

The Symbiotic Relationship between Traditional and Digital Assessment Methods in Algerian Higher Education Blended Learning Environments

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Abstract:

The enforced shift to blended instruction in Algerian universities, lead by the COVID-19 pandemic, covered assessment practices. Teachers were driven to simultaneously blend digital and traditional assessment tools. This study aims to explore Algerian university teachers' perceptions, readiness and common practices of blended assessment. Through the use of an online semi-structured questionnaire, this pilot study is surveys a sample of 85 teachers from different Algerian universities. The findings provided empirical evidence on teachers' engagement in blended assessment practices and their positive dispositions towards using digital assessment tools. Thus, this study calls for the promotion of assessment in higher education through

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the adoption of digital practices and calls for further research in this area in the context of the Algerian university.

Keywords: Blended Learning; Digital assessment; Traditional Assessment; Blended Assessment; EFL teaching; Higher Education.

1- Introduction :

Blended teaching, as the result of the applications of technology in the educational field, is becoming increasingly recognized in language education. It refers to bringing together traditional and technological teaching methods to synergize the strengths of both modalities and foster a comprehensive learning experience. This teaching approach is considered as an advanced approach to instruction that involves a combination of traditional face-to-face teaching and online environments (Albiladi & Alshareef, 2019). Interestingly, this combination provides a more flexible, interactive, encouraging and inspiring educational atmosphere for learners (Zhang & Zhu, 2018). Furthermore, the online activities and the rapid digital information transfer offer the flexibility to engage in the process of learning/teaching regardless of location or time constraints.

It is globally acknowledged that the outbreak of the COVID-19 provided the supportive environment for the spread of blended teaching in higher education (HE). In order to ensure the continuity of the educational plans and the completion the academic programs, universities around the world adopted online teaching protocols. As the global health crisis gradually subsided and institutions began the transition back to in-person instruction, a hybrid approach emerged. This approach combined cautious on-site teaching with the continuation of complementary online activities reflecting

health safety procedures yet resulting in a shift to a more flexible and efficient educational models.

In the Algerian HE context, both teachers and students were driven to use different online platforms including mainly “Moodle” to facilitate the delivery of course contents and the evaluation of students’ learning (Guemide & Masouche, 2020; Hichour, 2022; Boubekheur, 2022; Laifa et al., 2023). In fact, this digital shift was not limited to instructional delivery; it also extended to assessment practices, thus integrating online assessment as a significant component of blended teaching and learning.

As a result, online assessment has gained a significant share of attention and witnessed remarkable rapid development, evolving into an indispensable element of contemporary teaching practices. This transition reflects the initiation of a broader pedagogical transformation, wherein assessment is no longer confined to traditional classroom settings but is increasingly embedded within flexible, technology-mediated learning environments.

In light of the aforementioned shift to blended learning in the Algerian HE system, teachers were and are increasingly required to implement online assessment tools in their practices. This does not mean that they had to abandon the traditional face to face assessment methods, but integrate online assessment practices along the traditional ones. Within this scope, this study seeks to answer three main research questions:

- What are Algerian university teachers’ perceptions about Online Assessment?

- How do Algerian university teachers' perceive blended assessment practices?
- Do Algerian university teachers' successfully practice blended assessment?
- Do Algerian university teachers show positive predispositions to the use of blended assessment?

2- Theoretical Background:

2-1- Assessment in Higher Education:

Assessment in HE plays significant roles including not only through enhancing students learning and progress, but also ensuring that academic programs accomplish the intended learning outcomes, and meet quality standards. Effective assessment promotes critical thinking, and provides a space for knowledge, while also preparing students for professional and real-world challenges. At the university level, assessment supports student-centered learning which emphasizes active learning and student engagement (Mahlangu, 2024; Rutherford et al., 2024) . These methods include formative assessments and self-assessment, which are designed to promote student engagement and independence.

Learner-centred approach to assessment in HE emphasizes active student engagement and autonomy, shifting the focus from simply measuring performance to supporting individual development and lifelong learning skills (Boud & Falchikov, 2007). This approach is applied through formative assessment practices, self-assessment, constructive feedback, and tailoring assessment methods to diverse learning styles and needs. These practices promote inclusivity, motivation, engagement and practical

understanding rather than rote memorization (Boud & Falchikov, 2007; Nicol & Macfarlane-Dick, 2006).

