

Students' Perceptions of E-assessment at the Teachers' Training School of Constantine

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Abstract

The outbreak of Covid 19 pandemic and the advances ICT's witnessed greatly impacted ways of both knowledge transmission and evaluation. As it was imperative to prioritize learners' safety, e-learning and subsequently e-assessment emerged as new ways of teaching and also assessing the academic performance of learners. The present paper seeks to cast light on 4th year students of English perspectives of e-assessment, at the Teachers Training School 'Assia Djebar' in Constantine 62 students and pre-service teachers were given out a questionnaire to compile quantitative data on our sample's perspectives. Findings revealed that our participants hold a negative attitude on e-assessment. It is highly recommended to give e-assessment more importance if aspiring to cope with the demands of the digital era.

Keywords:

ICT's; E-assessment; Covid 19; Perspective.

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1. INTRODUCTION

In an everlasting changing world, literacy index shifted from the ability to read and write, to the ability to use computers and related technologies. Digital literacy emerged, then, as a pre-requisite in nearly all domains of life. Education is no exception, that is why the use of Information and Communication Technologies (ICT'S) is gaining traction in the educational settings, and their benefits remain incontestable; they not only enhance students' critical thinking (El Ouchdi-Mirali, 2015) but also promote a renewal in the pedagogical practices (Ghellab, 2016). As a result, their handling became highly recommended.

The outbreak of Covid 19 pandemic in Algeria expedited the resort to ICT's as the safest means of content delivery. A transition from a traditional course transmission to an electronic course delivery, i.e. e-learning, marked the teaching/learning scene in tertiary education. E-learning was conceived as an emergency exit from a precarious health situation, as well as a solution to education disruption. New ways of teaching required a change of direction in assessment practices; e-learning entailed e-assessment.

2. Literature Review

2.1 Definition of Assessment

Assessment, from the Latin root *assidere*; to sit beside another, is an integral component of the teaching/learning process, and its role remains incontestable. It 'covers any activity in which evidence of learning is collected in a planned and systematic way, and is used to make a judgement about learning' (Harlen and Deakin-Crick, 2001:1). Assessment, accordingly, is a systematic and evidence-based undertaking that helps judge learners' performances. In line with the aforementioned quote, Miller, Linn and Gronlund (2009) view assessment as an integrated process for determining the nature and extent of student learning and development. Still, an assessment is the measurement of learners' achievement and progress in relation to desirable outcomes of the learning process (Gikandi, Morrow, & Davis 2011). The desirable outcomes pertain to a clear

statement of what knowledge and skills learners should have upon completion of learning.

Assessment in higher education not only helps provide information about students' learning and progress, but tells about the teaching quality, and ensures the accountability of programmes and institutions (Fletcher, Meyer, Anderson, Johnston & Rees, 2012). Teachers' excellence at tertiary levels, according to Ellington (2000), is closely tied to the use of appropriate assessment methods.

2.2 Types of assessment tasks

Crisp (2011) dissects assessments into diagnostic, formative, integrative and summative.

2.2.1. Diagnostic Assessment

Crisp (2011) refers to diagnostic assessments as tasks used to “identify students’ prior level of understanding of key concepts or knowledge for the purpose of defining future learning or teaching (19). This type of assessment, as its name suggests, is purely diagnostic and is given prior to instruction. It helps collect information on students’ prior knowledge, and benefits both learners and teachers. The compiled information on learners helps teachers set sound instructional decisions that benefit learners.

2.2.2. Formative Assessment

For Popham (2008) formative assessment refers to an evidence-based instructional decision making, and if teachers desire to become more instructionally effective, and want their students to achieve more, then formative assessment should be for them.

