

## Innovative Assessment Methods: Enhancing Student Learning through Formative Assessment and Peer Review

Hasanatun Latifah<sup>1a</sup>, Mohamad Ardin Suwandi<sup>2b</sup>

<sup>1</sup>Institut Islam Nahdlatul Ulama (INISNU) Temanggung, Indonesia, <sup>2</sup>National Research Polytechnic Tomsk University, Russian Federation  
e-mail: hasanatunlatifah@gmail.com<sup>ab</sup>

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### Abstract:

This study investigates the effectiveness of formative assessments and peer reviews in enhancing student learning outcomes in educational settings. Through a mixed-methods approach, quantitative data were collected via pre- and post-test scores, while qualitative insights were gathered from student and teacher interviews. The results reveal a significant improvement in student performance following the implementation of formative assessments, particularly among low-performing students. Additionally, qualitative findings indicate that students generally view formative assessments as beneficial for self-regulation and learning control, despite some challenges related to workload and stress. Teacher feedback highlighted the importance of these assessment methods in adapting instruction and monitoring progress, although concerns about time and resource allocation were also noted. The study underscores the need for careful implementation of formative assessments and peer reviews to maximize their effectiveness while addressing the associated challenges.

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### Corresponding Author:

Hasanatun Latifah

Institut Islam Nahdlatul Ulama (INISNU) Temanggung, Indonesia.

e-mail: hasanatunlatifah@gmail.com

### Introduction (مقدمة)

Assessment plays a crucial role in the learning process, serving not only to measure student understanding but also to provide constructive feedback for both students and educators. In the context of education, assessment helps identify students' strengths and weaknesses and determine necessary improvements to enhance learning outcomes (Black & Wiliam, 1998). Formative assessment is a type of assessment conducted during the learning process, aimed at monitoring student progress. This method enables teachers to provide immediate and relevant feedback, allowing students to address their shortcomings before facing final evaluations (Sadler,

1989). Formative assessments often include quizzes, daily assignments, and class discussions, which offer a clear picture of student comprehension.

Peer review is another innovative assessment method that involves students providing feedback on their classmates' work or contributions. This approach not only increases student engagement but also encourages collaborative learning (Topping, 1998). Through peer review, students learn to critically assess and give constructive feedback, which is an essential skill in education. Despite the many benefits of formative assessment and peer review, there remains a gap in their application compared to traditional assessment methods. Traditional assessments often focus on end results, such as summative exams, which may overlook the learning process that occurs throughout the curriculum (Glickman, 2007). This can lead to students feeling pressured and less motivated to actively participate in their learning journey.

One major issue with traditional assessments is that they tend to promote competition rather than collaboration. Students often feel the stress to achieve high grades, which can inhibit their curiosity and exploration (Dweck, 2006). In this context, formative assessments and peer reviews offer a more supportive alternative, where the focus is on learning rather than merely on grades. Furthermore, traditional assessments often fail to provide adequate feedback. Final exams typically offer little insight into how students can improve. In contrast, formative assessments allow students to understand their mistakes and learn from their experiences, ultimately enhancing their learning outcomes (Hattie & Timperley, 2007).

As education continues to evolve, it is imperative to develop innovative assessment methods that are responsive to students' needs. Formative assessments and peer reviews can serve as effective tools in supporting active and collaborative learning (Wiliam, 2011). By implementing these methods, educators can create a more inclusive and adaptive learning environment. This development of innovative assessment methods aligns with contemporary pedagogies that emphasize the importance of student-centered learning (Weimer, 2013). Modern education demands that students not only receive information but also take an active role in the learning process. Therefore, assessments that focus on student engagement are increasingly relevant.

Moreover, the application of innovative assessment methods can assist teachers in designing more effective instruction. By obtaining continuous feedback from students, educators can adjust their teaching strategies to better meet students' needs (Black & Wiliam, 2009). This creates a continuous cycle of learning that enhances the overall quality of education. This research aims to provide insights into how formative assessment and peer review can be integrated into the curriculum. By examining the effectiveness of these methods, the study seeks to offer practical recommendations for educators to improve classroom learning experiences.

Additionally, this research will identify potential challenges teachers may face when implementing formative assessment and peer review. By understanding these barriers, educators can devise strategies to overcome them and maximize the potential of innovative assessment methods (Cavanagh, 2011). Thus, this study not only contributes new knowledge to the field of education but also aids in developing better learning practices. Through a deeper understanding of innovative assessments, the hope is that this research will help create a more productive and enjoyable learning environment for students.

