



Formative assessment in a blended learning model: exploring EFL students' engagement and outcomes

التقييم التكويني في نموذج التعلم المدمج: استكشاف تفاعل الطلبة ونتائجهم

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ملخص

يتناول هذا البحث فعالية التقييم التكويني في تحسين نتائج تعلم الطلبة للغة الإنجليزية كلغة أجنبية ومستوى تفاعلهم ضمن نموذج التعلم المدمج. شملت الدراسة طلبة السنة الثانية بكلية علوم الإعلام والاتصال في جامعة الجزائر 3، الذين حضروا حصصًا أسبوعية منتظمة لمقياس اللغة الإنجليزية، ثلاث منها عبر منصة مودل (Moodle) وحصّة واحدة حضورية كل شهر. اعتمدت الدراسة منهجًا مختلطًا لتحليل التغير في الكفاءة اللغوية والمواقف تجاه التعلم المدمج باستخدام اختبار قبلي واختبار بعدي بالإضافة إلى مناقشات جماعية. أظهرت النتائج الكمية تحسنًا ملحوظًا في مهارة الكتابة، كما أفاد الطلبة بارتفاع مستويات التفاعل لديهم، بفضل التفاعل الفوري الناتج عن التكوين المنتظم المقدم عبر منصة مودل. وأبرزت البيانات النوعية من خلال المناقشات الجماعية ردود فعل إيجابية على التقييمات التكوينية، إلا أن بعض الطلبة أشاروا إلى تحديات مرتبطة بالمشكلات التقنية وضعف الكفاءة الرقمية. تؤكد هذه النتائج الحاجة إلى استثمارات مؤسسية في البنية التحتية الرقمية والتدريب المستهدف لضمان تكامل أكثر فعالية للتقييمات التكوينية في سياق التعلم المدمج.

الكلمات الدالة: التعلم المدمج؛ طلبة اللغة الإنجليزية كلغة أجنبية؛ التفاعل؛ التقييمات التكوينية؛ مودل.

Abstract

This research probes into the effectiveness of formative assessment in promoting EFL students' learning outcomes and engagement in a blended learning model. The study involved second-year EFL students at the Department of Communication Sciences in the University of Algiers 3, who attended regular weekly English sessions, three online through the Moodle platform, and one on-site each month. The study followed a mixed-method approach for the analysis of variation in language proficiency and engagement with blended learning through pre-test and post-test with focus group discussions. Results from the quantitative data indicated that writing proficiency had significantly improved; moreover, the students

reported higher levels of engagement thanks to regular formative feedback provided through Moodle. Qualitative data from the focus groups underlined positive feedback on formative assessments, but some students reported challenges related to both technical problems and limited digital literacy. Based on these findings, the study recommends institutional investments in digital infrastructure and targeted training to ensure more effective integration of formative assessments in blended learning contexts.

Keywords: blended learning; EFL learners; engagement; formative assessment; Moodle.

Introduction

EFL learning is often burdened with considerable difficulties, especially in the context of Algeria, where Arabic and French are dominant languages that interfere with the process of learning English. Seghier and Ghaoui (2020) draw on the significant impact of linguistic interference on the writing proficiency of EFL learners. Learners often fail to switch between these linguistic systems. Similarly, Temmam (2021) points out the competition between English and French in Algerian higher education, stating that the preponderance of French in higher education and professional circles may outshine the endeavours to promote the learning of English. These aspects also draw attention to the need for new pedagogies, including assessment methods that will help learners surmount such obstacles.

In blended learning environments, Moodle supports formative assessment by allowing real-time feedback and offering interactive learning activities (Ghouali & Ruiz Cecilia, 2021). However, in the Algerian context, this tool remains underexploited for formative assessments due to technical hurdles and limited digital literacy (Sebbah, 2021). Addressing these gaps is essential to enhance student engagement and effective assessment practices.

The current study is conducted to investigate the role of formative assessment in bringing improvement to learning outcomes and engagement of Algerian EFL students. Precisely, it investigates the effectiveness of Moodle-supported formative assessments within a blended learning model. The study addresses the following question: *How do formative assessments influence student learning outcomes and engagement in an online classroom via Moodle?* It also contributes to offering actionable insights for teachers about assessment strategies specifically designed for online and blended learning environments.



