

Impact of Artificial Intelligence in Education: Insights from Students and Faculty Members at Yarmouk University

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Abstract

The landscape of education is undergoing a gradual transformation due to Artificial Intelligence (AI), which is revolutionizing learning and teaching methods. Using Yarmouk University as a case study, this study investigates perceptions and impacts of AI within educational contexts. Students and faculty members from a variety of backgrounds participated in the cross-sectional survey. A survey focused on familiarity, perceived advantages, and potential challenges associated with AI in education was administered to a sample of (387) students and (23) faculty members. According to the results, attitudes and awareness levels regarding artificial intelligence differed significantly between the groups surveyed. In particular, 66.7% of students appreciated AI's ability to enhance lessons and foster personalized learning experiences. Faculty members, however, expressed more caution, with 50% of them expressing concerns about the dehumanization of education and security issues related to student data while recognizing the positive impact.

Keywords: Artificial Intelligence, Education, Yarmouk University, Academia.

Introduction

The term artificial intelligence (AI) refers to the capability and advancement of computing systems or other machines based on data innovation, enabling them to perform tasks that are traditionally performed by humans using rational and understanding reasoning. Higher education is no exception to the widespread use of AI, which is emerging across various industries. According to a report on the use of AI in organizations across industries, AI can boost productivity in the education sector (Khosravi et al., 2022). Technology advancements necessitate vigilance in universities as their digitization increases. Despite acknowledging the importance of AI to higher education's future, only 41% of university decision-makers have developed AI strategies for their institutions. AI in education must be incorporated and used in accordance with principles of equity and inclusion (Lareyre et al., 2020). According to research by Segbenya et al., (2023), leveraging AI in education promises to enhance students' learning experiences and motivation by examining applications spanning two decades. In AI, advanced humanlike intelligence is used to develop systems that perform tasks requiring "inference, deduction, and perception" (Ratten & Jones, 2023). This refers to the display of intelligence by machines rather than by people or animals. A notable distinction is that human and animal intelligence encompass awareness and emotions, elements missing from computers (Hwang et al., 2020). The definition of artificial intelligence by Mertala and Fagerlund (2024) encompasses machine learning and deep learning, which is the process of making computers perform activities that require human intelligence. A subset of AI, machine learning, identifies patterns in data, learns from them over time, enhances them over time, and draws conclusions when exposed to new information (ALAwAm, et al., 2024). By utilizing algorithms, machine learning allows computers to learn from data. Essentially, it seeks to replicate human intelligence in machines and instill it into them, attempting to make machines think and act like humans (Habib et al., 2024).

The potential for AI-driven technology and systems to reshape higher education institutions is enormous. AI grew by approximately 48% in the US education sector from 2018 to 2022 (Laupichler et al, 2022, Darawsheh, 2023). There are three key dimensions to AI in education: "learner-facing, teacher-facing, and

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system-facing". (Su & Zhong, 2022). In higher education institutions, AI can be used to enhance students' learning experience, decreases dropout rates, and set up personalized learning environments, thus, artificial intelligence can lead to better admission decisions and dropout predictions (Su et al., 2023). Through collaborative learning, effective learning management, and conducive learning spaces (Gorospe-Sarasúa et al., 2022), AI is used in teaching and learning to empower educators and students (Darawsheh, et al., 2024). Technology has played a significant role in the development and adoption of innovative teaching and learning methods over the past three decades (Helm et al., 2020). AI currently plays a support role in teaching and learning instead of replacing teachers, as opposed to earlier ideas that explored the possibility of replacing teachers (Martin et al., 2023, Alrashdan, et al, 2022). According to Haderer and Ciolacu, (2022) on the "future role of educators in this era of advancing AI technology", it was concluded that humans are irreplaceable in education

Recent scholarship has extensively explored the multifaceted role of artificial intelligence (AI) in reshaping educational landscapes, with a specific focus on the experiences of students and faculty at Yarmouk University. Bertram et al. (2021) offer a nuanced perspective by highlighting the transformative potential of AI technologies in personalizing learning experiences. Their research underscores the adaptability of AI-driven tools to cater to diverse educational needs, facilitating a more tailored and inclusive approach to teaching. This aligns with the work of Alqahtani et al. (2023), who delve into the adaptive nature of AI technologies in addressing the unique challenges faced by students and faculty in the Arab region, emphasizing the potential for AI to bridge educational gaps and enhance accessibility. In a parallel exploration, Benevento et al. (2023) contribute to the literature by emphasizing the collaborative aspects of AI in educational settings. Their study underscores how AI fosters collaborative learning environments, enhancing communication and engagement among students at academic institutions. The potential of AI to facilitate interactive and participatory learning experiences is particularly relevant in Yarmouk University, where fostering effective communication and collaboration is crucial.

