

# STUDENT PERCEPTION OF THE IMPLICATION OF AI IN UNIVERSITY AND ITS IMPACTS ON EDUCATION

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**ABSTRACT**— Despite its emergence since the 1950s, recent years have witnessed artificial intelligence (AI)'s significant development in numerous fields, including university education. As can be inferred from many applications available nowadays, talking of students, AI has a large capacity of maximising the effectiveness of studying by personalising learning methods to meet different students' needs, generalising immediate feedback and automating routine administrative duties. Regarding teachers, AI may offer them assistance in the grading process, allowing them to dedicate more time and effort to planning and delivering lessons with high quality. This study examines its role in education at college level through the analysis of many education-related aspects, such as teaching and learning, assessment and grading, ethical concerns, demand skills and thereby evaluates AI's influences on graduate students' prospective professions. To achieve this goal, qualitative-design research is utilised to collect data from university students through interviews. The outcomes of this research show the significance of AI in the educational environment, especially higher education level. Besides, the investigation highlights the importance of ethically integrating AI in the classroom environment.

**Keywords**— artificial intelligence (AI), teaching, learning, higher education, impacts

## I. INTRODUCTION

Although AI was put into use since the 50s, its true power has been merely accessed recently thanks to the modern advancements of technology. Similar any favourable phenomenon, AI is now surrounded by a mixture of both praise and scepticism. In this study, the author intends to provide a brief understanding about AI's influence on education, then hopefully suggests some practical policy for the future of education in the present period of digitalisation.

In general, AI can be seen as a branch of computer science which concentrates on creating a machine that can perform tasks which require human intellect [1]. AI is one of the must-have tendencies in the 21st century world, especially after proving its effectiveness throughout COVID-19 pandemic [2]. During the horrible time, AI asserted itself as a powerful tool by preventing unemployment and helping people maintain continual studying [3]. Therefore, it is necessary to evaluate its effectiveness in one of the most indispensable slices of life, education.

Up to now, AI has been known as a powerful tool that can totally facilitate the teaching and learning process, but it also poses some challenges for the upcoming workforce, such as new skill requirements, labour market shifting. Since 2017, the world has recognised the impactful effect of AI on the labour market based on the study by Frey and Osborne [4] which shows that a number of necessary requirements and skills for jobs can be easily automated by AI tools. Plus, another research carried out by researchers at Stanford highlights the enormous capacity of AI in healthcare when AI-based tools are used for diagnosis [5]. Nevertheless, present AI remains constrained because it still significantly depends on the past data and man-made input. For the aforementioned rationale, this research is carried out to clarify AI's role in education, especially in Vietnam.

It is quite obvious that the impacts that AI has can be slowly revealed when humans implicate it into our society and educational institutions. AI has widely improved our life in many aspects, but this research focuses on its role in education, especially, teaching methods, ethical rules and students' learning outcomes. Therefore, study is designed to answer the following questions:

- How do students perceive the use of AI in education?
- How do students describe the impacts of AI on the learning and teaching process, future career opportunities and ethical concerns at university?

The following sections focus on literature review, methodology, data analysis and discussion.

## II. LITERATURE REVIEW

### A. LEARNING AND TEACHING

In recent years, the efficiency of AI has been illustrated across various educational sectors, especially in student intake and syllabus [6]. Ma and Siau [7] argue that curriculum development and student enrolment can be accomplished consistently and accurately thanks to AI technologies. In addition, the two authors imply that unlike careers such as accounting and finance, majors related to social science and arts may witness an increase in their prevalence, as those studies seem to be less likely to be affected by the popularity of AI [7].

Even if this research may not cover all the effects brought about by AI in the education sector, the author tries to highlight some of the most remarkable ones. In fact, it is undeniable that AI has been taking the place of teachers in some ways, especially in an era of rapid technological advancement. It is obvious that despite their irreplaceable role in teaching, during an e-learning session, students mostly communicate within a virtual learning space [8]. Likewise, Chin [9] asserts that the implication of AI can redefine the way we teach, learn, work and live, and we must be prepared for the future with AI. For this rationale, the authors believe AI's impacts have exceeded the surface level, and profound and structural transformation is sure to occur [9]. Agreeing with the above idea, Zouhaier [10] claims that AI is entirely effective in the learning and teaching process on the condition that both we and AI systems understand the process of human learning. Also, Yousif et al. [11] support the use of AI due to the captivating and pedagogical demonstration provided by AI, which creates a more engaging learning environment.

In spite of the beneficial aspects that AI has on teaching and learning, in many situations, it is essential to involve human support to accomplish the whole procedure [12]. Particularly, AI assists teachers to choose the suitable teaching methods to meet learner needs and identifies the parts which teachers put efforts in as well [11]. Regarding students, AI motivates learners' autonomy, as they can actively access learning materials anytime, anywhere [13].

### ***B. ASSESSMENT PROCESS***

Beside the learning and teaching process, AI also has impacts on assessment and evaluation. Specifically, many AI tools allow users to attach rubrics and evaluation forms to grade essays, and the result is that hundreds of essays can be conveniently graded in a moment [14]. What is worth mentioning is that AI actually provides really constructive feedback [15]. In particular, a study carried at Stanford University in 2019 highlights the usage of AI to grade students' answers [16]. In this study, the researchers manage to build a computer model which is trained to imitate teachers' marking styles, and the results suggest that AI promotes transparency, increases reliability and ensures better quality for students' performances [16]. Discussing the similar topic, Smith [17] reports that many states in the US, namely Utah, Ohio, have been using robots that can grade papers effectively, and Massachusetts will start to do the same. In line with Smith, Foltz [18] thinks that the widespread utilisation of AI in grading at university level results from its capacity to evaluate learners' responses considering from 50 to 100 criteria. Due to the fact that AI can check many aspects of an essay, it learns from teachers' grading style and gives human-like feedback, which makes the assessment become more and more accurate [19].

### ***C. FUTURE CAREER OPPORTUNITIES FOR GRADUATES IN THE ERA OF AI***

It is obvious that AI has placed tremendous impacts on many aspects in education; however, it is quite surprising to many people that it continues to affect students when they look for jobs after graduation. In other words, Wang and Siau [20] explain that AI is changing the job market by affecting the basic skills that are required for future occupations. Specifically, jobs that include repetitive or routine tasks (such as data entry clerks, payroll clerks, assembly line workers, machine operators, cashiers...) can be at risk of being replaced by automation [20]. In contrast, occupations that rely on imagination, originality or deep human insight (such as writers, designers, artists, psychologists, teachers, builders, judges, lawyers...) might remain insusceptible to the automation of AI [20]. In fact, AI is a major factor in job hiring. To put it differently, when you apply for a job nowadays, it is not likely that all the CVs are read by a human being. In place of that, many companies opt to employ a computer system called Applicant Tracking System to scan your documents [21]. These systems use a set of rules and logic to decide who are the suitable candidates. The truth is that applicants can be automatically rejected by companies using these kinds of AI-based systems due to some technical errors such as lack of keywords, wrong formats [22]... Because of this, many job applicants try to attach relevant keywords in their CVs in the hope that their information matches employers' interest, and they may move to the next stage [19].