This investigation addresses existing gaps in the literature about the limited research on formative assessment in Moodle-supported EFL contexts and offers practical insights for developing effective digital learning frameworks in Algeria. Based on an investigation into the opportunities and challenges of formative assessments in Moodle-supported settings, the findings will provide valuable guidance for integrating innovative assessment practices into EFL pedagogy at local and international levels.

1. Literature review

The literature review section examines the function of formative assessments within language learning, in both blended and online learning environments. It also looks at their effectiveness in engaging students and improving motivation and linguistic outcomes while using Moodle as an assessment delivery platform. Drawing on studies conducted in the Algerian and global contexts, the review explores both benefits related to formative assessments' impact on writing skills _a key component of language proficiency that particularly benefits from iterative feedback_ and improved academic performance. While writing is part of overall academic performance, its process-oriented nature makes it especially suited for formative assessment, as regular feedback helps refine skills over time. The review also addresses challenges of limited digital literacy and technical constraints. By using constructivist learning theories as a basis, this review sets the framework through which formative assessment provides insights into a cyclical and feedback-driven learning process.

1.1 Student engagement in formative assessment

Engagement in learning refers to students' active involvement in the educational process, encompassing behavioural, emotional, and cognitive dimensions (Fredricks, Blumenfeld, & Paris, 2004). In formative assessment, engagement is enhanced through continuous feedback and interactive learning opportunities that motivate students to participate actively (William, 2011). Digital platforms like Moodle facilitate this engagement by offering instant feedback, self-paced activities, and discussion forums that promote student interaction and critical thinking (Gikandi, Morrow & Davis, 2011).

Sebbah (2021) highlights that formative assessment fosters engagement by providing structured opportunities for students to reflect on their progress, adjust their learning strategies, and develop self-regulated learning habits. However, engagement levels may vary due to factors such as digital literacy, technical challenges, and workload management (El Hassan & Ahmed, 2023). To

maximize engagement, instructors should ensure clarity in task instructions, provide adequate training on digital tools, and integrate formative assessments that align with students' learning objectives (Appleton, Christenson, & Furlong, 2008).

1.2 Learning outcomes and formative assessment

Formative assessment has been widely recognized for its role in improving learning outcomes, particularly in language education. By incorporating continuous assessment and personalized feedback, students are guided toward progressive skill enhancement (Black & Wiliam, 1998). Research indicates that students who receive formative feedback show improvements in language accuracy, writing coherence, and overall comprehension skills (Khairil & Mokshein, 2018).

In Moodle-based learning environments, formative assessments allow students to track their progress, identify weaknesses, and refine their work based on instructor feedback (Ghouali & Ruiz-Cecilia, 2021). In Algerian higher education, studies have shown that well-implemented formative assessments lead to noticeable improvements in students' academic performance, particularly in writing proficiency (Sebbah, 2021). However, challenges such as inconsistent feedback application and technical barriers can limit the effectiveness of these assessments (Alruwais, Wills, & Wald, 2018).

1.3 Formative assessments in language learning

Formative assessments are essential in language acquisition because they allow learners to continuously understand where the problem lies and what they need to improve. Wiliam (2006) noted that through formative assessment, they can be motivated to create active engagement and self-regulation in learning, especially in EFL contexts where students usually need more emphasis on reinforcing focused instruction and providing targeted practice. They provide continuous feedback, guiding students through the writing process, and allowing them to refine their work over time.

As Abdullaeva, Çakmak, and Abdullaev (2024) have noted, formative assessment enhances learners' accountability and motivation by creating a structured learning process where students receive timely feedback, set goals for improvement, and engage more actively in their own progress. This process ultimately leads to improved linguistic outcomes, whether assessments are conducted in paper-based or online modes. These studies



provide evidence that formative assessments have several benefits for improving language performance in various settings.

1.4 Online learning and Moodle as a platform

Moodle, as one of the most popular learning management systems globally, has played an important role in the provision of online learning and assessment, especially with the transition to distance learning around the world. As highlighted by Ghouali and Ruiz-Cecilia (2021), concerning its utility in enhancing the writing performance of Algerian EFL students, Moodle-based assessments give real-time feedback enhancing learning. Likewise, similar benefits of e-assessment in Moodle have been pointed out by Alruwais, Wills, and Wald (2018) such as availability, which allows learners to access assessments anytime, and flexibility, which enables them to complete tasks at their own pace, catering to diverse learning needs, along with instant feedback scores.

