Digital Language Assessment Literacy:
A Theoretical Overview for English as a Foreign Language Teachers

كفاءة التقييم الرقمي للغة:
خلفية نظرية موجهة لمدرسي الانجليزية كلغة اجنبية

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الملخص:

أدى التقدم في استخدام تكنولوجيا المعلومات في التعليم بصفة عامه إلى اهتمام متزايد بممارسة التقييم الرقمي. نتيجة لذلك أصبحت كفاءة التقييم الرقمي عنصرًا مهمًا في كفاءة تقييم اللغة بين مدرسي اللغة الانجليزية كلغة اجنبية. في هذا الصدد ، يهدف هذا المقال إلى تزويد مدرسي اللغة الانجليزية ومدربيهم بخلفية نظرية حول هذا المجال والتي من شأنها أن تساهم في تأطير مجهوداتهم لتطوير الكفاءة المهنية وخاصة الكفاءة الرقمية لتقويم اللغة. يركز هذا المقال على تحديد المكونات الرئيسية لكفاءة التقويم الرقمي للغات بما في ذلك المعرفة والمهارات والكفاءات اللازمة. كما يسلط الضوء على تأثيره على ممارسات تعليم اللغة الفعالة. يحث هذا المقال مّدرسي اللغة الانجليزية على إدراج التقييم الرقمي في ممارساتهم التقييمية والأخذ بعين الاعتبار تطوير كفاءاتهم في التقييم الرقمي باعتبارها مهارة مطلوبة للمعلمين في القرن الحادي والعشرين. كما يدعو إلى مزيد من البحث في هذا المجال.

الكلمات المفتاحية:

التقويم، تقويم اللغات، كفاءة التقويم الرقمي، تعليم اللغات، مدرس اللغة الانجليزية كلغة اجنبية.

Abstract:

The widespread of the integration of information technologies within the educational landscape has yielded a growing interest in the implementation of digital assessment practices. As a result, digital assessment literacy is becoming an important constituent of language assessment literacy among EFL teachers. In this respect, the aim of this paper is to provide EFL teachers and teachers' trainers with a theoretical background and related research in this area that would serve in framing their endeavors to develop digital language assessment literacy. This paper focuses on defining the main components of digital assessment literacy including knowledge, skills and competencies. It also highlights its impact on informed efficient language teaching practices. This paper urges EFL teachers to incorporate DA in their assessment practices and consider developing their digital assessment literacy being a requisite skill for teachers in the 21st century. It also calls for further research in this area of professional development.

Keywords:

EFL teachers; Language assessment literacy; Digital assessment literacy; Digital assessment; Information technologies

1. INTRODUCTION:

Assessment is often perceived, by teachers, as a monotonous task of preparing tests and assigning scores. However, the process of assessing students' learning is a complex multifaceted activity which implies a set of well-informed actions, including determining assessment objectives and performance criteria, selecting the appropriate assessment tools to evaluate learners' performance, providing clear constructive feedback that clarifies the points of strength and weakness and how to deal with both.

Consequently, it has been widely recognized in educational research that the quality of teaching goes hand in hand with the quality of the assessment practices. Teachers who lack knowledge about planning, selecting, designing and administering different types of assessment tools will definitely face difficulties in collecting evidence about learners' levels of proficiency and, thus, may lack necessary data to reflect and adjust their relevant teaching contents and practices. The knowledge and skills that promote the implementation of useful assessment are referred to as assessment literacy.

Stiggins (1991, as cited in Stabler-Havener, 2018) highlights the importance of assessment literacy through depicting the assessment literate teacher as a person who has the ability to distinguish between good and poor-quality assessments and applies this knowledge to effectively assess his students learning. Meanwhile, Siegel and Wissehr (2011) specify the knowledge that a teacher should develop to be an assessment literate as a combination of "an understanding of theory, or theoretical principles for assessment, and practice, or practical methods of use in a classroom" (p. 373).

According to Harding and Kremmel (2016), since language teachers are the exclusive users of language assessment, they definitely need to develop competence and knowledge of the principles and practices of language assessment. Accordingly, language assessment literacy (LAL) constitutes an integral part of language teachers' expertise (Popham, 2009; Harding & Kremmel, 2016). It is, as reviewed by Coombe, Vafadar, and Mohebbi (2020), commonly assumed as "a repertoire of competences, knowledge of using assessment methods, and applying suitable tools in an appropriate time that enables an individual to understand, assess, construct language tests, and analyze test data" (p.2).

Yet, LAL, if limited to knowledge and skills of using traditional methods of language assessment, can be rendered useless and insignificant. In light of this limitation, it is essential that language teachers possess the ability to adapt their LAL and practices to the current trends and tendencies in the field of assessment. According to Eyal (2012), the use of modernized methods of assessment alongside with the traditional methods is highly recommended for effective assessment practice as it allows to create a more inclusive picture of learners' achievements.

It is worth mentioning at this point that the tendency to use digital assessment is boosted in recent times by the global upsurge of digitalization in all aspects of life due to the Covid-19 pandemic. Consequently, new methods of language assessment were introduced including assessment in digital environments. Digital assessment offers teachers and learners facilitative solutions to enhance their teaching and learning practices. For learners, digital assessment offers a diversity of learning opportunities that enable them to show elevated thinking levels (Eyal, 2012). As for teachers, it enhances the teaching and assessment practices since it offers a diversification in the evaluation methods of learners addressing communication skills and reflective thinking and can provide a solution for individual differences as it enables teachers to assign adapted assessment tasks to learners needs.

