

Assessment in Digital Pedagogical Communication Amid the Release of ChatGPT



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Abstract

Aim: This study aimed to evaluate the integration of digital assessment tools in Moroccan education and explore educators' perspectives on ChatGPT's impact on pedagogical practices.

Methods: The study adopted a survey structure, targeting a total of 100 educators. A SWOT analysis for a broad view of the study was conducted.

Results: The AI tool provides quick, well-formulated answers to a variety of questions, and this has encouraged students to take advantage of the situation. Educators, for their part, are required to significantly enhance their efforts in assessment in light of the use of ChatGPT among students. The survey revealed that 78% of respondents prefer paper-based evaluation over digital tools. Additionally, 65% highlighted the need for ethical guidelines to govern the use of ChatGPT in education, while the majority of our target believe that this AI-based tool is a threat to the educational system (60%), 34% think that it depends on how this tool is used, and 6% consider it as an aid.

Conclusion: Researchers and decision makers are still analyzing and looking up ways to make its use appropriate and ethical for both educators and learners.

Keywords: *Assessment, education, ICT, Chat GPT, AI, learners.*

INTRODUCTION

Launched on November 30, 2022, the new open AI ChatGPT has gone viral and witnessed a large number of users immediately after its release, mainly students. According to the latest available data, ChatGPT has exceeded 100 million users, while the website reached 1.6 billion visits in June 2023.¹ Chat GPT technology has sparked significant attention, leading learners to have an interactive conversation in order to help providing organized and coherent human-like feedback, and modifying answers based on user feedback.² Furthermore, it provides answers to all types of questions in a few seconds from various data, with a limit of 2021, noting that it functions in a variety of languages such as French, English, Spanish, and Deutsch, among others. This new AI tool, on the other hand, ChatGPT provides pre-written responses, which can undermine students' ability to think critically and engage actively in the learning process, thereby impacting knowledge retention and mastery.³ Educators, for their part, find themselves doubling efforts in assessments in order to figure out whether or not the student has used the AI tool to cheat in assignments and evaluation exams. ChatGPT's use has demonstrated that it encourages academic dishonesty⁴ and a lack of reliance on the student's knowledge and competencies only, raising the need for an ethical framework to regulate its use in education.⁵

To address this issue, three hypothetical cases are developed. The first one relates to how digital assessment tools and ChatGPT could latch this revolutionary wave of technology to enhance education. The second concerns the negative impact on the student's outcome if Chat GPT is used during the learning process and the education as a whole. The third hypothesis contends that the use of ChatGPT can be both beneficial and detrimental to the education sector, potentially resulting in a lack of effectiveness of digital assessment tools and detectors. Therefore, to address these challenges and opportunities, this study seeks to answer three questions: (1) How can digital assessment tools and Chat GPT detectors accurately evaluate student outcomes? (2) Can digital assessment tools in pedagogical communication replace paper-based evaluation?, and (3) Is Chat GPT a useful tool or a hindrance to the educational system? The purpose of this study is to assess how digital assessment tools are incorporated into Moroccan education and examine how teachers perceive ChatGPT's influence on teaching methods. This paper's objectives are to examine the rate at which educators use digital assessment tools and to gain their opinions about ChatGPT using a survey. A SWOT analysis will be provided for an in-depth knowledge of the study.

¹ Duarte, F. (2023, 13 juillet). Number of ChatGPT users (2023). *Exploding Topics*.
<https://explodingtopics.com/blog/chatgpt-users>

² Huang, Y. (2023). Reflection on whether chat GPT should be banned by academia from the perspective of education and teaching. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1181712>

³ Technology News Australia. (2023). ChatGPT may lead to the downfall of education and critical thinking. *Tech Business News*. <https://www.techbusinessnews.com.au/blog/chatgpt-may-lead-to-the-downfall-of-education-and-critical-thinking/#:~:text=Reduces%20creativity%3A%20Chat%20GPT%20generates,learn%20and%20understand%20the%20material.>

⁴ ChatGPT, Artificial Intelligence, and academic integrity. (2023). Office of Academic Integrity.
<https://oai.missouri.edu/chatgpt-artificial-intelligence-and-academic-integrity/>

⁵ Maboloc, C. R. (2023). Chat GPT : The need for an ethical framework to regulate its use in education. *Journal of Public Health*. <https://doi.org/10.1093/pubmed/fdad125>

DISCUSSION

Assessment in Pedagogical Communication

On the etymological level, assessment means assigning a value to something: a product, a situation, a service, an object, and so on. In the field of education, “assessment is a procedure that consists of gathering information about learning, making judgments based on the information, and deciding on the course of learning based on the initial evaluation intention.” (Cuq, 2005, p.123).⁶ Educational assessments have a significant influence on teaching and learning since they specify which areas of learning will be officially recognized (Baird et al., 2017).⁷ Additionally, assessment represents an essential component in education, as the professor defines the course's goals, which include skills and evaluation criteria. He is conscious of the consequences of his actions. By observing students' behavior and output. Understanding the state or condition of learning is accomplished through assessment. An instructor tries to gain a better understanding of students' learning in a course by evaluating learning using both measurement and observation. (Watson, n.d).⁸ Assessment significantly affects students' learning. Assessment influences students' perceptions of what is essential, how well they comprehend learning tasks and how engaged they are with them, and how effectively these insights are applied to future learning (Schellekens et al., 2021).⁹