However, research also emphasizes the difficulties that exist when using Moodle in the Algerian context such as limited access to information and communication technology tools, and the low level of digital literacy among the users (El Hassan & Ahmed, 2023). These studies point to the dual role of Moodle as both a facilitator of innovative learning and a platform requiring additional teacher and student support to maximize its potential.

1.5 Impact of formative assessments on learning outcomes

The positive correlation between formative assessment and learning results has been well documented in the literature. For instance, Spector et al. (2016) portray how technology-enhanced formative assessments promote reflective learning and collaborative problem-solving. In like manner, Khairil and Mokshein (2018) identify that formative assessments provided in digital learning environments give a boost to academic achievement and enhance student academic engagement and satisfaction as well.

In blended-learning environments, this becomes even more essential, as formative assessments help scaffold writing skills. Sebbah (2021) has identified that for Algerian students, formative assessment provided on an ongoing basis is considered essential to enhancing writing skills, motivating them in blended classrooms by fostering a sense of progress, encouraging active participation, and reinforcing their learning through regular feedback. Additionally, Sebbah (2021) observed a significant improvement in writing and grammatical skills among Algerian higher education students using continuous formative assessment on Moodle.



Formative assessments also enable learners to apply acquired knowledge effectively. According to Mngomezulu, Mkhize, and Nhlumayo (2024), formative feedback makes it possible for learners to apply the acquired knowledge by integrating it into their work, making necessary adjustments to their language use, and strengthening their understanding through practice to retain new information, which is extremely important in language learning.

1.6 Challenges in implementing formative assessments in blended environments

Despite their advantages, there are still some major obstacles to formative assessments in blended and online environments. El Hassan and Ahmed (2023) noted that the most crucial obstacles, particularly in the Algerian context, are technical and related to a lack of sufficient teacher training. These limitations are further exacerbated by students' disparate skill levels regarding digital literacy, which in turn affects their engagement with e-assessments.

Addressing these challenges requires a structured approach to formative assessments, ensuring that they are not only effectively integrated into blended learning but also supported by adequate infrastructure and institutional policies. For formative assessments to yield optimal learning outcomes, they have to be strategically designed to provide meaningful feedback, encourage active participation, and align with pedagogical objectives. Institutions should also address infrastructural and technical limitations to enhance the effectiveness of formative assessment in blended learning models (Mngomezulu, Mkhize, & Nhlumayo, 2024).

1.7 Theoretical framework

This study is based on constructivist learning theories, which assert that learning occurs through interaction with the environment. According to Piaget (1977), feedback plays a substantial role in this process, making development cyclical. The Assessment for Learning (AFL) approach, a formative assessment strategy that emphasizes ongoing feedback to enhance learning rather than merely measure achievement, supports this framework because assessments are woven into the learning process and encourage self-regulated learning (Wiliam, 2006).

In Algerian blended learning contexts, these principles are realized through an implementable approach, which is a structured and adaptable method that integrates formative, Moodle-based assessments. This approach fosters

engagement and promotes LOOP cycles, which refer to iterative learning processes where learners receive feedback, reflect, and adjust their understanding accordingly. These cycles are essential in promoting continuous improvement, reinforcing knowledge, and enhancing learner autonomy. Kwan (2020) and Sebbah (2021) have corroborated that such assessments not only engage learners but also offer a mapped out developmental learning process for EFL learners, providing a clear and systematic path for skill progression.

2. Methodology

The methodology section describes the mixed-method research approach used in this study to analyse students' participation and learning outcomes under formative assessment in a blended learning EFL environment. It includes a description of the research approach, characteristics of the participants sample, and data collection tools which comprise a pre-test, formative assessment tasks, a post-test, and focus group discussions. Furthermore, it describes the evaluation process, examining both the extent of the change in students' performance and engagement, while also offering qualitative insights into the achievement of the study's goals and conclusions. This includes analyzing students' engagement over time, identifying patterns in their participation, and assessing how formative assessments contributed to their overall learning achievement.

