

Comparison of Students Score between Progress Test and Final Test; Pilot Project

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ABSTRACT

Introduction: The implementation of diverse assessment methods has facilitated the collection of both quantitative and qualitative data, providing students with valuable feedback. Most programs reported that their assessment strategies were aligned with a competency framework, emphasizing constructive alignment and assessments structured according to Miller's pyramid. Many programs highlighted the significance of multiple low-stakes workplace-based assessments for evaluating real-world competencies, alongside the use of the final test, including progress testing in the knowledge domain to decrease student load. The aim of this study is to compare student final score between the progress test and the final test.

Methods: This is a mixed-method research. A quantitative of 506 students participated in the growth and development & geriatrics block, divided into two groups. Group A (progress test), comprising 253 students, underwent a progress test conducted over four exam sessions in 2024, as a pilot project. Meanwhile, Group B (final test), also with 253 students, completed a final test in 2023. The data from both groups were collected and analyzed using the T-independent test. Also, qualitative data was taken by student interviews.

Result: Group A, assessed in 2024, achieved a higher average score (69.33 ± 11.22) compared to Group B (54.92 ± 11.49). The T-independent test yielded a P value of <0.0001 , indicating a statistically significant difference. This suggests that the progress test method is more effective than the final test in enhancing students' final scores, as progress tests help alleviate cognitive load.

Conclusion: As a pilot initiative, the progress test has proven effective in improving students' final scores. It is recommended that this approach be extended to other educational blocks that have similar characteristics to the interventional blocks to enhance overall educational quality.

Keywords: Assessment; progress test; final test



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Introduction

In learning, the follow-up action that will be taken is to make a test and assess the results of the test, to assess how much the student understands in capturing this knowledge. The progress test is usually administered to all students in the medical program at the same time and at regular intervals (usually twice to four times yearly) throughout the entire academic program. The test samples the complete knowledge domain expected of medical students on completion of their course, regardless of the year level of the student. The resultant scores provide longitudinal, repeated measures, curriculum-independent assessment of the objectives of the entire medical program.¹

The progress test (PT) has been known in the world of education as a tool to measure competence. The test was originally held in Missouri and Maastricht in the 70s and has now been widely embraced in various countries. There are several medical education institutions in Indonesia, both public and private, that organize PT. The implementation of the PT has challenges. The challenge comes from the logistics of questions, time, energy, individual feedback, and problem analysis. The COVID-19 pandemic is also a challenge in itself, but it provides an opportunity to hold online universities and flexibility for university organizers and students.²

Progress tests can be a means for medical institutions to evaluate the progress of mastery of each scientific topic related to the field of medicine from all students by comparing changes in the progress test scores of each student from year to year. The implementation of the progress test is expected to make students have a good quality of knowledge so that later students will be able to pass the UKMPPD one-shot exam and are ready to enter the clinic station (co-ass).³

So far, there is still little research related to the relationship between progress test scores and final tests, The purpose of this study is to find out the comparison of Student Final Score Achievement between progress test and final test methods at the Faculty of Medicine, UMI Makassar as a pilot project.

Methods

This research is a mixed method using stratified sampling that collect in the data of block score in preclinical student and qualitative data through interview. A total of 506 sample students participated in the growth and development & geriatrics block, divided into two groups. Group A, comprising 253 students, underwent a progress test conducted over four exam sessions in 2024, while Group B, also with 253 students, completed a final test in 2023. The data from both groups were collected and analyzed using the T-independent test.

Result

This research consists of quantitative and qualitative data. There were a total of 506 students who took the Growth and development & geriatrics block, then divided into 2 groups. Group A with 253 students in 2024, with a progress test. The progress test in question is an exam that is divided into 4 sessions of 25 questions each. The questions in each exam are different. Then compared with group B with 253 students in 2023, with a final test of 100 question numbers.

Table 1. Student Score

	Group A	Group B
Score	student (%)	Student (%)
A	157(62)	13(5,1)
A-	35(13,8)	14(5,5)
B+	22(8,6)	18(7,1)
B	17(6,7)	37(14,6)
B-	9(3,5)	37(14,6)
C+	8(3,1)	33(13)
C	5(1,9)	35(13,8)
E	10(3,9)	66(26)

The highest score for progress test students was A (62%), followed by A- (13.8%) and B+ (8.6%). different between groups in the final test, the highest scores are B and B-. This provides information that progress scores are able to increase student grades by splitting the course material.

Group A, assessed in 2024, achieved a higher average score (69.33 ± 11.22) compared to Group B (54.92 ± 11.49). The T-independent test yielded a P value of <0.0001 , indicating a statistically significant difference. This suggests that the progress test method is more effective than the final test in enhancing students' final scores, as progress tests help alleviate cognitive load.

