

EDUCATORS' PERSPECTIVES ON USING (AI) AS A CONTENT CREATION TOOL IN LIBYAN HIGHER EDUCATION: A CASE STUDY OF THE UNIVERSITY OF ZAWIA

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ABSTRACT

This study investigates how artificial intelligence (AI) is incorporated into curriculum development and instruction at the University of Zawia in Libya. It focuses on focuses on educators' challenges, perceptions, and their use of (AI) for content creation. According to 119 participants in a mixedmethods study incorporating quantitative questionnaire and qualitative interviews, 96.4% acknowledge the need for advanced training, and 95.2% believe that (AI) will have an increasing impact on education. Even though 71.9% of respondents agreed that (AI) could improve educational materials, only 30.2% utilized (AI) tools to assess students. Challenges included limited access to (AI) tools (79.6% had not attended (AI) workshops) and ethical concerns (61.3%). Notwithstanding these obstacles, academics emphasized how (AI) could improve research and instruction. They also highlight the necessity of institutional support and training to maximize (AI's) contribution to higher education.

Keywords: (AI), University of Zawia, Curriculum, Higher Education

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INTRODUCTION

The University of Zawia is considered one of the leading higher education institutions in Libya, with around 3000 lecturers and 24000 students. It ranked 201-250 in Arab Region Rankings by QS Quacquarelli Symonds Limited (<u>Top Universities, n.d.</u>). The language of instruction is Arabic unless the program requires a foreign language, such as English or French. The university aims to build qualified graduates who are equipped with the most recent knowledge. The administration prioritizes education over research and community service, emphasizing that "education has an important role in forming a quality next generation" (<u>Masuwd & Putra, 2024, p. 30</u>).

The use of artificial intelligence (AI) tools is becoming increasingly relevant in Libya's higher education intuitions. Emran and Elhony, in their study of AIin Libyan higher education institutions, conclude that "the implementation and adoption of artificial intelligence is inevitable in the education sector" (Emran & Elhony, 2024, p. 1248). This use facilitates the teaching and learning process, which works in accordance with other technology. Abdulghani and Nurhidin highlight the administration's role in facilitating technology use in educational institutes, noting that opportunities to improve and develop educators' professional competence include participating in webinars, seminars, workshops, and teaching practices as a way to enhance their knowledge and stay up to date with technology (Abdulghani & Nurhidin, 2024). Also, the use of AIin education motivates educators to develop new competencies and refine their teaching methods. Researchers argue that motivation is very important in education (Masuwd, Sumanik, Sarkawi, & Amer, 2024). The use of AI in developing curriculum and methods of teaching requires highly motivated educators who are eager to engage with advanced technologies associated with Society 5.0.

In this research, we seek to address key questions regarding the use of AIas, a supportive method for educators to create suitable content for the learners in various fields of knowledge. The study aims to 1) explore the educators' use of AIas, a teacher support tool in content creation, 2) investigate educators' perceptions and attitudes toward AIas, a content creation tool integrated within their existing syllabi, and 3) identify the benefits and challenges experienced by the educators when using AIin content creation and teacher support activities.

LITERATURE REVIEW

In the contemporary era of technology, the integration of AI tools has become pervasive across diverse domains. Literature indicates a substantial acceptance of and positive attitudestowards using AI in the classroom. Paisun, Syarifah, & Masuwd, M. argue that Self-efficacy plays a crucial role in the classroom, especially in the era of digitalization and Education 4.0. Teachers who have a strong sense of self-efficacy are more likely to adapt to new technologies and teaching methods, ultimately benefiting their students (Paisun, Syarifah, & Masuwd, 2024, p. 97).

The interest of educators in the use of AI in their classes has increased as it facilitates the teaching and learning process. In science education, for example, literature indicated that teachers "have a high level of acceptance for using AI applications in their classrooms" (Al Darayseh, 2023, p. 6). Other studies indicate that "applications of AI in higher education have the potential to improve faculty engagement and their attitude toward applying new technology in their routine teaching, learning, and assessment practices" (Rahiman & Kodikal, 2023, p. 17).