Within this scope, language teachers, specifically EFL teachers, are required to broaden their LAL to encompass the knowledge and skills relevant to the use of digital assessment; in other words, they are required to develop their digital language assessment literacy (DLAL). Accordingly, this research paper contributes to this research area by providing a theoretical background that builds on the collection and reflections on the relevant literature. The focus of this research paper helps in providing an overview that would assist in EFL teachers in understanding the DLAL, its importance, its components and providing them with suggested methods to develop it among EFL teachers.

2. Language Assessment:

Language assessment is a subfield of language research under applied linguistics whose main scope is the assessment of first, second or other languages' learning (Shohamy & Hornberger, 2008). This strand of assessment targets individuals' competence in core language skills (reading, writing, listening, and speaking), as well as their ability to integrate these skills effectively. The complexity of language assessment mirrors the inherent complexity of language learning itself. Coombe et al. (2020) explain this relationship, emphasizing that the multifaceted nature of language learning, encompassing varied modes and constructs, necessitates correspondingly sophisticated assessment practices.

Furthermore, to explain the complexity of language assessment, Wigglesworth and Frost (2008) posits that effective language assessment tasks should prioritize the evaluation of productive skills by simulating authentic language use scenarios. This perspective is corroborated by Douglas (2000), who emphasizes that the goals of language testing must stem from a thorough analysis of real-world communicative contexts. The creation and administration of these tasks represents, in a way, a complex activity for language teachers.

Coombe et al. (2020) highlight six assessment themes involved in language assessment and which reflect language learning objectives. The first type of assessment seeks to improve language learning in context such as learning oriented assessment and dynamic assessment. The second theme, labeled as classroom assessment, focuses on assessing task performance within the educational settings. The third theme, referred to as integrated language assessment, promotes the integration of language skills in assessment activity. The fourth type is content assessment which is based on the idea that content and language are supplementary to one another. The fifth type is the multilingual assessment, through which learners can use their whole language-learning repertoires and multilingual competence. The last type of assessment is the multimodal assessment which is based on the fact that texts in different languages are constructed in different modes and present different meanings.

Further, language assessment is a dynamic process. This fact is confirmed by Al-Mahrooqi (2017) asserting that it is affected by social, cultural, and historical factors. She goes on explaining the changes that it has undergone in terms of objectives, processes, and methods through the last few decades. Indeed language assessment has changed meeting the requirements of the new objectives of language teaching and learning that, in turn, has changed due to shifts in language perception and use. From a mere concern on grammar and accuracy to authentic performance, the scope of language assessment has been significantly transformed.

In conclusion, the multifaceted and intricate nature of language assessment necessitates the engagement with a vast array of principles and dimensions (e.g., assessment purpose, task design, scoring criteria). Therefore, EFL teachers are tasked with developing a comprehensive understanding of both the theoretical underpinnings and practical considerations of language assessment to ensure the implementation of effective and appropriate assessment practices.

3. Language Assessment Literacy:

Examining the suggested definitions of LAL in the related research, it is clearly revealed that it is a complex, multifaceted construct which enacts serious efforts from the side of language teachers to grasp and master all the necessary knowledge and skills for a successful language assessment practice.

Most definitions of LAL commonly point at the fact that it holds theoretical and practical knowledge about aspects of effective assessment. According to Pill and Harding (2013), LAL is a repertoire of competences that assists language teachers to not only construct and utilize language tests effectively but also to critically analyze and effectively use the data garnered from such assessments to inform decisions about their teaching outcomes.

Malone (2013) defines LAL as language teachers' knowledge and understanding of language testing and their application in real classroom practices. Furthermore, Taylor (2013) provides a detailed list of the assessment knowledge constituents which are classified in eight areas, namely knowledge of theory, principles and concepts, technical skills, language pedagogy, sociocultural values, local practices, personal beliefs/attitudes, and scoring and decision making. Taking a similar perspective, Fulcher (2012) suggests three main categories of knowledge to be mastered by language teachers, namely theoretical knowledge, procedural or practical knowledge, and socio-historical or principled knowledge.

Moreover, Popham (2009) specifies certain standards related to LAL, involving knowledge about types of tests and test qualities such as reliability, validity and fairness in addition to knowledge about using traditional and alternative methods of assessment, including, for instance, authentic assessment, performance-based tasks and portfolios assignments. As for Brookhart (2011), other aspects should be included in order to provide a more comprehensive definition of LAL for teachers, including the full understanding of the language learning processes, the relationship between assessment, instruction, and curriculum, the test design methods, the test administration and the feedback provision techniques and methods.

Noticeably, some researchers suggested further aspects of knowledge that serve assessment practices including, for instance, understanding EFL learners motivation and test anxiety so as to encourage and motivate learners to be engaged in assessment tasks and reduce their test anxiety and stress (White, 2009). As for Popham (2009), it is important to develop knowledge about the use of information and communication technologies (ICTs) and digitalization in the assessment practices.