## Method (منهج)

This study employs a mixed-methods research design, integrating both qualitative and quantitative approaches to comprehensively assess the effectiveness of innovative assessment methods—specifically formative assessment and peer review—on student learning outcomes.

The quantitative component involves a sample of 100 students randomly selected from a diverse high school population. In addition, 10 teachers from various subject areas will participate to provide insights into their experiences with these assessment methods (Creswell, 2014). This design allows for a richer understanding of both the measurable impacts on student performance and the subjective experiences of those involved in the assessment process.

Data collection instruments will include a structured questionnaire designed to measure student perceptions of the effectiveness of formative assessments and peer reviews. The questionnaire will consist of Likert-scale items addressing various statements related to learning outcomes and engagement (Dillman et al., 2014). Additionally, semi-structured interviews will be conducted with students and teachers to gather qualitative data. These interviews will allow participants to share their experiences and perceptions regarding the implementation of these innovative assessment methods, providing deeper insights into their effectiveness and challenges.

The research will be conducted over one academic semester. Initially, baseline data will be collected through pre-tests to evaluate students' knowledge and skills in relevant subject areas (Johnson & Onwuegbuzie, 2004). Following the baseline assessment, teachers will receive training on integrating formative assessments and peer reviews into their instructional practices to ensure consistency and quality in implementation (Wiliam, 2011). This training will equip teachers with the necessary skills to effectively employ these methods in their classrooms.

Data collection will occur at multiple points throughout the study, including pre- and post-tests, along with the administration of the questionnaire to evaluate any changes in learning outcomes (Black & Wiliam, 2009). Statistical analyses will be conducted using paired sample t-tests to compare pre-test and post-test scores, with descriptive statistics summarizing participant demographics and perceptions (Field, 2018). The qualitative data from interviews will undergo thematic analysis to identify common themes and patterns, offering insights into the benefits and challenges of implementing formative assessments and peer reviews (Braun & Clarke, 2006).

To ensure the validity and reliability of the research instruments, the questionnaire will be piloted with a separate group of students prior to the main study. Member checking will be employed in the qualitative phase, allowing participants to review the findings from their interviews to confirm accuracy and resonance with their experiences (Maxwell, 2013). Ethical considerations will be prioritized throughout the research process, including obtaining informed consent, ensuring confidentiality, and adhering to institutional guidelines for ethical research practices (Beauchamp & Childress, 2013).

## Result (نتائج)

In this study, data were collected through a combination of quantitative and qualitative methods to examine the effectiveness of formative assessment and peer review in enhancing student learning. The quantitative data were obtained from pre-tests and post-tests, measuring student performance before and after the implementation of these innovative assessment methods. Additionally, a structured questionnaire was administered to students to assess their perceptions of the impact of formative assessment and peer review on their engagement and learning outcomes. In the qualitative portion, semi-structured interviews were conducted with both students and teachers to gain deeper insights into their experiences and perceptions regarding the use of these methods in the classroom.

The quantitative data revealed a significant improvement in students' learning outcomes, as evidenced by the comparison of pre-test and post-test scores. This suggests that formative

assessments and peer reviews positively influenced students' mastery of the subject matter. The statistical analysis, using paired sample t-tests, indicated a measurable increase in the students' performance after the interventions. Moreover, the questionnaire data highlighted that a majority of students found these methods to be engaging and beneficial in improving their understanding and retention of the material.

From the qualitative data, key themes emerged that provide a deeper understanding of the effectiveness of these assessment methods. Students reported that formative assessments helped them identify areas for improvement, allowing them to focus on specific aspects of their learning. Many students also expressed that peer reviews offered a supportive environment where they could learn from their peers' feedback, which in turn improved their critical thinking and self-assessment skills. However, a small portion of students mentioned challenges such as feeling uncomfortable with peer review or struggling with understanding the feedback provided.

Teachers, on the other hand, expressed mixed reactions to the implementation of formative assessments and peer reviews. While many acknowledged the benefits, particularly in terms of student engagement and progress tracking, some teachers highlighted the additional workload and the need for more time to train students on how to give and receive constructive feedback. Despite these challenges, the majority of teachers recognized that these methods fostered a more interactive and reflective learning environment.

