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The Critical Role of Artificial Intelligence in Enhancing Higher Education

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Abstract

Artificial Intelligence (AI) has already earned its deserved respect in academic research, and researchers have been taking interest in how to use it to enhance many domains, namely education. Within this scope of the emergence of AI and its multiple uses in the field of education, this paper holds as an objective emphasizing the critical role of AI in higher education through exhibiting a sample of its uses. The inquiry conducted in this study about AI and its role in enhancing higher

education begins with theoretical illuminations and investigation in real-life experiences with field research through a questionnaire that is designed to provide quantitative data. This field research is based on the responses of 83 participants, all of whom study or teach at one of the institutions of higher education in the Orient of Morocco. The results of this enquiry reveal that the participants in this study already use AI in their higher education, but only few of them are aware of it. Through the post-results discussion and in connection with relevant points taken from different references, AI-powered tools are found to be already integrated in education. Not to be left behind while the world is advancing towards new technologies, it is recommended that AI should have its due attention as there is an emerging race towards developing this newly uprising technology by pioneering companies and developed countries.

Keywords: Artificial Intelligence (AI), Higher education (HE), ChatGPT, Microsoft Office, Google Search

1. Introduction

In recent years, AI has been shaping aspects of life. Higher education (HE) has been influenced by this emerging technology in positive and negative ways. It has been referred to as "a double-edged sword" (Goh, 2023, p. 26). Considering its ongoing developments and the attention it is receiving, it would be intriguing to study the ways in which it has been contributing to HE. Recent studies have covered

some of its implications in improving HE. Tomar and Verma explore its role in HE believing like others that it "assists teaching, learning, assessment, references and collaboration" (Tomar & Verma, 2020, p. xx). This paper's objective is to examine and study the role of AI in enhancing HE which will be highlighted through exhibiting certain frequent uses of AI by HE students and professionals.

1.1. Background of the Study

The integration of AI in HE is not as new as one might expect. It has actually emerged long ago. Studies concerned with AI show that AI as a concept "was first introduced at the renowned Dartmouth Conference in 1956" (Chen et al, 2022, p. 2), and it has been evolving ever since. Nowadays, AI has been a major topic of interest for many countries, companies, universities, laboratories as its implications are expanding to "affect every person one way or another" (Kempt, 2020, p. 8). This study is constituted on foundational and synthesized findings of various studies that expound how AI is becoming dependable in HE. For instance, UNESCO published a paper *ChatGPT and Artificial Intelligence in Higher Education* which explores various ways of using AI in HE ethically. In 2022, Churi et al contributed to this topic with their study *Artificial Intelligence in Higher Education: A Practical Approach* which is empirical research that highlights "AI applications in education" and "offers case studies of AI techniques in educational activities" (Churi et al, 2022). This study draws on these of studies and others that focus on the same research areas to explore how students and professors belonging to

one of the higher institutions of HE in the Orient of Morocco use AI in their HE.

1.2. Problem Statement

This paper's focus, as covering research of this immensity needs unlimited endeavour for the nonstop AI novelties, is not to exhaust every resource there to cover every aspect related to this research area; instead, it is centred on investigating a sample of instances in which AI is effective when used to promote HE. More particularly, the essence of this paper is to make evident how AI is used in education to effectively search for information, to indicate the platforms that implement AI of which users including HE students may not be aware, and to explain how AI helps provide models for students through examining an instance of the functioning of ChatGPT.

1.3. Purpose, Significance, and Scope of the Study

On media, it is common to come across reports that warn users to be aware of the dangers that may result from such new technologies. The stark reality is that such high technology is being quickly developed day by day while only few users are benefiting from it. In this paper, attempts will be made to define the basics of such technology, explore how it (is or) can be adopted in the Moroccan HE, and provide samples of Moroccans who are already using it in HE. Little do people know that AI has been invading our lives in many ways, many of which we are not aware. Efforts should be made to raise awareness of AI, understand it, and use it especially at schools in order not to

remain stationary while the world is exponentially advancing. This paper attempts to invite the concerned people to act as well as progressively implement AI in HE as it would be inevitable, omnipresent, more complex and highly influential in the near future. Developed countries have been pioneering, monopolizing and developing knowledge on AI without involving developing or underdeveloped countries in understanding and using such advanced technologies. It could be even assumed that such developed technologies remain hidden and incomprehensible for the rest of the world. The scope of this study covers how AI has become influential and critical in the field of education. More specifically, it attempts to capture how HE has been being improved with the effects of AI. Within the scope of this study, it is necessary to prelude this paper with a glimpse on the development achieved so far by AI developers.