For now, digital assessment has gained relevance as a component of the digital learning process since technology offers evaluation, including constructive feedback, in addition to teaching and learning. Since educational technology is developing rapidly and related research is growing (Jurāne-Brėmane, 2023).¹⁰ At least four major theoretical perspectives on learning can be used to assess the pedagogical communication's effectiveness, and are as follows; Learning is the transmission of knowledge through the reinforcement of behaviors (behaviorism); Learning is the processing of information through the internal mental mechanisms that underpin thought and action (cognitivism); Learning is creating images of reality in action situations (constructivism); Learning is exchanging meaning in social relationships (socio-constructivism).¹¹

⁶ Le rôle de l'évaluation dans l'apprentissage du FLE au niveau. (2019). <http://e-biblio.univ-mosta.dz/bitstream/handle/123456789/12654/63e0bb2f9b63e26371de72201523f0a4.pdf?sequence=1&isAllowed=y>.

⁷ Baird, J., Andrich, D., Hopfenbeck, T. N., & Stobart, G. (2017). Assessment and learning: fields apart? *Assessment in Education Principles Policy and Practice*, 24(3), 317–350. <https://doi.org/10.1080/0969594x.2017.1319337>

⁸ Watson, E. (n.d.). Defining Assessment. *University of Alberta*. <https://www.ualberta.ca/en/centre-for-teaching-and-learning/media-library/resources/assessment/defining-assessment.pdf>

⁹ Schellekens, L. H., Bok, H. G., De Jong, L. H., Van Der Schaaf, M. F., Kremer, W. D., & Van Der Vleuten, C. P. (2021). A scoping review on the notions of Assessment as Learning (AaL), Assessment for Learning (AfL), and Assessment of Learning (AoL). *Studies in Educational Evaluation*, 71, 101094. <https://doi.org/10.1016/j.stueduc.2021.101094>

¹⁰ Jurāne-Brėmane, A. (2023). Digital Assessment in Technology-Enriched Education: Thematic Review. *Education Sciences*, 13(5), 522. <https://doi.org/10.3390/educsci13050522>

¹¹ Théories de l'apprentissage : behaviorisme, cognitivisme, socio-constructivisme / SI & Management. (s. d.). SI & Management. <http://www.sietmanagement.fr/theories-de-lapprentissage-individuel-transmettre-construire-echanger-j-piaget-l-vygotski/>

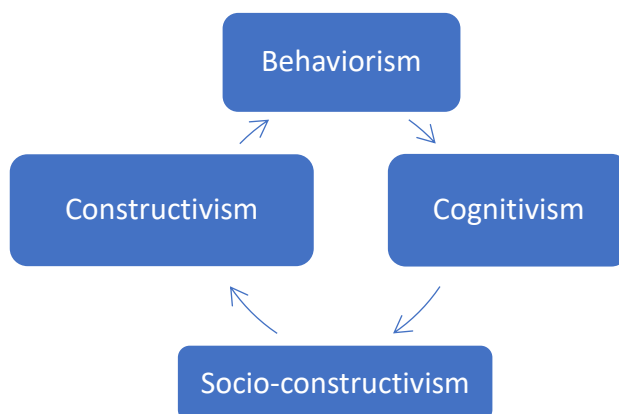


Figure 1. Theories of Learning in the Pedagogical Communication Process

The four theories of learning - behaviorism, cognitivism, constructivism and socio-constructivism - have made it possible to gain a thorough understanding of how learning occurs, which has led to the emergence of numerous instructional practices and considerations. As a result, it has been determined that instructional design will not be successful or productive unless teachers and designers take into account these instructional practices and considerations that are based on the educational maxims of these learning theories (Jabsheh, 2024).¹² Behaviorism emerged as a response to psychoanalysis, which discusses the invisible subconscious, and introspection, which examines the human condition based on subjective reports. Behavioristic psychologists developed the theory of learning behaviorism psychology. They contend that environmental reinforcement or rewards govern human behavior. As such, behavioral responses to stimulation are crucial in the learning process (Muhajirah, 2020).¹³

Cognitive assessments aim to clarify and anticipate how effectively students will do on assessment tasks by comparing their abilities and levels to the requirements of the tasks. This assessment method involves a series of activities with varying attribute criteria to evaluate student mastery and areas for improvement. It is clear how this kind of information could be valuable to teachers and students (Kane & Bejar, 2014).¹⁴ Constructivism is a learning theory that argues that people create new information based on previous knowledge and experiences. This method of knowledge acquisition exceeds the traditional approach of just obtaining information from others (Tsulaia, 2023).¹⁵ Socio-constructivism is based on the idea that humans learn and grow through observation, imitation, and modeling (Powers, 2020). Learning is socially constructed, and students create meaning in a collaborative context (Mistry et al., 2020).¹⁶

¹² Jabsheh, A. (2024). Behaviorism, cognitivism, and constructivism as the theoretical bases for instructional design. *Technium Education and Humanities*, 7, 10–28. <https://doi.org/10.47577/teh.v7i.10576>

¹³ Muhajirah, M. (2020). Basic of learning theory. *International Journal of Asian Education*, 1(1), 37–42. <https://doi.org/10.46966/ijae.v1i1.23>

¹⁴ Kane, M. T., & Bejar, I. I. (2014). Cognitive frameworks for assessment, teaching, and learning: A validity perspective. *Psicología Educativa*, 20(2), 117–123. <https://doi.org/10.1016/j.pse.2014.11.006>