In the Algerian HE context, assessment is conducted under requirements of quality assurance, sustainability, and renovation. However, it faces hindering challenges. While Algerian universities have formal systems to ensure assessment quality, the gaps lie in aligning this assessment with the skills students need for the job market (Belimane & Chahed, 2022; Mohammed et al., 2024). The mismatch between assessment objectives and the overall objectives of HE constitutes one of the major Challenges. Further challenges coincide with recent developments, such as the use of distance learning which marked important progress in assessment, yet received large negative attitudes and practices challenges (Aouali, 2024).

2-2- Online Assessment:

Online assessment (OA), which is also labeled as Digital assessment (DA), Electronic Assessment (e-assessment), Computer-Based Assessment (CBA), Computer-Assisted Assessment (CAA), or Technology-Enhanced Assessment (TEA), is the type of assessment conducted through digital mediums such as computers, mobile phones or other computer technologies including internet mediums and assessment platforms (Issayeva, 2021). This type of assessment is among the alternative assessment practices resulting from the implementation of computer technologies in the field of education as a facilitating tool of teaching and learning processes.

Tools to deliver OA include a variety of options including; softwares, phone applications, assessment platforms and assessment websites. Examples of assessment online software include; Weave, Assessment Generator, EVA-SSESS and Flubaroo. Examples on assessment platforms

can be; Google forms, Microsoft forms, Trivie, Socrative, StoryPulse, InSpera Assessment, Award Force, Edmodo and Exam Time. Among the famous assessment apps are Kahoot and Quizlet. Examples of assessment websites for online testing include ClassMarker, TestGorilla and TestMoz. In fact, all the mentioned platforms provide teachers opportunity to create quizzes, share them with students online, automatically grade their performance and track their progress. They include questions and test banks with a variety of items.

Electronic assessment platforms (EAP) are among the most common tools of DA. According to Swiecki et al. (2022), EAP are becoming increasingly popular because they enable teachers to deliver questions that cannot be delivered on paper-pen tests, including for instance; questions incorporating multimedia and because they provide learners with instant individualized feedback. The use of EAP to assess students' performance facilitates the provision of formative and instant feedback that would promote critical learning processes and establish equity in education (Yulia, Husin & Anuar, 2019). Two of the most popular, easy to access and use platforms that teachers need to consider in improving their students' learning experiences are Google Forms and Moodle.

OA is a pedagogical support that can promote flexible classroom environment through facilitating teaching tasks including mainly the demanding assessment and feedback provision tasks. Álvarez and Rico (2006) highlight the fact that computer assisted testing (CAT) represents an innovative tool to measure language proficiency. These tests can be administered easily avoiding any logistical issues related to paper-and- pen tests delivery and they enable to provide immediate feedback. Moreover, Álvarez and Rico (2006) suggest that OA serves in providing immediate

results that would cut the long waiting time for results due to the lengthy time devoted to the correction of paper and pen tests.

However, the drawbacks of using online assessment, as summarized by Álvarez (2016), include cheating issues related to security and identifying test-takers' identity, technical issues The possible negative washback DA, “which to some degree is associated with the technological costs and the anxiety that taking the test on a computer can cause in test-takers” (Álvarez, 2016, p. 68).

2-3- Blended assessment:

Blended assessment (BA) refers to the combination the traditional paper-and-pencil assessment and technology based assessment methods (Janier & Shafie, 2009). According to Riley et al. (2014), tests administered exclusively in the classroom suing traditional paper and pencil are useful, yet, they neglect the advantages of technology. They supported the use of the mixture of online and offline tests to evaluate students' performances. On the same vein, Yukselturk & Curaoglu (2010) confirmed that one way to assess the difficulties of assessing learning is through the use of both face-to-face and online techniques to assess student learning outcomes.

Actually, the term BA is not exclusively created to refer to mixing online and traditional assessment methods; it is rather a flexible term that can refer to the use of more than one approach of assessment of learner's performance. Thus, it can be perceived in many ways depending on the purpose of its use. Therefore, and within the scope of this study BA entails the use of traditional methods and online assessment in assessing students' learning.

3- **Research Design**

 This study makes use of the descriptive method. It was conducted in the last semester of the school year 2024/ 2025.

3-1- **The sample**

 The selected sample, which is meant to represent the targeted population of Algerian university teachers, constitutes a number of 85 university teachers from the University of M’sila. Table 1 displays the sample description.