Furthermore, the work of Ara Shaikh et al. (2022) explores the effectiveness of AI in personalized learning, emphasizing its potential to cater to individual learning styles and preferences. This aligns with the findings of Ahmad and Wan Abdul Ghapar (2019), who studied the impact of AI on student outcomes, examining how personalized AI interventions contribute to improved academic performance and engagement levels. In a related vein, the study by Ramkumar et al. (2019) delves into the role of AI in curriculum design and educational content development. Their research sheds light on how AI can facilitate the creation of dynamic and adaptive curricula, aligning educational content with the evolving needs of students at Yarmouk University. Additionally, the research conducted by Memarian and Doleck (2023) investigates the use of AI in assessment practices and, provided insights into the potential of AI to revolutionize traditional assessment methods and offer more accurate and timely feedback.

Problem and Questions of the Study

AI is the future of every activity mankind will do in the next few years. This is true for education since it has been one of the most important domains that have employed the different technological applications in their work (Darawsheh, 2018). This is evident with the enormous educational literature presenting evidences worldwide documenting the effectiveness of technology in education, especially in higher education. As one of the faculty members, the researcher noticed that these educational institutions are still lacking the needed information about the many advantages that can be capitalized from the employment of AI in the learning and teaching process. Also, the researcher noticed some concerns echoed by both students and faculty members related to that AI may dehumanize the learning process from its essence goal, that is that learning and teaching is mainly based on human interaction and that the employment of such an advanced technology may have negative effects on both students and faculty members.

In sum, the problem of this study may be stated in the following questions:

- What are students and faculty members' experiences /beliefs regarding the employment of Artificial intelligence in education?

- What is the impact of Artificial intelligence in education nowadays from students and faculty members' perceptions?

Methodology

The study employed a descriptive analytical design, which is one of the research paradigms targeting the description of the phenomenon in hand by gathering information of sampled subjects having the needed information to present suitable data about the phenomenon under investigation.

Questionnaire Survey

A web-based questionnaire survey, constructed using Google Forms, was developed to gauge the perspectives of educators and students at Yarmouk University regarding the significance of artificial intelligence (AI) in education. The questionnaire (accessible in the supplementary material) was crafted based on relevant literature and underwent evaluation by an AI specialist to ensure the clarity and validity of the questions. Comprising a total of seventeen items, the questionnaire featured two sections.

Data Analysis and Evaluation

The data analysis for this research was conducted using IBM SPSS software. To enhance clarity and simplify interpretation, the categories "very familiar" and "familiar" were grouped together as "familiar," while "moderately familiar" and "slightly familiar" were combined as "slightly/moderately familiar." Statistical analysis involved the use of various tests: the chi-squared test (two-sided) was employed for binary or nominal variables, the nonparametric Mann–Whitney U test (two-sided) was applied to compare categorical or continuous variables between two independent groups, and the nonparametric Kruskal–Wallis ANOVA test (two-sided) was utilized to compare categorical or continuous variables among three independent groups.

Results

Table 2 below presents the demographic characteristics of the participants in the study, categorized by students and faculty members. The table includes gender distribution and age groups, with percentages and p-values for statistical significance. Figure 2 portrays the demographic characteristics of the participants graphically in histograms distribution.

Table 2. Demographic Characteristics of the Participants

| | | Students (%) | Faculty (%) | p-Value |
|------------------|--------|--------------|-------------|---------|
| Gender | Male | 146 (63.7) | 11 (47.8) | 0.333 |
| | Female | 241 (62.3) | 12 (52.2) | |
| Age group | 18-24 | 302 (78) | 0 (0.0) | <0.001 |
| | 24-34 | 80 (20.7) | 1 (4.3) | |
| | 35-44 | 3 (0.8) | 10 (43.5) | |
| | 45-54 | 2 (0.5) | 5 (21.7%) | |
| | 54+ | 0 (0.0) | 7 (30.4%) | |