¹⁵ Tsulaia, N. (2023). Constructivism as a theory of learning (foundations and significance). *ResearchGate*. https://www.researchgate.net/publication/372244917_Constructivism_as_a_theory_of_learning_foundations_and_significance

¹⁶ Mistry, H., Jeanboampong, Jenniferkim, Michaelmackenzie, & Sutheswaran, T. (2020). *Social Constructivism & UDL*. Pressbooks. <https://ecampusontario.pressbooks.pub/innovativedigitalpedagogies/chapter/social-constructivism-udl/>

Types of Assessments

There are many forms of assessments in pedagogical communication, such as initial, formative and summative (Dandyke, V, 2019). Initial/diagnostic occurs before teaching begins. this type of assessment is used to identify learners' current knowledge, skills, and capabilities in order to better understand, respond to their needs and adapt courses to their level. Formative assessment form requires feedback from students after the course in order to ensure that they are on track and achieving their goals, while also focusing on areas for improvement. This type of assessment can also aid in determining teaching effectiveness by providing a summary of the main points of the lesson as well as question and answer sessions. Summative assessment relates to the course itself where students are required to fulfill several assignments to process levels of achievement. The types of Summative Assessment include accredited examinations, final examination, essays and performances.¹⁷

Globally, the assessments are an essential tool to evaluate the students' abilities to capture information related to courses in the pedagogical communication. In fact, the assessment system considers several factors. Assessment at the service of learning: assessment enable teachers to figure out the students' outcome. Evaluation in the context of learning: Evaluation allows students to become aware of their learning methods and use them to adjust and advance their learning while taking on increased responsibility. The information gathered following the evaluation allows students, teachers, and parents, as well as the larger educational community, to be informed about the learning outcomes attained at a specific time in order to highlight successes, plan interventions, and continue to promote achievements.¹⁸ As AI technology has been examined in education, ChatGPT is an emerging tool that shows potential uses in test design and student feedback. Formative assessment is a type of assessment that is intended to continuously monitor student progress and provide quick feedback in order to help students better understand and absorb what they are learning (Zhang, 2024).¹⁹ Assessments that utilize AI can increase the quality of education and the learning experiences of students to some extent (Ray, 2023), but it still lack specific knowledge about the relationship between AI-driven formative – and summative assessments in education (Krumsvik, 2024).²⁰

Overall, ChatGPT enhances academic achievement, affective-motivational states, and higher-order thinking propensities while reducing mental effort and showing no significant effect on self-efficacy (Deng et al., 2024).²¹ Still, how ChatGPT is used specifically during the learning

¹⁷ Dandyke, V. A. P. B. (2019, 10 avril). *Application of theories, principles and models of assessment in education and training*. Dan Dyke Teaching Reflection.
<https://dandyke100294.wordpress.com/2019/04/10/application-of-theories-principles-and-models-of-assessment-in-education-and-training/#:~:text=Theories%20of%20assessment%20begin%20at,they%20have%20met%20the%20criteria>.

¹⁸ *Le rôle de l'évaluation dans l'apprentissage | Éducation et apprentissage de la petite enfance Manitoba*. (s. d.).
<https://www.edu.gov.mb.ca/m12/eval/role.html#:~:text=L'%C3%A9valuation%20vise%20divers%20buts,une%20r%C3%A9troaction%20utile%20aux%20%C3%A9l%C3%A8ves>.

¹⁹ Zhang, S. (2024). ChatGpt assisted teachers in improving formative assessment. *Journal of Education Humanities and Social Sciences*, 40, 27–32. <https://doi.org/10.54097/qz3kbj17>

²⁰ Krumsvik, R. J. (2024). Artificial intelligence in nurse education – a new sparring partner? *Nordic Journal of Digital Literacy*, 19(3), 172–186. <https://doi.org/10.18261/njdl.19.3.5>

²¹ Deng, R., Jiang, M., Yu, X., Lu, Y., & Liu, S. (2024). Does ChatGPT enhance student learning? A systematic review and meta-analysis of experimental studies. *Computers & Education*, 105224.
<https://doi.org/10.1016/j.compedu.2024.105224>

process shows how skilled the student is with the program and how well they can sum up the task requirements. In order to avoid the planned evaluation procedure, students may take advantage of Chat GPT during online tests or quizzes to look for solutions in real time (Gao, 2024).²² However, it has both pros and cons. Its advantages include the fact that the response text it generates is highly rapid, grammatically correct, and nearly identical to human English (Dale, 2021). It can also respond to follow-up queries intuitively and conversationally (Zhu et al., 2023). Users can obtain valuable information by responding to prompts without accessing many web pages and going through the content (Chatelan et al., 2023).²³

An Overview of Digital Assessment Tools

Digital learning environments have become more recognized, especially in recent years after the outbreak of the COVID-19 pandemic and its variants, which is still ongoing with the EG.5 Omnicron's subvariant that was officially declared by the World Health Organization (WHO) since February 17, 2023.²⁴ The demand for hybrid learning, including remote teaching has increased, leading to a change in the whole learning process (United Nations Educational, Scientific and Cultural Organization, 2020). Both Educators and students had no choice but to use Information and Communication technologies (ICT) in order to adapt to the external environment and the related circumstances.