In reality, some companies, namely Vodafone and Intel, simplify the hiring process with AI by using HireVue, a tool in which applicants are interviewed on a video and assessed by a computer [23]. In particular, applicants record their answers on a video; then, after watching these videos, AI analyses their facial expressions, tone of voice and words they say. In the end, AI decides whether to accept the candidates or not [19]. This supports the argument by Frey and Osborne [4], which warns nearly half of the jobs in the US are exposed to the possibility of being taken over by AI and automation [13]. According to Acemoglu and Restrepo [24], for every robot used at a workplace, approximately 5.6 people lose their jobs [1].

Another study conducted by Ma and Siau [7] forecasts that in the next 20 years, half of the jobs in the US and Europe are in danger of being substituted by AI. They also predict that AI is potentially capable of writing essays in 2026, writing popular novels in 2049 and even carrying out a surgical procedure in 2053 [7]. However, it is important to remember that AI is already here to serve our life. Chin [9], a professor from Hong Kong University,

reminds us that AI is around us, we have been using translating machines (e.g. Google Translate) to communicate for more than a decade [7].

Although AI is playing an indispensable role in education and career, Ma and Siau [7] are also aware of some notable issues caused by AI itself. To clarify, they argue that AI can master repetitive and routine activities, but AI is absolutely not good at soft skills including human emotions, critical thinking, collaboration, communication, problem solving, leadership... that are hard for AI to learn or imitate, which makes it impossible for AI to entirely replace human, hence it is a good idea that educators should combine both hard skills (e.g. math, engineering) and soft skills in the syllabus [7]. Plus, although some believe that using AI in hiring may bring about objective evaluation, the algorithm of some AI-based tools favour individuals who are willing to invest money and time to improve their CVs, which unfairly rejects potential candidates [22].

#### ***D. ETHICAL IMPACTS***

Holmes [25] emphasises the essentiality of ethics in the application of AI, especially in education. To be more specific, he mentions that we need to clarify the way in which AI is used, because it may affect students and their learning process. In addition, he points out that AI is already widely employed at the university level despite the controversy it raises. He also adds that AI is said to be clearly changing the structure of higher education all over the world. Plus, he predicted that the market for AI in education was growing fast and would probably be worth about £4.5 billion by 2024, and his prediction seems to be true up to now. He explains that beside checking whether the data is correct or not, users must clarify who owns and controls the data and whether learners' privacy is protected. The researcher warns us about the bias that AI has. To illustrate, if an AI system is trained by male developers, some female aspects might be missed, or it might not work well for female users. Take another example, if the learning system is trained by American teachers, it might overlook or misunderstand or might not meet Asian students' needs, which affects student outcomes.

To address the issue, Open University in the UK carried out a case study about AI in education in 2022, to highlight the importance of ethics in AI [26]. In the article, the specialists agreed on the urgency of studies to handle the bias caused by AI. However, there are still serious concerns on privacy and security when AI can track users 24/7. The questions of laws, policies and morals remain unclearly answered. Therefore, higher education should train not only technology engineers but also social science and humanities majors to reinforce responsibility and ethics in the fast moving forward world of AI [26].

#### ***E. COGNITIVE IMPACTS***

In fact, AI has become so advanced that it can replicate some human cognitive capacities, such as translating languages, diagnosing various medical conditions... Chin [9] explains that humans can actually use real thinking skills, like analysing, thinking, solving problems; at the same time, AI is trained to imitate humans artificially, using supercomputers, fast internet, complicated algorithms and data.

Indeed, AI is said to use a large amount of data imported by humans to work really fast with unlimited memory to handle specific tasks following fixed logic; unlike AI, human beings have the ability to think more flexibly and creatively, and deal with different unstructured issues based on our experience and emotions [9]. However, AI has outweighed humans in some specific domains, such as automation or recognition. In the same topic about AI's impacts on cognitive ability, Chin [9] discusses a fictional idea about a special computer chip that can be implanted into human brains. The chip enables people to communicate without speaking, just by thinking and connects our brains to the internet, so that thoughts can be sent online, just like sending text messages. Therefore, it is essential that universities take action and be prepared for a world with rapid and unpredictable development of AI.

### **III. THEORETICAL FRAMEWORK**

This study is guided by three well-established theoretical frameworks, namely Technology Acceptance Model (TAM), Sociocultural Learning Theory and Human-Centered Artificial Intelligence (HCAI), to investigate how university students perceive AI's role in educational context and how these perceptions shape their anticipation of AI's effects on teaching and learning as well as future career pathways.

First, TAM, with its focus on perceived usefulness and perceived ease-of-use, provides a lens to explore students' readiness to utilise AI-based tools in their learning [27]. According to Davis et al. [28], in higher education, if students view an AI-driven tools efficient, supportive of autonomous learning, and easy to use, they are more likely to adopt it in their studies. TAM has been widely used in educational setting, shedding light on the motivations and practical factors that influence how students engage AI-powered tools in their learning process.

Second, according to Sociocultural Learning Theory, learning is inherently social and developed through interactions, scaffolding and cultural tools [29]. For this reason, AI can serve as a supportive tool which facilitates learning process by providing guidance and structured assistance. At the same time, this framework also

emphasises the irreplaceable role of human educators in offering emotional support, mentorship and opportunities for reflection and collaboration, which are essential for profound cognitive development.

Finally, HCAI defines AI as a tool designed to augment human capabilities instead of replacing the, focusing on user control, creativity, responsibility and social participation [30]. HCAI advocates for combining automation by AI with human oversight and appreciates designs that empower users rather than replicate human behaviours. Furthermore, the framework also highlights ethical, managerial, and organizational aspects, ensuring that AI-driven systems are safe, reliable and supportive of human educators and learner autonomy.

Together, these three frameworks provide a multidimensional theoretical foundation. While TAM addresses factors that affects students' willingness to accept and use technology in learning, Sociocultural Learning Theory considers AI as a part of socio learning, with HCAI highlighting ethical and human-centred design. In general, they guide the interpretation of AI's role in teaching and learning as future professional development, considering both what AI can do and the significance of human involvement.

