO to students if the 5 year study period has passed. Students are affected by decreased self-confidence, money has to be spent because every exam has to be paid for, and this is also a benchmark for the success of all teaching and educational staff in the D-III Midwifery study program.(Fitria et al., 2019)Increasing student graduation can be done by carrying out guidance using the online and offline Group Discussion (SGD) method.(Wahyuni & Syahriyanti, 2021)research conducted by Maulana where the internet-based Midwifery Competency Test Web Tryout application was created which was able to improve students' ability to answer midwifery competency exam questions.(Pontianak et al., 2018)Based on this, researchers are interested in creating learning media for the national midwifery competency exam using Google Sites to assess the increase in midwifery students' abilities at the Maluku Ministry of Health's health polytechnic in the fifth semester of 2022.

2. METHOD

In carrying out this research, the Quasi Experiment method was used with a pretest-posttest design. The learning media contains 6 subtopics of material, namely discussion of pregnancy, childbirth, postpartum, babies and toddlers, reproductive health and family planning, and emergencies, learning available on Google media sites made by including learning videos from 6 subtopics and practice questions from 6 subtopics. Activities were carried out over 6 meetings. By taking a sample of students in the 5th semester of the Maluku Ministry of Health Polytechnic, D-III Midwifery Study Program for the 2022/2023 Academic Year, class A from 40 people was determined by drawing lots of 15 people. To assess the level of success of the Google Sites learning media by assessing the results of the tryout exam which was carried out before and after the mentoring process was carried out, then new questions were given to assess students' abilities with different questions. To assess the success of the Google Sites learning media, a sample T test was carried out using the SPSS application. 24.

3. RESEARCH RESULTS AND DISCUSSION

Health universities, especially midwifery education, are required to provide the ability for each student to be able to pass the national midwifery competency exam, which is one of the requirements for someone taking midwifery education, which is the initial requirement in order to get recognition from the government to be declared capable and meet the qualifications, implementation of the exam This competency is also applied by several countries such as Australia, which is able to provide an increase in graduate competency.(Dawson et al., 2016; Fitria, 2021)

The learning process in higher education does not only involve interaction processes between lecturers and students, but it is important for a lecturer to develop following the development of digitalization, which nowadays students prefer to learn using smartphones which are easy to carry anywhere and can be seen at any time, where students prefer to see and hear them more.(Devi et al., 2018; Maesyaroh & Asikin, 2023)But not only that, students' ability to understand the lecture material given, their activeness in participating in the learning process and their presence in the learning process also influence the final results of the learning process.(Augustin, 2014; Tabrizi et al., 2016).

Chart 1. Evaluation Results of Learning Activities from the First Day to the Sixth Day Using Google Sites Learning Media
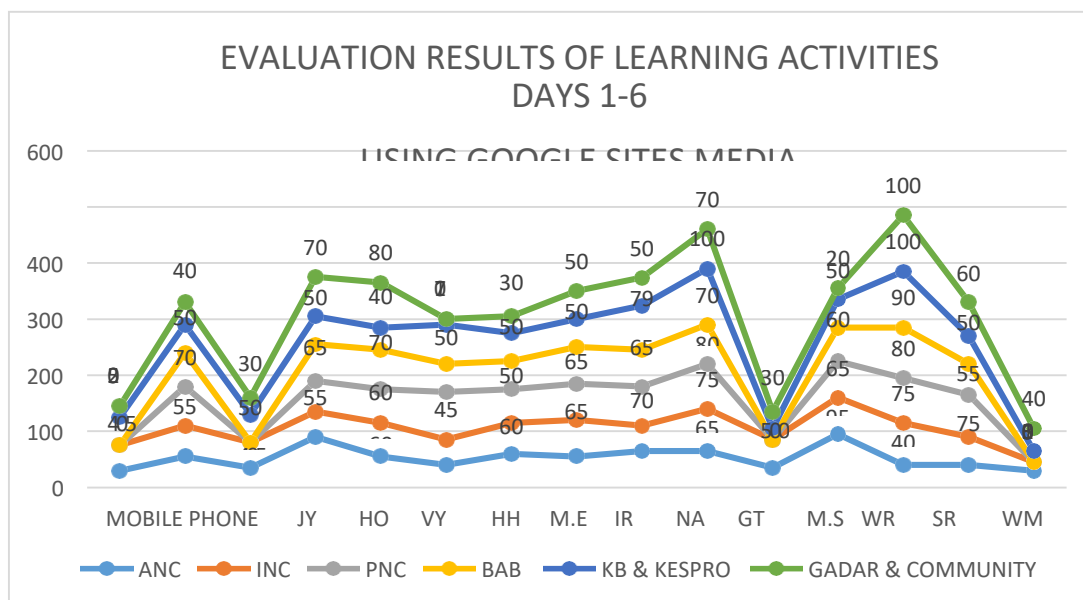

Chart 1. The above shows the results that of the 15 students who studied on Google sites, it shows that there were 4 (26.67%) people who experienced an increase in their knowledge, ups and downs or changes every day, while 11 (73.33%) experienced a significant increase.