Building on these findings, a study in the Libyan context, a study by Alaiat (2023) explored the challenges and difficulties encountered by computer science educators in higher education focusing on the utilization of ChatGPT. This study highlighted that most participants (72%) encountered occasional internet connectivity issues, causing delays in system responses and interrupting the flow of virtual conversations. In addition, the system occasionally generates responses that might be "culturally

inappropriate or misunderstood". The study indicates that 78% of educators recognized the need for time and effort to become proficient in using ChatGPT and incorporating this technology requires adjustments in lesson planning and delivery strategies.

Moreover, another Libyan study by (Abolkasim & Hasan, 2024) has evaluated the potential for integrating ChatGPT into university-level learning and education in Libya. The results indicate that lecturers comprise 49% of the sample, while students make up 31%. The remaining university staff represents a smaller percentage. The study found that ChatGPT is used more frequently among educators and students than among other university staff. Consequently, there is a relatively high level of agreement and positive attitudes among the respondents to the use of ChatGPT in education.

Studies related to interactive digital media show that "the use of interactive digital media can improve the pedagogic ability of teachers in designing, providing and developing better, interesting, interactive and effective learning processes" (Mustakim, Setyawan, Hunaenah, & Masuwd, 2024, p. 156). Thus, it is important to consider AI as a valuable tool for content creation in academia, as it is already used by many educators. This shift in teaching and learning makes it a necessity to integrate AI in education. Jacques, Paul H., Hollye K. Moss, and John Garger mention that integrating generative AI into curricula "exposes students to practical applications that align with academic goals (Jacques, Moss, & Garger, 2024, p. 105).

Most studies focus on the benefits, challenges and drawbacks of AI tools in educational settings. Yet, research on how educators integrate AI into curriculum content creation in higher education remains limited. This study aims to address this gap in the literature by inspecting the use of AI toolsto create content at the University of Zawia, Libya.

METHODS

To obtain thorough information on faculty opinions, a mixed-methods approach combining quantitative questionnaire and qualitative interviews was employed. Faculty members were chosen through stratified random sampling from a variety of departments to ensurefull representation of different specialties and AIrelated experiences. An online Google form questionnaire that included Likert-scale questions and yes/no questions about the perceived advantages, difficulties, and readiness to use AI tools. The qualitative interviews aimed to obtain in-depth knowledge and firsthand accounts of AI's application in education.

RESULT AND DISCUSSION

Quantitative Analysis:

To analyze the data and address the study's objectives, percentages were utilized to present the findings effectively. A total of 119 responses to the questionnaire were collected from participants in various specialties. The percentage of participating disciplines is as follows:

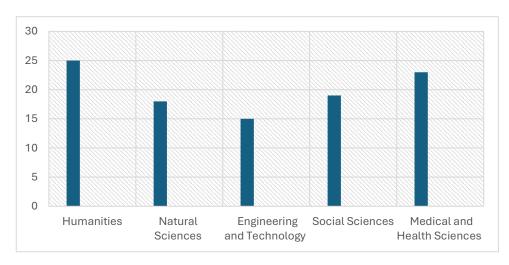


Figure 1: The percentage (%) of participating disciplines

The chart above clearly shows that the survey participants represent a wide range of disciplines and departments across the university. This reflects the strong interest among faculty members in artificial intelligence and their eagerness to share their insights on the topic. The highest percentage of participants came from the humanities departments, accounting for 25% of the total number of participants.

The questionnaire included a total of five Likert-scale questions, designed to gauge participants' opinions, attitudes, or behaviors on specific topics. Respondents were asked to indicate their level of agreement or disagreement with each statement. To present the results in a more comprehensible way, the responses to these questions were visualized using charts. These charts simplified identifyingpatterns and trends in the participants' feedback thanks to these charts, which helped to clearly display the distribution of responses.

Q1: What is your level of familiarity with AI tools and programs?

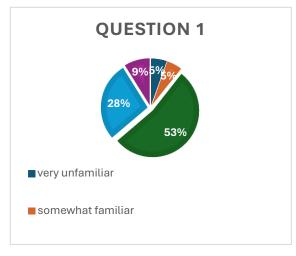


Figure 2: Chart showing the percentage of responses for question 1

Q2: How do you perceive the impact of artificial intelligence on the quality of teaching?