All the aforesaid summarized ingredients of LAL make it so important to consider developing it because it seriously constitutes an important contributor in promoting language instructional/assessment practices. According to Bayat and Rezaei (2015), LAL assists teachers to collect reliable and valid information about student learning to enhance their teaching practices, to avoid inaccurate assessment and the impact of the resulting decisions on both teachers and students, and to choose the most relevant and useful evaluation tools for each learning objective. Furthermore, informed well developed LAL enables teachers to make rigorous and sound instructional decisions and to cope with any instructional situations germane to the testing and evaluation process (McMillan, 2019). Its impact on teaching further encompasses affective factors that can inhibit or foster learners 'engagement and motivation in language learning. According to Popham (2009), LAL helps EFL teachers to avoid resulting negative assessment attitudes and stress among learners.

Along with the growing significant pedagogical implications of LAL in teaching, a growing equivalent concern on how to develop it among language teachers as part of their preparation. Herrera Mosquera and Macías (2015) emphasize the inevitability of assessment training for both pre-service and in-service teachers. Likewise, Stiggins (1999, as cited in Herrera Mosquera & Macías, 2015) suggests a set of procedures and measures to take to promote teachers' LAL including:

- the inclusion of a unit or multiple units on assessment in teacher education programs

- a separate course or set of courses on assessment methods and techniques dedicated to pre-service teachers or in-teachers

- promoting auto-professional development among language teachers

- assessment training by experts in assessment and evaluation

Nevertheless, it is insufficient to develop teachers' LAL through training them only on theoretical knowledge as they need to develop strategic skills to use this knowledge in the field (Malone, 2008; Popham, 2009). Thus, there should be a link between theoretical knowledge and real practice of assessment. This is what Fersaoui (2022) highlighted when she raised the issue of the discrepancy between what pre-service teachers learn and what they face when they start practice.

Other types of LAL training are suggested by Herrera Mosquera and Macías (2015); for instance, forming teachers' study groups and collaborative action research; attending conferences; participating in EFL teaching and assessment workshops; self-development though reading the latest research in the field of assessment. Al-Mahrooqi (2017) suggests online professional development through participation in online courses and workshops. Furthermore, Al-Mahrooqi et al. (2017) emphasize the importance of continuous professional development (CPD) as a means to alter and develop old assessment knowledge and practices.

4. Digital Assessment:

Digital assessment (DA), also known as electronic Assessment (E-assessment), online assessment, Computer-BasedAssessment (CBA), Computer-Assisted Assessment (CAA), or Technology-Enhanced Assessment (TEA), is the type of assessment delivered through digital devices including, for instance, computers, mobile phones, and other computer technologies including internet mediums and assessment platforms (Issayeva, 2021). This type of assessment is proposed as an alternative to traditional methods of assessment as a result of the implementation of the computer technologies in the field of education as a facilitating tool of teaching and learning processes.

Among the advancements in the use of computer technologies in assessment is the online delivery of tests or online assessment. According to Alvarez (2016), in web-based assessment (WBA), tests are taken at a distance so that "the test is located as a website on the tester's server where it can be accessed by the test-taker's computer" (p.66). In this mode of assessment the tester can use a variety of mediums and aids including, for example, images, sounds, and videos (Alvarez, 2016). In fact, the use of such mediums can serve in increasing test authenticity, clarifying test requirements and increasing its validity.

Another practical gift offered by advanced technologies is automated assessment (AAs). This type of assessment is carried through computer programs that work in terms of test-specific algorithms that interactively control students' performance in the given tests (Chapelle & Voss, 2016). Automated feedback and automated scoring are common terms in the area of AAs. According to Yildiz (2021), automated feedback refers to "instant feedback generated by the systems that use computer technologies" (p.9), and automated scoring refers to "the act of producing scores automatically with the help of scoring algorithms" (p.9).

Via the use of AAs, teachers can make sure that learners receive immediate, clear, detailed, individualized and automated feedback on their performance. Explained by Chapelle & Voss (2016), these assessment modes can facilitate the formative assessment tasks as they ensure that students receive their individual work and customized tasks based on their respective results from the adaptive algorithm, immediate feedback on their learning progress.

Artificial intelligence (AI) as part of the digitalized trends in education, can serve in facilitating and promoting assessment practices. Kengam (2020) suggests that assessment can be developed and realized through machines, exactly, artificial intelligence. Actually, the use of AI serves not only in providing automated individualized feedback but also in generating assessment tasks. According to Swiecki et al. (2022), AI "can generate assessment tasks, find appropriate peers to grade work, and automatically score student work. These techniques offload tasks from humans to AI and help to make assessment practices more feasible to maintain"(p.2). Specifically, given the nature of language performance tasks, AI enables authentic assessments for language teachers as it has the facility to simulate acts undertaken by native speakers through simulated tasks in both virtual and physical learning environments (Swiecki et al., 2022).

Furthermore, adaptive assessment, also known as computerized adaptive testing (CAT), has been introduced to the field of assessment providing opportunity to tailor assessment experiences to meet students' individual differences. Swiecki et al. (2022) confirm that this mode of assessment permits the adjustment of tasks to individual students' abilities and needs instead of

delivering one test to all students at once. Consequently, individual assessment can be more accurate and effective especially with learners with special needs. Additionally, the CAT can be used to efficiently assess language skills. Norris, Kenyon, and Malabonga (2001), emphasizes the benefits of computerization of complex speaking skills tests which does not only lie in their adaptability but also in their creativity through which learners are offered a variety of topics. This, according to Norris et al. (2001), contributes to promoting their interest and engagement with the exam.