Chart 2. Evaluation Results of Pretest and Posttest Learning Activities Using Google Sites
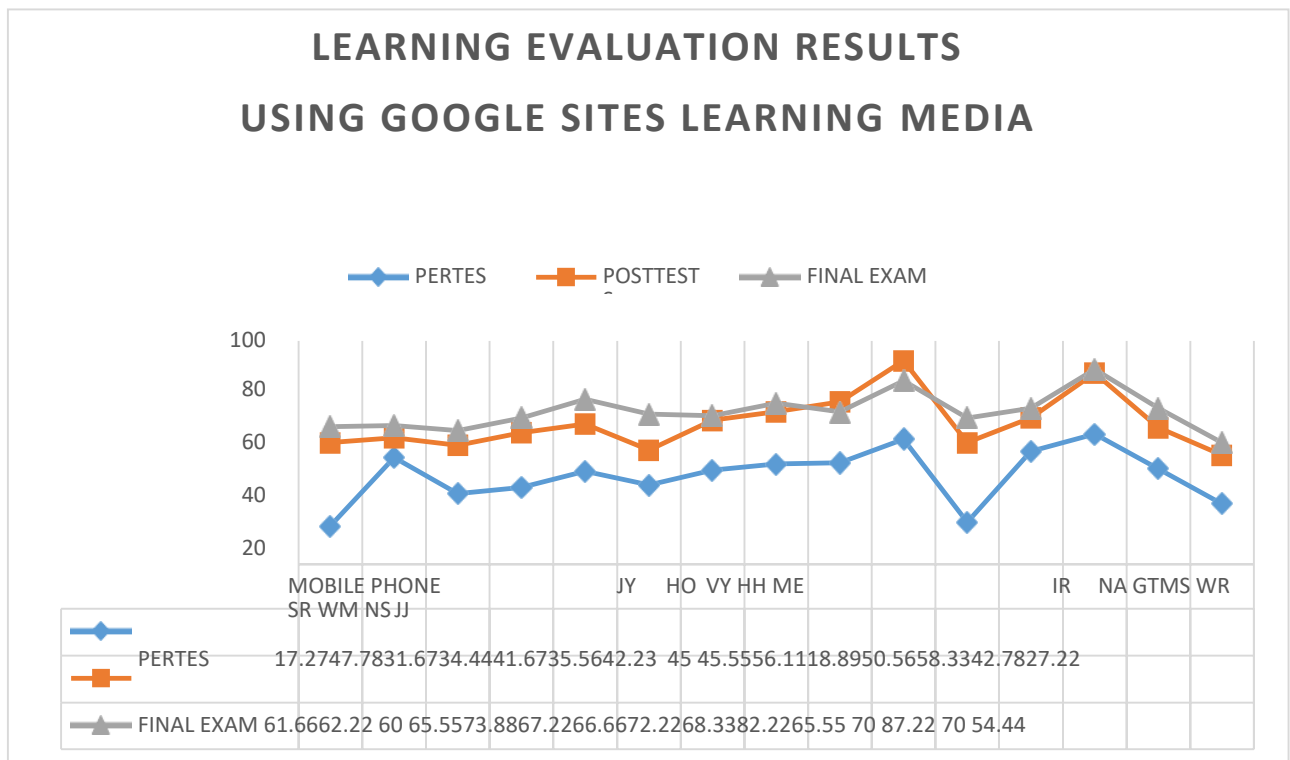Learning Media

Chart 2. The above shows the results that of the 15 students who studied on Google Sites, the pretest scores for answering the national midwifery competency exam questions were with the highest score of 58.33 and the lowest score of 17.27, while the posttest score was the highest score of 91.11 and the lowest score of 48.88. , the results of the final exam with different questions showed the highest score of 87.22 and the lowest score of 54.44

Table 1. Comparison of the Improvement of Posttest and Pretest Tryout Midwifery Competency
Test Results for Midwifery Students at the Health Polytechnic of the Ministry of Health, Maluku

Tryout exam results	Mean	elementary school	*P-Value*
Posttest (before treatment is given)	39.67	12,19	0.00
Pretest (after being given action)	63.39	12.16	

Table 1 above shows that the average Posttest student score (before being given treatment) was 39.67, while the average Pretest score (after being given treatment) was 63.39, with a P-Value value of 0.00, which shows that there is a significant difference in the results of the tryout exam on competency exams. Midwifery Posttest and Pretest

The final result of the student learning process, especially D-III Midwifery students, is something that is frightening and provides a physical burden for students at the end of the semester because based on the latest regulations that students who do not pass the national midwifery competency exam cannot take part in the judiciary and graduation which means the student is declared have not graduated and are still the responsibility of the educational institution(Mushawwir et al., 2020).