1.4. The Research Questions and Hypotheses

This research enquires about evidence that satisfies the following questions:

- To what extent is AI used by Moroccan students and professors in higher education?
- How aware and knowledgeable are they about AI, its implications and constant development?
- In which ways is AI employed in higher education?

The appropriate hypotheses that seem appropriate to lead answers for the questions are:

- AI is already being used by students and professors in the Orient's institutions of higher education.
- As it is exponentially developing and expanding, awareness of AI would always be constrained.
- There are various ways in which AI is used such as in searching on Google, in writing on Microsoft Office, and perhaps unethically in ChatGPT.

2. Literature review and Theoretical Framework

2.1. Artificial Intelligence: Concept Definition.

AI is a form of intelligence that it based on and designed to assimilate human intelligence but with more rigor, more precision, more accuracy, more rapidity, and other ultra enhanced capacities. It is designed to simulate humans' ability to learn and create but without errors, deficiencies, and challenges that face human beings such as fatigue, boredom, inability to access certain data bases, and so on. Somdip Dey (2023) defines it as "the ability of machines to perform tasks that typically require human intelligence, such as learning, reasoning, problem-solving, perception, and natural language processing". With little attention and awareness of what is going on around ordinary people, several facts may be discovered especially about the technologies that are used on regular bases such as

Facebook, YouTube, Instagram, Google, and so on. These social media, platforms, and websites are presenting interesting topics, advertisements, pieces of information and services to people who are interested in such matters. Rarely do ordinary people wonder from where these matters are sent, nor do they think of how these technologies sparked their interest.

Corrigan et al. believe that "it has become a truism to assert that AI is everywhere" (Corrigan et al, 2023, p. 14). Based on people's life that has become inseparable from excessive use of and dependence on technologies, namely communication technologies, Corrigan, et al. may be right since AI, might have already been used by technology users consciously or unconsciously. Someone who might search on Facebook, for instance, for a method of how to learn a particular language might not be aware that his simple action has been saved, and will be later analyzed, processed, joined with other similar actions of other users, categorized and packaged to be characterizing its user as a potential customer for companies which are interested in selling services of language teaching. This is an example of machine learning which can be defined as "the training of computers to simulate human learning and independently obtain knowledge with the aim to detect meaningful patterns in data" (Plevris et al, 2023, p. 250). Today, it is possible to have AI design personalized education that would fit individuals no matter how diverse they are. If it possesses the ability to find data, collect them, process them, and use them to generate

differentiated educational contents that fit each individual, think what it can do and the results it will achieve in the recent future.

2.2. The Use of AI in Higher Education: Manifestations and Illustrations

There are several methods by which AI can be integrated in HE. Accelerating its development by the second, AI might be achieving unbelievable progress owing to the interest and attention large investors are paying to it. Particularly in the field of education, there are emerging studies that demonstrate what AI can do for education. In a recent publication entitled *Intelligent Communication Technologies and Virtual Mobile Networks: Proceedings of ICICV* (2023), three central points in particular are advanced to elucidate the education procedures AI can perform:

> 1. "AI-based intelligent tutoring systems provide students with immediate feedback and guidance, as well as help teachers identify areas where students need extra support.
>
> 2. AI is used to create adaptive assessments that adjust the difficulty level and content of questions based on the student's performance.
>
> 3. "AI is used to generate personalized learning materials, such as quizzes, practice problems, and summaries that are tailored to each student's needs." (Rajakumar et al, 2023)

According to the first point, AI can help students receive 'immediate feedback' in the form of correction, evaluation, modification, reedition and so on. Unlike human-to-human feedback, ChatGPT's feedback is based on objective data analyses that are not tainted with

human impulses or biases. Learners know that machine feedback would be based on their performances rather than be built by human opinions. This would lead students to apply such feedback directly to their previous work to find ways in which it can be enhanced.