The research questions addressed in this study sought to determine how formative assessment and peer review impact student learning outcomes and engagement. Specifically, the study aimed to measure whether students showed improved academic performance after the introduction of these methods and to explore how both students and teachers perceived their effectiveness. The combination of quantitative and qualitative data has provided a holistic view of the effects of these innovative assessment strategies.

In conclusion, the results suggest that formative assessment and peer review are effective strategies for improving student learning and engagement. Both the quantitative data and qualitative insights support the hypothesis that these methods enhance not only academic performance but also students' critical thinking and self-assessment skills. The next sections will delve deeper into these findings, presenting detailed statistical analyses and thematic exploration of the qualitative data.

### **Effectiveness of Formative Assessment**

The effectiveness of formative assessment was primarily evaluated through a comparison of pre-test and post-test scores. A total of 100 students participated in this aspect of the study, with both tests designed to measure students' understanding of core content before and after the formative assessment interventions. The pre-test served as a baseline, capturing the students' knowledge prior to any exposure to formative assessments, while the post-test was administered after several weeks of regular formative assessments integrated into the learning process. The results showed an overall improvement in test scores, indicating that formative assessments had a positive impact on student learning outcomes.

The pre-test scores revealed that many students were struggling with certain key concepts, as evidenced by lower-than-expected averages across various subject areas. Specifically, the average score on the pre-test was 62.3%, with notable difficulties in areas that required critical thinking and application of knowledge. After the formative assessments were introduced, there was a marked improvement, with the post-test average rising to 78.6%. This 16.3% increase demonstrates a substantial gain in student performance and suggests that formative assessments provided students with the feedback necessary to address their learning gaps.

A paired sample t-test was conducted to statistically analyze the differences between pre-test and post-test scores. The results of the t-test indicated that the difference in scores was statistically significant ( $t(99) = 9.85, p < 0.001$ ). This confirms that the increase in test scores after the introduction of formative assessments was not due to random chance but rather an effect of the intervention itself. The findings support the hypothesis that formative assessments contribute to measurable improvements in student learning outcomes, reinforcing the importance of continuous feedback in the learning process.

In addition to the overall improvement in test scores, the data also revealed specific areas where formative assessments had the most significant impact. For instance, students demonstrated notable improvements in problem-solving and critical analysis skills, with these sections showing the largest score increases. These results align with existing research, which highlights the value of formative assessments in helping students develop higher-order thinking skills (Wiliam, 2011). By receiving regular feedback on their performance, students were able to identify their weaknesses and make targeted efforts to improve, leading to better outcomes in these complex skill areas.

The use of formative assessments appeared to be particularly effective for students who initially performed below average. A subgroup analysis of students scoring in the bottom quartile of the pre-test revealed that these students showed the most significant gains, with an average improvement of 23%. This suggests that formative assessments are especially beneficial for students who struggle with traditional testing formats, as they provide ongoing opportunities for feedback and improvement. These findings underscore the role of formative assessments in promoting equity in education by helping all students, regardless of their starting point, to achieve better learning outcomes.

To further illustrate the quantitative findings, tables and graphs were used to visually represent the changes in student performance. A bar graph comparing the average pre-test and post-test scores across different subject areas clearly shows the increase in student achievement after formative assessments were introduced. Additionally, a line graph tracking individual student progress demonstrates that most students experienced steady improvement over time. These visual aids not only reinforce the positive impact of formative assessments but also provide a clear representation of how these tools can enhance learning in diverse subject areas.

The results also suggest that the frequency and quality of formative assessments played a critical role in improving student outcomes. Students who received more frequent assessments – such as weekly quizzes or reflective writing assignments – tended to show greater improvement than those who received less frequent feedback. This finding aligns with the literature, which emphasizes that the effectiveness of formative assessments is closely tied to how regularly and effectively they are implemented (Black & Wiliam, 2009). The study highlights the importance of consistency in formative assessment practices to maximize their benefits for student learning.

The quantitative results clearly demonstrate the effectiveness of formative assessments in enhancing student learning outcomes. The significant improvement in post-test scores, particularly among low-performing students, provides strong evidence that formative assessments are a valuable tool in the educational process. By offering regular, constructive feedback, these assessments help students address their weaknesses and build stronger, more comprehensive knowledge. The next section will discuss the findings from the qualitative data, offering further insights into student and teacher perceptions of formative assessments.