Formative assessment as advanced by Yorke (2003) and Black and Wiliam (1998) takes place during instruction as students are taking part in the learning activity so as to give them feedback about their current performance. The dispensed feedback helps students adjust their weaknesses by themselves or through an additional assistance, and in both instances the return cannot be but a better academic achievement. In like

manner, Sadler (1998) stresses feedback generation as the intention behind formative assessment, a feedback expected to improve and enhance students' learning. Ruiz-Primo & Furtak (2004, 2007) consider formative assessment as a tool used to spot weak areas in students' learning, and once the gaps between learners' actual performance and desired performance are identified, actions should be taken to bridge those gaps. Feedback provision and decisions taking in relation to the next teaching steps are reasons behind teachers' use of formative assessment, also called assessment for learning. Last but not least, this type of assessment focuses on the quality of learning rather than the quantity (Crisp 2011).

Yorke (2003) distinguishes two forms of formative assessment; formal and informal. Ruiz-Primo & Furtak (2007: 60) illustrate best this distinction in the following table:

Table 1: *Differences between formal and informal formative assessment practices*

Formal: Designed to provide evidence about students' learning		
Gathering	Interpreting	Acting
Teacher collects or brings together information from students at a planned time. For example, quizzes, embedded assessments	Teacher takes time to analyze information collected from students. For example, reading student work from all the students, providing written comments to all students.	Teacher plans an action to help students achieve learning goals. For example, writing or changing lesson plans to address state of student learning.
Informal: Evidence of learning generated during daily activities		
Eliciting	Recognizing	Using
Teacher brings out or develops information in the form of a verbal response from students. For example, asking students to formulate explanations or to provide evidence.	Teacher reacts on the fly by recognizing students' response and comparing it to accepted scientific ideas. For example, repeating or revoicing students' responses.	Teacher immediately makes use of the information from the students during the course of the ongoing classroom narrative. For example, asking students to elaborate on their response, explaining learning goals, promotes argumentation.

Primo & Furtak, 2007, p. 60.

Formal formative assessment is structured and allows more control from the part of the teacher. The latter presents an activity at a planned time so as to gain an idea on students' understanding. Information gathered by the teacher is then analyzed and actions are undertaken with one end in mind; students' achievement of learning goals.

Informal formative assessment, on the other hand, is not planned and uses every day learning activities as an evidence of students' learning,

in the context of a teacher-student interaction or a student-student interaction. This evidence can be oral as well as written. The time frame set for the interpretation and use of that evidence is restricted.

2.2.3. Integrative assessment

Integrative assessment or assessment as learning tasks are designed to promote and measure student self-regulation and the capabilities associated with lifelong learning (Crisp, 2012). Such tasks help students think about their own way of learning (meta-cognition). This type of assessment helps promote independence and autonomy in learners as they monitor their own progress. Self or peer assessments exemplify best integrative assessment.

The characteristics of integrative assessment tasks are highlighted by Crisp (2010) as follows:

- Students are provided with opportunities to make judgements about their own learning or performance through review and critique.
- Students are provided with opportunities to define standards and expectations in their response.
- Students are provided with opportunities to track and analyse their approaches to responding to a problem, issue, situation or performance.
- Students are provided with opportunities to integrate prior or current feedback into their response.
- Students are provided with opportunities to engage with a meaningful task that has inherent worth beyond just an assessment activity.
- Students are rewarded for the quality of their analysis of meta-cognitive abilities, rather than declarative knowledge.

2.2.4. Summative assessment

Summative assessment, also dubbed assessment of learning, differs from formative assessment in that it targets the quantity of knowledge students gain by the end of instruction; emphasis is mainly placed on the outcomes or results of the learners or the program (Hyland, 2003).

Additionally, Bransford et al (2000) assert that summative assessment is accomplished at the end of a course to not only figure students' progression but to discriminate between them as well. Similarly, Shute and Rahimi (2017) affirm that summative assessment is usually administered at the end of a study cycle with a given end in mind; attributing grades, sitting for high-stakes exams or obtaining a certificate, or a promotion. They also advance that summative assessment allows the comparison of learners' performances, across diverse populations, against well-defined educational objectives and standards. This assessment type, for the two authors provides reliable data (such as scores) that can be used at various levels (classroom, school, district, state and national) and for various stakeholders; it can also inform educational policy.