2.1 Research design

A mixed-method approach was employed in this study to understand how formative assessment influences engagement and learning outcomes for EFL students within a blended learning model. This approach combined the collection of quantitative data through pre- and post-tests with more in-depth qualitative insights gained via focus group discussions. Quantitatively, language improvement was measured, while students' experiences and attitudes toward formative assessment in an online environment were explored qualitatively.

2.2 Participants

The participants involved 60 Algerian second-year undergraduate students, aged between 18 and 23, studying at the Faculty of Information and Communication Sciences at the University of Algiers 3. These students were enrolled in an English course as part of the transversal teaching unit, with weekly 90-minute sessions as part of their academic curriculum. Classes adopted a blended learning model in which three online sessions per month



were conducted via Moodle, and the fourth one was on-site. This teaching structure then provided a context in which the effectiveness of formative assessments could be evaluated in a blended learning setup.

2.3 Data collection methods

The study employed multiple methods to data gathering in order to obtain an overview of students' interaction and achievement profiles within the blended learning environment. These methods included a pre-test, formative assessments, a post-test, and focus group discussions, each designed with specific features to explore aspects of students' engagement and achievement.

2.3.1 Pre-test

The pre-test was administered at the beginning of the semester to obtain baseline information about the participants and their initial perceptions of online learning. This instrument was divided into three sections. Section A obtained demographic information such as age, gender, and previous experience with blended learning or digital platforms like Moodle. This information was crucial for assessing students' perceptions and awareness of online education, as well as anticipating the potential difficulties they might encounter due to its novelty.

Section B focused on students' self-assessment of their English proficiency with regard to four skills: grammar, vocabulary, writing, and speaking. Students had to rate their abilities using a five-point Likert scale, with 1 = very weak and 5 = very strong. This section did not cover the actual skills testing, but it provided a notion about students' confidence regarding their language abilities.

Section C explored students' attitudes towards online learning and formative assessments. This section used a series of Likert scale items to evaluate their comfort with Moodle, their engagement and motivation, and how they perceived the value of formative assessments in enhancing learning outcomes. This served as the basis for grasping how students initially approached both the blended learning environment and the tools used.

2.3.2 Formative assessments

Weekly formative assessments were an integrated part of the course, linked to the lecture content uploaded on Moodle. These assessments activities were included to generate ongoing feedback and to allow students to be more involved with the material. Following each lecture, a forum discussion



was held in which students responded to a question related to the lecture content. This discussion encouraged students to engage with the content at a more critical level. Moreover, the forum discussions acted as an informal writing practice, helping students develop coherence and clarity in expressing their thoughts in written form.

At the end of each unit, which consisted of three lectures, students completed two additional assessments: a quiz and an assignment. The quizzes were in multiple choice format (MCQ) to test the students' understanding of the content of the unit. These quizzes focused on the key concepts presented in the lectures, ensuring that students had absorbed the material. The assignments required students to submit a short essay on a particular topic related to the unit in PDF format via Moodle. These writing tasks were a core component of the formative assessment strategy, aimed at developing students' ability to articulate arguments, structure ideas, and apply academic writing conventions. The aim of these tasks was to reinforce the theoretical and practical application of the course content. Additionally, students received feedback on their writing, allowing them to identify areas for improvement and refine their skills over time.

2.3.3 Post-test

The post-test, administered at the end of the semester, revealed a change in students' attitudes and achievement with the blended learning model. Unlike the pre-test, the post-test did not include self-assessment with regard to their proficiency in English. The Likert scale post-test survey was used to gauge comfort levels about Moodle, levels of class engagement, and their overall perceptions of formative assessments effectiveness.

A key aspect of the post-test analysis was identifying whether students' confidence in their writing skills had improved over the semester. The results provided insight into whether exposure to continuous formative writing assessments had enhanced students' ability to structure responses, engage critically with content, and express ideas more effectively. This allowed for a reflective assessment of the semester's experience, highlighting any attitudes and achievement shifts throughout this period and pinpointing persistent challenges.

2.3.4 Focus group discussions

To back up the quantitative data, focus group discussions were held during the onsite sessions. A subset of students in groups of 4-8 participated in open-ended discussions about their experiences with the course and the

formative assessments. Questions within the focus groups were structured in order to gain insight into how the students engaged with the online platform, their experiences with Moodle-based assessments, and the provided feedback. The table below illustrates the question prompts and their intended purpose.