Assessment, for its part, has witnessed a new digital form that brought up the necessity of basic digital literacy skills for both teachers and students. In the hybrid teaching model, mainly the remote mode, the assessment process was also conducted online (Senel & Senel, 2021). Educators used digital assessment tools (eg Google forms, interactive videos, KAHOOT) to observe, test and even provide feedback on students' performances.²⁵ As such, Google Forms is a web-based application or tool that may be used to send surveys, conduct tests to students or others quizzes, and efficiently collect basic information.²⁶ In terms of useful tools, Kahoot is an online program for making interactive quizzes. It is free but there are paid versions with additional features) and needs the teacher to create an account (Bakhmat & Smorgun, 2022). Quizzes consist of multiple-choice questions and answers. The teacher generates the answers. For optimal use of this application in the classroom, the learning space should be equipped with a computer with a projector and an internet connection, as the teacher projects the quizzes onto the board using the classroom computer. Students can answer questions on a tablet, smartphone, or the computer. (Alharthi, 2020)

Teachers can choose different parameters based on their learning objectives (Lopatynska et al., 2024).²⁷ Therefore, the teacher can conduct an instant question-and-answer activity using

²² Gao, L. (2024). Impact of CHATGPT on academic Integrity and assessment Effectiveness for e-learning in Higher education: The need for redesigning assessment practices. *Communications in Humanities Research*, 45(1), 40–44. <https://doi.org/10.54254/2753-7064/45/20240084>

²³ Khan, M., Chaudhry, M. N., Ahsan, M., & Ahmad, R. (2024). ChatGPT and the future of impact assessment. *Environmental Science & Policy*, 157, 103779. <https://doi.org/10.1016/j.envsci.2024.103779>

²⁴ EG.5 Initial Risk Evaluation. (2023). World Health Organization. https://www.who.int/docs/default-source/coronaviruse/09082023eg.5_ire_final.pdf?sfvrsn=2aa2daee_1

²⁵ Özel eğitim öğretmenleri için dijital değerlendirme Araçları : Zorluklar ve fırsatlar görünümü. (s. d.). <http://journals.iku.edu.tr/yed/index.php/yed/article/view/556/338>

²⁶ Fadhilah Nasution, S. (2024). View of KAHOOT AND GOOGLE FORM AS ALTERNATIVES TO EVALUATE ISLAMIC RELIGIOUS EDUCATION LEARNING IN THE DIGITAL ERA. <https://journal.epublish.id/index.php/icobba/article/view/68/65>

²⁷ Lopatynska, I., Bratanych, O., Biletska, I., Cherednychenko, V., & Pustovoichenko, D. (2024). Evaluating the efficacy of Kahoot as a computer-assisted language learning tool in higher education. *EDUWEB*, 18(1), 152–163. <https://doi.org/10.46502/issn.1856-7576/2024.18.01.11>

Google forms. Or the teacher can present the course content prepared in the form of interactive videos, keeping the student active and integrating the evaluation process into the content presentation. They can organize interactive activities by launching in-class competitions using KAHOOT) (Božić, 2023).²⁸ Studies suggest that students increasingly use ChatGPT for assignments, raising concerns about over-reliance and its impact on critical thinking (Stojanov et al., 2024).²⁹ Some educators are already aware of students' use of ChatGPT, prompting them to double-check the authenticity of their answers by copying and pasting texts and asking ChatGPT if the answers belong to their data and if it responds favorably, it is a sign of fraud and cheating.³⁰

AI detection tools like ZeroGPT and GPTRadar are increasingly adopted by educators to verify the originality of student submissions, helping address challenges in academic integrity (Horsey, 2023).³¹ and several general-purpose AI text detectors are available online, but none are widely considered as particularly effective for professional academic writing. (Desaire et al., 2023).³² In addition, ten popular AI-detection tools (free versions) like Copyleaks, QuillBot, GPTZero, Sapling, Undetectable AI, Content Detector AI, Wordtune, Dupli Checker, and Scispace were compared for their sensitivity in detecting exclusively AI-generated text, with results ranging from 0% to 100%. Five software applications detected AI-generated content with 100% accuracy (Table 1), whereas four detected it with 50% to 100% accuracy.³³

METHODOLOGY

This study will be conducted within the framework of mixed-methods research. This type of research aims to collect detailed opinions and information from the participants (Bader & Rossi, 2002). Participants were selected using purposive sampling, targeting educators who actively use digital tools in hybrid teaching environments. In this study, an online questionnaire survey was conducted, aiming to enable our target of educators to examine in-depth the experiences and express freely their views on digital assessment tools as well as the student's potential use of Chat GPT. The questionnaire was distributed via professional social media platforms, such as Facebook educator groups, Whatsapp and Instagram. Informed consent was obtained before participation, ensuring confidentiality in order to remain in the digital world. Furthermore, the online questionnaire comprised 14 questions and is divided into three sections, it takes about 15 to 20 minutes and has been accomplished using Survio, designed to gather qualitative data,

²⁸ Božić, V. (2023). Chat GPT and education. *ResearchGate*. <https://doi.org/10.13140/RG.2.2.18837.40168>

²⁹ Stojanov, A., Liu, Q., & Koh, J. H. L. (2024). University students' self-reported reliance on ChatGPT for learning: A latent profile analysis. *Computers and Education Artificial Intelligence*, 6, 100243. <https://doi.org/10.1016/j.caeai.2024.100243>

³⁰ ChatGPT and cheating : 5 ways to change how students are graded. (2023). <https://theconversation.com/chatgpt-and-cheating-5-ways-to-change-how-students-are-graded-200248>