Diversity in assessment methods is advocated, as it provides students with multiple opportunities whereby they can display what they know; no one assessment tool can fully address the learning advancement and accomplishment of students (Brookhart & Nitko, 2008).

ICTs development opened up new avenues for assessment; assessment practices have been electronically conducted and gained ground, especially under covid19 pandemic. E-assessment emerged as a new way of measuring the academic achievement of learners.

Rovai (2000) views that the general assessment tenets do not change in an online environment (e-assessment), what does change is the manner in which these principles are implemented.

2.3. Definition of E-assessment

E-assessment, alternatively known as technology-based assessment, and computer-based assessment, pertains to information and communication technologies (ICTs) used for the presentation of assessment activity and the recording of responses (JISC 2007). In like manner, Crisp (2011:5) refers to e-assessment as “the use of digital devices to assist in the construction, delivery, storage or reporting of student assessment tasks, responses, grades or feedback.” Put differently, the whole steps e-assessment goes through are electronically performed.

E-assessment devices can involve computers, mobile phones, gaming tools, or tablets through which students' assignments, answers, scores, and feedback are developed, assigned, registered, rectified, analyzed and stored. This paperless assessment can be presented in various layouts among which are texts, videos, documents, pictures, sounds, or games (Crisp 2011).

2.4. E-assessment Formats

Among the formats e-assessment can take, Crisp (2011:8), suggests the following:

- Blog : journals, videologs, podcasts.
- Discussion: asynchronous discussion forum which can be group or individual activity.
- Free text: short or extended text essay.
- MCQ: select options from list; yes/no, true/false
- Ordering: arrange options according to a specific order.
- Role play: adopt a persona in a simulated activity, reflect on actions.
- Self/peer review: review and critique own work or that of others.
- Wiki: online group project.

2.5. E-assessment Cycle

As displayed in Figure1 below, Whitelock et al (2006, p. 184) suggest a series of steps that constitute altogether the e-assessment framework. They advance that the driving force of the whole process is motivation that is why it is step one. The two subsequent steps deal with the design and then creation of the assessment. Next, the students start the test and when they have finished the outcomes are given up. Afterwards, the data are processed and the feedback is delivered. Then, there is evaluation of the outcomes and a review of the feedback. Last, the cycle moves back to the design and creation steps.