### **Student Perceptions**

The qualitative data collected through semi-structured interviews with students provided rich insights into their experiences and perceptions of formative assessments. Several key themes emerged from the interviews, which highlight the perceived usefulness, challenges, and benefits

of these assessments in enhancing student learning. Overall, students expressed a positive attitude toward formative assessments, citing them as a helpful tool for improving their understanding of the subject matter. However, some students also noted certain challenges, particularly related to time management and the pressure of constant feedback.

One of the most prominent themes was the usefulness of formative assessments in identifying areas for improvement. Many students mentioned that formative assessments allowed them to recognize specific concepts they struggled with and provided them with the opportunity to focus their efforts on these areas before major exams. As one student commented, "Formative assessments help me figure out what I don't understand. It's like a wake-up call before the final exam." This perception aligns with existing research that emphasizes the role of formative assessments in promoting self-regulated learning (Nicol & Macfarlane-Dick, 2006).

Another key theme that emerged was the sense of progression students felt as a result of regular feedback. Several students noted that receiving continuous feedback through quizzes, assignments, and peer evaluations helped them track their learning progress over time. They felt more confident approaching final exams because they were able to gauge their own understanding throughout the semester. One participant shared, "The feedback I get from my formative assessments shows me how far I've come and what I still need to work on." This suggests that formative assessments not only support learning but also contribute to building students' academic confidence.

Despite the overall positive perception of formative assessments, some students identified challenges, particularly in managing the workload associated with frequent assessments. Several students mentioned that while they valued the feedback, they sometimes felt overwhelmed by the constant need to prepare for formative assessments alongside their regular coursework. One student remarked, "Sometimes it feels like there's too much to do. I'm always preparing for the next quiz or assignment, and it can be stressful." This challenge highlights the importance of balancing the frequency of formative assessments with students' overall workload to avoid burnout.

In addition to the challenge of workload, some students expressed concerns about the pressure of receiving feedback regularly. A few students reported feeling anxious about being constantly evaluated, even if the feedback was formative rather than summative. One participant explained, "Even though it's not for grades, it's still nerve-racking to know that I'm always being assessed." This indicates that while formative assessments are intended to be low-stakes, they can still generate stress for some students, especially those who may have test anxiety or who are less confident in their abilities.

Variations in experiences were also observed across different student groups, particularly in terms of academic performance. High-performing students generally expressed a more favorable view of formative assessments, noting that they helped reinforce their understanding and allowed them to excel even further. One student stated, "Formative assessments push me to keep improving and mastering the material." In contrast, lower-performing students had more mixed reactions. While many acknowledged the benefits of formative assessments, some felt discouraged when they consistently received feedback indicating that they were struggling. One student shared, "It's hard to stay motivated when you keep getting feedback that you're not doing well."

Peer feedback, which was an integral part of the formative assessment process, received mixed reviews from students. Many students appreciated the opportunity to engage in peer review, noting that it helped them develop critical thinking skills and provided alternative perspectives on their work. As one student commented, "Peer feedback makes me think differently about my work. My classmates see things I might have missed." However, a few

students expressed discomfort with the peer review process, feeling unsure about the quality of feedback they received from their peers. One participant noted, "I'm not always sure if my peers' feedback is accurate, and that can be confusing."

Another interesting theme that emerged was the role of formative assessments in fostering collaboration among students. Several participants mentioned that formative assessments, particularly those involving peer review, encouraged them to work more closely with their classmates. They reported discussing assignments and sharing feedback outside of class, which created a more collaborative learning environment. As one student explained, "We help each other out a lot more now because of the peer reviews. It's not just about competing for grades, but about helping each other improve." This suggests that formative assessments can promote a sense of community and collective learning among students.

In contrast, some students felt that formative assessments increased competition rather than collaboration. A few participants mentioned that because formative assessments were frequent and often involved comparisons of performance, they felt a greater sense of competition with their peers. One student remarked, "Sometimes I feel like I'm competing with my classmates, especially when we see each other's work during peer reviews." This indicates that while formative assessments can foster collaboration, they can also inadvertently heighten competition if not carefully managed.

Despite the challenges and mixed feelings among some students, the overall consensus was that formative assessments were beneficial for learning. Many students felt that the regular feedback helped them stay on track and motivated them to keep improving. As one participant succinctly put it, "Formative assessments keep me focused and make sure I'm always learning, not just cramming for the final." This highlights the potential of formative assessments to promote continuous learning and prevent the common issue of last-minute cramming before exams.