Table 1. Focus-group questions

Focus-group questions	Objective
1. What specific aspects of the formative assessments helped you the most in improving your English skills?	Identify which formative assessment activities (quizzes, assignments, feedback) contributed most to student learning and engagement.
2. What challenges did you face when completing online quizzes and assignments, and how did you overcome them?	Explore barriers such as technical issues, time management difficulties, and motivational challenges that affected student participation and achievement.
3. How did the feedback you received on formative assessments impact your approach to learning and writing?	Examine whether students effectively used feedback to refine their writing skills and enhance their engagement with course materials.
4. Do you think the formative assessments in this course were fair and effective in evaluating your writing skills? Why or why not?	Investigate student perceptions of the fairness and effectiveness of the assessments in tracking and improving their writing abilities.
5. In what ways could formative assessments and online learning be improved in future courses?	Encourage students to provide suggestions for improving engagement, writing support, and the overall assessment process.

The students were required to discuss the effectiveness of the formative assessments, including whether these helped them improve their proficiency in the language, what problems they faced, including technical issues, time management, or the online format. They were asked to reflect on which specific aspects of the assessments such as quizzes, assignments, or instructor feedback that were most beneficial in enhancing their writing skills and overall engagement with the English course. Additionally, the students provided suggestions for improving the assessment process, considering ways to make it more supportive of their learning needs and workload management.



The discussions also explored how the feedback they received influenced their approach to learning, particularly in terms of revising their writing and applying corrections to future tasks. Furthermore, the students evaluated whether the formative assessments were fair and effective in assessing their progress, expressing their views on the alignment between assessment methods and their learning objectives. Finally, they shared recommendations for refining the use of formative assessments in online and blended learning environments to better facilitate active participation and academic achievement.

The focus group discussions brought a qualitative dimension to the study. They contextualized the quantitative findings, allowing for deeper insights into the learning experiences of the students, especially their engagement with online assessments, their progress in writing development, and their perceptions of the assessment structure.

2.4 Data analysis

Quantitative data were derived from the pre-test and post-test, especially from the attitudinal scales. Descriptive statistics using means and percentages were used to observe changes in students' attitudes toward formative assessment and online learning. Comparison of the pre-test and post-test results indicated shifts regarding students' comfort with Moodle, engagement levels, and perceived benefits of formative assessment for achievement. Mean scores for each unit-level quiz were also calculated to evaluate comprehension of the lecture materials throughout the semester and to assess consistency in students' engagement with formative tasks.

In qualitative data analysis, thematic analysis was conducted on the focus group discussions to extract key themes, such as student engagement, the perceived effectiveness of feedback, and challenges encountered during the semester, like technical difficulties and limited digital literacy. These analyses provided a nuanced insight into how students interact with formative assessments and the Moodle platform, and contextualising the quantitative results. Together, these methods offered a comprehensive view of the ways formative assessments influenced student learning achievement and engagement within the blended learning model.

3. Results

The results section presents the outcomes of the students' performance and attitudes toward the formative assessments conducted within the online learning environment on Moodle. It first outlines the pre-test findings

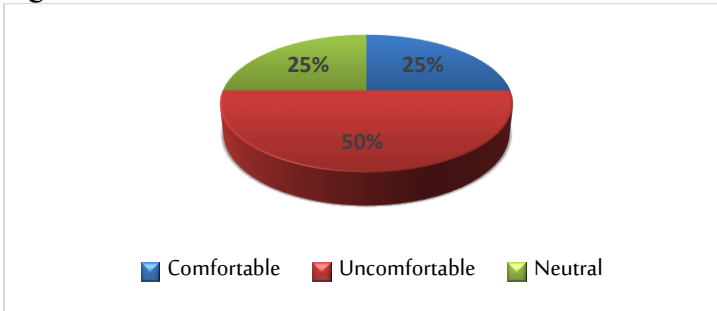
regarding students' initial challenges, particularly in writing skills, engagement with online assessments, and barriers to digital literacy. It then examines the progressive developments of students' quiz scores throughout the semester, highlighting trends in writing proficiency and overall academic progress. Additionally, the section includes feedback on issues students encountered with workload and technical difficulties, which influenced their ability to complete writing-based assessments effectively.

