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THE USING A.I TOOLS ON FOURTH-YEAR EFL LEARNER-AUTONOMY: A CASE AT NGUYEN TAT THANH UNIVERSITY

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Abstract

The purpose of this current study is to evaluate the extent to which the Application of Artificial Intelligence (AI) tools support Learner-Autonomy EFL learning among fourth-year students of Nguyen Tat Thanh University. Hence, it looks at the effectiveness of A.I in promoting learner-autonomy while evaluating the effectiveness of an A.I system on self-regulated learning behaviours. The results reveal mostly positive attitudes towards the use of A.I tools, mostly for developing skills and seeking resources. But the studies also showed some problems including over dependence on A.I, problems with use of the A.I types, doubts about critical thinking and social skills. Anyways, the study established fills the literature gap on understanding A.I to help EFL learners. It provides recommendations for both teachers and developers of A.I as they point to valuable strategies to implement effective learning space that fosters language development and allows learners to be self-directed.

Keyword: Learner-autonomy, A.I tools, using A.I tools, Learner-Autonomy English as a Foreign Language (EFL).

INTRODUCTION

This research proposal examines the applicability of AI in changing the face of education focusing on EFL learning NTTU. The concern to the paper is set in the introduction noting the increasing applicability of AI in learning context and its impact on the learner independence – the student's capacity of being able learner. It also accepts the fact that although many skills and resources are available in the forms of educational tools through the application of AI; the incorporation of AI tools within the educational system should also be controlled and guided properly, A.I-supported instruction has significantly improved learners' speaking abilities, including fluency, grammar, vocabulary, and pronunciation. Some A.I tools can help students become more confident and improve their skills more effectively than traditional methods (Kim, 2022). This comprises an analysis of how they may contribute to self-organised, individual and self-paced learning.

However, as the above literature reveals, the use of AI has been established to enhance learner confidence, skills, and delivery of tailored learning, there are challenges as regards human interaction, connectivity, data privacy, and the general possibility of reduced involvement in more conventional forms of learner interactions, According to the studies by (Crompton, Lee et al. ,2024) A.I has offered improvement in readed and spoken language proficiencies, getting better in Reading (Crompton et al., 2024); rapid and effective communication (Lee et al., 2024), and offers customized learning experiences as highlighted by (Chea and Xizo, 2024). All these issues need to be well coordinated, solved, or analyzed so as to ensure that integration is proper and has a positive impact.

A.I technologies support learner autonomy, which includes self-directed learning, independent learning, and self-instruction. A.I based programs adjust to the pace, complexity, and pertinence of the learning materials to learn most effectively (Solidjonov, 2024). This section also presents the research focus as the impact of how learner-autonomy using AI tools in academic accomplishment and rising demand in educational institutions – benefits and risks only.

LITERATURE REVIEW

Without exaggeration, it is imperative to incorporate the A.I tools into Self-Regulated Learning of English as a Foreign Language (EFL). Many scholars claim that language learning autonomy is crucial in today's diverse and multilingual learning environment

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(Dwivedi 2023). Self-directed learners are able to take full responsibility for themselves, their learning activities, personally and academically set goals and make decisions regarding their learning of languages). One such approach is becoming integrated between A. I tools and learner autonomy that have been researched highly for their impact in SAMR modules, Constructivism theory and Self Determination theory. In general, the application of the learner-autonomy on the path has incorporated the use of A. I tools.

Leaner Autonomy

In recent years, many studies have highlighted the importance of Learner-autonomy for ESL students, demonstrating its vital role in fostering independent learning. The concept of "learner-autonomy" emerged in the 1970s and has since become a cornerstone in language education. According to (Holec, 1970) being autonomous in learning means taking responsibility for all decisions related to every aspect of the learning process. A learner-autonomy could be described as the ability of the learners to manage the learning process so as to set goals, select modes of learning, and assess accomplishment, (Lam, 2023). This notion has originated from the fact that learners are seen as the actors in learning process rather than being the recipients of information.. In the context of language learning, learner autonomy is particularly important as it makes students use self-directed learning behaviours, as well as autonomous learning strategies, such as practising language skills outside classroom which are significant to the achievement of the desired learning outcomes of a foreign language.