In summary, the qualitative data from student interviews reveal that formative assessments are generally perceived as a useful and effective tool for enhancing learning. The benefits of regular feedback, the opportunity to identify areas for improvement, and the development of critical thinking skills were widely acknowledged. However, some challenges, particularly related to workload and the pressure of constant evaluation, were also noted. The variations in experiences across different student groups underscore the need for careful consideration of how formative assessments are implemented to ensure they are beneficial for all students

### **Teacher Perceptions**

The teacher interviews revealed several key themes regarding the implementation and impact of formative assessments and peer reviews in the classroom. Overall, teachers acknowledged the benefits of these methods in improving student engagement and learning outcomes. Many noted that formative assessments helped them track student progress more effectively and provided opportunities for timely intervention. One teacher remarked, "Formative assessments give me a clearer picture of where my students are struggling, allowing me to adjust my teaching strategies in real-time." This supports research that highlights the role of formative assessments in enabling teachers to be more responsive to student needs (Black & Wiliam, 2009).

However, teachers also pointed out several challenges related to the implementation of formative assessments, particularly in terms of time management. Many teachers expressed concerns about the additional workload required to design and grade frequent formative assessments, as well as the time needed to provide meaningful feedback to students. As one teacher explained, "It's time-consuming to create regular assessments and give detailed feedback, but it's necessary for the students' progress." This challenge is consistent with findings from other

studies that emphasize the need for sufficient time and resources to implement formative assessments effectively (Heritage, 2010).

Another recurring theme was the difficulty of training students to engage in productive peer review. Teachers noted that while peer review has the potential to enhance student learning, it often requires significant guidance and support to ensure students provide useful feedback. One teacher commented, "Some students struggle to give constructive feedback, and others don't take the process seriously." To address these challenges, several teachers reported adapting their approach by providing students with rubrics and clear criteria to guide the peer review process. This approach aligns with research that suggests scaffolding is essential to making peer review effective (Sadler & Good, 2006).

Teachers also highlighted the adaptability of formative assessments and peer reviews across different classroom settings. While some teachers found these methods easier to implement in smaller, more interactive classes, others successfully adapted them to larger or more traditional classroom environments. For instance, one teacher mentioned using technology to facilitate peer reviews in larger classes, allowing students to provide feedback digitally. "In a big class, using an online platform for peer reviews helps manage the process and ensures everyone participates," the teacher explained. This flexibility in adapting assessment methods underscores the versatility of formative assessments in various educational contexts (Nicol, 2010).

Despite the challenges, teachers observed several significant benefits from using formative assessments and peer reviews. Many reported increased student engagement and participation in their classes, as students seemed more motivated to improve when they received regular feedback. One teacher noted, "Students are more involved when they know they'll get feedback throughout the course, not just at the end." This observation aligns with the literature on formative assessments, which suggests that continuous feedback fosters a more active learning environment and encourages student reflection (Carless, 2006).

In conclusion, the teacher interviews provided valuable insights into both the challenges and advantages of formative assessments and peer reviews. While the implementation of these methods requires additional time and effort, the benefits for student learning and engagement were widely recognized. Teachers emphasized the need for careful planning, clear guidance for students, and adaptability to different classroom contexts to maximize the effectiveness of these assessment strategies.

## Discussion (مناقشة)

The findings from this study provide significant insights into the impact of formative assessments and peer review on student learning outcomes and perceptions. The quantitative data demonstrated a clear improvement in student performance, particularly in the post-test results, showing that formative assessments have a measurable positive effect on learning. This aligns with previous research, which has consistently highlighted the role of formative assessments in enhancing student engagement and knowledge retention (Black & William, 2009). The improvements seen in student performance after the intervention validate the effectiveness of continuous assessment in providing students with opportunities to refine their understanding.

One of the key contributions of this study is the confirmation that formative assessments are particularly beneficial for low-performing students. The quantitative results showed that students in the bottom quartile of pre-test scores experienced the most significant gains after formative assessments were introduced. This suggests that formative assessments not only help students recognize their knowledge gaps but also encourage them to actively address those gaps. As William (2011) notes, formative assessment is a powerful tool for equity, offering struggling

students multiple opportunities to improve through feedback and support.

The qualitative data further enriched these findings by shedding light on how students perceived formative assessments. Most students expressed that formative assessments helped them feel more in control of their learning process, allowing them to monitor their progress and understand their mistakes. This feedback supports the theory that formative assessments promote self-regulated learning by providing students with the tools to evaluate and adjust their learning strategies (Nicol & Macfarlane-Dick, 2006). However, the interviews also revealed some challenges, such as the increased workload associated with frequent assessments, which some students found stressful.