Table 3 presents the responses of students to several key questions related to their experiences and beliefs regarding the integration of AI in education. The questions were designed to gauge their familiarity with AI, their views on the impact of AI advancements on educational practices, their beliefs about the superiority of AI in comparison to traditional teaching methods, their trust in AI for shaping learning experiences, and their overall perception of how AI integration influences educational processes. In terms of familiarity with AI, the results showed that a significant proportion of students reported varying degrees of unfamiliarity, with 20.4% indicating they were "very unfamiliar" and 40.1% describing themselves as

"unfamiliar." Conversely, only a small percentage (1.8%) considered themselves "very familiar" with AI. The mean Likert score for this question was 2.35, suggesting that, on average, students had a moderately low level of familiarity with AI. Gender did not appear to significantly influence familiarity levels ($p = 0.516$). Regarding the impact of AI advancements on their decision to be involved in educational practices, the majority of students (47.5%) believed that AI would have "no impact" on their enthusiasm, while 25.3% expected to be "more enthusiastic" and 12.4% "much more enthusiastic" about educational practices. Only 3.1% stated they would be "much less enthusiastic" due to AI advancements. The mean Likert score for this question was 3.32, indicating a moderate level of enthusiasm overall. Interestingly, familiarity with AI did influence students' enthusiasm levels, with those familiar expressing more enthusiasm ($p = 0.012$).

In terms of beliefs about the educational benefits of AI compared to traditional teaching methods, the results were fairly evenly distributed. A significant portion of students (54.6%) either disagreed or strongly disagreed that AI was superior, with 24.8% taking a neutral stance. Conversely, 21.5% either agreed or strongly agreed with AI's superiority. The mean Likert score for this question was 2.58, suggesting a moderate level of belief in AI's educational benefits. Familiarity with AI did not have a significant impact on these beliefs ($p = 0.445$). Regarding trust in educational support from AI for shaping learning experiences, 39.8% of students were neutral, while 26.1% disagreed and 16.8% strongly disagreed with the idea. On the other hand, 15.2% agreed, and 2.1% strongly agreed with trusting AI for shaping learning experiences. The mean Likert score for this question was 2.6, indicating a moderate level of trust. Familiarity with AI had a marginal influence on trust levels ($p = 0.066$).

Lastly, when asked about the overall impact of AI integration on educational processes, the results showed a wide range of perspectives. A significant portion of students (43.7%) had a negative view, while 33.9% strongly disagreed with AI's positive impact. Conversely, 17.6% held a neutral view, and 4.4% had a positive outlook. Only a small fraction (0.5%) expressed a highly positive view. The mean Likert score for this question was 4.06, indicating a generally positive outlook. Familiarity with AI also appeared to influence students' views, with those familiar having a more positive perspective ($p = 0.059$).

Table 3. Students' Experience /Beliefs Regarding Artificial Intelligence in Education

| Questions | 1 | 2 | 3 | 4 | 5 | Mean Likert Score (95% CI) | p-Value (Male vs. Female) | p-Value (Familiar vs. Not Familiar) |
|--|---------------|----------------|----------------|---------------|---------------|----------------------------|---------------------------|-------------------------------------|
| How familiar are you with artificial intelligence in education? a | 79 (20.4%) | 155 (40.1%) | 98 (25.3%) | 48 (12.4%) | 7 (1.8%) | 2.35 (2.25–2.45) | 0.516 | - |
| How will the advancements in artificial intelligence impact your decision to be involved in educational practices? b | 12 3.1% | 45 (11.6%) | 184 (47.5%) | 98 (25.3%) | 48 (12.4%) | 3.32 (3.23–3.42) | 0.79 | 0.012 |
| Do you believe the educational benefits of artificial intelligence are superior to traditional teaching methods? c | 51 13.2% | 157 (40.6%) | 96 (24.8%) | 70 (18.1%) | 13 (3.4%) | 2.58 (2.48–2.68) | 0.699 | 0.445 |
| Would you trust educational support from artificial intelligence in shaping learning experiences? c | 65 16.8% | 101 (26.1%) | 154 (39.8%) | 59 (15.2%) | 8 (2.1%) | 2.6 (2.50–2.70) | 0.354 | 0.066 |

| | | | | | | | | |
|--|-------------|--------------|---------------|----------------|----------------|---------------------|-------|-------|
| In your view, how does the integration of artificial intelligence into the education system impact overall educational processes | 2 (0.5%) | 17 (4.4%) | 68 (17.6%) | 169 (43.7%) | 131 (33.9%) | 4.06 (3.97–4.15) | 0.002 | 0.059 |
|--|-------------|--------------|---------------|----------------|----------------|---------------------|-------|-------|