By the same token, assessment of students' writing skill is automated by means of computerized technology. Many systems have been developed and used in practice for automated essay scoring among them is AI (Ke and Ng, 2019; Swiecki et al., 2022). Confirmed by Petchprasert (2021), " Computers or automated text tools can provide information about multiple variables in textual features, explain differential findings of multilingual texts, allow users to easily store results of analyses in data files, and demonstrate cohesion relations and language discourse characteristics" (p.4). Moreover, automated text analysis can perform activities like "accessing vocabulary from online dictionaries and indicating misspelled words, basic morphemes, or phonemes" (Petchprasert ,2021, p.4).

Typically, all the aforementioned innovative methods of assessment offered by digitalization resulted in a plethora of digital assessment tools (DATs) and techniques that can significantly transform the exercise of traditional assessment. These DATs are used, explored or still under experimentation. The following section summarizes some tools that can be used to assess students in different subject matters including languages.

5. Tools of Digital Assessment:

DATs can be assessment software, 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 with the 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 digital assessment. The 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 (Yulia et al., 2019; Swiecki et al., 2022). Furthermore, 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. Google Forms platform includes a variety of items of different types, including check box, multiple-choice, true or false, and open-ended items. With the analysis of students' data both collectively and individually, it allows teachers to track student learning progress and performance (Issayeva, 2021). Moodle, being an open-source learning management system (LMS), it provides various digital assessment tools to evaluate students' performance, including quizzes, assignments, and workshops. Like Google Forms, Moodle platform includes different types of questions and activities. Both platforms, according Issayeva (2021), provide teachers with convenient assessment tools that do not only assist teachers in assessing students but also serve in making online learning a "fun, interactive, and self-paced experience".

A new trend of using game-based tools in assessment marked new teaching practices since it proved to contribute in reducing assessment and test anxiety. Internet-based gamification apps provide a means through which teachers and students can have fun with the assessment process (Yulia et al., 2019). These apps, according to Yuli et al. (2019), allow teachers to post tests and students to answer them on their phones during class. Among these phone apps is Kahoot in which tests can be developed and administered in a "game-show format". Similar to other DATs, this gamification app provides automated feedback and adapts to students' performance and is one of the most motivating and effective tools that can promote positive and energetic classroom atmosphere (Yuli et al., 2019).

An abundant number of DATs is presented for language assessment purposes. These tools enable learners to practice their language skills and to use language in authentic situations. Khan, Kim and McClendon (2020) represent three efficient tools, namely Socrative, NearPad and Adobe Spark Page. The three tools, according to Khan et al. (2020), are versatile teaching tools that serve formative assessment purposes and that use adaptive tasks to meet different levels of learners. Socrative can be used in class real-time through mobiles or tablets, allows teachers to track and monitor students' progress, and can be efficiently used to teach and assess grammar, vocabulary and language skills (Khan et al.,

2020). Nearpod allows for interactive assessment activities through PowerPoint slides, Google Slides, videos, audios, pictures, or web content (Khan et al., 2020).

Eyal (2012) suggests creative technological tools that can serve as both learning tools and DATs, including digital portfolio, forums, online peers assessment. These tools, according to Eyal (2012),"increase involvement of the learner in assessment while decreasing the weight of the teacher's assessment" (p.42). Eyal (2012) goes further proposing some learning environments that can be used as effective DATs, namely blogs as assignments to be evaluated by teachers and Wikis, as collaborative writing spaces.

In essence, the effectiveness of the DATs suggested in the related literature is determined by teachers' willingness, knowledge, and skills in using them. Thus, it is worth highlighting here that DAL dictates the rules of efficient use of DATs. Without a strong foundation in DAL, teachers might struggle to select appropriate DATs, utilize them effectively for assessment purposes. Consequently, this could lead to flawed assessments that do not accurately reflect students' learning or provide them with meaningful feedback.

6.   Pros and Cons of Digital Assessment:

DA is a teaching pedagogical support that can promote flexible classroom environment through facilitating teaching tasks including mainly the demanding assessment and feedback provision tasks. DATs provide teachers with facilities that assist them in the design, the administration, the scoring and the provision of instant, quick, easy feedback to large numbers of students (Issayeva, 2021).

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. Álvarez and Rico (2006) summarized some of the advantages of this assessment mode in the following:

- Efficient administration with a small or a large group of students in any setting which eliminates issues related to paper and pen tests including; time and place.

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

- Efficient item development which assists teachers in developing valid and accurate tests and exams.

- Increased authenticity which is necessary in language testing ensuring testing students' performance in real life native like situations.

Noticeably, the use of DA serves in eliminating paper and pen related issues and troubles including logistical considerations, consistency, authenticity, and rapid feedback provision. According to Pathan (2012), the benefits of implementing CAT include the following:

- Administrative and logistic issues are much easier to overcome

- Consistency and uniformity is offered.

- Authenticity and greater interaction are enhanced.

- Insight into test-taker's route and strategies is offered

- Tests are individualized.

- Self-pacing is provided.

- Immediate test results and feedback are offered.

- More accurate assessment of the test-taker's language ability is provided.