Artificial Intelligence (A.I) Tools.

An overview of A.I tools, according (Kessler, 2018); (Xia, 2022) Artificial Intelligence (A.I) refers to computer models that simulate human intelligence and are programmed to think, learn, and perform tasks like humans, including problem-solving, data analysis, and interpretation (Hassani, 2020). A.I is used in adaptive learning systems, socially assistive robots, intelligent tutoring systems, and administrative support systems with the goal of assisting language learners to enhance their linguistic skills, such as reading, writing, vocabulary, oral communication, and grammatical skills (Vall & Araya, 2023). A.I take on various roles in vocabulary learning for second language (L2) Learner-autonomy, acting as a personal assistant, teacher, and reviewer. This transformation shifts traditional learning methods into innovative and effective solutions (Kessler, 2018). However, the field is still in its early stages. Moreover, AI facilitates inclusivity and accessibility, further supporting autonomous learning. Adaptive technologies can cater to diverse learning needs, including those of students with disabilities. For instance, speech-to-text and text-to-speech tools enable students with visual or hearing impairments to engage with educational content independently. Additionally, AI-powered translation tools break language barriers, allowing non-native speakers to access a broader range of resources. These advancements create an equitable learning environment where all students can exercise greater autonomy over their education. A.I tools can be incredibly helpful for students preparing for tests and assessments by offering immediate, personalized feedback This quick feedback loop can significantly enhance the learning experience, allowing vocabulary learner autonomy to correct mistakes in real time and learn more effectively.

Technology in Education.

The proposal concludes that cultural, language, and contextual factor have a great influence on the use of technology enhanced language acquisition (Boonmoh, 2023). People are diverse in terms of communication pattern, cultural belief, and way of learning (Hoang, 2017). Using culturally appropriate materials and technologies can help teachers build the feeling of acceptance and respect, as well as any of the student's activity increase their motivation and engagement in language practices (Hoang, 2024). It also enables one reach out to the students and at the same time ensures that every student is esteemed in class. Therefore, learning integration of culture, language, and context in technology supported teaching plans will help facilitate the definition of an all rounds learning environment. Hearing this thoughtful approach, it is not only possible to use the features of technology but also pertinent to the backgrounds and learning requirements of the various learners (Crompton, 2024). In this way educators are creating a better opportunity for meaningful and efficient language learning processes. In jointly appreciating these elements, staying alert to them will be important in the contemporary advances in technology as learners are helped to be empowered through effective and comprehensive learning environments.

Challenges and Limitations of using A.I Tools on Learner-Autonomy.

(Alharbi & Khalil, 2023) explore the role of A.I in vocabulary acquisition, they don't fully address how these tools can promote learner autonomy. There's a pressing need for research that delves into how A.I can foster self-directed learning skills. Although their study discusses the integration of A.I in vocabulary learning, it doesn't examine how A.I can aid in educational planning and personalized learning experiences, both of which are crucial for developing autonomy. Additionally, (Alam et al., 2023) have started to explore A.I 's impact on writing skills, but their work doesn't focus on how these tools can promote learner autonomy. There's a gap in understanding how A.I can empower students to take control of their own learning, develop self-discipline, and improve their skills independently.

Future research should focus on combining A.I tools with strategies for fostering learner autonomy, investigating how these technologies can help students plan their learning paths, monitor their progress, and stay motivated. This approach could offer invaluable insights into creating more effective, engaging, and personalized learning experiences. (Thuy & Thao, 2024) is quite helpful to provide a richer perspective on Vietnamese EFL teachers' perceptions and beliefs regarding the impact of A.I on students' creativity in learning English. It highlights the advantages and disadvantages of integrating A.I into language acquisition and learning environment and considers its potential for future policies, curricula, and teacher training in education. However, it does not

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allow the student to have control over their learning processes such as self-directed learning and independent study. In the (Nguyen, 2023) study, Nguyễn tries to explain how context matters with regards to the integration of A.I tools in Vietnamese EFL and ELT classrooms, as well as the rationale behind the use of tools like ChatGPT and Bard. These A.I tools presented in the research demonstrate potential for the improvement of students' learning process in Vietnam. However, it points to an important gap in the current work on the notion of learner autonomy (L.A.), a component of second language acquisition. In (Lam, 2023) study, a focused, empirical research explores the specific tool of the use of mobile-assisted applications and their impact on learner autonomy in listening skills. The research concluded that through the mobile-assisted applications, they enhanced the students' participation and motivation, as well as enhanced their sense of responsibility. Students were therefore able to utilize learning strategies in a way that enhanced their listening competence.