Operating with unknown limits, ChatGPT, one of the manifestations of AI, can answer questions, write creatively, compose stories, write digital codes, search for resources and use them to do all these tasks and more. Asked by users, for example, "What can ChatGPT do for language teachers?" (Peachey, 2023, p. 12), it answered "ChatGPT can provide a range of resources and support for language teachers" which it lists beginning from 'language practice' materials, to 'language learning support', to 'translation support', to 'content creation', and ultimately to 'language assessment' (Peachey, 2023, p. 12). This answer may be a road map for novice teachers and even the experienced ones because ChatGPT always uses Big Data to search for the latest novelties and present its own synthesis. This can be of great assistance to teachers who may need a lot of time, efforts, experience and resources to find appropriate teaching materials.

The second point is devoted to explaining how AI can help improve assessment. If the fundamental objective of assessment is to measure what learners have learnt along with what they can do with it, it should not be discouraging, tricky, inappropriate in terms of difficulty, irrelevant to the content taught and so forth. Humans usually need to pay a lot of attention while designing assessment tools because it may

lead to damaging consequences in case it is not designed appropriately. It is noted that AI can "help to improve the overall quality and accuracy of assessments" which is demonstrated by "several research studies on the use of AI technology in educational assessment" (Meletiadou,2023, p. 316). AI can personalize assessment tools to suit individual students based on the data it can collect about them by any possible means such as experimental multiple-choice quiz, writing assignment, reactions to certain topics, and so on. AI can also adjust the level of difficulty to assess students based on their true level. It can do so by either simplifying tasks or making them more challenging based on the performance of students. In this way, they would neither be discouraged or demotivated, nor would they be bored or dispirited. The third point summarizes and consolidates the former ones and gives concrete examples of how AI can improve education.

There are several cases in which AI is used in education in addition the previously mentioned ones. AI is used by leading companies such as Microsoft to correct language mistakes related to spelling, morphology, syntax etc. In addition, AI is implemented by Microsoft to predict the students who are likely to drop out (Chen, 2021, p. 343). With AI, students' writing can be improved. For example, ChatGPT can improve writing. Another form of AI that helps students with their writing is manifested by the use of AI by Grammarly, which is an application used to identify, check and edit language. It can "identify and correct over 400 types of grammatical errors" (Culican and

Melkumian, 2023). Generally, it is assumed that "Grammarly can improve students' overall writing accuracy" (Guo et al, 2023, p. 23). Conclusively, AI is already being used by technology users to enhance their education.

3. **Method**

A descriptive design was adopted in this study. This design is typically based on observing a group of participants at a certain time (Craighead & Nemeroff, 2002, p. 1400). The resulting "observations are quantified via the use of ratings, scales, test scores and the like" (Craighead & Nemeroff, 2002, p. 1400). This design, which complies in essence with a quantitative approach, tends to "take an objective deductive approach to describe and test relationships" as well as it abides by "objective measurement of variable and statistical analysis of data" (Douglas et al, 2018, p. 350). In this study, data is collected from a number of 83 participants. These data will be described objectively and examined to designate some instances of the role of AI in HE in the Oriental region of Morocco.
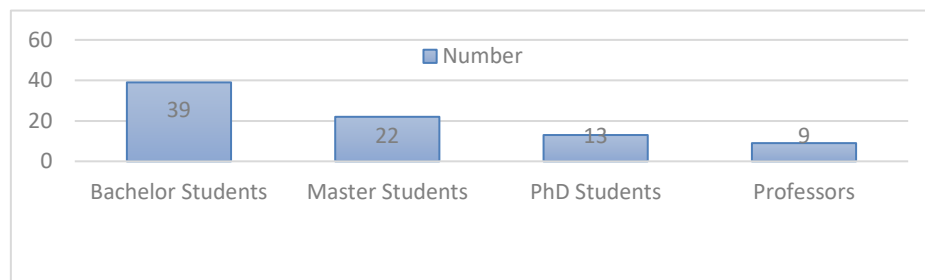
3.1. Sample / Participants

Although AI-powered applications such as YouTube, Facebook, Google, Microsoft and others may be used even by kids today, the participants in focus are the professors, researchers, and students who belong to one of the institutions of HE in the Oriental region of Morocco. This field study depends on the answers of 83 participants,

who are all from the Oriental region and belong to one of the HE institutions there. Among them, there are 9 professors and 74 students. 61 of the students are undergraduate while 13 are graduate students. The sample selected consists of both male and female participants. 58 of all the participants selected are conversant with AI as their answers demonstrate their knowledge on AI while the other 25 are merely users of AI-powered applications with little knowledge about this new field as shown by the answers they provided.