- Less time is required in the administration process

- A more positive attitude toward tests is created (as cited in Álvarez,2016, p.68)

On the same vein, Roever (2001) extricates a number of merits of the use of WBA, including; flexibility in time and space as it reduces the time consumed and the tools which are limited to a computer with/ without Internet connection and a Web browser. The second merit is ease in writing tests since these tools provide testers and test takers with simple instructions and services to use. The third aspect, according to Roever (2001), is affordability because most of these tools are free or provided by the institution. To add to Roever's (2001) last point, it is clear that unlike paper and pen tests, digital tests make zero use of paper and thus reducing costs of printing several copies especially in outnumbered groups of students.

Even though there are so many advantages gained out of the use of technology in assessment, it is an inescapable fact that there are several issues associated with their use. The drawbacks of using DA summarized by Álvarez (2016):

- Security is the most frequent issue of DATs

- Identifying test-takers' identity. In spite of the advancement in the area of test taker identification it is not always easy to confirm that the test-taker is the concerned student

- Technical issues (for instance internet connectivity, screen size, inaccurate automated scoring) that can have a negative impact on the quality of the test.

- The possible negative washback DA

Swiecki et al. (2022) highlight a number of critical issues related to automated assessment practices. The first issue is "the sidelining of professional expertise", that leads to the acceptance of machine evaluation as correct and unquestionable. For this problem, according to Swiecki et al. (2022), there must be a balance between automated and teacher decision-making. The second issue is the removed accountability away from teachers' shoulders. Students will stop blaming the teacher for misgrading and start blaming "the programmers, learning engineers, instructional designers, software vendors and other humans that have no direct knowledge of the students being assessed, their local contexts, or even necessarily the educational systems" (p.6). The third issue is "Restricting the pedagogical role of assessment" through eliminating teacher judgments based on his/her knowledge of the real levels of the students which can be reflected in showing leniency or strictness in evaluating students work when it is needed for their benefit. The last issue is associated with the importance of exam surveillance that is absent in distant exams which may lead to malpractice and other forms of cheating.

Ultimately, research in this field is in progress seeking to upgrade the level of the benefits of using DA and to minimize the hindering challenges. Overall, digital assessment can be a valuable tool for teachers, providing them with a number of benefits that can help them to improve their teaching and their students' learning. Rather, it is a tool that can be used in conjunction with traditional methods to provide teachers with a more complete picture of student learning.

7. Digital Language Assessment Literacy:

Developing digital literacy is part and parcel of LAL and a key aspect in language teacher professional development. Digital language assessment literacy implies developing a repertoire of knowledge about digital implications in assessment and knowledge of using DA methods to construct language tests, to administer them and analyze test data.

Accordingly, digital language assessment literacy (DLAL) is the ability to use digital tools and resources to assess language learning. It is a central skill for language teachers given the fact that the use of DATs is an unavoidable charge imposed on them as a result of the fast transformation of language proficiency assessment methods due to the evident outbreak of digitalization. Thus, in other terms, DLAL refers to the language teacher AL that is tailored to the digital learning environment.

Digital language assessment literacy involves a complex interplay of skills and knowledge needed to effectively use technology for assessing language learning. Familiarity with Learning Management Systems (LMS) is one of the basic constituents of DLAL. The LMS are software applications for the administration, documentation, tracking, reporting, automation, and delivery of educational courses, training programs, materials or learning and development programs. An LMS, as explained by Eyal (2012), provides teachers with the tools for the development and administration of tests and management of feedback.

The following is an adapted list of the abilities and skills language teachers need to be a digital literate teacher suggested by Eyal (2012). The first level is the basic DAL which includes:

- The use of digital tools in all phases of the evaluation process: from design to drawing conclusions.

- The use of an LMS database to identifying sources of error in the teaching process, identifying difficulties on tests on both personal and class wide levels, to draw conclusions and plan instruction

- The regular testing of the effectiveness and suitability of the selected technological tools and components.

- The organization and documentation of all the mutual feedback and their efficient use to monitor and promote learning

- Management of formative and summative assessment scoring and interpretation of results based on a digital database.

- Effective use of assessment data in the digital database for pedagogical decision making and for planning the teaching–learning–assessment processes.

The second list delineates the DA skills and abilities required in an intermediate DAL level. It includes:

- The prudent use of the number of computerized tests used for learning assessment.

- The holistic view of the relationship between teaching, learning and assessment and the integration of alternative methods of DA

- The ability to diagnose and assess a range of learning areas using performance tasks that incorporate various technological tools.

- The use of a variety of methods and digital tools to track learning progress.

- The appropriate selection of DATs to meet the learning objectives and teaching methods.

- The combination of several technologies to measure and assess learning, to increase the validity and cross-check information.

- The development of appropriate criteria for evaluating performance in a digital environment, and using feedback and guidance to promote learning.

- The awareness and ability to cope with the risks and inherent ethical issues associated with the use of DATs.

Finally, the advanced level of DAL includes teachers' ability to:

- share the assessment methods and evaluation criteria with learners, using learning systems and applications that enable transparency and collaborative learning.

- encourage cooperative learning by having students expose their learning outcomes to their peers at all stages of implementation and at the end of the learning process (through digital portfolio, personal learning environments, wikis, blogs, podcasts, publishing or multimedia databases).