RESEARCH METHODOLOGY

This research uses a quantitative approach. Data are collected using questionnaire survey with learners. These data are then supplemented by a survey questionnaire to obtain the students' perspectives on their self-learning experiences. Quantitative data was used to show the impact of A.I integration with their self study practice. The instrument used is SPSS (Statistical Package for Social Sciences), which allows the researcher to gather the data and offer reliable and valid findings. The structured questionnaire contains the students' opinions regarding the use of A.I tools in their self-study, including questions in a 5-point Likert scale format (Strongly Agree – Strongly Disagree). Interviews were conducted in dual-lingual (Vietnamese & English) to allow the participants to freely express their views.

The participants of the study were 50 English major students from the Faculty of Foreign Languages at NTTU, consisting of 27 females and 23 males in the 2024-2025 academic year. These students, all majoring in English, the participants ranged from 20 years old and above, with varying levels of English proficiency, having studied the language for 7 to 9 years. While some students demonstrated strong English skills, others were less proficient.

Scale	Numerical Value	Descriptive Value
5	4.50 – 5.00	Strongly Agree
4	3.50 – 4.49	Agree
3	2.50 – 3.49	Maybe
2	1.50 – 2.49	Disagree
1	1.00 – 1.49	Strongly Disagree

FINDINGS AND DISCUSSIONS

Table 1. Benefits of Using A.I Tools for LA

QUESTIONNAIRE ITEMS	1	2	3	4	5	MEAN	SD
1. I BELIEVE THAT USING A.I TOOLS CAN ENHANCE MY SKILL SET IN LEARNING EFL	0%	12%	22%	38%	28%	3.82	0.98
2. I FEEL COMFORTABLE USING A.I AS AN ADDITIONAL TOOL FOR MY SELF-STUDY	0%	8%	20%	34%	38%	4.02	0.96
3. I FEEL COMFORTABLE USING A.I AS AN ADDITIONAL TOOL FOR MY SELF-STUDY	0%	4%	16%	42%	38%	4.14	0.83
4. I REALIZE THAT USING A.I TOOLS HAS SIGNIFICANTLY IMPROVED MY EFL LEARNING ABILITY IN A SHORT PERIOD OF TIME.	0%	8%	16%	36%	40%	4.08	0.94
5. I OFTEN USE A.I TOOLS FOR MY EFL SELF-STUDY.	0%	8%	34%	30%	28%	3.78	0.95

In general, students have some recognition of the importance of A.I tools in their learning process. However, given the mean scores using A.I tools by the students, the actual utilization of the tools differs with the accessibility, time available, and frequency of utilization. The average thus derived was not very high and it points to the probability that the frequency of A.I tool usage could be upscaled, maybe through training or sweeteners. About the utilization level of the AI tools, several participants claim that they rarely use A.I at all, it could be due to restricted availability or personal choice. On the other hand, some learners often use these tools as part of their learning schedule indicating high utilization

The scores varied from equality 2 to 5; none of the participants opted for 1 (Strongly Disagree) regarding the items in this cluster. This means that while adopting different stances on the use of A.I tools, all the participants in the study declare they have utilized the tools in some way, in short-term tasks or for long-term goals.

In total, the values into five items varied from 3.78 to 4.14, which shows a rather positive attitude towards the usage of A.I tools for

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self-study. These values suggest that the respondents comprehend the usefulness of A.I instruments and do not have major concerns about their use, even though there are distinctions in the frequency of the use and the effect on their EFL learning capabilities.