#### IV. RESEARCH METHODOLOGY

This study employs a qualitative research approach to analyse students' opinions and experiences on the use of AI in the classroom settings and their everyday life. This investigation is based on the philosophy called Objectivism, which means that humans' abstract aspects, such as experiences, thoughts and feelings, can be examined in a neutral and unbiased way [31]. Therefore, a qualitative approach was adopted to capture students' experiences and feelings when using AI to study, which is appropriate for the aim of exploring students' perceptions of AI in the field of education.

This research applies non-probability sampling strategy which includes convenience sampling for students and purposive sampling for lecturers. Regarding students, they are chosen based on the accessibility at HUFLIT and Bach Viet College throughout the data collection session. In the meantime, the lecturers are selected depending on two following criteria: (1) having experience on grading academic writing, (2) having prior communication with the students using AI during academic activities. This method ensures that all the chosen students and lecturers are able to provide information related to the research objective. The participants include 32 university students with different majors at HUFLIT and Bach Viet College in Ho Chi Minh City, Vietnam from 18 to 21 and 4 lecturers aged from 30 to 35 from HUFLIT and Tan Tao University. The sample size is suitable for a qualitative inquiry whose aim is to get deep understanding of students' perception on using AI in the teaching and learning process, not to generalise the results. Because the participants are selected using non-probability sampling strategy and mostly due to convenience, the findings cannot represent for Vietnamese students and lecturers. However, the sample still provide initial understanding which is valuable to generate relevant research on large scale in the future.

The data was collected using semi-structured interviews which allowed participants to freely discuss their perceptions while the researcher was enabled to gather further details. Each face-to-face interview lasted in approximately 15 minutes. The interview included nine open-ended questions which were developed based on the constructs (student perception, teaching and learning impact, cognitive impact, ethical concerns and employability) and theoretical frameworks mentioned in Section III. The questions include:

- How is AI affecting the teaching and learning process at universities in Vietnam?
- Compared to human lecturers, what can AI-powered tools make the learning and teaching process better?
- How do you feel about the idea that AI-powered teaching tools have more effective teaching methods than your human lecturers?
- How do you feel about using AI for essay grading? What are some benefits and drawbacks?
- How will AI impact your job opportunities across different industries? What industries will be affected by AI? What will not?
- What are some skills that students should be taught at universities to prepare for AI era?
- As a job applicant, what do you think if you are interviewed by an AI-based machine?
- As a recruiter, which method do you use to search for the right candidates: human decision or AI-based filter or both? Why?
- List some areas of life which will be strongly affected by AI in the near future.
- What do you think about the idea of replacing all academic staffs at your university with AI?

After the collection process, the data were analysed using the six-step thematic analysis framework developed by Braun and Clarke [32]. The steps include:

- Familiarising with the data

- Generating initial codes
- Searching for themes
- Reviewing themes
- Defining and naming themes
- Producing report

Both explicit statements and implicit meanings in the answers are coded to get a full understanding of their perspectives.

All participants were interviewed directly, with their permission to record their information through field notes. However, due to participants' preference, no audio or video recordings were made. Therefore, to ensure accuracy, field notes were thoroughly taken during and immediately after each session. Besides, to enhance the trustworthiness, the researcher attempted to summarise participants' answers and confirm them with the participants at the end of each interview. Also, the author tried to record all the stages of the data collection process to maintain transparency. Furthermore, before writing the report, the author also had a colleague review to avoid vagueness. Lastly, when presenting data, the researcher used direct statements.

## V. FINDINGS

This study involved answers by 36 participants and adopted thematic analysis to explore student perceptions of AI in higher education settings. The findings concentrated on 2 major aspects: first, students' perceptions and experiences of using AI at university as well as its impacts on academic works; second, the further implications of their perceptions for future professional development and ethical concerns. According to the research aim, the focus is placed on students' perceptions while lecturers' insights are used only when the author attempt to clarify or confirm students' ideas.

As discussed above, neither video nor audio recordings were made due to participants' preference. Instead, their answers were transcribed and then cleaned by correcting typos, standardising the texts and removing personal information. After that, the data were analysed based on the thematic analysis procedure proposed by Braun and Clarke [32]:

- **Familiarising with the data:** After reading the transcripts multiple times, the researcher took initial notes and marked noticeable or recurring ideas.
- **Generating initial codes:** The ideas or patterns reflecting perceptions, experiences and concerns about AI were labeled with codes.
- **Searching for themes:** Similar codes were collated into categories, which allowed the author to identify themes across the dataset.
- **Reviewing themes:** The themes were iteratively refined through multiple times of reviews and reflections by the author to ensure that these themes were coherent, distinctive and supported by illustrations of many participants.
- **Defining and naming themes:** Each theme was clearly named with descriptive phrases that transfer its core meanings.
- **Producing report:** The official themes were organised to address research question 1 and 2, and several answers by participants were chosen to support the corresponding themes.

Despite the fact that this study did not aim to examine AI's impacts on future careers, the interviews revealed that students were aware that AI literacy and its effective application throughout university study would be necessary preparation for their job opportunities in the coming years. In other words, the integration of AI and academic work at higher education is linked to skill development and employability in an AI-influenced labour market.

To address the 2 research questions, after the process by Braun and Clarke [32] mentioned above, the author highlighted 6 major themes, reflecting (1) personalized and on-demand learning support from AI, (2) enhanced teaching efficiency with essential human oversight, (3) risks of over-reliance on AI for critical thinking and integrity, (4) AI's constraints in assessing creativity, nuance, and context, (5) centrality of human educators for empathy, mentorship, and ethics and (6) preference for a hybrid human – AI model and its influence on career outlooks. These themes demonstrate not only what the participants believed about AI (RQ1) but also why they held these views and how these perceptions shape their thoughts about AI at higher education level, including its impacts on the learning and teaching process, future career opportunities and ethical concerns (RQ2). Each theme is presented and discussed in detailed in the following sections.

Note: Participants from number 33 to 36 are lecturers. These participants are highlighted in bold.

### **A. THEME 1: PERSONALIZED AND ON-DEMAND LEARNING SUPPORT FROM AI**

(Addresses RQ1)

The participants considered AI as a learning facilitator mostly because it offers individualised instructions, prompt feedback and continuous support. The students believed that the aforementioned features cannot be provided by traditional teaching methods. As can be inferred from their answers, numerous students depicted AI as a 24/7 tutor that can respond instantly and modify explanations to meet each individual needs. In fact, this recurring pattern implies that personalised support functions not only as a convenience but also a compensatory strategy to bridge gaps in classroom learning, particularly when students feel hesitant to ask questions directly or require additional reinforcement beyond class hours. Implicit in these statements is the perception that AI diminishes reliance on teachers for routine queries while promoting student autonomy. Such autonomy is regarded as enhancing efficiency (“learn faster” – P) and academic confidence, thereby affirming the view that AI functions as an enhancer rather than a replacement of human teaching.