³¹ Horsey, J. (2023). 7 Chat GPT detectors and how to bypass them. *Geeky Gadgets*. <https://www.geeky-gadgets.com/chat-gpt-detectors/>

³² Desaire, H., Chua, A. E., Kim, M., & Hua, D. (2023). Accurately detecting AI text when ChatGPT is told to write like a chemist. *Cell Reports Physical Science*, 4(11), 101672. <https://doi.org/10.1016/j.xcrp.2023.101672>

³³ Kar, S. K., Bansal, T., Modi, S., & Singh, A. (2024). How sensitive are the free AI-detector tools in detecting AI-generated texts? A comparison of popular AI-detector tools. *Indian Journal of Psychological Medicine*. <https://doi.org/10.1177/02537176241247934>

including open-ended questions that allowed participants to freely express their views on digital assessment tools and ChatGPT's impact. The first section discusses our target's socioeconomic situation, the second highlights the hybrid teaching and use of digital assessment tools, while the third section shows the educator's insight into learners' potential use of Chat GPT as a threat or an aid to the educational system.

Data analysis was provided by the same website Survio and It was used for its user-friendly interface and built-in analytical tools, which facilitated the collection and preliminary analysis of data. Qualitative responses were analyzed thematically to identify recurring patterns and insights. The findings were further enriched through a SWOT analysis, which provided a structured framework to evaluate the strengths, weaknesses, opportunities, and threats associated with digital assessment tools and ChatGPT in education.

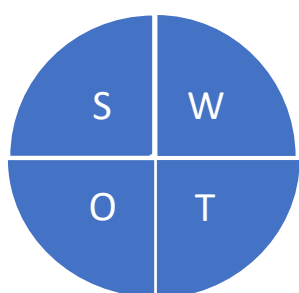
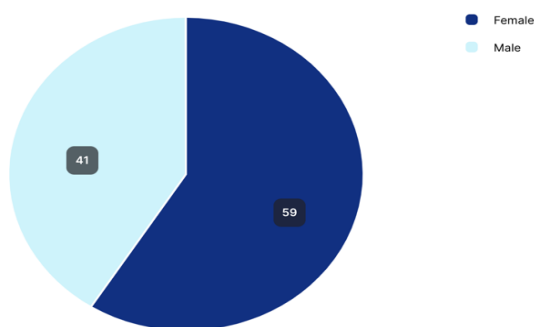


Figure 2. SWOT analysis method

FINDINGS

Socioeconomic Situation

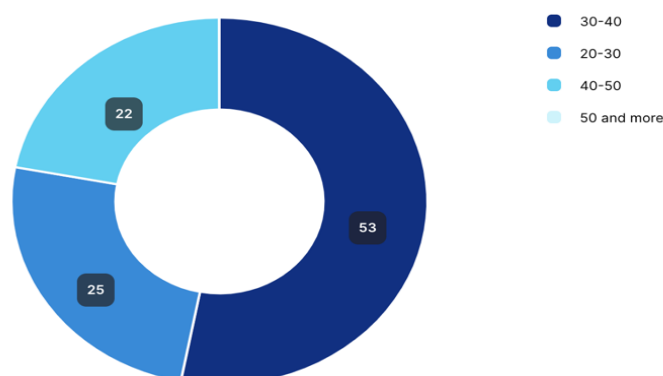
1. Gender



Source: Authors (2024).

This study had 100 educators with 59% being females and 41% being males.

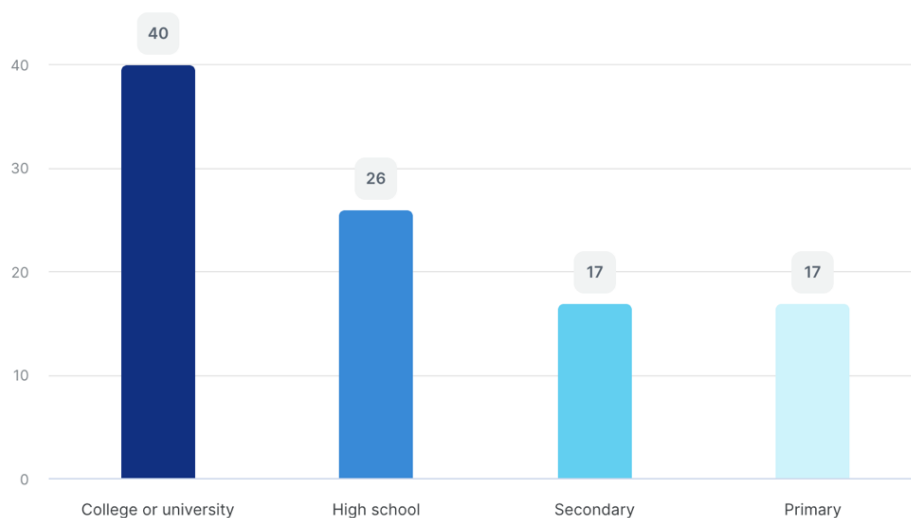
2. Your age range group



Source: Authors (2024).

They are mostly aged between 30 and 40 (53%), 25% are aged from 20 to 30, while 22% are aged between 40 and 50, involving different age groups in order to better assess the integration of ChatGPT into digital pedagogical communication.