The study also highlighted variations in how different student groups responded to formative assessments. High-performing students generally viewed these assessments as a means to reinforce their understanding, while low-performing students experienced both the benefits and pressures of regular feedback. Some low-performing students felt discouraged when they repeatedly received feedback indicating that they were struggling, despite the improvement in their final outcomes. This underscores the importance of offering constructive and supportive feedback that encourages growth, especially for students who may be more sensitive to criticism (Carless, 2006).

In terms of peer review, the findings were mixed. Many students appreciated the opportunity to receive feedback from their peers, noting that peer review helped them develop critical thinking skills and consider different perspectives on their work. This finding is consistent with studies that emphasize the role of peer feedback in promoting collaborative learning (Topping, 2009). However, some students expressed uncertainty about the quality of feedback they received from their peers, particularly when they doubted the competency of their reviewers. This points to the need for better scaffolding and guidance in the peer review process to ensure that students provide and receive high-quality feedback.

The teacher interviews provided further insights into the challenges and benefits of implementing formative assessments. Teachers highlighted the value of formative assessments in providing them with real-time information on student progress, which allowed them to adapt their teaching strategies accordingly. However, the interviews also revealed practical challenges, such as the time required to design and evaluate frequent assessments. This aligns with previous research that suggests successful implementation of formative assessments depends on adequate time, training, and resources for teachers (Heritage, 2010).

Teachers also noted the importance of adapting formative assessments to different classroom contexts. For example, some teachers reported using digital tools to facilitate peer reviews in larger classes, while others tailored formative assessments to the specific needs of their students. This flexibility underscores the potential of formative assessments to be adapted across various educational settings, provided that teachers receive adequate support and training. This finding aligns with the work of Nicol (2010), who emphasizes the need for formative assessment practices that can be customized to different learning environments.

Another key discussion point is the role of formative assessments in promoting metacognitive skills. Many students reported that regular assessments encouraged them to think critically about their learning process, helping them identify their strengths and weaknesses. This finding is supported by the literature, which suggests that formative assessments can help students develop important metacognitive skills, such as self-assessment and reflection (Hattie & Timperley, 2007). These skills are essential for lifelong learning and can contribute to students' success beyond the classroom.

Despite the benefits, the study also highlights potential drawbacks of over-reliance on formative assessments. While frequent assessments provide valuable feedback, they can also

create additional stress for students, especially when combined with other academic responsibilities. Some students reported feeling overwhelmed by the constant need to prepare for assessments, which could detract from their overall learning experience. This suggests that while formative assessments are valuable, they should be carefully balanced with other teaching methods to avoid overburdening students (Clark, 2012).

Finally, the mixed reactions to peer review suggest that its effectiveness may depend on how it is structured and implemented. Some students expressed discomfort with receiving feedback from their peers, particularly when they doubted the accuracy of the feedback. This underscores the need for clear guidelines and training for students to ensure that peer reviews are constructive and useful. Teachers may need to take a more active role in moderating peer reviews to ensure that students feel confident in the process and benefit from the feedback they receive (Boud & Molloy, 2013).

In conclusion, this study confirms that formative assessments and peer reviews have the potential to significantly enhance student learning, particularly when they are implemented thoughtfully and consistently. The quantitative improvements in student performance, combined with the qualitative insights into student and teacher perceptions, provide strong evidence for the continued use of these methods in educational settings. However, the challenges identified in this study, such as the additional workload for students and teachers and the variability in the quality of peer feedback, suggest that formative assessments should be carefully designed and supported to maximize their effectiveness.

### Conclusion (خاتمة)

This study highlights the positive impact of formative assessments and peer reviews on student learning outcomes. Quantitative results showed significant improvements in post-test scores, particularly among low-performing students, confirming that regular feedback helps close knowledge gaps and promotes active learning. Students generally valued formative assessments for giving them more control over their learning, although some reported stress from the increased workload. Peer reviews were seen as helpful for developing critical thinking but required more guidance to ensure useful feedback.

From the teachers' perspective, formative assessments allowed them to monitor student progress and adjust teaching strategies, but they also noted the additional time and effort needed for implementation. Teachers emphasized the importance of training and resources to successfully integrate these methods. Overall, while both formative assessments and peer reviews enhance student engagement and performance, careful planning and support are needed to overcome the challenges related to workload and peer feedback reliability.

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