Figure 1

Number of Participants According to Their Academic Group

Instrument(s)

For this study, a survey is conducted among a sample of 83 participants, all of whom study or teach in one of the HE institutions in the Oriental region of Morocco. To do so, a questionnaire was designed on Google Forms and distributed on Facebook, Instagram, and WhatsApp. Figure 1 displays the samples of participants. The questionnaire was designed to meet the main aim of this paper which is to investigate how AI can be used to enhance education. It

investigates what AI-powered applications can be used for what purposes and in which way they function, the extent to which people are aware of such applications, and whether they use them in education. The survey focused on the question whether AI is used in Moroccan HE or not, which can only be determined with a profound field investigation. Thus, to account for this study, different focus groups and participants who pertain to HE had to be consulted. Professors, researchers and students within the geographical reach of the Oriental region in Morocco were asked sets of systematic questions to determine whether or not they use AI, if they are aware of the new uses of AI, and how they may AI in enhancing their learning.

3.2. Data collection procedures

To conduct this survey, a structured questionnaire was used to help collect data from the 83 participants. Both closed-ended and open-ended questions were used in this quantitative research. The questionnaire includes personal information of students, such as gender, qualification, occupation, age, and institution. The main objective of the questionnaire was to survey how they participants use AI-powered applications and platforms in their education, and whether or not they are aware that AI is using the entries of its users as data that it analyses and processes to create profiles for each user.

3.3. Data analysis

To describe the results in figure 2, for the first question concerning the age variable, 42 of the participants are between 16 years old and 20 years old, 15 participants are aged between 21 years old and 25 years old, 18 of the participants are between 26 and 30 years old, and 8 participants are more than 30 years old. It can be noticed that there are participants from different ages to ensure a coverage of representatives that are not the same age. For the gender variable, 38 male and 45 female participants participated in this study.

Participants were asked these preliminary yes-no questions to see if they are aware of how advanced AI is becoming or not:

1. Does modern technology depend on Artificial Intelligence?
2. Are technology users using Artificial Intelligence?
3. Is Artificial Intelligence operating nowadays?

The first question aimed at discovering the extent to which people are aware of the new emerging technology. 59 participants replied with the affirmative while the remaining 24 replied with the negative. For the second question, 53 participants replied, "yes" while the other 30 replied, "no". For the third question, 72 participants said, "yes" whereas 11 participants said, "no".

The following questions were intended to assess the use of AI in education. These questions include:

1. For which platform, website or application do you to fact check information?
2. Typing in Google search bar "What is Machine Learning?" as shown on figure 2, Google suggests other questions that people ask with answers as demonstrated in the picture. Do you think they are relevant to the first question?

Figure 2

Search Suggestions Based on AI
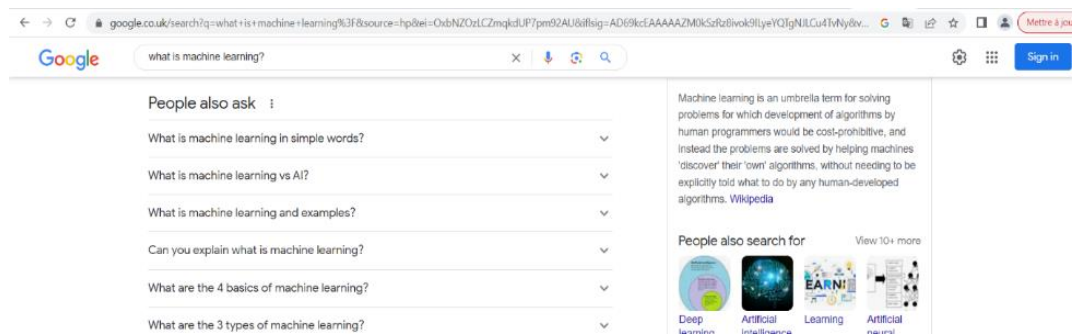
Regarding the first question, 83 participants opted for Google as a primary source of information. The second question received unanimous consent, and so did the third one. The next questions aimed at investigating whether users use AI to check spelling, grammar, and punctuation mistakes. The questions include:

1. Do you use Microsoft Office Word to write?
2. Do you pay attention to the underlined mistakes with the red color?
3. Do you correct them as Microsoft Office Word suggests?