Table1. Study sample description

Gender	Male	45	52,94%
	Female	40	47,06%
Field of Expertise	Letters and languages	30	35,29%
	Humanities and social sciences	22	25,88%
	Political sciences	17	20%
	Technology	16	18,82
Years of Experience	1 to 4 years	13	15%
	5 to 8 years	38	45%
	8 to 11 years	17	20%
	More than 11 years	17	20%

From table1, the teachers were 40 females and 45 males of different teaching experiences ranging from 4 years (15%) to more than 11 years (20%). The remaining participants (65%) are from different experience ranges.

3-2- **The Research instruments**

The teachers were invited to respond to an online semi-structured questionnaire designed for the purpose of this study and administered online via Google form services. The online questionnaire holds three sections. The first Bio-data section is intended to describe the sample of the study in terms of gender field of expertise and years of experience. The second section is designed to explore teachers' perceptions about online assessment in general. The third section explores teachers' attitudes and current practices of blended assessment.

4- Data Analysis

The first set of data related to the first, second and third research questions exploring Algerian university teachers' perceptions and practices of OA and specifically blended practices of assessment, revealed a number of findings classified in the following tables and graphs.

The data obtained from the first items of the first section of the questionnaire summarized in table 2.

Table 2. University teachers' perceptions about OA use

Perceptions about online assessment	Mean	Std. D	N	Order
1. Online assessment was largely used before Covid-19	2,23	0,75	85	6
2. I kept using online assessment after COVID-19	2,59	0,69	85	7
3. Unlike paper-pen evaluation, online assessment provides teachers with a wide range of evaluation methods	4,52	0,85	85	4
4. Online assessment is an extra teaching burden	3,44	0,69	85	5
5. I only used online assessment when it was compulsory	4,77	0,82	85	2

6. Online assessment is not valid I cannot rely on it alone	4,81	0,52	85	1
7. I do not think online assessment can work in the Algerian context	4,65	0,72	85	3

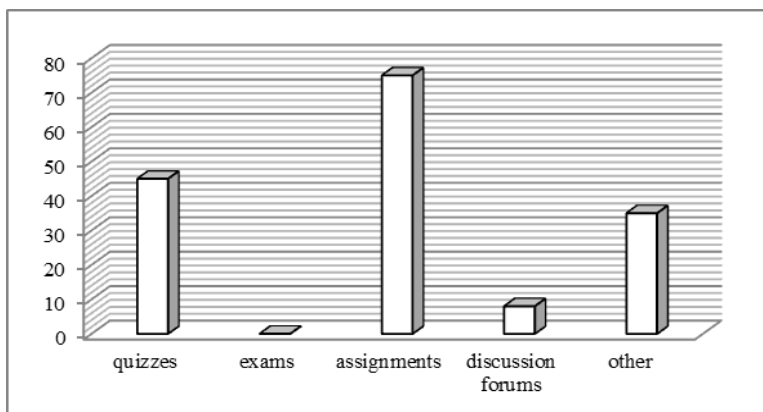
From table 2, it is confirmed that there had been limited use of OA before the pandemic with a mean value of Mean=2,23 and Std.D=0,75 indicating a low level of agreement among the respondents (item1). The majority of teachers showed very high level of agreement (mean=4,77, Std. D=0,82) about the fact that OA was only used because it was compulsory (item5), revealing that after the pandemic they stopped using it. Yet, a few teachers kept using OA after the Pandemic. This is confirmed by the low level of agreement on the second item. A very high level of agreement (mean=4,52) was on the benefits of OA (sub-item 3); however, there had been a moderate agreement (mean=3,44) on the fact that it is an extra-burden (item4). The last two sub-items 6 and 7 high levels of agreement (mean= 4,81 -4,65) indicate the negative attitudes teachers hold towards the use of OA. This negative attitude is also confirmed in item 4.

The second question of the second section of the questionnaire targeted the impact of Covid-19 on changing perceptions and practices of OA. From the analysis of teachers responses, it is found that the majority (82,79%) of teachers agreed on the fact that the COVID-19 assessment experiences changed their perceptions about OA. Teachers were asked in the sub-item of the second question to explain how their perceptions changed. Extracted themes revealed that most of the teachers (65%) who used OA during COVID-19 used to believe that it is unrealistic or unrealizable, but after using it, they knew it can be an accessible, varied and available

assessment tool. According to teachers (45%), OA benefits were not discovered until they practiced it.