Table 2. Challenges of Using A.I Tools for LA

QUESTIONNAIRE ITEMS	1	2	3	4	5	MEAN	SD
6. FEEL TOO DEPENDENT ON A.I TOOLS IN MY EFL LEARNING	0%	4%	24%	34%	38%	4.06	0,890
7. I FIND IT DIFFICULT TO LEARN EFL EFFECTIVELY WITHOUT A.I TOOLS	0%	10%	22%	42%	26%	3.84	0,934
8. I SOMETIMES FIND A.I TOOLS CONFUSING OR DIFFICULT TO USE, WHICH HINDERS MY LEARNING	0%	12%	24%	30%	34%	3.86	1,030
9. I FEEL THAT USING A.I TOOLS MAKES ME LESS LIKELY TO SEEK HELP FROM TEACHERS OR PEERS	0%	8%	18%	38%	36%	4.02	0,937
10. I AM CONCERNED THAT OVER-RELIANCE ON A.I TOOLS WILL WEAKEN MY CRITICAL THINKING AND PROBLEM-SOLVING SKILLS	0%	12%	16%	38%	34%	3.94	0,998
11. I NOTICE THAT FEEDBACK FROM A.I TOOLS IS SOMETIMES INACCURATE OR UNHELPFUL	0%	6%	16%	36%	42%	4.14	0,904
12. I FIND THAT A.I TOOLS DO NOT ALWAYS MATCH MY PERSONAL LEARNING STYLE, MAKING THEM LESS EFFECTIVE	0%	10%	24%	32%	34%	3.90	0,995
13. I FEEL OVERWHELMED BY THE VARIETY OF A.I TOOLS, MAKING IT DIFFICULT TO CHOOSE THE RIGHT ONE	0%	12%	20%	24%	44%	4.00	1,069
14. I FEEL A.I TOOLS CREATE DISTRACTIONS RATHER THAN HELPING ME FOCUS	0%	8%	16%	42%	34%	4.02	0,915

This study thus has implications for how such reliance might negate the promotion of learner autonomy. Students just become over-reliant on the use of A.I; therefore they develop lower self efficacy, which means that they will start doubting their own capacity to learn. This statistic brings a connotation to the over-reliance on technology when producing desired academic outcomes. Also may stem from the students having little experience with traditional teaching models or because of the widely held belief that they cannot achieve great scores if the A.I tool is not doing most of the work.

Usability Challenges (Q8) – "I sometimes find A.I tools confusing or difficult to use, which hinders my learning". When compared to the Means and the Standard Deviations obtained for all the other questions, the results from question 8 show a relatively high level of variation in terms of usability of the A.I tools by students. Q9 inclination to disengage and withdrawal from participating in collaborative collaboration can lead to decrease student's motivation as well as their perceived membership in the classroom. According to (Thuy & Thao ,2024) educational stakeholders must subjectively integrate A.I systems in a manner that enhances critical thinking steps rather than degenerating it. The issue is to use these technologies in a way that will improve students' ability to analyze and evaluate content, as well as to develop their thinking skills.

Inaccurate or Unhelpful Feedback (Q11) The results for Question 11 is alarming, with the (M= 4.14 ; SD = 0.904) pointing to the fact that a fairly large number of students reported difficulties associated with the accuracy and utility of the feedback provided by A.I tools. This finding shows a weakness of the current A.I technology, it is because number of students could seek positive suggestions from them. As a result, it underscores the importance for learners on the development of relevant critical evaluation skills for accessing and interpreting A.I feedback during self-appraisal.

Q12 is evidence of the need for personalised education and to allow learners to have the chance to select tools that they prefer and need. According to (Nguyen, 2023), enabling learners to choose the strategies and tools that suit them will create more interested and effective learners in their academic work. Within this context, there are various sources of information that educators

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must guide leaners to access the right information that shall enable them to progress in the complex life situation.

Thus, providing guidance and specific suggestions, teachers may help students understand which tools are helpful for improvement, thus helping the A.I tools to be more valuable for students. The fact that 34% of students reported feeling distracted by A.I tools (M=4.02, SD=0.915)) show the existence of a great need for the use of focused learning strategies within this sample. Since technological accessories are predominant the learning environment and can greatly affect the learning outcomes, teachers should know strategies that promote focused learning.