The aim of implementing competency exams is to encourage the formation of competent Indonesian human resources, to support increasing the quality of education and learning from each tertiary institution. The results of competency exams will become a benchmark for the success of

the process of a study program or institution.(Confederation & Federation, 2004)Thorough preparation for students in facing the national competency exam can be done by following guidance programs held by private institutions, guidance carried out by study programs and Self Directed Learning.(Fitria, 2021; Fitria et al., 2019)

This research was conducted on 15 students at the Maluku Ministry of Health Polytechnic of the Midwifery Study Program in the odd semester of the 2022/2023 academic year who studied midwifery competency exam questions using Google System media. It is designed in such a way that it has an attractive appearance where the learning media consists of 6 materials, namely pregnancy, childbirth, postpartum, babies and toddlers, reproductive health and family planning, emergencies where the materials in the media generally contain videos of exam question completion competency and practice answering competency exam questions. This learning media can be viewed and accessed at any time by students. After implementing the learning media for midwifery competency exam questions using Google sites for 2 weeks for midwifery students by looking at the results of the Posttest and Pretest exams. Where the test results show that of the 15 students who studied on Google sites, there were 4 (26.67%) people who experienced an increase in their knowledge, ups and downs or changes every day, while 11 (73.33%) experienced a significant increase. increase. Analysis of 4 (26.67%) people who experienced fluctuating grades due to attendance of less than >8 meetings during this learning meeting, discussion of competency exam questions using Google sites, there were 14 meetings, this is in line with research conducted by Nurhayati that the learning outcomes and the presence of students with the results of the midwifery study program student competency exam has an influence on the graduation of students who take the student competency exam.(Baso et al., 2021; Pg et al., 2017)

Using the midwifery competency exam tryout website application has a menu of participants taking competency exams via the existing Web application,(Pontianak et al., 2018)However, the learning application with Google Sites that has been created has menus such as material, viewing videos of solving case questions and competency exam practice which makes it easy to access video material and questions on Google Sites for midwife competency exam learning. Doing learning on Google Sites shows pretest scores. from answering questions on the national midwifery competency exam with the highest score of 58.33 and the lowest score of 17.27 while the post-test score was the highest score of 91.11 and the lowest score was 48.88, the results of the final exam with different questions showed the highest score of 87.22 and the the lowest was 54.44, with the average PostTest student score (before being given treatment) 39.67, while the average PreTest score (after being given treatment) was 63.39, with a P-Value value of 0.00, which shows that there is a significant difference in the results of the tryout test on competency test questions. Midwifery Posttest and Pretest using learning media for competency exam questions with Google sites can be viewed at any time and students can practice so that they can prepare themselves thoroughly so that students have prepared until they are ready to take the national midwifery competency exam.(Chiu & Wang, 2008; Fitria, 2021)

Yanti Nurhayati, 2017 revealed that competency exam results have an influence on attendance at competency exam guidance,(Pg et al., 2017)However, with the implementation of this Google Sites guidance, students can review and review the material and if we talk about the problem of student attendance in taking part in activities based on online attendance, there are 3 students whose attendance is 60%. Using Google Sites has a drawback, namely that when you want to access materials and videos and want to take part in competency exam practice, you must be connected to the network. This result is the same as the existing midwifery competency exam practice application. The weakness is that there must be a good signal so that the competency exam practice application can be used. accessed(Aprina & Maulana, 2018). Rahmi's research, 2021 shows that the results of competency exams using computers and web-based tests give students more satisfaction in the learning process and competency exams.(Baso et al., 2021)

4. CONCLUSION

Learning midwifery competency exam questions using Google Sites media provides an increase in students' knowledge in answering midwifery case questions so that Google Sites learning media can be used by students as an alternative preparation for students taking the national midwifery competency exam at the Maluku Ministry of Health Polytechnic, Ambon Midwifery Study Program.

5. REFERENCE

Aprina, T., & Maulana, M. S. (2018). *Mengukur Tingkat Usability Aplikasi Latihan Uji Kompetensi (Silikon) Kebidanan Menggunakan USE Questionnaire*. *IV*(2), 187–194.

Augustin, M. (2014). How to learn effectively in medical school: Test yourself, learn actively, and repeat in intervals. *Yale Journal of Biology and Medicine*, *87*(2), 207–212.