As for the practices of OA, teachers were asked about the methods they used in the third question. Graph 1 below display the findings relevant to teachers use of OA methods.

Graph 1: The use of OA methods among university teachers



From graph 2, the most used methods of OA were assignments (88,24%), followed by online quizzes (52,94%) and discussion forums (9,41%). None of the respondents indicated online exams. Other methods were indicated by 41,18% of the respondents. These methods include Moodle, Google forms; Zoom and Google meet applications to deliver continuous evaluation activities including; quizzes and students' participation and engagement during sessions and to deliver their project works.

The third section of the questionnaire targeted teachers' perceptions and practices of BA during and after the pandemic. Table 4 displays data of the first items in the third section.

Table4. Perceptions about the use of BA

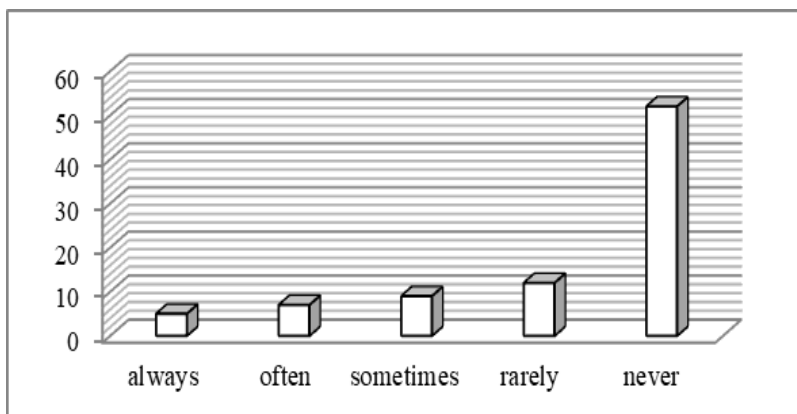
Sub-items	Mean	Std. D	N	Order
1. During the pandemic I blended the two types of assessment	2,01	0,76	85	5
2. I think blending online and traditional assessment methods is beneficial	3,54	0,82	85	3
3. Blending these two assessment methods is time consuming	4,22	0,79	85	1
4. It is impossible to blend these two types of assessment	4,10	0,82	85	2
5. I am still blending the two types of assessment	2,56	0,87	85	4

From table 4, the least agreement was indicated in the first and the last items revealing that teachers used OA besides their actual traditional methods only when required and only a few are still using it after the pandemic. This finding confirms the validity of the responses on items 2 and 5 in the first section of the questionnaire. Even though teachers showed very high level of agreement (mean=3.54, Std.D=0.76) on the effectiveness of blending assessment methods (ietm2), they think it is impossible to realize (item4) and time consuming (item 3) showing high levels of agreement about these items.

The second question of the third section, explored the frequency of the use of BA among the teachers who confirmed that they are still blending

online and traditional assessment methods. Graph 1 displays the data relevant to the frequency of using BA.

Graph 1: The frequency of the use of BA practices



From graph 1, it is clear that the majority of teachers (61,18%) did not use BA after the pandemic. A number of 14,12 % of the teachers rarely used it, and 10,59% indicated that they sometimes use it. Only a few (8,24%) used it often. Interestingly, 5,88% of the teachers (5 teachers) confirmed that they always use it.

The third question in the third section explored teachers' perceptions about the benefits of BA. From the responses, it was clear that teachers held unclear perceptions about the effectiveness of BA and blended learning in general. According to the teachers, the benefits of blending online and traditional assessment methods are only limited to varied tools to provide holistic picture of students' performance (35%) and a means to lower some teaching burdens including planning and scheduling quizzes and evaluation sessions (25%) and to facilitate the collection of submitted assignment (37%)

In the final item in the third section teachers were asked about the challenges faced in their practice of BA. Table 5 displays teachers suggested challenges.

Table 5. Challenges related to the use of BA

Sub-themes	Responses	%
1. Internet access and connectivity	85	100
2. Students' cheating in online quizzes	85	100
3. Lack of validity and reliability of the online tests	76	89,41
4. Teaching extra-burdens	72	84,71
5. Lack of professional training	69	81,18

A total agreement (100%) is on the first two challenges; internet connectivity (100%) and Cheating (100%). Moreover, the lack of the validity and reliability of the online tests is another significant challenge which received a 76% of agreement. Moreover, 72% of the teachers confirmed that blending assessment practices is an extra teaching burden, and 69% of them think that the lack of professional training is a challenge that is potentially limiting the use of blended assessment.