- “AI personalizes learning, offers 24/7 support” (P04, P07, P20, P24, P30, P31, P32)

This demonstrates students’ view that AI addresses gaps in instruction by giving immediate clarification without the need for teacher assistance.

- “AI helps students learn faster by giving instant answers, personalized lessons” (P01, P04, P05, P06, P07, P09, P11, P16, P17, P22, P24, P25, P31, P32, **P35, P36**)

This reinforces the finding that speed and convenience are key factors in students’ positive attitudes towards AI.

### ***B. THEME 2: ENHANCED TEACHING EFFICIENCY WITH ESSENTIAL HUMAN OVERSIGHT***

(Addresses RQ1 & RQ2)

The students viewed AI as an effective and useful tool to help simplify various teaching tasks, but they emphasised that educators must monitor the outputs to ensure that they are accurate and aligned with the educational context. In particular, students noted that AI can ease teachers’ workload by automating routine task, such as grading, proposing instructional materials, and assembling teaching resources. This perception suggests that students consider AI not only as a learning tool but also as a mechanism that enhances efficiency within the educational setting. Nonetheless, their emphasis on educator oversight indicates that students implicitly doubt AI’s reliability and its capacity to adjust responses based on the specific context. The idea that AI speeds up teachers’ repetitive tasks yet still requires human verification demonstrates a balanced perspective: being efficient does not equate AI’s independence; in other words, AI outputs should remain guided by human academic decisions. Consistent with this view, a teacher emphasised that AI should be reserved for first draft of grading, human-directed and critical judgment needs to remain central to ensure students’ autonomy, ethics and cognitive development.

- “AI helps teachers save time on grading and planning” (P01, P03, P04, P05, P06, P07, P09, P11, P13, P15, P16, P23, P24, P25, P26, **P33, P36**)
- “AI grading is useful for first drafts and practice, but human lecturers are still needed for deeper evaluation and guidance” (**P35, P36**)

This quote holds the view that AI reduces educators’ repetitive tasks in an automatic way.

- “AI helps us to design the Powerpoint, prepare the lesson” (P09, P16, **P33**)

This reinforces the perspective that AI increases educational efficiency but still remains the role of an assistant for lecturers; that is to say AI does not work independently and automatically but requires lecturers to refine and validate the materials.

### ***C. THEME 3: RISKS OF OVER-RELIANCE ON AI FOR CRITICAL THINKING AND INTEGRITY***

(Addresses RQ1 & RQ2)

A major concern among students showed that over-reliance on AI may undermine the essential academic competencies, especially critical thinking and independent research skills. Notably, these participants did not simply say “AI makes people lazy”, their answers reflect a more profound concern: The excessive use of AI to simplify task can diminish the cognitive effort necessary for reasoning at university level. Several students pointed out that overly depending on AI “shortens time for researching”, implicitly suggesting reduced engagement with sources, argumentation and reflective thinking. This theme highlights that higher education is beyond obtaining answers, but it is more about fostering inquiry skills. In fact, they express an ethical concern when students

uncritically accept AI-generated information, which leads to the risks of unintentional plagiarism and deterioration of their academic integrity.

- “It also leads to the over-reliance” (P15, P16, P23, P29, **P36**)

This quote highlights the students’ perception that excessive dependence on AI can jeopardise both learning process and academic integrity.

- “AI... makes us lazy to think, lazy to research” (P23, P27, **P36**)

These reflect an apprehension that excessive use of AI can weaken students’ critical thinking skills and reduce their active involvement in academic work.

#### ***D. THEME 4: AI'S CONSTRAINTS IN ASSESSING CREATIVITY, NUANCE AND CONTEXT***

(Addresses RQ2)

While acknowledging the strength of AI in providing consistent and rapid grading, the participants expressed scepticism about its ability to evaluate assignments that require creativity, contextual awareness and complex reasoning. To put it differently, as can be seen in their responses, these participants consistently noted that AI evaluating function works most effectively when handling structured and formulaic writing with clear and objective answers. At the same time, they criticised for its inability to recognise subtle meanings, rhetorical intent, cultural context and originality which are considered fundamental features of humanities and communication. Apparently, participants’ scepticism reflects their belief that learning process involves not only technical skills but also expressive dimensions; therefore, assessment should be capable of interpreting tone, originality, creativity and implied meaning. The identification of absence of human sensitivity in grading by AI explains their preference for using AI as a supportive tool rather than as the main evaluator.

- “Lacks sensitivity to creativity, relies on algorithms, raises ethical concerns” (P01, P02, P11, P13, P17, P24, P26, P27, P31, P32)
- “AI is unable to truly understand their students' perspectives and feelings” (**P34**)

These demonstrate the repeated concern that AI fails to effectively assess originality and implied meanings in students’ work.

- “AI may miss nuanced arguments, creative expression, irony” (P06, P10, P15)

This underscores their perception that AI is suitable for structured tasks while inadequate for assignments needing critical thinking and creativity.

#### ***E. THEME 5: CENTRALITY OF HUMAN EDUCATORS FOR EMPATHY, MENTORSHIP AND ETHICS***

(Addresses RQ1 & RQ2)

Despite recognising AI’s utility, the participants highlighted the indispensable role of human educators in providing emotional support, encouraging motivation and making ethical judgements. As inferred from the analysis of the interviews, the students frequently remarked that AI cannot “understand students’ feelings” (P05), “inspire” (P01, P06, P07, P09, P20, P32) or “mentor” (P02, P04, P09, P11, P16, P17, P20, P24, P25, P26, P31, P32, P35, P36), suggesting that they view effective teaching as based on human relationships and interactions. These patterns reflect the viewpoint that learning is a socio-emotional experience, not simply a process of acquiring knowledge. In other words, the students emphasised human educators’ role in maintaining academic integrity, monitoring inappropriate use of AI and understanding classroom interactions. The aforementioned tasks are those that require both empathy and ethical judgement. For this rationale, their reluctance to accept entirely AI-driven teaching does not merely result from fear of teaching, but from desire to preserve human connections in education. Likewise, the lecturers acknowledged the key difference between human and AI lays in complex pedagogical decisions.