- encourage peer assessment through the integration of collaborative technologies that enable comment and discussion, while developing skills for learners and promoting mutual feedback.

- collaborate with others as part of the assessment process, by disseminating information, and providing access and permissions to various digital environments.

- produce rich assessment information about both learners and the learning-teaching process, based on documented data collection and cross-checking a variety of digital tools over time, and the ability to use interpretation to promote learning.

- encourage learners to use self-assessment and reflection, using advanced digital technologies such as writing a blog, computerized practice tests.

- create online anonymous feedback surveys on the learning-teaching process and the teacher, and use of the information obtained for self-reflection to improve instruction and assessment.

- providing learning resources for learners (tasks, information sources and products) appropriate to their learning needs

To conclude, and in light of the related research, to be a digital assessment literate, EFL teachers ought to cover five main areas, namely foundational/theoretical knowledge, technical skills, pedagogical skills, ethical considerations and professional development. The following table summarizes the skills under each category:

Theoretical Knowledge	- Language learning theories - Language assessment principles (e.g, validity, reliability, bias, and washback) - Digital technologies use in education - The principles of language assessment, in other terms, they need to develop LAL.
Technical Skills	-Ability to select and use appropriate digital assessment such as Google Forms, Microsoft forms, Moodle and Kahoot. -Proficiency in using digital tools - Data analysis and interpretation
Pedagogical skills	- Designing effective digital assessments (aligned with learning objectives, clear instructions, appropriate difficulty level, and engaging format.) - Providing meaningful feedback using technology - using assessment data to promote instruction
Ethical considerations	- Privacy and data security - Accessibility and inclusivity - Designing digital assessments tools that are fair and equitable.
Professional development	Staying updated with emerging technologies Collaboration and sharing best practices Engaging in training programs and workshops

Table 1: Areas of Digital Language Assessment Literacy

Overall, as long as teachers are aware of the importance of DAL in conducting efficient teaching practices, they are more likely to actively seek out opportunities to develop their digital assessment literacy. The following section explores various strategies and approaches that can be employed to support the development of DAL among EFL teachers,

Development of Digital Language Assessment Literacy:

As a matter of fact, developing DAL among language teachers is an important investment that would promote the outcomes of language teaching and learning. Providing teachers with the essential theoretical and practical knowledge of DA and its different aspects they need in order to use DA effectively will lead them to embrace technology to enhance their teaching and, thus, to easily reach their teaching objectives.

To develop DLAL among language teachers, one key effective method is professional training as part of institutional efforts and personal endeavors of professional development. Professional training on LAL and DAL would be a good opportunity to provide teachers with the necessary knowledge, principles, and competences of language assessment in digital environments. Likewise, Husain, (2021) emphasizes training as it equips teachers with the procedures, methods and tools of DA. Stimulatingly, Fersaoui (2022) directs attention to the importance of linking pre-service teachers' training and real field practice to avoid the discrepancy between the expected outcomes of the training and the reality of practice. Eyal (2012) suggests that DAL can be acquired through interaction with the environment, so, for teachers to develop DAL they need to interact with the digital environment and get involved into practice. Encouraging teachers to experiment with different DA tools and resources enables them to find the tools that work best for their students and their teaching style.

The creation and promotion of a culture of assessment literacy among language teachers in all levels of education can be a good strategy to encourage teachers to work on their literacy development. To this end, teachers should be encouraged to ask, discuss, share and reflect on their assessment practices. Moreover, this assessment culture can be spread through teachers' conferences, workshops, forums and online courses organized by institutions and research centers.

9. Digital Language Assessment Literacy among Algerian EFL Teachers:

Digital assessment is taking a rapid development pace and becoming an avoidable teaching skill in the Algerian EFL classroom. Whether they prefer it or not, teachers are obliged to incorporate DA tools and methods in their assessment. This was truly witnessed in the outbreak of Covid-19 in the end of 2019 and the beginning of 2020 when most schools and universities were subject to enforced lockdown. As a result, e-learning became the only means of teaching and number one priority in all countries around the world including Algeria. Consequently, DAL is a necessary professional quality to develop among language teachers to be able to efficiently use DATs in their teaching.

The research on DA in the Algerian context corresponds with the growing interest in its integration. The examination of this research research reveals a range of interesting findings. Many studies (e.g, Berbar & Hamouda Ait, 2019; Elottri & Gasmi, 2022) acknowledge Algerian teacher recognition of the benefits of digital assessment tools for many reasons, for instance, the efficiency and convenience offered by digital assessment tools, particularly in time-constrained situations (Hadi, 2024). Furthermore, research indicates willingness among educators to learn and utilize digital platforms for assessment, suggesting their openness to embracing technological advancements (Elottri & Gasmi, 2022; Hamadouche & Ghoues, 2023)

However, along with the recognized benefits and necessity of the development of DA lie significant concerns regarding its effectiveness and practicality. These concerns highlight the need for addressing teacher anxieties and fostering a sense of confidence in their ability to utilize these tools effectively. Research identifies challenges hindering the easy adoption of digital DA. Studies like Hamadouche and Ghoues (2023) highlight the lack of infrastructure and technical expertise as significant barriers. Among the limitations hindering the widespread adoption of DATs include the lack of sufficient training and support for teachers in using these technologies effectively (Elottri & Gasmi, 2022).