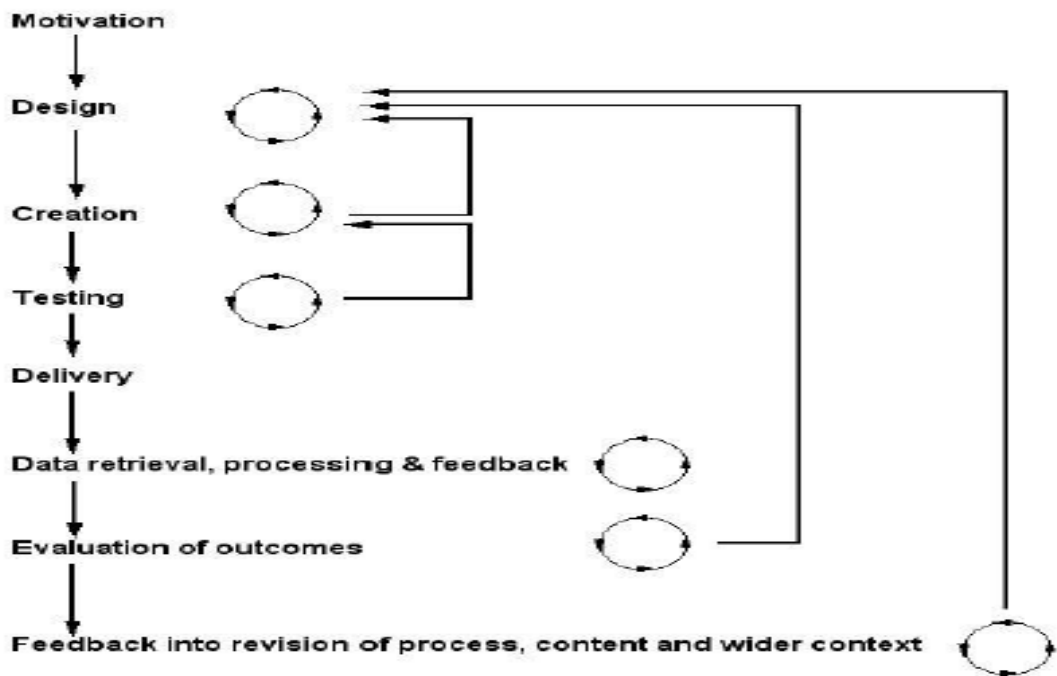


Figure 1: *E-assessment Cycle*, Whitelock et al., 2006n p. 184.

3. Methodology

3.1. Research Design

This study adopted a descriptive survey design, and the setting was the Teachers' Training School of Constantine 'Assia Djebbar' (ENSC). 62 fourth year pre-service middle school teachers of English constituted our sample, during the academic year 2021/2022. A closed-ended questionnaire was the tool used to help compile quantitative data on our sample's perspectives on e-assessment. Before moving to the results obtained, we need to hint at the questionnaire construction. Our tool encloses three sections entitled respectively "Demographic Information", "Computer Skills", "Affective Factors", "Gains and Challenges of E-assessment"" and "Reliability and Security of E-assessment". Section I unfolds with 2 questions pertaining to such variables as age and gender (items 1&2). Section II seeks to know how our participants assess their computer skills: basic, medium or advanced (item 3), and whether they access Internet for study-related information or for entertainment (item 4). Section III is related to the emotional state of our sample vis-à-vis e-assessment (items 5&6).

Section IV is about the benefits and drawbacks of e-assessment (items 7, 8, 9, 10, 11 &12). The last part, section V involves items 13&14 and is intended to discover whether e-assessment is reliable and secure.

3.2 Findings and Discussion

Section I

Table 2: *Demographic Information*

Items		Percentage
1. Gender		
	Male	1.61%
	Female	98.38%
2. Age		
	20	1.61%
	21	72.58%
	22	20.96%
	23	4.38%

72.58% of our participants are 21 years old, and 20.96% are 22 years old; in their majority they seem representative of the future generation of Algeria. Their perspectives are of great importance because how they consider e-assessment heavily impacts its future adoption and use. If positive attitudes are displayed, e-assessment can gain ground and if negative attitudes are expressed e-assessment use might be hindered. In addition, our sample involves 62 pre-service middle school teachers of English who might be asked, in their respective middle schools to adopt such digital assessment tools, so the answers collected emanate from students and teachers to-be.

Section II

Table 3: Computer Skills

Items	Statement	Percentage
3.	How do you assess your computer skills?	
	Basic	9.67%
	Medium	82.25%
	Advanced	08.06%
4.	Do you access Internet for	
	Study –related information	22.58%
	Entertainment	17.74%
	Both	59.67%

As for their computer skills, 82.25% view their comfort level with technology acceptable, so our sample's proficiency in computer skills can aid in using technology for assessment purposes. 59.27% access Internet for study-related information and entertainment.

Section III

Table 4: Affective Factors

Items	Statement	percentage
5.	Do you feel comfortable with	
	paper-based tests	90%
	Online tests	09.67%
6.	Do you feel stressed during online tests	
	Yes	74.19%
	No	25.80%

When e-assessment was raised 90% said they prefer paper-based exams. For our respondents, the paper-based assessment seems to be their comfort zone where they think they can perform well. E-assessment is perceived as a new zone with which they are not familiar. As a consequence, they seem to resist this transition or change, and if compelled to use it, they would feel anxious. 74.19% responded that they feel stressed during e-tests.