- “AI will not be able to replace the human in teaching” (P18, P19, P23, P26, P28, P30)
- “Teaching also involves emotional intelligence, cultural understanding, and ethical judgment, which machines do not have” (**P36**)

These illustrate that the students believe AI cannot replace human lecturers in emotional support and ethical guidance.

- Teaching requires “human connection and mentorship” (P01, P02, P04, P06, P09, P11, P16, P17, P19, P20, P25, P26, P27, P31, **P36**)

This underscores the perception that socio-emotional support and mentoring is essential for effective learning and should be directed by human educators.

#### **F. THEME 6: PREFERENCE FOR A HYBRID HUMAN – AI MODEL AND ITS INFLUENCE ON CAREER OUTLOOKS**

(Addresses RQ2)

Both lecturers and students preferred an integration of AI and human judgement, believing such combination promotes fairness in grading and reflects how decisions are made in real-world classroom setting. In practice, from recruitment to classroom activities, the participants constantly recommended leverage AI for efficiency for administrative and routine tasks, such as organising and filtering while keeping the ultimate decisions under human authority. This proposal reveals their understanding AI's strengths should be used to support human in an appropriate way, not to replace human-mediated judgement. Moreover, the participants also added that future careers will demand new skills, such as digital literacy, flexibility, effective communication and ethical AI use, showing awareness that AI is not only changing the tools that human-beings use, but also reshaping workforce expectations.

- “I would choose both – AI-powered filtering with human decision-making” (All participants)

This quote expresses the students' preference for hybrid systems that combine AI's efficient speed with humans' critical judgement.

- Students need “digital literacy, critical thinking, communication, adaptability” (P02, P04, P06, P19, P25, P31, P36)

This confirms the participants' belief that AI is having impact on labour market by redefining new demanding professional competencies.

#### Summary of Findings

Overall, the findings above indicate that students in Ho Chi Minh City regard AI as a powerful tool that promotes personalisation, efficiency and accessibility in the learning and teaching processes. At the same time, they also express noticeable worry about over-reliance on AI resulting in reduced critical thinking, as well as AI's limitation in assessing creativity and diverse context nuances. Crucially, the participants continually highlighted the irreplaceable role of human lecturers in mentorship, ethical judgement and socio-emotional support. Also, the findings reveal the students' strong favour for a balanced and appropriate integration of AI – human model, emphasising the need for academic and professional skills to meet future career requirements.

## VI. DISCUSSION

This research explored Ho Chi Minh City university students' perspectives on the growing use of AI in education, especially how it influences learning practices, teaching activities, future employability and ethical considerations. The findings reveal a balanced perception: Although students acknowledge AI's efficiency and support in academic work, they still clearly point out the limits on the tasks where AI involvement should be stopped. To summarise, students view AI as an educational complementary tool that supports efficiency and accessibility when paired with human lecturers. The following discussion interprets the findings using three theoretical frameworks – TAM, Sociocultural Learning Theory and HCAI – and connects them with existing studies to identify their implications for theory, educational practice and future research.

### **A. AI AS A LEARNING ENHANCER: ENABLING PERSONALISATION, FLEXIBILITY AND AUTONOMY**

Participants perceived AI as a 24/7 tutor that provides personalised learning activities, instant feedback and flexible learning access. Such descriptions align with previous findings that adaptive AI tools boost academic performance by adjusting and personalising learning materials to meet each individual learner's needs [11] [33] [34]. Another experimental evidence by Mahendra [13] indicates that students who employ AI tutoring systems achieve higher grades and develop deeper understanding of learning materials, thereby get learner autonomy motivated, compared to those without such support, with teachers' role not being faded. Consistent with the global trend, Bui and Nguyen [35] found that Vietnamese undergraduates in Ho Chi Minh City claimed that they were greatly motivated by their improved writing performance when using AI-powered tools for drafting and feedback.

From TAM perspective, students' experience indicates that they find AI both useful and easy to use, which motivates them to adopt the technology [27] [28]. Their expressed confidence and independence also suggest that AI successfully fosters learner autonomy. According to Sociocultural Learning Theory, AI acts a supportive tool that supports human teaching process, not to replace it [29]. Especially in Ho Chi Minh City, Vietnam where large

class size and cultural norms may sometimes prevent students from asking questions to clarify, AI can become a valuable source to assist students. As a result, these contextual factors emphasise AI's ability to personalise and adapt to learners' pace. Besides, opinions by Vietnamese lecturers further reinforce this view when saying that AI can merely supplement teaching practices without underestimate human instructors' role in guidance and motivation

As an implication for practice, universities in Vietnam should integrate AI to boost learning accessibility and personalisation while still reserving a chance for students to interact with their human lecturers. In particular, Vietnamese universities should provide adaptive learning platforms, AI-assisted tutoring or automatic feedback on assignments while having human lecturers facilitate discussions, mentor students and monitor learning progress to maintain meaningful interaction between teachers and students.

#### ***B. ENHANCING TEACHING AND ADMINISTRATIVE EFFICIENCY: THE NEED FOR HUMAN OVERSIGHT***

As can be seen from the Finding section, both teachers and students emphasise AI's capability to streamline grading, lesson preparation and administrative duties. Such perceptions reflect international trends where AI deals with routine tasks, enabling teachers to dedicate more time and effort to mentoring and personalised teaching [36] [37]. However, participants repeatedly stressed the necessity of human supervision, resulting from the concerns about accuracy, contextual sensitivity and ethical responsibility. Consistent with the concern above, regarding lecturers, Hoang et al. [38] stated that while using ChatGPT for lesson planning, the teachers remain cautious about accuracy and ethical aspects. This finding is also spotted in Holmes' research in 2020 [25].

This view is supported by HCAI framework, which emphasises the collaboration between human and AI, rather than the replacement [30]. In Vietnam where this study was conducted, the emphasis on human oversight may also reflect the cultural norms, in which teachers are expected to take the authority, maintain fairness and protect academic integrity. Moreover, lecturers' feedback on AI-based assistance also stressed the importance of human responsibility in critical assessment.

The author suggests that AI use should be supervised by humans, especially for assessment and material generation, to ensure fairness and maintain academic integrity. In particular, there should be rules and procedures for lecturers to review AI-generated assignments for accuracy and provide corrective feedback. Besides, it is necessary for universities develop a dedicated course where students are allowed to explore different AI-based tools' strengths and weaknesses, as well as guided how to responsibly for academic tasks.