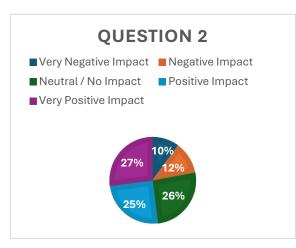


Figure 3: Chart showing the percentage of responses for question 2

Q3: What is your overall assessment of using artificial intelligence in education?

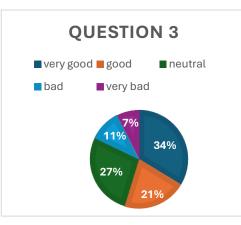
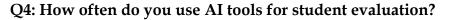


Figure 4: Chart showing the percentage of responses for question 3



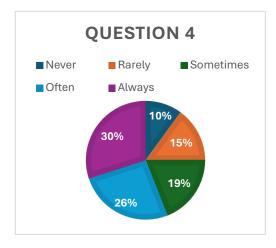


Figure 5: Chart showing the percentage of responses for the question 4

Q5: How would you evaluate your university's shift toward AI-powered digital education?

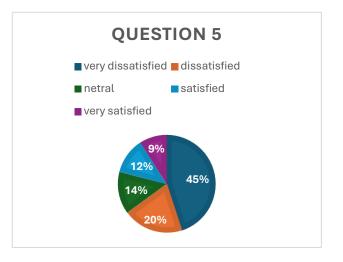


Figure 6: Chart showing the percentage of responses for the question 5

A total of 13 Yes/No questions were included in the questionnaire to investigate participants' involvement with AI workshops, the perceived effect of AI on the value of lecturers for students, and other relevant subjects. The following table (Table 1) presents the questions and the percentage of 'Yes' and 'No' responses.

No.	Yes/No Questionnaire question	% of YES	% of NO
		answers	answers
1.	Have you ever attended any courses or workshops on	20.4	79.6
	using artificial intelligence in education?		
2.	Do you employ any AI tools in your instruction?	56.6	43.4
3.	Do you use AI applications in your scientific research?	44.7	55.3
4.	Has artificial intelligence (AI) helped you provide better	71.9	28.1
	educational content for students?		

Table 1: The percentage of responses to Yes/No question

5.	Do you have concerns about the impact of AI applications on the ethics of education?	61.3	38.7
6.	Do you believe the use of artificial intelligence in education will increase in the near future?	95.2	4.8
7.	Do you recommend your colleagues use AI programs in teaching?	89.2	10.8
8.	Has artificial intelligence (AI) helped you improve your interaction with students?	65.3	34.7
9.	Do you think students prefer using AI-based technology in the educational process?	78.6	21.4
10.	Have you used AI programs to assess student work (such as tests, assignments)?	30.2	69.8
11.	Do you think AI in education could reduce personal interaction between teachers and students?	42.7	57.3
12.	Do you think there is a need for advanced training courses on using AI?	96.4	3.6
13.	Do you think AI could replace traditional teaching methods in the soon?	80.8	19.2

Table 1 shows the distribution of responses, providing information about participants' opinions regarding the application of AI in education and its potential. The "Yes" and "No" answers make it evident where people stand on various issues regarding AI's influence on research and education. Respondents to this survey strongly believe that artificial intelligence will become more prevalent in education in the future. The overwhelming majority (95.2%) believe that the use of AI tools and applications in educational settings will increase. This suggests that the widespread belief in AI's growing role in teaching and learning approaches is acknowledged. Additionally, a sizable portion of respondents (96.4%) concur that advanced AI training for educators is imperative. This demonstrates a shared understanding that teachers must possess specific knowledge and abilities to use AI in the classroom as it becomes more incorporated into education. This shows a strong support for AI in education. There is broad confidence in AI's potential to improve the educational process and raise student and teacher outcomes, as evidenced by nearly 90% of respondents who think AI tools can improve teaching practices.