Section IV

Table 5: Gains and Challenges of E-assessment

Items	Statement	Percentage
7.	Do online tests add to your knowledge	
	yes	85.48%
	No	14.51%
8.	Do online tests reflect your knowledge	
	Yes	20.96%
	No	79.03%
9.	Do your online tests address	
	lower order thinking levels	72.58%
	higher order thinking levels	27.41%
10.	Do you receive immediate feedback on online tests	
	Yes	80.64%
	No	19.35%
11.	Do you have Internet access problems during online tests?	
	Yes	67.74%
	No	32.25%
12.	Does your institution handle computer programs and online assessment techniques?	
	Yes	64.51%
	No	35.48%

As for the attributes of e-assessments, as suggested by our sample, 85.48%, the majority, think that paperless tests add to their knowledge, 80.64% declared that it allows them receive instant feedback, and 64.51% assume that their institutions handle computer programs and online assessment techniques . The sample seems well aware of the benefits of e-assessment. Regarding the challenges of e-assessment, 79.03% view that e-assessment is not reflecting their level, may be because of the questions of their e-tests which according to their responses address lower thinking

levels; 72.58% answered that online questions address lower thinking levels such as remembering, understanding and applying. Analysis and evaluation as higher order thinking levels are disregarded in the questions posed in e-assessments. Still, Internet access seems one of the biggest hurdles to e-assessment; 67.14% declared having poor Internet connection during online tests. This problem is compounded if students live in rural areas.

Section V

Table 6: *Reliability and Security of E-assessment*

Item	Statement	Percentage
13.	Are online test scores reliable?	
	Yes	16.12%
	No	83.87%
14.	Is it easy to cheat on online exams?	
	Yes	85.48%
	No	14.51%

Our participants’ fears of e-assessment are related to security and reliability. 83.87% think that the scores are not reliable, and 85.48% consider cheating easy in online exams which might limit the widespread of e-assessment and could lower the degree of trust in this technological practice.

All in all, our participants hold a negative attitude on e-assessment and prefer paper-based assessment. A negative attitude engenders a lack of motivation, and the latter is supposed to be the foremost step in e-assessment cycle as shown in Figure1. All subsequent steps in the cycle will be insignificant if motivation is missing.

4. Recommendations

The transition from paper-based assessment to online assessment should not be abrupt, nor should it be an alternative to a precarious health situation caused by Covid19 pandemic, it should be conceived as one way of coping with a digital era where digital literacy is becoming a

prerequisite. E-assessment practices should be under the guidance and supervision of a qualified and a specialized staff so as to ensure a successful implementation. Once embraced, e-assessment practices should be subject to a continuous evaluation so as to fix all the challenges encountered.

5. Conclusion

ICT's introduction in educational settings gradually led to a change in teaching and learning practices; e-learning emerged as a novelty and subsequently entailed electronic ways of assessing learners' academic performance. The present paper tentatively attempted to cast light on the perspectives of the Teachers' Training School students and teachers –to-be of English on e-assessment. Results show that our respondents view that their comfort level with technology is acceptable and that their access to Internet is mainly for study purposes. Moreover, they are well aware of the advantages of e-assessment as a practice that adds to their knowledge and helps gain an immediate feedback. But, they prefer paper-based tests and feel stressed when sitting for an e-assessment test, and think that it addresses mainly lower thinking levels. E-assessment scores, for our sample, are unreliable and cheating seems to be an easy matter. Our participants hold a negative attitude towards e-assessment. To wrap up, training and guidance in the use of e-assessment practices are highly recommended if our country and educational sector, more precisely, aspire to catch up with the demands of a digital world.

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