Therefore, while the use of digital assessment tools holds promise for Algerian EFL teachers, addressing these challenges through targeted training to develop their DAL, planned promotion of infrastructural requirements of the DA practice, and ongoing support is crucial to fully embrace the potential efficiency of these technologies in the Algerian educational landscape and, thus, pave the way for a more efficient, effective, and learner-centered assessment experience.

Conclusion:

After the pandemic, e-assessment is still used as it proved to be an effective tool that was esteemed by teachers. CBA, CAA and WBA have offered a great set of benefits to teachers through freeing them of many assessment burdens including the exhausting task of creating tests and exercises, the insurance of the appropriate setting for the tests and exams, the lengthy and daunting correction process, the nearly impossible mission of providing immediate individualized feedback to students, the storage of students' results and the tracking of their progress, the heavy responsibility of ensuring objective evaluation and equity of assessment, the use of multimedia to test authentic use of language and many other assessment roles. All these assessment tasks are extravagant burdens with overcrowded classrooms and outnumbered groups of students. This fact, then, adds to the importance of developing DAL for teachers to grip the benefits of DA.

Based on the gained insights from the related literature, strategies to develop digital assessment literacy and skills among Algerian EFL teachers could include:

-The implementation of specialized training programs dedicated to the use of digital assessment tools and methodologies in the EFL classroom. This could involve collaborating with international organizations or universities with expertise in digital assessment to develop tailored programs for Algerian teachers.

-The promotion of collaborative professional development among teachers through establishing collaborative projects and knowledge-sharing platforms where experienced teachers and researchers can mentor and support their peers in developing their digital assessment skills.

-Addressing the limitations in access to reliable technology and internet connectivity by investing in infrastructure development and providing teachers with necessary resources to conduct DA.

-The needed consideration of the local cultural and contextual factors when implementing DA which implies tailoring digital assessment tools and methodologies to the specific needs and capacities of both Algerian teacher and learners.

In conclusion, this paper supports the body of the current DAL literature as it raises awareness towards its importance through highlighting the fact that the level of DAL is not only a supporting tool to promote teaching practices but also an index of teachers' quality and professional development. Thus, it urges Algerian EFL teachers to consider developing DLAL, and invites researchers in the field of assessment to focus on DLAL and all means to develop it. It is optimistically expected that the focus on this aspect of teacher professional development could be reflected in further flourishing outcomes on language teaching, learning and assessment

Bibliography List:

Al-Mahrooqi, R. (2017). Introduction: EFL Assessment: Back in Focus. In R. Al-Mahrooqi, K. Coombe, F. Al-maamari & T. Vijay (Eds.), *Revisiting EFL Assessment: Critical Perspectives* (pp. 1-6). Switzerland: Springer International Publishing.

Al-Mahrooqi, R., Coombe, C., El-Maamari, F., & Thakur, V., (eds). (2017). *Revisiting EFL assessment: Critical perspectives*. Switzerland: Springer International Publishing. http://link.springer.com/10.1007/978-3-319-32601-6

Alvarez, M., F. (2016). Language Testing in the Digital Era. In Martín-Monje, E., Elorza, I., & Riaza, B., G, *Technology-Enhanced Language Learning for Specialized Domains Practical applications and mobility* (pp.61-72). Routledge.

Álvarez, M., F., & Rico, J., G. (2006, January). *Web-based Tests in Second/Foreign Language Self-Assessment* [conference paper]. Annual Convention of the Association for Educational Communications and Technology 2006.

Bayat, K., & Rezaei, A. (2015). Importance of Teachers' Assessment Literacy. *International Journal of English Language Education*. Retrieved from: https://doi.org/10.5296/ijele.v3i1.6887

Berbar,K., & Ait Hamouda, H. (2019). Teachers' Perspectives on the Benefits and Challenges of ICT Integration in Algerian EFL Classrooms. TRANS: Internet journal for cultural studies . Retrieved from https://www.inst.at/trans/23/

Brookhart, S. (2011). Educational assessment knowledge and skills for teachers. *Educational Measurement: Issues and Practice*, *30*(1).

Chapelle, C. A., & Voss, E. (2016). 20 years of technology and language assessment. *Language Learning & Technology*,20(2),pp.116–128.

Coombe, C., Vafadar, H., and Mohebbi, H. (2020). Language assessment literacy: what do we need to learn, unlearn, and relearn?, *Language Testing in Asia*, 10(3).

Csépes, I. (2021). The Evolving concept of (Language) Assessment Literacy. Implications for teacher education. *Central European Journal of Educational Research, 3*(1), 120–130.

Djoub, Z. (2017). Assessment Literacy: Beyond Teacher. In Al-Mahrooqi, R., Coombe, C., ElMaamari, F., & Thakur, V., (eds). *Revisiting EFL assessment: Critical perspectives*(Pp. 9-28). Springer International Publishing: Switzerland.

Ellotri, E., & Gasmi, M. (2022). Investigating the Digital Literacy of EFL Teachers in Algerian Universities to Promote Blended Learning. *Journal of social sciences*,16 (2), pp. 524-539.

Eyal, L. (2012). Digital Assessment Literacy—the Core Role of the Teacher in a Digital Environment. *Educational Technology & Society*, *15* (2), 37–49.