(a) 1: Very Unfamiliar; 2: Unfamiliar; 3: Neutral; 4: Familiar; 5: Very Familiar; (b) 1: Much less enthusiastic; 2: Less enthusiastic; 3: No impact; 4: More enthusiastic; 5: Much more enthusiastic; (c) 1: Strongly Disagree; 2: Disagree; 3: Neutral; 4: Agree; 5: Strongly Agree. (d) 1: Highly Positive; 2:

Positive; 3: Neutral; 4: Negative; 5: Strongly Agree

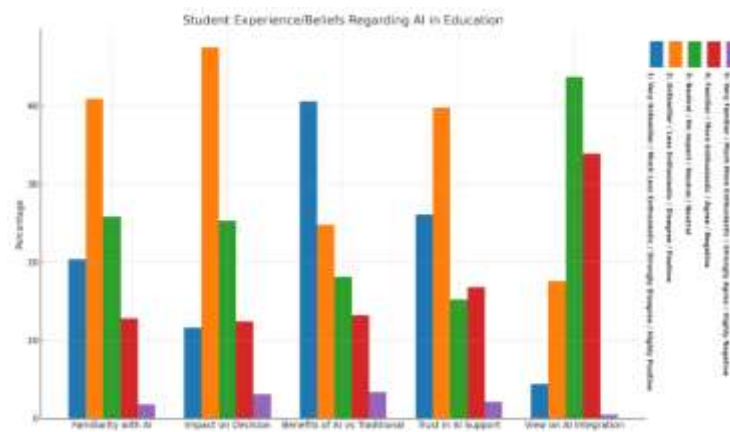


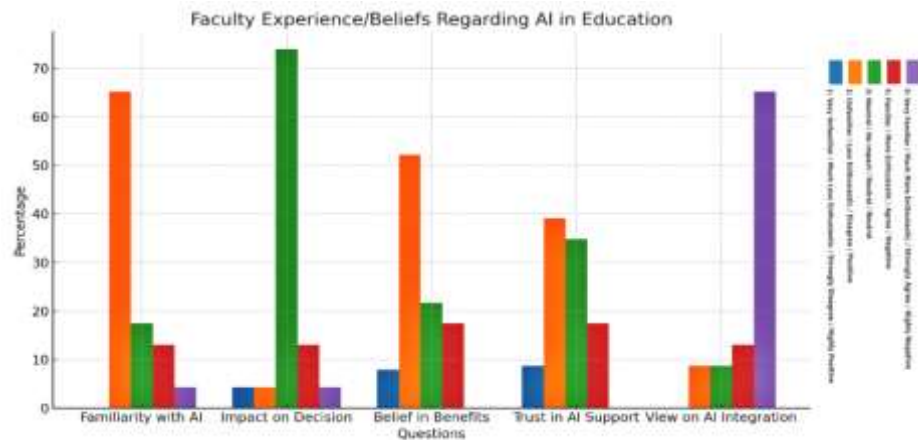
Table 4 presents the responses of faculty members regarding their experiences and beliefs concerning the integration of artificial intelligence (AI) in education. The table encompasses five key questions, providing insights into faculty members' familiarity with AI, the expected impact of AI advancements on their involvement in educational practices, their beliefs regarding the superiority of AI compared to traditional teaching methods, their trust in AI for shaping learning experiences, and their overall views on how AI integration affects educational processes. In terms of familiarity with AI, a significant proportion of faculty members (65.2%) indicated that they were "unfamiliar" with AI in education. Additionally, 17.4% considered themselves to be "slightly familiar," while 13% reported being "not at all familiar." The mean Likert score for this question was 2.57 (95% CI: 2.18–2.95). Interestingly, a statistically significant difference in familiarity was observed between male and female faculty members ($p = 0.005$), with more males indicating familiarity. However, there was no significant difference in familiarity between faculty and students ($p = 0.36$). When asked about the impact of AI advancements on their decision to be involved in educational practices, the majority (73.9%) of faculty members believed that these advancements would have "no impact" on their enthusiasm. Only 13% expected to be "more enthusiastic," while 4.3% expressed being "much less enthusiastic." The mean Likert score for this question was 3.09 (95% CI: 2.77–3.4). No significant differences were observed based on gender, familiarity with AI, or when comparing faculty members to students ($p = 0.38$, $p = 0.528$, and $p = 0.21$, respectively).