Baso, Y. S., Hasanuddin, U., Manapa, E. S., Hasanuddin, U., Tamar, M., & Hasanuddin, U. (2021). *The Difference of Satisfaction Level of Midwifery Students in Trying Out Competency Test with Computer-Based Test and Web-Based Test. January*. https://doi.org/10.31295/ijhms.v4n1.390

Chalid, M. T. (2016). Upaya Menurunkan Angka Kematian Ibu: Peran Petugas Kesehatan. *PT. Gakken*, *1*(1), 1–5.

Chiu, C. M., & Wang, E. T. G. (2008). Understanding Web-based learning continuance intention: The role of subjective task value. *Information and Management*, *45*(3), 194–201. https://doi.org/10.1016/j.im.2008.02.003

Confederation, I., & Federation, I. (2004). Joint statement: Management of the third stage of labour to prevent post-partum haemorrhage. *Journal of Midwifery and Women's Health*, *49*(1), 76–77. https://doi.org/10.1016/j.jmwh.2003.11.005

Dawson, A., Kililo, M., Geita, L., Mola, G., Brodie, P. M., Rumsey, M., Copeland, F., Neill, A., & Homer, C. S. E. (2016). Midwifery capacity building in Papua New Guinea: Key achievements and ways forward. *Women and Birth*, *29*(2), 180–188. https://doi.org/10.1016/j.wombi.2015.10.007

Devi, E., Agung, F., Informasi, J. S., Komputer, F. I., & Nuswantoro, U. D. (2018). Analisa Minat Penggunaan Aplikasi TB eScoring dengan Pendekatan Technology Acceptance Model (TAM). *Edu Komputika Journal*, *5*(1), 1–12.

Dochy, F., Segers, M., Van den Bossche, P., & Gijbels, D. (2003). Effects of problem-based learning: A meta-analysis. *Learning and Instruction*, *13*(5), 533–568. https://doi.org/10.1016/S0959-4752(02)00025-7

Fitria, R. (2021). Persiapan Peserta Ujian Menghadapi Uji Kompetensi Nasional Diii Kebidanan. *Jurnal Ilmiah PANNMED (Pharmacist, Analyst, Nurse, Nutrition, Midwivery, Environment, Dentist)*, *16*(1), 114–119. https://doi.org/10.36911/pannmed.v16i1.1004

Fitria, R., Serudji, J., & Evareny, L. (2019). Persiapan Uji Kompetensi Bidan sebagai Exit Exam. *Jurnal Ilmiah Universitas Batanghari Jambi*, *19*(1), 195. https://doi.org/10.33087/jiubj.v19i1.590

Kesehatan, P., & Maluku, K. (2020). *Rencana strategis (renstra)*.

Maesyaroh, S., & Asikin, N. A. (2023). *Advancing English Language Learning : Innovations In Web-Based Learning Media Development*. *11*(2), 451–460.

Mushawwir, A., Tahir, T., Kadar, K., Saragih, S. L., & Zuidah. (2020). Evaluate the implementation of educational curriculum and lecturer's knowledge about the blueprint to the ukni's graduation rate in South Sulawesi. *International Journal of Psychosocial Rehabilitation*, *24*(8), 14709–14719. https://doi.org/10.37200/IJPR/V24I8/PR281448

Peraturan Menteri Pendidikan, Kebudayaan, R. dan T. R. I. (2022). Peraturan Menteri Pendidikan, Kebudayaan, Riset dan Teknologi Republik Indonesia (Nomor 2 Tahun 2022). *Gastronomía ecuatoriana y turismo local.*, *1*(69), 5–24.

Pg, P. T., Ii, R., Pg, U., & Majalengka, J. (2017). *Jurnal Kesehatan Indra Husada – Volume 5 Nomor 1 Tahun 2017 | 7. 5*(2012), 7–13.

Pontianak, A. A., Maulana, M. S., Khairuzzaman, M. Q., & Nasihin, M. (2018). *Aplikasi Web Tryout Uji Kompetensi Kebidanan berbasis Intranet (Studi Kasus : 4*(2), 156–162.

Tabrizi, A., Pourfeizi, H. H., Aslani, H., Elmi, A., Mirza Tolouei, F., Taleb, H., & Rikhtegar, R. (2016). Effect of Small Group Discussion in Residency Education Versus Conventional Education. *Research and Development in Medical Education*, *5*(1), 47–49. https://doi.org/10.15171/rdme.2016.010

Wahyuni, S., & Syahriyanti. (2021). Efektivitas Bimbingan Ujian Kompetensi Dengan Metode Small Group Discussion(Sgd) Onlinedan Offline Terhadap Hasil Nilai Try Out Ujian Kompetensi Di Prodi D-Iv Kebidanan Poltekkes Kemenkes Jayapura. *Intan Husada: Jurnal Ilmu Keperawatan*, *9*(1), 1–8. https://doi.org/10.52236/ih.v9i1.203.