#### ***C. RISKS OF AI OVER-RELIANCE: IMPACT ON CRITICAL THINKING AND ACADEMIC INTEGRITY***

All participants worried that the excessive use of AI may erode critical thinking, self-directed research skills and academic integrity. This is consistent with studies showing that over dependence on cognitive tasks can weaken advanced thinking skills [39] [40]. Similar findings about ethical issues, including plagiarism and reduced ownership of learning, are also found in research by Zawacki-Richter et al. [41]. These findings indicate Vietnamese students' growing awareness of these risks, which shows that they are becoming more and more responsible in their academic work, particularly in a context where AI tools are easily accessed but no formal guidelines are published.

Viewed through the lens of Sociocultural Learning Theory, the excessive dependence on AI can potentially decrease students' engagement in interactive, socially supported learning activities, thereby weakens the primary purpose of university, which is to transform and develop students' professional skills through a series of collaborative and socially supported learning activities [29]. Corroborating this stance, the lecturers in this study emphasised that AI use must be put under human authority to maintain academic integrity and develop cognitive skills.

In practice, university should provide training in critical use of AI, allowing students to join discussions of ethics, academic integrity and independent inquiry. Specifically, universities should help learners use AI wisely by showing them how to check AI-created content, identify mistakes and verify facts with reliable sources. For example, during the course, teachers should organise activities that require students to independently think, or maybe teachers ask students to compare their own ideas with AI content on the same topic; in this way, students will appreciate their own creativity compared to AI's answers.

#### ***D. LIMITATION OF AI-BASED ASSESSMENT: CREATIVITY, SUBTLE MEANING AND CONTEXT***

Students were sceptical about AI's ability to grade essays requiring creative thinking, subtle reasoning or contextual understanding. This is consistent with previous research showing that automated scoring models perform reliably when handling clearly structured tasks, but struggle with subjective, interpretive or creative writings [42] [43].

In academic fields which demand creativity, deep interpretation and cultural understanding, such as humanities and communication, AI-based assessment tools alone are inadequate. Obviously, students' strong preference for human evaluators matches with HCAI principles, which emphasises that AI should act as a supportive tool to enhance human performance, rather than replace expert judgement [30]. Echoing this view, the Vietnamese lecturers in this research also emphasised that mentorship, nuanced assessment and contextual interpretation are distinct abilities possessed by human.

According to students' view, hybrid assessment models are proposed to minimise algorithmic bias and misgrading context-based tasks. In particular, the author recommends AI for the first round of assessment, such as checking grammar, calculating scores for multiple-choice items, with tasks needing creativity, personal interpretation or a contextual understanding being graded by human lecturers. This approach both saves time and ensures fairness and accuracy when grading complex works.

#### ***E. THE IRREPLACEABLE ROLE OF HUMAN EDUCATORS: EMOTIONAL AND ETHICAL DIMENSIONS***

Despite their confirmation of AI's benefits, students consistently highlighted the irreplaceable contributions of human lecturers in terms of providing mentorship, emotional support, motivation and moral guidance. This view is also reflected in international studies stating that interactive and ethical dimensions cannot be automated in pedagogical procedures [37] [41].

Drawing on Sociocultural Learning Theory, teachers scaffold both students' cognitive development and their emotional growth, influencing how students absorb knowledge and construct understanding through socially situated interactions [29]. Complementing this stance, HCAI framework underscores that AI-based designs function to enhance human efficiency, not to replace teachers [30].

In the context of Vietnam, strong relations between teachers and students are culturally crucial in education, which helps interpret why Vietnamese students repeatedly express their preference for learning experience directed by human teachers.

Based on the analysis of student responses, the researcher suggests that AI integration can be employed on the condition that the interaction and mentorship between teachers and students are protected. In other words, beside purely theoretical and hands-on classes, universities should set aside time for face-to-face discussion sessions where students are allowed to freely talk through their ideas and emotions and receive personalised feedback about both academic and ethical aspects from lecturers. In this way, socio-emotional support and ethical guidance remain instead of being overshadowed by AI-based tools.

#### ***F. HYBRID HUMAN-AI MODELS AND FUTURE CAREER OPPORTUNITIES***

Participants advocated for hybrid systems combining AI's efficiency in filtering with final judgement by human recruiters. This perception aligns with global research reflecting that future labour market will operate a model where machine and human capabilities are intentionally integrated to maximise efficiency of recruitment, instead of full automation [44] [45]. As can be seen from the findings in this study, despite acknowledging AI's strengths in handling large number of applicants, they still expressed concerns about fairness, nuanced emotions and contextual evaluation, which matches research showing that entirely automatic recruiting systems sometimes create algorithmic bias resulting in missed important qualities that a human recruiter would notice [46].

From the perspective of HCAI framework by Shneiderman [30], students' preference for a hybrid recruiting system stems from the emphasis on fairness, accountability, transparency and human oversight. Therefore, students implicitly advocate for a hybrid system which is reliable, explainable, empathically and ethically governed, indicating a mature and profound understanding of responsible use of AI. Furthermore, students' perceptions are confirmed by the Vietnamese lecturers' comments in this study stressing the need for balanced integration of AI and human to foster fairness, transparency and ethical supervision.

Based on what have been discussed above, the author proposes that universities should prepare students AI-human hiring processes. This includes clear guidance on AI literacy and algorithmic bias, so that students understand how AI filter applicants and why AI sometimes exclude potential candidates. To put it another way, students should be trained how to describe their strengths, so that AI can recognise promising candidates, such as how to prepare CVs. This kind of course should give students. Curricula should also deliver lessons related to socio-emotions so that students can still effectively and successfully pass human assessment. Finally, regarding companies, they should establish clear ethical rules about using AI in recruiting process to ensure fairness, transparency and accountability.

## VII. LIMITATIONS

Despite deep insight into students' perception of AI use and its impacts in education, this study still has some limitations. First, the small sample consisted of students from only 2 universities (HUFLIT and Bach Viet College) and 4 lecturers from 2 universities (HUFLIT and Tan Tao University). Consequently, the findings might not represent the perceptions of all students and teachers across Vietnam or other educational settings. Second, this study employed self-reported interviews where students shared their own opinions and experiences. Therefore, their answers might be affected by factors such as the desire to give socially acceptable responses, inaccurate memories or personal and subjective interpretations. Third, thematic coding method employed in this study has some limitations. That is to say, in spite of the methodology and reflexivity, the findings remain subjective because the researcher's views may influence how the themes were identified and interpreted. Fourth, this study only captured students' perceptions at one single time; as a result, it cannot assess the outcome of the integration of AI and human over a long period of time. Fifth, because the study was carried out in Ho Chi Minh City, which is characterised large class size, cultural norm and local teaching methods, its findings may not be appropriate to apply to other universities or countries. Finally, because this study mainly focuses on exploring students' perception instead of measuring the outcomes by AI, it cannot draw conclusions about the impacts of AI on students' academic achievement. However, it is undeniable that the study still provides deep understanding of the interaction between AI and human-centred role in education. In conclusion, to enhance generalisation and practical relevance, future studies are encouraged to broaden sample diversity, apply longitudinal or mixed-method designs and combine different instruments to obtain data from multidimensions.