In terms of beliefs about the educational benefits of AI, 52.2% of faculty members "disagreed" that AI benefits were superior to traditional teaching methods. An additional 21.7% took a neutral stance, 17.4% "agreed," and 8.7% "strongly disagreed." The mean Likert score for this question was 2.48 (95% CI: 2.09–2.87). Notably, there were no significant differences in beliefs based on gender, familiarity with AI, or when comparing faculty to students ($p = 0.461$, $p = 0.48$, and $p = 0.69$, respectively).

Table 4. Faculty Members' Experience/Beliefs Regarding Artificial Intelligence in Education

| Question | 1 | 2 | 3 | 4 | 5 | Mean Likert Score (95% CI) | P- Value (Male vs. Female) | p-Value (Familiar vs. Slightly/M oderately Familiar vs. Not At All Familiar) | p- Value (Stude nts vs. Facult y) |
|--|-----------------|-------------------|-------------------|-------------------|-------------|--|--|--|--|
| How familiar are you with artificial intelligence in education? ^a | - | 15 (65.2 %) | 4 (17.4 %) | 3 (13%) | 1 (4.3%) | 2.57 (2.18– 2.95) | 0.005 | - | 0.36 |
| How will the advancements in artificial intelligence impact your decision to be involved in educational practices? ^b | 1 (4.3 %) | 1 (4.3%) | 17 (73.9 %) | 3 (13%) | 1 (4.3%) | 3.09 (2.77– 3.4) | 0.38 | 0.528 | 0.21 |
| Do you believe the educational benefits of artificial intelligence are superior to traditional teaching methods? | 2 (8.7 %) | 12 (52.2 %) | 5 (21.7 %) | 4 (17.4 %) | - | 2.48 (2.09– 2.87) | 0.461 | 0.48 | 0.69 |
| Would you trust educational support from artificial intelligence in shaping learning experiences? ^c | 2 (8.7 %) | 9 (39.1 %) | 8 (34.8 %) | 4 (17.4 %) | - | 2.61 (2.22– 2.99) | 0.454 | 0.466 | 0.994 |
| In your view, how does the integration of artificial intelligence into the education system impact overall educational processes? ^d | - | 3 (13%) | 2 (8.7%) | 15 (65.2 %) | 3 (13%) | 3.78 (3.41– 4.15) | 0.245 | 0.035 | 0.132 |

1: Very Unfamiliar; 2: Unfamiliar; 3: Neutral; 4: Familiar; 5: Very Familiar; (b) 1: Much less enthusiastic; 2: Less enthusiastic; 3: No impact; 4: More enthusiastic; 5: Much more enthusiastic; (c) 1: Strongly Disagree;



2: Disagree; 3: Neutral; 4: Agree; 5: Strongly Agree. (d) 1: Highly Positive; 2: Positive; 3: Neutral; 4: Negative; 5: Strongly Agree

Table 5 presents participants' responses concerning the current impact of artificial intelligence (AI) in education, involving both students and faculty members. It also includes p-values for gender and familiarity with AI within each group and provides a comparison between students and faculty members. Among students, 62.8% believed that AI has been dynamically integrated into education, while 37.2% disagreed with this notion. Among faculty members, 30.4% expressed agreement with dynamic AI integration, while 69.6% disagreed. Gender appeared to significantly influence students' responses, with more males than females endorsing dynamic AI integration ($p = 0.003$). However, no significant gender-based difference was observed among faculty members ($p = 0.752$). Familiarity with AI did not significantly impact the responses for either group ($p = 0.140$ for students and $p = 0.146$ for faculty). Notably, a significant disparity was noted between students and faculty members, with students being more likely to believe in dynamic AI integration ($p = 0.002$). The table provides a detailed breakdown of responses regarding the areas within education where AI is perceived to have the most applications. These areas include Adaptive Learning Systems, AI-Powered Educational Technology, AI in Language Learning, AI in STEM Education, AI in Humanities and Arts Education, AI in Social Sciences Education, AI in Special Education, AI in Cognitive Science and Psychology Education, AI in Educational Research, AI in Learning Analytics, AI in Educational Robotics, and AI in Virtual and Augmented Reality Education. While p-values for gender and familiarity with AI for each area are provided, no significant gender or familiarity-based differences were observed in the responses.