The post-test results show that the students gained greater confidence in using Moodle and are better engaged with the course materials, though several challenges persisted. Notably, students reported improvements in structuring their writing assignments and integrating instructor feedback into their work. Finally, the focus group discussions enabled the identification of the need to provide feedback and structured training, by offering recommendations on how to enhance formative assessment in blended learning environments. These discussions further emphasize the importance of targeted feedback in helping students refine their writing skills and actively engage in the learning process.

3.1 Pre-test results

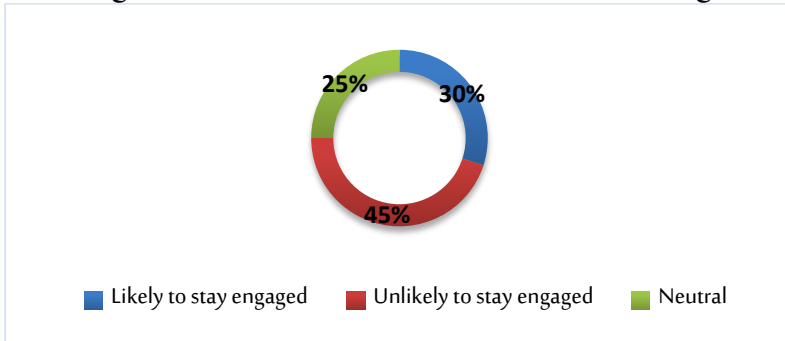
Section C in the pre-test assessed students' prior attitudes toward formative assessments and their comfort levels with online learning on Moodle. The findings showed a great deal of concern among the participants. Only 25% of the students indicated they were comfortable with using Moodle to navigate or complete online activities such as quizzes and assignments (Figure 1).

Figure 1. Students' attitudes toward comfort with Moodle



Additionally, 70% students were concerned about their ability to stay motivated in a completely or mostly online learning environment (Figure 2).



Figure 2. Pre-test attitudes toward online learning

Moreover, the pre-test included a self-assessment of English skills, allowing students to rate their proficiency in writing, grammar, vocabulary, and speaking. The results disclosed that a significant portion of students lacked confidence in their writing abilities, with 65% rating their writing skills as 'weak' or 'very weak'. This initial self-assessment served as a baseline to measure changes in achievement over the semester, particularly in relation to writing improvement through formative assessments.

3.2 Formative assessments results

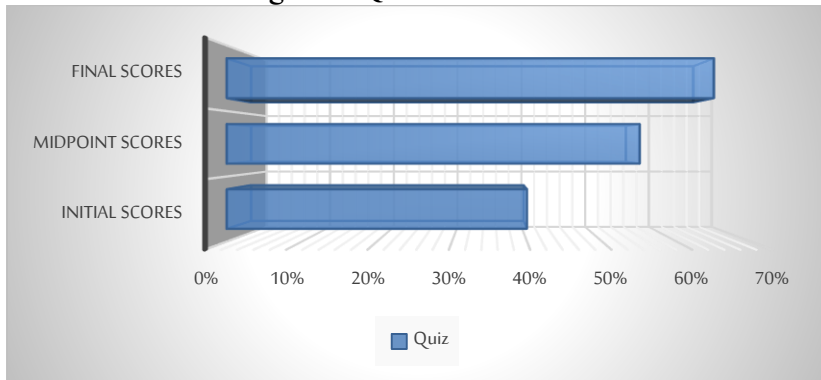
The formative assessments consisted of weekly MCQ quizzes on Moodle, designed to assess students' understanding of uploaded lectures. In the comprehension-based quizzes, which were designed as MCQs to test whether students had read the uploaded lectures, scores were relatively low, averaging 40%. This suggested a lack of engagement with the course materials prior to the pre-test. Additionally, most students admitted during informal feedback that they had difficulty accessing the content due to unfamiliarity with the platform. Over the semester, the students showed gradual improvements in these quizzes. Average scores rose from 40% in Week 1 to 65% by Week 10, indicating increased engagement with the lectures (Figure 3).

Despite this uptrend, the feedback from the focus group showed that the volume of tasks was overwhelming for the students. Many reported that the combination of quizzes, assignments, and forum discussions made it very hard to prioritize tasks effectively. Technical problems, like frequent disconnections and slow loading of content, also contributed to these challenges.



While the quizzes tested knowledge of the lectures, in practice, only 30% participated regularly in the forums and submitted the assignments, partly because of perceived workload issues and confusion over how these were to be done. While a few students valued the instructor feedback provided in the formative assessments, most indicated that they did not actually use it in their subsequent work.