## VIII. CONCLUSION

This study investigated how students in Ho Chi Minh City perceive AI in universities, revealing both its benefits and drawbacks. The participants' answers show that they appreciate AI for offering personalised support, prompt feedback and flexible accessibility, thereby promoting learner autonomy and efficiency. However, they repeatedly underscored the indispensable role of human instructors in offering mentorship as well as ethical supervision and developing critical thinking skills for complex tasks demanding nuanced contextual interpretation. These findings also combine three frameworks (Technology Acceptance Model, Sociocultural Learning Theory and Human-Centred AI), providing complete explanations of how students engage AI in their study in universities. In practice, this study recommends a hybrid AI-human model which leverages automation for efficiency while maintaining human judgement centred to ensure academic and ethical quality. As mentioned above, AI literacy, ethical instructions and socio-emotional skills need to be included in curricula to prepare students for educational demands and labour market's expectations. Despite its contributions, this study is limited by its small and localised sample, self-reported data and cross-sectional design, so the findings cannot be applied to other contexts. Therefore, future research should exclude these limitations by including diverse participants, using longitudinal or mixed-method designs to exactly measure AI's impacts in education. In conclusion, this study highlights the need for a combination of human and machine to boost teaching and learning processes while still guaranteeing human-authorized evaluation the centre of education.

## IX. REFERENCES

- [1] McCarthy, J. (1955). *A PROPOSAL FOR THE DARTMOUTH SUMMER RESEARCH PROJECT ON ARTIFICIAL INTELLIGENCE*. [Www-Formal.stanford.edu](http://www-formal.stanford.edu). <https://www-formal.stanford.edu/jmc/history/dartmouth/dartmouth.html>
- [2] Vaishya, R., Javaid, M., Khan, I. H., & Haleem, A. (2020). Artificial Intelligence (AI) applications for COVID-19 pandemic. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(4), 337-339.
- [3] UNESCO, I. (2020). Combat COVID-19: Keep learning. Together we are on the move. *Institute for Information Technologies in Education*.
- [4] Frey, C. B., & Osborne, M. A. (2017). The Future of Employment: How Susceptible Are Jobs to Computerisation? *Technological Forecasting and Social Change*, 114(1), 254-280. <https://doi.org/10.1016/j.techfore.2016.08.019>
- [5] Rajpurkar, P., Irvin, J., Zhu, K., Yang, B., Mehta, H., Duan, T., ... & Ng, A. Y. (2017). Chexnet: Radiologist-level pneumonia detection on chest x-rays with deep learning. *arXiv preprint arXiv:1711.05225*.
- [6] Taneri, G. U. (2020). Artificial Intelligence & Higher Education: Towards Customized Teaching and Learning, and Skills for an AI World of Work. Research & Occasional Paper Series: CSHE. 6.2020. *Center for Studies in Higher Education*.
- [7] Ma, Y., & Siau, K. L. (2018). Artificial intelligence impacts on higher education.
- [8] Wei, X., & Jia, H. (2021). A review of the application of artificial intelligence in the virtual learning environment. In *2021 Tenth International Conference of Educational Innovation through Technology (EITT)* (pp. 79-82). IEEE.

- [9] Chin, R. T. (2018). Education in the Artificial Intelligence Era-QS WOWNEWS.
- [10] Zouhaier, S. (2023). The Impact of Artificial Intelligence on Higher Education: An Empirical Study. *European Journal of Educational Sciences*, 10(1). <https://doi.org/10.19044/ejes.v10no1a17>
- [11] Yousif, J. H., Saini, D. K., & Uraibi, H. S. (2011). Artificial intelligence in e-learning-pedagogical and cognitive aspects. In *Proceedings of the World Congress on Engineering* (Vol. 2, pp. 6-8).
- [12] Mellul, C. (2018). Emerging technologies in higher education and the workplace: An assessment. *THE FUTURE*, 223.
- [13] Mahendra, M. W., Nurkamilah, N., & Sari, C. P. (2023). Artificial-intelligence powered app as learning aid in improving learning autonomy: Students' perspective. *JEES (Journal of English Educators Society)*, 8(1).
- [14] Hall, E. E. (2023). A user-centered design approach to evaluating the usability of automated essay scoring systems (Doctoral dissertation, Virginia Tech).
- [15] Jonäll, K., Sofkova, S., & Examiner, H. (n.d.). *DEPARTMENT OF EDUCATION, COMMUNICATION AND LEARNING Artificial Intelligence in Academic Grading: A Mixed-Methods Study*. Retrieved November 8, 2024, from [https://gupea.ub.gu.se/bitstream/handle/2077/83561/Jona%cc%88ll\\_HPA202\\_VT24.pdf?sequence=1&isAllowed=y](https://gupea.ub.gu.se/bitstream/handle/2077/83561/Jona%cc%88ll_HPA202_VT24.pdf?sequence=1&isAllowed=y)
- [16] Malik, A., Wu, M., Vasavada, V., Song, J., Coats, M., Mitchell, J., ... & Piech, C. (2019). Generative grading: Near human-level accuracy for automated feedback on richly structured problems. *arXiv preprint arXiv:1905.09916*.
- [17] Smith, T. (2018). More states opting to "Robo-Grade" student essays by computer. *NPR*. <https://www.npr.org/2018/06/30/624373367/more-states-opting-to-robo-grade-student-essays-by-computer>
- [18] Foltz, P. W. (2020). Practical considerations for using AI models in automated scoring of writing. *Application of artificial intelligence to assessment*, 101-113.
- [19] Bradrosenew. (2021). *Robots grade your essays and read your resumes - Brad Rose Consulting*. Brad Rose Consulting. [Robots Grade Your Essays and Read Your Resumes - Brad Rose Consulting](https://www.bradrosenew.com/robots-grade-your-essays-and-read-your-resumes)
- [20] Wang, W. & Siau, K. (2017). Impact of Artificial Intelligence, Robotics, Machine Learning, and Automation on the Medical Field. August 4-6. [https://www.researchgate.net/profile/Keng\\_Siau/publication/318913468\\_Impact\\_of\\_Artificial\\_Intelligence\\_and\\_Robotics\\_Machine\\_Learning\\_and\\_Automation\\_on\\_the\\_Medical\\_Field/links/5984ef56458515605844f070/Impact-of-Artificial-Intelligence-Robotics-Machine-Learning](https://www.researchgate.net/profile/Keng_Siau/publication/318913468_Impact_of_Artificial_Intelligence_and_Robotics_Machine_Learning_and_Automation_on_the_Medical_Field/links/5984ef56458515605844f070/Impact-of-Artificial-Intelligence-Robotics-Machine-Learning)
- [21] Gagua, L. (2015). E-recruitment and Applicant Tracking System: New age of technology based applicant screening. Threat or opportunity?.
- [22] Schellmann, H. (2024). *The Algorithm: How AI decides who gets hired, monitored, promoted, and fired and why we need to fight back now*. Hachette UK.
- [23] The Economist. (2018). How an algorithm may decide your career. *The Economist*. <https://www.economist.com/business/2018/06/21/how-an-algorithm-may-decide-your-career>
- [24] Acemoglu, D., & Restrepo, P. (2018). The race between man and machine: Implications of technology for growth, factor shares, and employment. *American economic review*, 108(6), 1488-1542.
- [25] Holmes, W. (2020). Artificial intelligence in education. In *Encyclopedia of education and information technologies* (pp. 88-103). Cham: Springer International Publishing.
- [26] Luckin, R., Cukurova, M., Kent, C., & du Boulay, B. (2022). Empowering educators to be AI-ready. *Computers and Education: Artificial Intelligence*, 3(100076), 100076. <https://doi.org/10.1016/j.caeai.2022.100076>
- [27] Davis, F. D. (1989). Technology acceptance model: TAM. Al-Suqri, MN, Al-Aufi, AS: Information Seeking Behavior and Technology Adoption, 205(219), 5.
- [28] Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management science*, 35(8), 982-1003.
- [29] Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Harvard university press.
- [30] Shneiderman, B. (2020). Human-centered artificial intelligence: Reliable, safe & trustworthy. *International Journal of Human-Computer Interaction*, 36(6), 495-504.
- [31] Saunders, M., Lewis, P., & Thornhill, A. (2009). Understanding research philosophies and approaches limited edition: Research methods for business students. *London: Pitman*.
- [32] Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- [33] de Baker, R. S. J., & Inventado, P. S. (2014). Chapter X: educational data mining and learning analytics. *Comput. Sci*, 7, 1-16.
- [34] Nye, B. D. (2015). Intelligent tutoring systems by and for the developing world: A review of trends and approaches for educational technology in a global context. *International Journal of Artificial Intelligence in Education*, 25(2), 177-203.