The first and second questions were replied to by the 83 participants with "yes". For the third one, 74 participants replied with "yes" while 7 participants replied with "no" and two participants said, "not necessarily" and "I can correct with another form or word."

The final set of questions are related to ChatGPT, and how it can be used in education. The first of these questions is as follows:

- Instructing ChatGPT to "write a descriptive paragraph about the beach". Do you think AI can provide samples of paragraphs for learners to use as models?

Almost three-quarters (69%) of the participants agreed that ChatGPT can provide interesting examples of how paragraphs should be written. The second question, also related to the first one, was as follows:

- Do you think the answers of ChatGPT appropriately corresponds with the entry question, "Can ChatGPT be used in HE?"?
- The majority of the participants (83%) replied with yes. The third question targets raising awareness of the stark reality that AI is advancing exponentially and has already reached a high level of development. It was as follows:
- Do you have any idea from where ChatGPT brings its answers?

Only 12 participants replied, 'yes' while 71 participants said, 'no'. It is important to note that the participants' answers are based on their observations of the AI manifestations corresponding to the questions suggested for the participants.

4. Results

In accordance with the data presented above, it appears that people are not completely unaware of AI. The majority of their responses demonstrate that they are somehow conscious of AI. However, the responses show that almost one-third of the participants are not sure of their answers, which shows that their knowledge on AI is not certain. The second question shows that 37 % of the participants are not aware that AI is learning from users. Table 1 below demonstrates the results of this enquiry about the extent to which people are aware of the newly emerging technology that is based on AI.

Table 1
People's Awareness of the Newly Emerging Technology That Is Based on AI

Reasons	N	%
They confirm that the new technology depends on AI.	59	71
They believe that technology users already use AI.	53	63
They believe that AI is operating nowadays.	72	87

The next part of the result is related to the commonly used platforms, applications, and websites by the participants which are Google, Facebook, Microsoft, etc. Table 2. below illustrates these results.

Table 2

The Platforms Users Use and the Topics They Receive

The Platforms Users Use and the Topics They Receive	N	%
Participants who use Google, Facebook and Microsoft.	83	100
Participants who use Instagram.	52	62
Participants who use ChatGPT.	30	36
Participants who use either WhatsApp, Snapchat, YouTube.	72	87
Participants who think that these platforms suggest interesting topics	76	92

for them.		
Participants who do not know if these platforms suggest interesting topics for others.	62	74

Table 2 demonstrates that Google, Facebook and Microsoft are used by all the participants whereas Instagram, ChatGPT and other platforms are not. The former platforms have existed for more than a decade and were being developed constantly. In addition, they have integrated AI and depended on it. All those factors may have led all the participants to use them. The other platforms, however, appeared quite recently; hence, users may not have been familiar with them, are not interested in them and may not know their uses. The majority of participants think that these platforms present interesting content for them, but they do not know if they present interesting topics for everyone else. Since AI gathers and processes data so that it can know what content users like and present it to them, answers could have been "yes" instead of "I do not know". Accordingly, this answer could consolidate the fact that contemporary technology users may not be that aware that they are already dealing with AI.

While the previously presented results target the users' knowledge on AI, the following results concern the actual use of AI in HE. Mainly, the results sought are primarily related to three fundamental points. The first is the platforms to which the participants resort to make sure of a piece of information. The second is the participants' meta-knowledge on how Google uses AI to suggest relevant questions or content to the users based on their entries. The second is illustrated

with a picture and a sample entry question "what is Machine Learning" so as for the participants to know exactly what is meant by the question. The third question pertains to the second one and aims at establishing results about whether the search of Google is satisfactory.

Table 3

The Use of AI in Higher Education.