Only 30.2% of educators are currently using AI to evaluate student work, despite the fact that interest in technology is growing. This might be the result of limited access to AI tools intended for assessment purposes or worries about the accuracy of AI in assessing subjective or difficult tasks. Nearly half of the respondents (42.7%) are worried that AI might result in less face-to-face interaction between educators and students, underscoring possible issues associated with an excessive dependence on technology. However, the majority (57.3%), however, does not express this worry, which may suggest that AI could enhance conventional teaching strategies rather than completely replace human interaction. The highest percentages show a resounding sense of optimism regarding AI's potential to enhance teaching methods, require specialized training, and be used in education in the future. The lower percentages

highlight issues like the current limited application of AI in evaluation and worries about a decline in human interaction. Overall, the data indicates that while AI is still being integrated into education, it is viewed as a useful tool for the future.

Qualitative Analysis:

In this analysis, faculty members' responses to important interview questions about their expectations, experiences, and difficulties with AI in academia are interpreted. Understanding the perceived advantages and challenges of utilizing AI tools in research and education is the focus of this article. The interview included 10 questions categorized by importance and function as follows:

1. Academic Background and Rank?

- What is your academic field of specialization?
- What is your academic position?

The interview was conducted with several faculty members from various disciplines, including both applied sciences and humanities. Their academic ranks varied, ranging from Assistant Lecturer to Lecturer, Assistant Professor, and Associate Professor. This diversity highlights the need for specialized training and resources to support AI integration in each academic discipline.

2. AI Tools and Applications:

- What artificial intelligence (AI) assistant programs do you use?
- For what purposes do you use these programs?

The primary applications of AI tools are in research, teaching improvement, and administrative support. Data analysis, scheduling, individualized content delivery, and grading automation are typical uses. In addition to improving lecture materials and customizing content to meet the needs of students, academics view AI as a means of decreasing repetitive tasks, freeing up more time for student engagement and research. The most common examples mentioned in the questionnaire are SPSS with AI capabilities, ChatGPT, Endnote with AI features and Duolingo.

3. Challenges in Using AI in Academic Work

- What challenges do you face using AI in your academic work?
- What solutions do you suggest overcoming these challenges?

Faculty members believe that technical and accessibility challenges are prevalent due to limited access to advanced AI tools and insufficient institutional support. Key ethical concerns include AI's potential impact on grading and student assessment, biases in AI algorithms, and data privacy issues. Moreover, some faculty were worried that AI could reduce meaningful student-teacher interactions, which they see as essential for effective learning.

4. Benefits and Recommendations:

- Why do you recommend using AI programs in teaching?
- What role do you foresee AI playing in improving university education?

Faculty value AI for its ability to personalize learning, enhance engagement with interactive tools, and improve efficiency by automating administrative tasks. Many recommend AI for its potential to boost teaching effectiveness, while expecting it to further support online learning, research collaborations, and large-scale data analysis.

5. Impact of AI on Research and Traditional Teaching:

- If you use AI applications in your research, how have they enhanced your work?
- How does AI enhance university education compared to traditional methods?

Faculty value AI in research because it streamlines data processing and analysis, freeing them up to concentrate on more complex tasks while automating dataintensive work. This promotes more rapid advancements in research and creative insights. AI is appreciated in education for bolstering data-driven tactics and improving resource accessibility, but many stress that it should supplement humancentered instruction rather than replace it because one-on-one interaction is still essential for student growth and engagement.

CONCLUSION

According to the study, most University of Zawia faculty members have a positive opinion of AI in education and acknowledge its potential to improve research and instruction. The majority of respondents, who anticipate an increase in AI use and stress the need for specialized training, demonstrate clear support for AI's role in improving teaching methods. The use of AI for student evaluation is limited, though, and there are still worries about less in-person interaction as well as moral dilemmas like algorithmic bias and data privacy. Academics appreciate AI's ability to simplify work, enhance research, and customize instruction, but they stress that AI should support human-centered instruction rather than take its place. Positioning AI as a beneficial but balanced addition to the educational process, the study recommends addressing ethical, training, and access issues for successful integration for both educators and students.

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