With these tools the educators can increase the content's meaning for the student and mitigate the effects of distractions on learning

Table 3. How do A.I tools impact on NTTU fourth-year LA

QUESTIONNAIRE ITEMS	1	2	3	4	5	MEAN	SD
15. I FIND THAT A.I TOOLS ALLOW ME TO STUDY MORE EFFECTIVELY IN A SHORTER AMOUNT OF TIME	0%	14%	16%	36%	34%	3.90	1,035
16. I APPRECIATE BEING ABLE TO SELF-LEARN DIVERSE EFL KNOWLEDGE FROM DIFFERENT CULTURES THROUGH A.I TOOLS	0%	14%	24%	24%	38%	3.86	1,088
17. I FEEL THAT USING A.I TOOLS MAKES IT EASIER FOR ME TO CREATE AND FOLLOW A SELF-STUDY PLAN	0%	18%	18%	30%	34%	3.80	1,107
18. I HAVE BECOME MORE INDEPENDENT IN LEARNING EFL THANKS TO A.I TOOLS	0%	10%	26%	26%	38%	3.92	1,027
19. I FEEL I HAVE BETTER CONTROL OVER MY LEARNING PACE WHEN USING A.I TOOLS COMPARED TO TRADITIONAL METHODS	0%	12%	18%	24%	46%	4.04	1,068
20. I AM FAMILIAR WITH USING A.I FOR MY SELF-STUDY TO LEARN NEW THINGS	0%	12%	28%	24%	36%	3.84	1,057

Q15 – Raise in Learning Effectiveness - A higher percentage of 70% of the students strongly affirmed the sense of belief that A.I. improves the learning efficiency as suggested and recorded with a mean value of 3.90 and standard deviation of 1.035.

Access to Diverse Knowledge (Q16) – self learning mechanism of diverse knowledge that exist in EFL or English as a foreign language from different culture is facilitated through A.I. In the case of the fourth research question, students' responses showed that 61.7% of them were either completely or partially in agreement that A.I. has allowed them to discover various facets of EFL across cultures (M = 3.86, SD = 1.088).

Self-Study Organisation Flexibility (Q17)– "The use of A.I. tools enhances my ability to arrange for self-study." Students' perception of A.I. in helping manage study schedules was confirmed by signed agreements reported by 74% of students (M = 3.80, SD = 1.107), as indicated their learning autonomy.

Independence in Learning EFL (Q18) – "I have become more independent in learning EFL thanks to A.I". To measure the relative autonomy of the students, the percentage of the students who described their level of independence in learning EFL as enhanced through the use of A.I tools were 64% (M = 3.92, SD = 1.027).

Beneficial Aspect: The intention of this question (Q19) was to establish whether the respondents had any idea about how artificially intelligent tools helped them to control their learning pace as opposed to conventional techniques. Respondents concur that A.I. gives them more control over the pace at which they learn, in total 70% of students approved this claim with Mean = 4.04 SD = 1.068).

Technology Comfort for Learning Anew (Q20) – "Comfort using A.I for self learning." This underlines that A.I. brings the approach that is individual to the student and that let him or her choose what to input to the educational environment, therefore, enhancing it.

CONCLUSION

This chapter intergrate the posited of the study concerning the strengths and weaknesses of deploying A. I am doing EFL self-study, and my area of interest is learners autonomy. Of course, it offers specific recommendations for educators to adopt, A. It is meant for tool developers and future researchers. There are significant differences between the current study and the one of Wang and Lin (2013), which was also conducted among fourth-year EFL students in NTTU in terms of the results obtained. Despite the acknowledged perspective that I tools are effective for optimizing learning efficiency, these tools have their drawbacks, including overreliance, functionality concern, and questions about critical thinking and individual approach.

A key finding is the autonomy paradox: while A. I tools could therefore assist learners by providing individual help, however they could lead to dependence, a decline of self- efficiency and motivation. This has raised the need for a critique of A. The research focuses on the integration of A.I in education, elements of self-regulated learning such as autonomy, metacognition, and intrinsic motivation for using A.I in self-regulated learning.

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