Factors Making of AI used by Google a Useful Learning Tool	N	%
The participants who opt for Google as a primary source of information.	83	100
The participants who think that Google's search is relevant to the entry.	83	100
The participants who believe that the search of Google is satisfactory.	83	100

According to table 3, all the participants resort to Google to search for information because the search it provides is thought of as relevant and satisfactory by all the participants. Users, though they use Google's AI, may not be quite aware that it is AI that enables Google to figure out the user's intent. It is also primordial to know in this context that "Google uses AI to interpret human search engine queries" (Shim, 2013); that is, AI processes the ability to understand people's search entries before matching it with the results it reveals for users. More than that, there are recent studies that hold that "Google uses AI to predict what people may be searching for" (Bhaduri, 2023). Synthetically, all the students and professors who contributed to this study find Google's results relevant and satisfactory, but the previous results demonstrate that they could not

be conscious that they are dealing with AI. This implies that AI contributes to their education whether they are aware of it or not.

After that, the subsequent part of the enquiry was conducted to see how the participants make use of AI to check for and correct mistakes related to spelling, grammar and punctuation. Table 4 below demonstrate the data collected with regards to this concern.

Table 4

The Use of AI to Check for and Correct Spelling, Grammar and Punctuation Mistakes.

Factors Making Microsoft Office Word's AI Utile to Check for and Correct Spelling, Grammar and Punctuation Mistakes	N	%
Participants who use Microsoft Office Word to write.	83	100
Participants who pay attention to mistakes spotted by Microsoft Office Word.	83	100
Participants who correct the spotted mistakes suggested by Microsoft Office Word.	74	89

Microsoft, which "uses AI extensively in its own products and services for everything" (Bisson et al, 2022, p. 14), created Microsoft Office Word with the ability to detect and suggest corrections for mistakes based on AI. Almost all university professors and students use it in their writings. 100% of the participants in this study use it and pay attention to the error it detects. 89% of them adopt the corrections suggested by AI that Microsoft Office Word use. Whether users are aware that what they are dealing with is a demonstration of AI or not does not deny the fact that AI has already become a part of our lives.

It has, moreover, become an indispensable tool in education as the results exhibit.

Regarding one of the evolved demonstrations of AI that are currently available, it was important to collect results on how the participant perceive ChatGPT; thus, chart 5 aims at showing these results.

Table 5

The Use of ChatGPT in Education

Reasons Making ChatGPT Useful in Education	N	%
Participants who think ChatGPT can provide samples for learners to use as models.	69	83
Participants who think the answer suggested by ChatGPT appropriately corresponds with the entry question.	83	100
Participants who have no idea from where ChatGPT brings its answers.	71	85

Considering that ChatGPT may be helpful in writing and based on the results in chart 5. 83% of the participants in this study believe that ChatGPT possesses the ability to provide sample pieces of writings for students to use as models. In addition, all the participants believe that ChatGPT shows offers answers that are appropriately corresponding to the entry questions. However, 85% of the participants said that they have no idea from where ChatGPT brings its answers. This may reinforce the hypothesis that although AI is used by many people, it is still not clearly understood by the users; in other words, people use AI without being aware that they are using it. Particularly, the results of

this study demonstrate that all the participants use AI, yet only a few of them are conscious of it.

5. Discussion

Through data, technology users seem to be already using AI without being aware of it. In Table 1, people's responses do not reveal a solid knowledge on what AI is. This lack or shortage of knowledge about AI may be a result of the fact that "the accessibility of knowledge about AI is currently limited mostly to experts" (Esposito et al, 2019, p. 139). Another reason may be the excessive warnings from AI's dangers spread on media which drive students away from such technology. Media reveals contradictory positions of certain influencers which warn from the dangers of AI but rush to invest in it. For instance, "prominent influencers like Elon Musk or Stephen Hawking warn from AI's danger to destroy humanity" (Bengel, 2020, p. 15), yet they want to be the pioneering figures in this new emerging field. Metz's (2021) publication shows that there is a race to AI (Metz, 2021). It would not be incorrect to say, in the context of this discussion, that "innovative companies and countries that focus on AI development may begin to monopolize AI knowledge" (Shackelford, 2022, p. 117). The lack or shortage of knowledge on AI shown in chart 1 may be a result of all these mentioned factors.