Fersaoui, I. (2022). Language Testing and Assessment Literacy for Pre-service EFL Teachers: between Reality and Expectations. *Journal of Studies in Language, Culture, and Society*, (05) 02, 62-73.

Fulcher, G. (2012). Assessment literacy for the language classroom. *Language Assessment Quarterly*, *9*(2), 113–132.

Hadi, K. (2024). Some Teaching Tips for Overcoming Challenges and conducting an Effective Online Assessment in Algerian Universities. *Journal of Languages and Translation*, 4(1), pp. 66-79

Hamadouche, M., & Ghoues, M. (2023). Online Assessment through Interactive Platforms in an EFL Context: Students' Achievements and Teachers' Perceptions. *Journal of social siences of Oum Bouaghi university*, 10(1), 168-189.

Harding, L., & Kremmel, B. (2016). Teacher assessment literacy and professional development. In D. Tsagari & J. Banerjee (Eds.), *Handbook of second language assessment* (pp. 413–427). Germany: De Gruyter

Herrera Mosquera, L., & Macías, D. F. (2015). A call for language assessment literacy in the education and development of teachers of English as a foreign language. *Colombian Applied Linguistics Journal, 17*(2), 302-312.

Husain, F. (2021). Digital Assessment Literacy: The Need of Online Assessment Literacy and Online Assessment Literate Educators. *International Education Studies*, 14(10), pp. 65-76.

Issayeva, L. B. (2021). What is Digital Assessment?, ASC. Accessed on 21 July2023, https://assess.com/what-is-digital-assessment/

Ke, Z., & Ng, V. (2019). Automated essay scoring: A survey of the state of the art. In Proceedings of the 28th international joint conference on artificial intelligence (pp. 6300–6308).

Kengam, J. (2020). Artificial Intelligence in Education. *Encyclopedia of Computational Chemistry, 6*(2), 1-9.

Khan, R., Kim, E., J., & McClendon, K. (2020). Digital Tools for Online Assessment in ELT. *TESOL Connections, 1-9.*

Kim, A. A., Chapman, M., Kondo, A., & Wilmes, C. (2020). Examining the assessment literacy required for interpreting score reports: A focus on educators of K–12 English learners. *Language Testing*, 37(1), 54–75.

Malone, M. (2008). Training in language assessment. In E. Shohamy & N. Hornberger (Eds.), Encyclopedia of language and education: Vol. 7. Language testing and assessment (2nd ed., pp. 225-239). New York: Springer Science+Business Media.

McMillan, J. H. (2019). Fundamental assessment principles for teachers and school administrators. *Practical Assessment, Research & Evaluation*, *7*(11). Retrieved from http://pareonline.net/ getvn.asp?v=7&n=8.

Norris, J. M., Kenyon, D. M., & Malabonga, V. (2001). Concerns with Computerized Adaptive Oral Proficiency Assessment: a Commentary on "Comparing Examinee Attitudes Toward Computer-Assisted and Other Oral Proficient Assessments" by Dorry Kenyon and Valerie Malabonga. *Language Learning & Technology*, 5(2), pp. 99-105. Retrieved from:

http://llt.msu.edu/vol5num2/norris/default.html

Petchprasert, A. (2021). Utilizing an automated tool analysis to evaluate EFL students' writing performances. *Asian-Pacific Journal of Second and Foreign Language Education*, 6(1).

Pill, J., & Harding, L. (2013). Defining the language assessment literacy gap: Evidence from a parliamentary inquiry. *Language Testing*, 30(3), 381–402.

Popham, W. (2009). Assessment literacy for teachers: Faddish or fundamental?, *Theory Into Practice*, *48*(1), 4-11.

Roever, C. (2001). Web-based language testing. *Language Learning & Technology,*
5(2), 84-94.

Shohamy, E., & Hornberger, N. H. (2008). Language Testing and Assessment. *Encyclopedia of Language and Education,* New York: Springer.

Siegel, M., & Wissehr, C. (2011). Preparing for the plunge: Pre-service teachers' assessment literacy. *J Sci Teacher Educ*, 22, 371-391.

Stabler-Havener, M. L. (n.d). (2018). Defining, Conceptualizing, Problematizing, and Assessing Language Teacher Assessment Literacy. *Working Papers in Applied Linguistics & TESOL*, 18,(1), pp. 1-22.

Swiecki, Z., Khosravi,H.,Chen,G.,Martinez-Maldonado.(2022). Assessment in the age of artificial intelligence. *Computers and Education:Artificial Intelligence*, 3(1).

Taylor, L. (2013). Communicating the theory, practice and principles of language testing to test stakeholders: Some reflections. *Langueage Testing*, 30(3),403–412.

Weng. F, Shen. B. (2022). Language Assessment Literacy of Teachers. *Frontiers in Psychology*. 13 (864582).

Wigglesworth, G., & Frost. K. (2008). Task and performance based assessment. In E. Shohamy & N. H. Hornberger (Eds.), Encyclopedia of language and education (2nd ed., Vol. 7, pp. 111-122). New York: Springer Science+ Business Media.

Yildiz, H. (2021). The automated writing evaluation system in EFL context: the efficiency of the system and the views of the teachers and the students [MA Thesis]. Anadolu University

Yulia, A., Husin, N. A., & Anuar, F. I. (2019). Channeling assessments in English language learning via interactive online platforms. *Studies in English Language and Education*, 6(2), 228-238.