- [35] Bui, T. T., & Nguyen, T. S. (2023). The survey of digital transformation in education: A systematic review. *International Journal of TESOL & Education*, 3(4), 32-51.
- [36] Luckin, R., & Holmes, W. (2016). Intelligence unleashed: An argument for AI in education.
- [37] Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial intelligence in education promises and implications for teaching and learning. Center for Curriculum Redesign.
- [38] Hoang, Thi Thanh Hang, Huong Nhung Dang, Ngoc Bao Quynh Pham, and Thi Kim Xuan Truong. (2025). "EFL Teachers' Perceptions of Utilizing ChatGPT in Designing Lesson Plans for IELTS Reading Skills." *International Journal of AI in Language Education* 2, no. 3 (2025): 19-39.
- [39] Selwyn, N. (2019). Should robots replace teachers?: AI and the future of education. John Wiley & Sons.
- [40] Arslanova, K. Z., Zh, A. A., & Aitpayev, A. T. (2024). THE IMPACT OF AI ON STUDENT MOTIVATION AND COGNITIVE SKILLS IN HIGHER EDUCATION. *Вестник науки*, 2(11 (80)), 1034-1052.
- [41] Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education—where are the educators?. *International journal of educational technology in higher education*, 16(1), 1-27.
- [42] Shermis, M. D., & Burstein, J. (2013). Handbook of automated essay evaluation. NY: Routledge.
- [43] Williamson, B., Eynon, R., & Potter, J. (2020). Pandemic politics, pedagogies and practices: digital technologies and distance education during the coronavirus emergency. *Learning, media and technology*, 45(2), 107-114.
- [44] McAfee, A., & Brynjolfsson, E. (2017). *Machine, platform, crowd: Harnessing our digital future*. WW Norton & Company.
- [45] Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. *Harvard business review*, 96(1), 108-116.
- [46] Ajunwa, I. (2020). An auditing imperative for automated hiring systems. *Harv. JL & Tech.*, 34, 621.

## NHẬN THỨC CỦA SINH VIÊN VỀ ỨNG DỤNG CỦA AI Ở ĐẠI HỌC VÀ ẢNH HƯỞNG CỦA NÓ ĐỐI VỚI GIÁO DỤC

Phan Ngọc Phương Vy

**TÓM TẮT**— Mặc dù đã xuất hiện từ những năm 1950, đạo gàn đây chúng ta mới được chứng kiến những bước phát triển ấn tượng của trí tuệ nhân tạo (AI) trong nhiều lĩnh vực, bao gồm cả giáo dục đại học. Có thể nhận thấy từ các ứng dụng có sẵn ngày nay, đối với sinh viên, AI có khả năng tối ưu hoá sự hiệu quả tron học tập bằng cách cá nhân hoá phương pháp học tập để đáp ứng các nhu cầu khác nhau của sinh viên, tạo ra phản hồi ngay lập tức, và tự động hoá các nhiệm vụ hành chính. Xét về giảng viên, AI có thể hỗ trợ họ chấm điểm, cho phép họ dành nhiều thời gian và công sức hơn cho việc lên kế hoạch và giảng dạy chất lượng hơn. Nghiên cứu này đánh giá vai trò của AI trong giáo dục đại học thông qua phân tích các mặt liên quan, như dạy và học, kiểm tra - đánh giá, vấn đề đạo đức, kĩ năng cần thiết; từ đó, đánh giá ảnh hưởng của AI với tiềm năng nghề nghiệp của sinh viên. Để đạt được mục tiêu này, phương pháp nghiên cứu định tính được áp dụng để thu thập dữ liệu từ sinh viên đại học thông qua công cụ phỏng vấn. Kết quả của nghiên cứu cho thấy tầm quan trọng của AI trong môi trường giáo dục, đặc biệt là ở bậc đại học. Bên cạnh đó, nghiên cứu cũng làm nổi bật tầm quan trọng của việc ứng dụng AI có đạo đức trong môi trường học tập.

Từ khoá— trí tuệ nhân tạo (AI), dạy, học, giáo dục đại học, ảnh hưởng



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