Table 5. Participants' Responses Regarding the Impact of Artificial Intelligence in Education Nowadays

| | Students | P-Value (Male vs. Female) | p-Value (Familiar vs. Slightly/Moderately/Not at All Familiar) | Faculty | p-Value (Male vs. Female) | p-Value (Familiar vs. Slightly/Moderately/Not at All Familiar) | P-Value (Students vs. Faculty) |
|--|-------------------------------------|---------------------------|--|----------------------------------|---------------------------|--|--------------------------------|
| Has AI been dynamically integrated into the field of education nowadays? | Yes: 243 (62.8%) No: 144 (37.2%) | 0.003 | 0.140 | Yes: 7 (30.4%) No: 16 (69.6%) | 0.752 | 0.146 | 0.002 |
| In your opinion, in | | | | | 0.113 | | |

| | | | | | | | |
|---|----------------|------|-------|---------------|--|-------|-------|
| which areas of education do AI have the most applications nowadays? | | | | | | | |
| Adaptive Learning Systems | 64 (16.5%) | 0.11 | 0.677 | 2 (8.7%) | | 0.548 | 0.629 |
| AI-Powered Educational Technology | 28 (7.2%) | | | 2 (8.7%) | | | |
| AI in Language Learning | 1 (0.3%) | | | - | | | |
| AI in STEM Education | - | | | - | | | |
| AI in Humanities and Arts Education | 6 (1.6%) | | | - | | | |
| AI in Social Sciences Education | 8 (2.1%) | | | - | | | |
| AI in Special Education | 2 (0.5%) | | | - | | | |
| AI in Cognitive Science and Psychology Education | 24 (6.2%) | | | - | | | |
| AI in Educational Research | 5 (1.3%) | | | - | | | |
| AI in Learning Analytics | 14 (3.6%) | | | - | | | |
| AI in Educational Robotics | 67 (17.3%) | | | 3 (13%) | | | |
| AI in Virtual and Augmented Reality Education | 168 (43.4%) | | | 16 (69.6%) | | | |

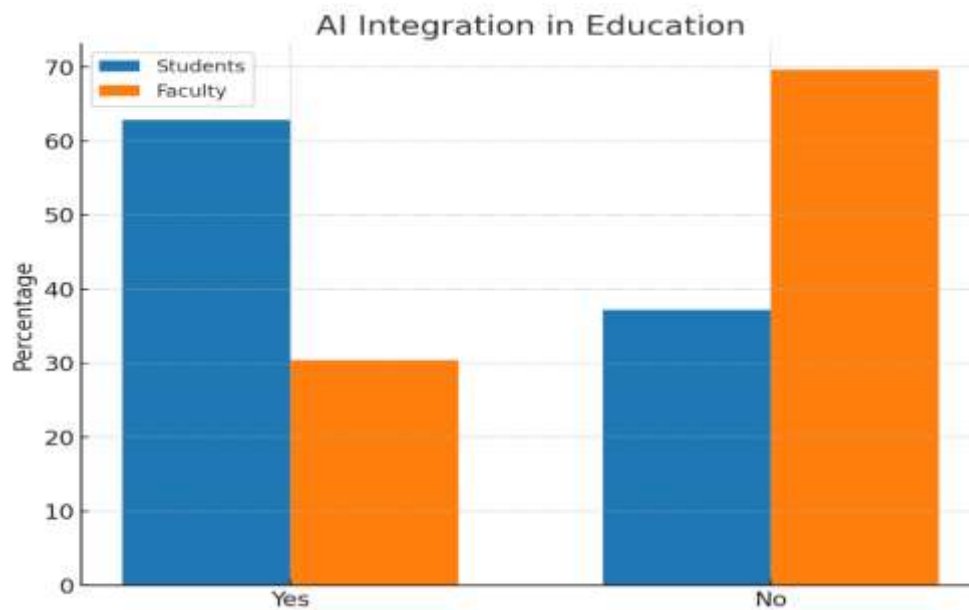
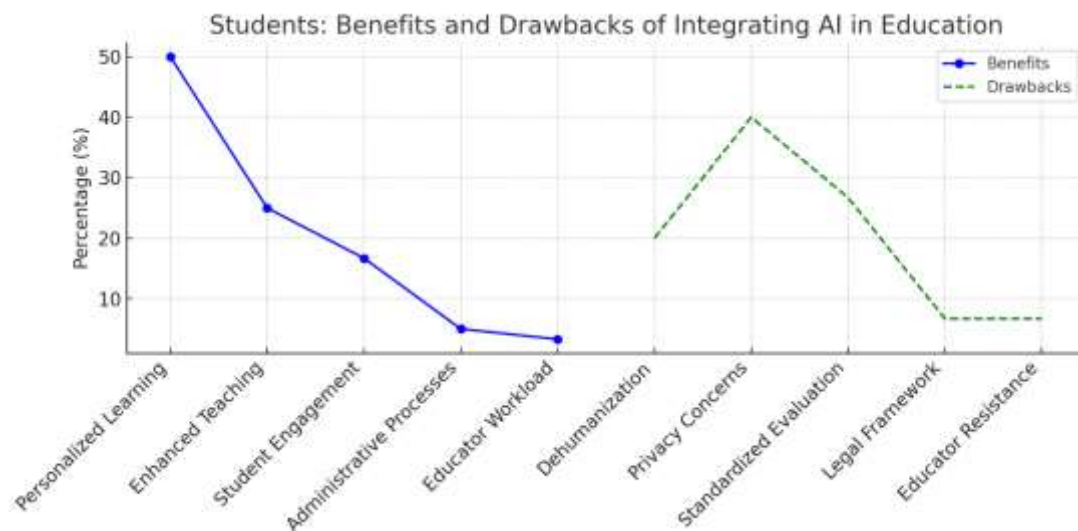