The results of the group A interview consisted of questions regarding the level of satisfaction with the progress test, whether they were very satisfied, satisfied, quite satisfied, less satisfied and dissatisfied. The five subjects were quite satisfied and one less satisfied with the following details below

Table 2. Student Interview

Subject	level of satisfaction	Reason of satisfaction level	Advantages	Disadvantages	Recommendation
1st	quite satisfied	because exams were held	Study more focus on	More frequent exam	Agree to continue

		every week	split exam		
2 nd	quite satisfied	Scores got better	Weekly study was better	Not easy to focus	Agree to continue
3 rd	quite satisfied	Could be more focus	Study time more frequent	More difficult questions	Agree to continue
4 th	quite satisfied	Less study time	Split exam got better	More frequent learning	Agree to continue
5 th	less satisfied	Unsatisfactory score	Deduce student load	Schedule of exam is more frequent	Agree to continue
6 th	quite satisfied	Reduce the burden of study	Focus on several materials	Must study hard	Agree to continue

The interview results showed that 6 students were not very satisfied because there were still several shortcomings. The tight lecture schedule makes the frequency of exams more than 4 times troublesome. On the other hand, there are also those who are satisfied because the student load can be reduced and feel more focused when split. Everyone agrees that the progress test will continue to the next blocks with improvements.

Discussion

Progress test in medical science is an assessment method where all students take the same exam, with the standards set by a new doctor expected to be competent. At Peninsula Medical School, each progress test consists of 125 multiple-choice questions with clinical vignettes and five answer options.⁷ The same question type was also used in this study.

Another study shows that final-year students, who have received more block material, are already familiar with the expected level of knowledge at the end of the undergraduate medical program.⁸ Based on the results in Table 1, progress test students achieved more satisfactory grades (A, A-, B+). Dividing the 100-item exam into four sessions of 25 questions reduces cognitive load and enhances focus.⁹ Progress tests are designed to evaluate long-term retention of knowledge rather than short-term memorization. They assess the breadth of a student's understanding of core medical knowledge, which is critical for the development of clinical competencies. Progress testing was found to be more reliable in evaluating retention of knowledge over time compared to traditional exams.¹⁰

The interview results showed differences in student perceptions. Some students felt burdened by frequent exams, while others felt more focused and experienced reduced cognitive load. Longitudinal studies in Germany show that repetitive progress testing is associated with learning progression and

performance in national high-stakes examinations. Repeated testing supports deeper learning, knowledge retention, and reduces surface learning ahead of examinations.¹¹⁻¹³ Progress tests often include detailed feedback, allowing students to reflect on their performance, identify weaknesses, and target areas for improvement. This encourages active learning and self-directed study, which are crucial skills in medical practice. This study highlighted how feedback from progress testing enhanced medical students' self-reflection, leading to more focused and effective study habits.¹⁴

A progress tests are relevant for preparing students for the national exit exam (UKMPPD), which uses CBT. Progress tests enable early identification of students with poor performance and guide institutions in offering academic remediation before students enter the clinical phase.¹³ Institutions can use progress test data to monitor student readiness, detect stagnation, and design targeted learning interventions.¹⁶

A key principle of the progress test is its longitudinal feedback function, which promotes deeper learning.¹⁷ Feedback from progress tests also contributes to quality control for item authors, lecturers, and curriculum committees by highlighting item reliability and performance across multiple test cycles.⁶ Repeated cycles of testing, feedback, and learning are known to enhance knowledge retention and strengthen transfer of learning in academic and clinical contexts.¹³⁻¹⁷

Unlike high-stakes exams, progress tests typically have a lower impact on final grades, which reduces test anxiety. This shift from pressure-based assessments to ongoing evaluations allows for a more holistic approach to learning and provides a less stressful environment for students to demonstrate their knowledge. Students who participated in progress testing reported lower levels of anxiety compared to those who relied on traditional high-stakes exams.¹⁸

Overall, progress test scores are also an important indicator for institutions to improve quality assurance. Providing item writers with reliability data from repeated test cycles helps identify strengths and weaknesses in item construction. These components support a programmatic assessment approach, integrating multiple assessment modalities to optimize student learning, ensure curriculum quality, and improve educational decision-making.¹⁵⁻¹⁷

Conclusion

As a pilot study, the progress test provided more satisfactory results compared to the final test. Progress tests can also be part of programmed assessment which is an integral approach of the assessment system to optimize learning functions, student decision making, and curriculum quality assurance.

Progress test could reduce student load. However, there are also those who think that the frequency of exams is a burden on students. It is recommended that this program be continued for further analysis.

Among fishermen who experience back pain, the most common accompanying symptoms are headaches and pain radiating to the abdomen. The most notable finding requiring further attention is the high frequency of self-reported episodes suggestive of loss of consciousness or presyncope accompanying back pain. As these symptoms are atypical for mechanical low back pain, further clinical clarification and investigation are warranted to better understand their underlying causes in this population.

Conflicts of Interest

There is no conflict of interest.

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