Figure 3. Quiz Performance



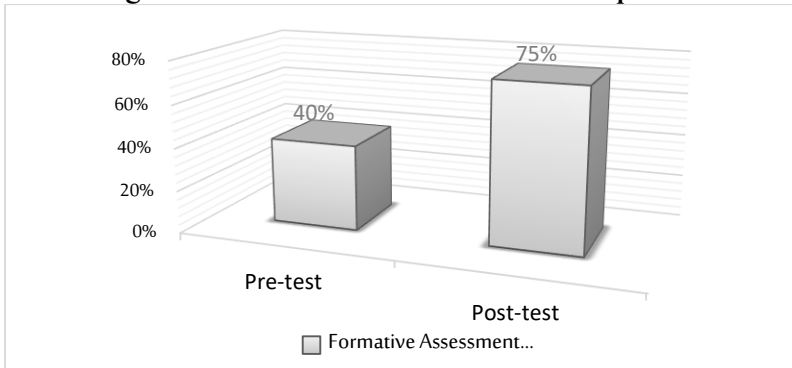
The final results showed that average scores in the MCQ quizzes increased to 75%, reflecting better engagement with the lectures. However, a number of challenges persisted, as students remained overwhelmed by the number of tasks and the reliance on self-motivation in completing these tasks.

3.3 Post-test results

The post-test results reflected modest gains in students' attitudes towards online learning and their abilities in using Moodle. By the end of the semester, 60% of the students reported that they had become more confident in accessing the platform, compared to 25% in the pre-test. This improvement can be attributed to the troubleshooting sessions and guidance during the semester.

Inclusively, the data indicated that students became more familiar with Moodle and demonstrated improved understanding of lecture materials. However, the full potential of formative assessments was not reached due to low participation in non-quiz tasks and persistent technical difficulties.



Figure 4. Pre-test vs. Post-test assessment performance

3.4 Focus group insights

The focus group discussions provided qualitative insights into the students' experiences with formative assessments and Moodle. Most participants acknowledged the value of receiving feedback but, at the same time, admitted they rarely applied it systematically. For example, one student said, "I read the comments on my writing tasks, but I didn't always know how to fix my mistakes."

Many students emphasized technical problems as one factor that kept on occurring. One participant shared, "Sometimes the internet would disconnect in the middle of a quiz, and I would lose all my progress." Others felt overwhelmed by the volume of tasks; one student expressed this by saying, "I tried to balance the quizzes, forums, and assignments each week, but it was too much to do."

Despite these challenges, there was some appreciation among the students for the regular routine in which weekly assessments kept the class on track. One participant highlighted, "By the end of the semester, I was more confident with Moodle, but to tell you the truth, I took a while to get familiar with it." Students wished for more training at the commencement of the semester on using Moodle and a reduction in the number of assigned tasks.

4. Discussion

The findings in this study illustrate both the challenges and potential of formative assessments integration into a blended learning model to support Algerian EFL students' engagement and achievement. Although this study showed an improvement in course content comprehension and familiarity



with Moodle, many obstacles have considerably reduced any further benefits given by using formative assessment.

4.1 Student engagement and use of Moodle

The results highlight a steep learning curve for students who were new to Moodle. At the start of the semester, most participants lacked the digital literacy required to navigate the platform effectively. This aligns with El Hassan and Ahmed's (2023) observation that technical barriers and insufficient training often impede the adoption of e-assessment tools in Algerian educational contexts. However, the students finally adjusted as the semester dragged on, and post-test data revealed a 60% increase in confidence in using Moodle.

The improvement in students' confidence in using Moodle suggests that with the regular use of the platform, combined with troubleshooting support, early anxieties are likely to be reduced. On the other hand, the low usage of forums and submission of assignments indicate that technical problems and task overload may deter students from fully engaging with all components of formative assessment. Ghouali and Ruiz-Cecilia (2021) also highlighted how a lack of adequate infrastructure and poorly explained tasks were two common barriers to students engaging with online learning environments.

4.2 Impact of formative assessments on comprehension and writing outcomes

The formative assessments, particularly the multiple-choice quizzes, designed to test lecture comprehension, showed a clear upward progression in scores over the semester, rising from 40% to 75%. This reflects the quizzes serving the intended purpose of encouraging students to engage with the uploaded lecture materials.