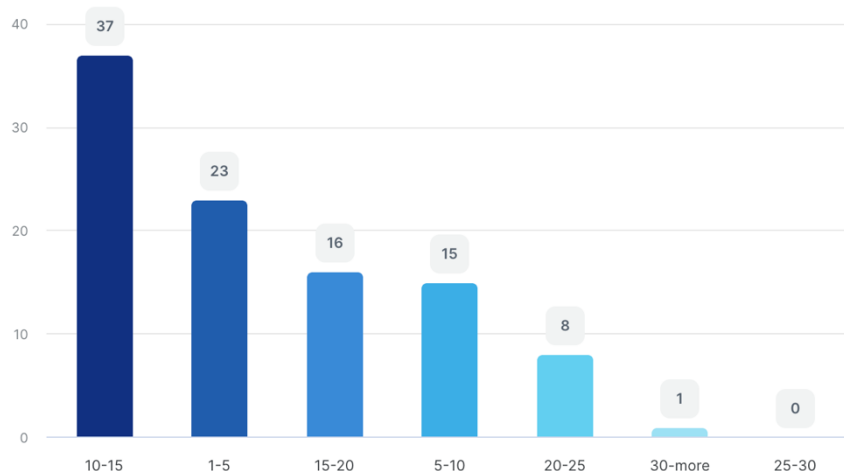
3. Level of teaching



Source: Authors (2024).

The majority of our target educators (40%) teach in colleges or universities, followed by high schools (26%), secondary institutions (17%), and primary schools (17%), which shows that higher education professors who use the most AI-based tools in their pedagogical communication.

4. Years of experience

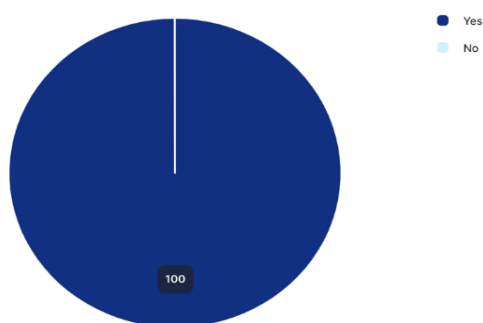


Source: Authors (2024).

The majority of respondents (37%), have between 10 and 15 years of experience, followed by a total rate of 23% with 1 to 5 years of experience, 15 and 20 (16%), 5 and 10 (15%), 8% with 20 to 25 years of experience, and a minority of 1% with 30 or more years of experience in the teaching career, which demonstrates that those with more than 30 years of experience still use traditional methods more than digital tools.

Section 2 : Hybrid Teaching and Use of Digital Assessment Tools

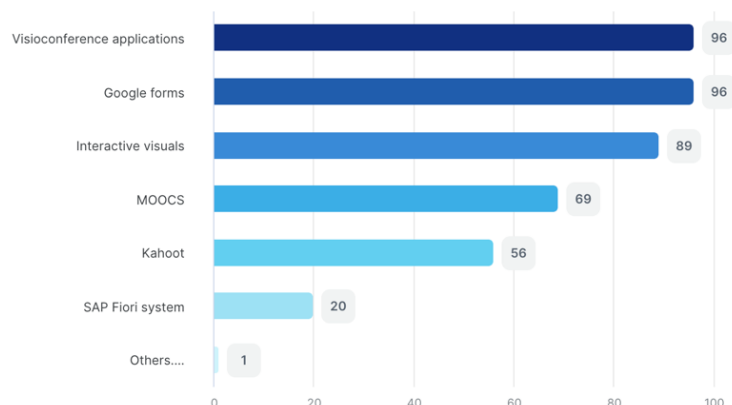
5. Did you opt for the hybrid mode of teaching, including remotely ?



Source: Authors (2024).

The hybrid mode of teaching, including the remote system, was chosen by 100% of the respondents, which affirms the full adaptation to this mode of teaching since the COVID-19 pandemic outbreak.

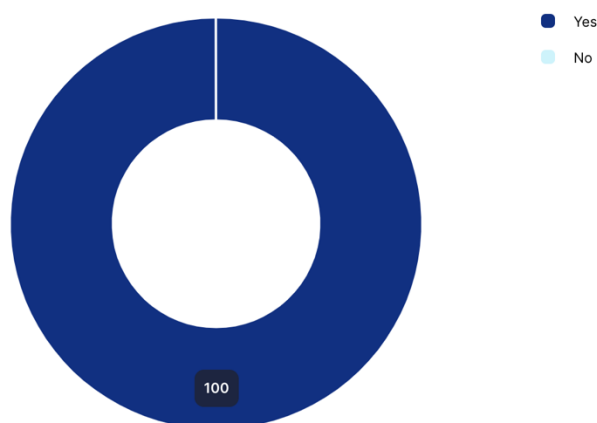
6. Which digital tools do you use in order to enhance the pedagogical communication and the assessment of learners' outcome?



Source: Authors (2024).

Our target of educators used mainly the following digital tools to improve pedagogical communication and learner outcome assessment: videoconference applications, Google forms, interactive visuals, MOOCS, Kahoot for online quizzes, and the SAP Fiori system, among others.

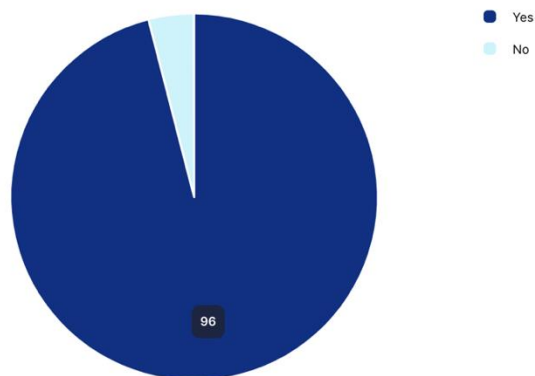
7. Did you use offline features, such as PDF and Microsoft Word files designed for students, to complete the online courses?