6. Discussion of the Findings

This exploratory study revealed interesting findings about Algerian university teachers' practices of online assessment in general and specifically their blended assessment practices. It is found that due the COVID-19 pandemic teachers were obliged to use online assessment. This finding is confirmed by many studies about distance teaching and assessment in the

Algerian HE context including, for instance, Hichour (2022), Boubekheur (2022), Guemid and Maouche (2020).

Remarkably, it has been revealed through the findings of this study that their perceptions of the use and the benefits of online assessment have changed due to the compulsory use during the pandemic. For most of them it is practical, accessible, and provides a varied and widely available assessment tool. Yet, just a few teachers kept using online assessment after the Pandemic. This finding is similar to what Hichour (2022) found in his study, revealing that only a few teachers adopted online assessment after the outbreak of the pandemic. She explained this finding by the age factor since aged teachers, showing less interest and lack of training on distance teaching, are the majority who abandoned the use of technology in their assessment practice after the pandemic. This study explains this finding by the challenges that teachers highlighted through their responses to the questionnaire including; problems of connectivity, lack of teacher expertise and preparation in the tools and methods of online assessment and the easiness of cheating among students which influences the validity of their scores.

For teachers online assessment can have negative side effects including the fact that it is an extra teaching burden, and it cannot be easily realized in our context by both teachers and students. This finding is confirmed by Guemid and Maouche (2020) and explained by a set of difficulties including lack of training among teachers and lack of interest and internet connectivity issues among students. However, this did not influence teachers' agreement on the benefits of online assessment. This confirms a positive attitude towards online assessment use.

Teachers used a variety of online assessment tools including; assignments, Moodle, Google forms; Zoom and Google meet applications. Some methods were less used including online quizzes and discussion forums. This finding reveals teachers ability to use online tools of learning and assessment that was also confirmed in similar studies by Guemid and Maouche (2020) and Hichour (2022).

As for blended assessment, teachers confirmed the blending of assessment methods during the pandemic because they were compulsory. However, few teachers are still blending assessment practices after the pandemic. These teachers are the teachers who are still using online assessment along with the tradition methods. Even though teachers agreed on the effectiveness of blending assessment methods, they think it is impossible to realize in our context due to specified challenges These challenges are confirmed by Álvarez (2016) and Abdulumuni (2022).

Another important finding is the unclear perceptions about the effectiveness of blended assessment practice due teachers' lack of practice and training on blended learning. According to the teachers, the benefits of combining online and traditional assessment methods were mostly limited to offering a greater variety of evaluation tools to measure students' performance and reducing certain teaching burdens, such as planning and scheduling quizzes, organizing evaluation sessions, and collecting submitted assignments. Teachers perceived benefits align with research showing that teachers' attitudes toward blended learning are often shaped by their prior experience and professional development opportunities (Garrison & Vaughan, 2008; Graham et al., 2013). In contexts where training is minimal, teachers tend to focus on the logistical conveniences of blended approaches

rather than their pedagogical potential to enhance engagement, support higher-order thinking, and provide continuous formative feedback (Alammary et al., 2014; Hrastinski, 2019). Without sufficient instructional design knowledge and technological proficiency, blended assessment may remain an underutilized supplement to traditional practices rather than an integrated strategy capable of transforming teaching and learning.

However, this assessment approach has further more efficient uses including, for instance, immediate feedback that can serve formative assessment purposes, promoted engagement, motivation and autonomy among learners, opportunities for authentic assessment experiences, reflecting the real-world applications of the skills and knowledge being assessed (Janier and Shafie, 2009; Yukselturk & Curaogl, 2010)

Conclusion

This study explored the perceptions and experiences of Algerian university teachers regarding blended assessment practices. The findings revealed that blended assessment practices were generally viewed favorably by participants. The negative attitudes recorded among some teachers are due to the lack of awareness of the benefits of blended assessment that is, in turn, due to lack of practice and training in this professional area. Furthermore, this study also identified challenges associated with implementing blended assessment practices. Accordingly, it points to due attention to this assessment approach from teachers, researchers and policy makers and calls for the need of research in this area, the need for professional development opportunities, the need for technological infrastructure provision, and supportive institutional policies.

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