However, there was no substantial increase in the other formative activities of writing assignments and forum discussions. This highlights the importance of streamlining assessments so that only those that add most value are included. While students demonstrated better comprehension of lecture content, their writing outcomes showed little measurable improvement, as many continued to struggle with structuring their assignments and incorporating instructor feedback effectively. According to Abdullaeva et al. (2024), students are more likely to use those assessments that directly relate to their learning objectives and seem manageable within their workload. The limited progress in writing tasks suggests that either students did not engage with them as consistently as quizzes or that they needed additional support,

such as clearer guidelines or more individualized feedback, to foster better writing development.

4.3 Challenges in implementing formative assessments

Despite the gains realized, the study also indicated that there was a problem that needed to be solved. For many students, the volume of assessment tasks was overwhelming and took away from their ability to meaningfully engage with the content. In addition, technical issues, such as unreliable internet access, complicated their experience. These findings echo the work of Alruwais et al. (2018), who identified similar challenges in the use of e-assessments across developing regions.

The online format also required students to be highly self-motivated, which proved challenging for some. Students who struggled to adapt to Moodle in the early weeks of the term tended to fall behind without being able to catch up very well, indicating that future courses should include an onboarding session to help prepare students, in case the course involves a blended learning format.

4.4 Practical implications for blended learning

This study shows the potential of formative assessment to enhance comprehension in different blended learning models, such as flipped classrooms, rotation models, or flex models, especially for focused and accessible tools like quizzes. However, it also points out a need to be underpinned through institutional support for technical and logistical issues. Investments in digital infrastructure, along with targeted training for both students and instructors, are very important for such initiatives.

Furthermore, the simplification of assessment design by focusing on fewer but high-impact tasks could lighten the workload for students and thus enhance student engagement. As Ghouali and Ruiz-Cecilia (2021) contend, formative assessments need to be thoughtfully fitted into the curriculum to avoid overwhelming students and to ensure their effectiveness.

In this regard, the researchers suggest that teachers' professional development should be focused and directed to address the challenges of designing and delivering online assessments. Ghouali and Ruiz-Cecilia (2021) add that digital competencies should also be developed among students to make online formative assessment effective in EFL classrooms.

To enhance the effectiveness of formative assessments in blended learning contexts, the study recommends institutional investments in reliable digital

infrastructure to ensure seamless access to online assessments and targeted training programs for both lecturers and students. Improving technical support and platform reliability will enhance engagement, while professional development programs should equip teachers with the skills to design effective formative assessments. Additionally, student training in digital competencies will foster independent learning and better integration of online assessments in blended learning contexts.

Conclusion

This study investigated whether formative assessments raise achievement and engagement in the blended learning model for a group of second-year students at the University of Algiers 3. Based on the transition from classic classroom-based instruction to its online learning environment, some challenges were addressed in the current study by incorporating quizzes, assignments, and forums provided through Moodle.

The findings underline the potential of formative assessments, especially multiple-choice quizzes, to enhance student engagement and content understanding. The significant rise in quiz scores within the post-test reflects the gradual adaptation of students to online learning tools and the constructive impact of structured assessments. However, the study also pointed out various challenges: limited digital literacy, technical issues, and an overwhelming workload with multiple types of assessments. These factors contributed to reduced engagement in tasks such as forum discussions and writing assignments, which eventually curtailed the full realization of the formative assessments' potential.

The findings have important implications for the design and implementation of blended learning programs. To maximize the potential of formative assessments, training in the use of digital platforms for both students and instructors, streamlining assessment designs to focus on high-impact tasks, and investment in infrastructure to reduce technical barriers become paramount for educational institutions. By attending to these areas, blended learning can be a far more effective and accessible model for promoting language acquisition in EFL settings.

Future research should consider longitudinal studies to evaluate the sustained impact of formative assessments on learning outcomes and engagement. Additionally, comparative studies involving different digital platforms or diverse student populations would provide deeper insights into the adaptability and scalability of blended learning approaches.



While this study has shown that formative assessments in blended learning bear promise, it has also pointed out that this area is seriously in need of institutional support and thoughtful assessment design to overcome existing limitations and fully realize their educational value.

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