Source: Authors (2024).

The total number of respondents used offline features such as PDF and Microsoft Word files to keep up with the pace of the online courses (100%), which demonstrates the importance of digitalization in teaching.

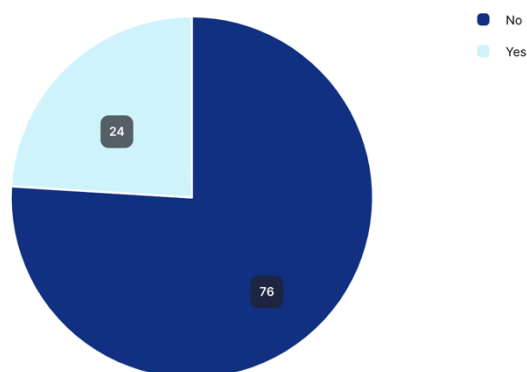
8. Does it require more efforts to prepare courses and assessments online ?



Source: Authors (2024).

In comparison with ordinary classes, the majority of respondents (96%), made more effort to prepare courses and assessments online, while a minority of 4% who found it effortless, as the creation of adapted and dynamic design requires time in order to stimulate learners in the digital pedagogical communication.

9. Can digital assessment tools replace paper based-evaluation ?

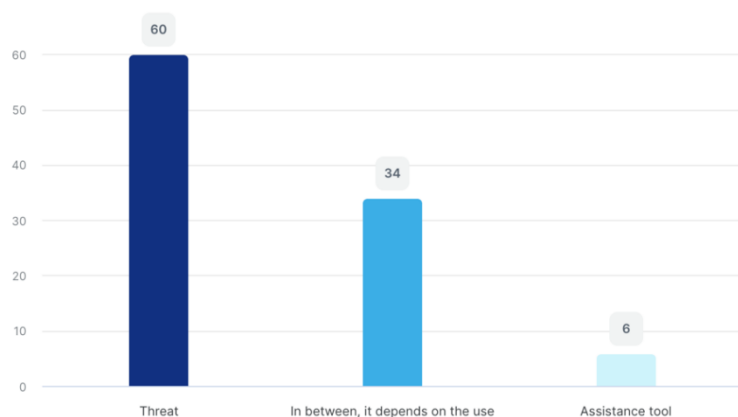


Source: Authors (2024).

The majority of respondents (76%) believe that paper-based evaluation is irreplaceable in comparison to digital assessment tools, as it remains the first tangible method in education. while 24% disagree.

Section 3 : View on ChatGPT

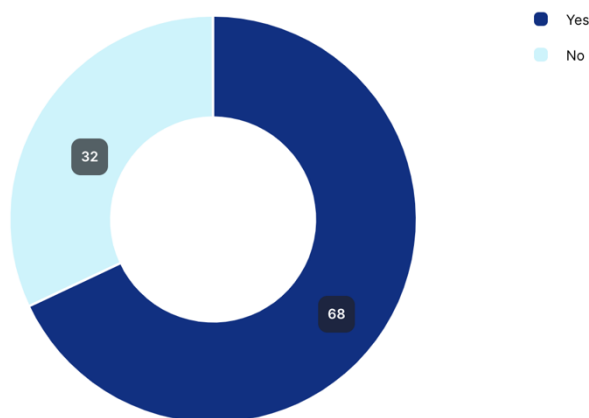
10. How do you perceive the student's potential use of Chat GPT? is it a threat or an assistance tool to the educational system?



Source: Authors (2024).

The majority of our target believe that Chat GPT is a threat to the educational system (60%), 34% think that it depends on how this tool is used, and 6% consider it as an aid, noting that researchers and decision makers are still analyzing and looking up ways to make its use appropriate and ethical for both educators and learners.

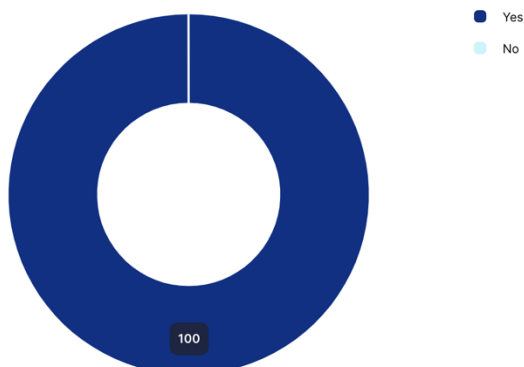
11. Do you use detector tools to figure out if the student used the open AI application?



Source: Authors (2024).

More than half of interviewees (68%) use detector tools to determine whether or not the learner used the open AI application for solving assignments or answer evaluation exams, while 32% do not, especially that its use has increased among students.

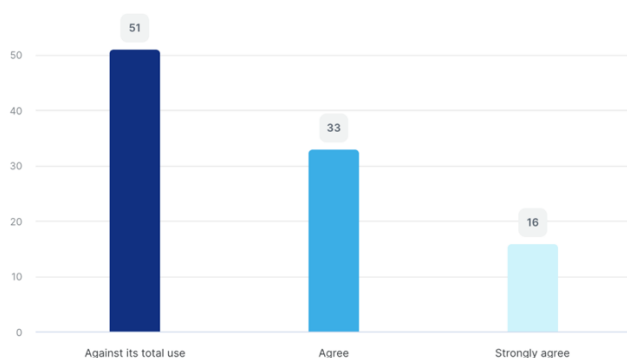
12. Does it arise the need for an ethical framework to regulate its use in education?