By using AI-powered platforms, websites and applications, users are allowing those applications to collect, process and use the users' data without them being aware of that. People are not yet fully aware of

this newly emerging technology as they state, "AI is a relatively new technology and is complex, meaning that the general public (and even technical employees who are unaware of AI) may suspect it exits" (Rocha et al, 2020, p. 164). With regards to the platforms, websites and applications the participants said they use, AI is already using the entries and data it collects about these users. For example, Facebook can use "AI to scan posts and identify what will be most engaging and relevant to their users" (Sandberg and Sandberg, 2022, p. 22). For students, the topics suggested may be related to their fields of education if they regularly search for matters related to their studies.

In their search for information that could be related to their education, all the participants use Google, but only by being aware of its use of AI will they realize the importance of AI in their education. It would be quite significant to know that Google has been creating profiles for its users so as for the content presented to be relevant and satisfactory. To understand how it does so, it is important to note what the following passage holds,

For many people among of whom are 37% of the participants in this study may not know that Google operates in the way the passage above it says it does. Despite being in the dark, people including the participants in this study are using Google in their education, and based on how it uses AI to collect data related to its users, it should be of a great help for professors and students who might not find any difficulties using it. Being conscious of how it functions, however,

should be extra helpful since users would know that it already is using the profiles it created for them to make their search relevant and satisfactory. Encouraging and motivating is this idea if users were to have it in mind beforehand.

There are many professors and students among whom are the participants in this study who use Microsoft Office Word to check for misspellings and ungrammatical structures of natural languages. Though it is a well-established fact that "natural languages evolve" (Reinhartz-Berger, 2013, p. 172), it seems that "AI constantly evolves" (Hamman, 2022, p. 173) to keep up with such evolution through continuous data collection and processing. Not only are people making use of Microsoft's AI-powered Word to check for mistakes, but they are also provided with AI explanations about 'why the pointed errors are considered as errors' and recommendations about 'how to fix them' (Yesilada & Harper, 2019, p. 341). Since users are already using Microsoft's products, it would be quite useful for them to know how such products function, so that they could use them more efficaciously. Though few are the people who know how developed AI is so far, ChatGPT astonishes many users at first encounter. It is immediately thought that ChatGPT can be used unethically because of its ability to simulate human writing based on what it learns. Some might depend on it completely to write on their behalf or use what it produces as their own. The use of AI to produce pieces of writing is not necessarily a matter that contribute to the development of humans; in contrast, it would make them lazier and

dependent consumers rather than producers. However, if these pieces of writings are used as guiding models for learners, they may learn to write better. This does not mean that it can think and write for you. ChatGPT should be used as a tool that generates models for writers to help them write.

6. Implications, Recommendations and Conclusions

Through this study on the critical role of AI in enhancing HE, it was important to prelude it with a definitional illumination on what AI is, the methods by which it is used in education and an idea about the current outreach of this new high technology. AI is already around us whether we are aware of it or not. In HE, professors and students are already consciously or unconsciously using AI to search for and make sure of the information and knowledge they learn using the common AI-powered platforms, websites, and applications such as Google, Microsoft, Facebook, etc.

Data collected and studied in this paper allowed a solid confirmation of such use of AI since the participants in this study did not deny how relevant and satisfactory these AI-powered applications, platforms and websites are. The answers the participants provided served to ensure that AI is already playing and important role to enhance their search for and expansion of knowledge. As they resort to these AI-powered platforms, the participants consolidate the fact that such platforms are effective. For writing, it could be concluded that AI helps writers detect spelling, and grammatical mistakes. It even helps to suggest

why the spotted mistakes are considered as mistakes through AI explanations as well as it can suggest corrections for these mistakes based on AI. Again, the participants confirm that they resort to AI-powered products such as Microsoft Office Word to make use of AI's capacities.

Advanced manifestations of AI such as ChatGPT seem, through this study, to be unaware of as they are still being developed and invested in. Though the rapid development of technology may be an index that AI will soon be able to perform intelligence-needing tasks, not everyone can be yet said to be aware of this fact. This study was intended to show what ChatGPT can do, and many participants thought that what the latter is doing can be very helpful to provide models for writers. Nonetheless, several warnings of the dangers of this new technology were evoked in the discussion so as for the users not to be completely dependent on it. AI is already playing a significant role in enhancing HE because it is designed to help searchers find what they are looking for. In the case of HE students, it was confirmed by the participants that what AI provided for them via the platforms, applications and websites they use was relevant and satisfactory.

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