Source: Authors (2024).

All respondents believe that Chat GPT necessitates the setup of an ethical framework to regulate its use in education.

13. Does it require an awareness-raising campaign for an appropriate use of ChatGPT and not a total dependence on it?



Source: Authors (2024).

More than half of respondents (51% are opposed to total use of Chat GPT), followed by 33% who agree and 16% who strongly agree that Chat GPT requires an awareness-raising campaign for appropriate use rather than total reliance on it, especially that the relationship between ChatGPT and human intelligence is symbiotic, where each entity fills gaps in the other's abilities.³⁴

³⁴ Kumar, S. (2023, August 25). *ChatGPT and human Intelligence*. SourceBae.
<https://sourcebae.com/blog/chatgpt-and-human-intelligence/>

14. What is your overall opinion on the open AI Chat GPT technology and its use in the education sector?

RÉPONSE	RÉPONSES	RATIO
Threat	6	6%
Terrible	6	6%
Threat	4	4%
Terrible	3	3%
Against its use	3	3%
Usually, It doesn't provide the right answers and it may mislead students on assignments. It'd be better without its use	1	1%
Useless tool for students, it will impact them in a negative way	1	1%
Threat to the education sector	1	1%
Threat to the educational system, as it encourages more cheating on exams	1	1%

Source: Authors (2024).

Some of our target of educators' reviews of open AI technology and its application in the education sector are as follows: terrible, threat to education, helpful, simple and easy-to-use application, ineffective tool that generates biased information, encourages academic dishonesty and cheating tricks, and so on.

Furthermore, the SWOT (Strengths, Weaknesses, Opportunities, and Threats) method was utilized to explore various aspects of digital assessment tools and Chat GPT in the education sector.

SWOT Analysis

Strengths

1. Chat GPT offers quicker access to information than other means.
2. It provides quick and well-formulated sentences for students.
3. It offers interactive dialogue, which will boost the learner's ability to ask accurate questions.
4. Chat GPT provides creative input into projects during class activities, in addition to interaction skills.
5. It provides customized responses and also helps with projects and outlines.
6. It has the potential to be a powerful tool for research and studies, as it provides a multitude of ideas from different sources.
7. The vast amount of information provided by Chat GPT encourages students to read more and facilitate complex learning.
8. It helps saving time and increasing efficiency for both professors and students.

Weaknesses

1. Chat GPT can teach bad habits for learners, such as poor writing and lack of thinking.
2. It decreases cognitive development process with the large amount of data.
3. Chat GPT raises ethical issues.
4. It has some guided opinions and misleading information that may impact the student's credibility.
5. It generates wrong answers and irrelevant information.

6. Chat GPT produces biased answers and may mislead users, mainly students.
7. It results in student's inability to think creatively about topics or even maintain the critical thinking skills.
8. It is not a replacement for traditional teaching methods.
9. It can't replace human intelligence.

Opportunities

1. Chat GPT offers immediate feedback and extra information for students, which may result in reducing workload for professors.
2. It can be used as a tool for language learners to improve their basic writing and reading skills.
3. It can be used for a better understanding before the course for students.
4. Chat GPT can be used in some situations such as proofreading or rephrasing.
5. It boosts the knowledge and reading skills.
6. It can help develop business communication skills.
7. It helps students expand their vocabulary, improve their grammar and sentence structure.
8. Chat GPT can help with day-to-day tasks.
9. It may result in the reduced workload for professors.
10. Chat GPT pushes students to do assignments on time as it helps provide them with ideas in few seconds, but it is important to change the content.

Threats

1. It poses security threats and privacy concerns.
2. For journalism students, Chat GPT leads to the spread of misinformation and fake news.
3. Chat GPT collects data for research purposes without citing sources, which may lead to plagiarism for students.
4. Chat GPT can act as a virtual tutor, which poses a threat on the future of teaching.
5. Chat GPT encourages cheating and fraud during exams.
6. It encourages laziness and academic dishonesty.
7. Chat GPT impacts student's competencies negatively as it has great writing skills, which leads to a lack of confidence on capacities.
8. It leads to inequality between students.
9. It causes memory retention risks and not building memory skills.
10. It decreases the learner's judgement and insight skills.

CONCLUSION

To sum up, digital assessment tools and Chat GPT are frequently used by educators and learners, yet they need to keep up with their evaluation practices in order to provide a better digital competency-based approach. According to the semi-directive survey, the majority of our target of educators are unconvinced that digital assessment tools will one day replace paper-based evaluation. Furthermore, the large part of respondents make more effort to prepare digital assessment tools in the pedagogical communication. Therefore, the overall study revealed that the third hypothesis is the most accurate, which contends that the use of Chat GPT can be both beneficial and detrimental to the education sector, potentially resulting in a lack of effectiveness of digital assessment tools and the open AI detectors.

More than half of respondents reject the total use of Chat GPT, noting that this tool reflects a range of perspectives, adhering to all aspects of the SWOT analysis method, including

strengths, weaknesses, opportunities, and threats. In fact, most of our educator targets emphasized the importance of implementing an ethical framework for the open AI application's appropriate use in the education sector, as well as setting up an awareness-raising campaign to avoid the tool's drawbacks.

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