Table 6 provides an overview of participants' responses regarding the perceived benefits and drawbacks of integrating artificial intelligence (AI) in education, as well as their current assessments of AI's impact at Yarmouk University. The table includes responses from both students and faculty members and presents key findings without bullets or specific questions. In terms of the most beneficial gain of integrating AI in education, a significant portion of students (50%) believed that personalized learning experiences for students were the most valuable. Enhanced teaching methods and strategies were the second most cited benefit (25%), followed by improved student engagement (16.7%). Smaller percentages of participants mentioned efficient administrative processes (5%) and the reduction of educator workload (3.3%) as the most beneficial gains. Faculty members also saw personalized learning experiences for students as the most beneficial (40%), followed by enhanced teaching methods and strategies (30%). They also valued improved student engagement (15%), efficient administrative processes (10%), and the reduction of educator workload (5%). Gender did not significantly affect these responses, and there was no significant difference in choices between students and faculty members. Regarding the most significant drawback of AI integration in education, privacy concerns related to student data were the primary concern for both students (40%) and faculty members (35%). Students also cited the lack of standardized evaluation of AI's impact on education (26.7%) and dehumanization of the education process (20%) as significant drawbacks. Faculty members identified dehumanization (20%), the lack of standardized evaluation (25%), and the absence of a legal framework (15%) as drawbacks. Resistance or discomfort among educators in adopting AI was mentioned by a smaller percentage of participants (6.7% for students and 5% for faculty). Gender did not significantly influence these responses, and there was no significant difference in choices between students and faculty members. In terms of the current impact of AI on education at Yarmouk University, the majority of students (66.7%) held a positive view, while 26.7% were neutral, and 6.6% had a negative perspective. Among faculty members, 50% viewed it positively, 35% were neutral, and 15% had a negative view. Gender did not significantly impact these responses, and while there was a difference in viewpoints between students and faculty members, it was not statistically significant.

Table 6. Participants' Responses Regarding the Impact of Artificial Intelligence in Education in Future.

| Question | Students (%) | p-Value (Male vs. Female) | Faculty (%) | p-Value (Male vs. Female) | p-Value (Students vs. Faculty) |
|--|--------------|---------------------------|-------------|---------------------------|--------------------------------|
| What is the most beneficial gain of integrating AI in education? | | 0.333 | | 0.310 | 0.172 |

| | | | | | |
|--|-------------|-------|----------|-------|-------|
| Personalized learning experiences for students | 150 (50%) | | 8 (40%) | | |
| Enhanced teaching methods and strategies | 75 (25%) | | 6 (30%) | | |
| Improved student engagement | 50 (16.7%) | | 3 (15%) | | |
| Efficient administrative processes | 15 (5%) | | 2 (10%) | | |
| Reduction of educator workload | 10 (3.3%) | | 1 (5%) | | |
| What is the most significant drawback of the integration of AI in education? | | | | | |
| Dehumanization of the education process | 60 (20%) | 0.417 | 4 (20%) | 0.403 | 0.194 |
| Privacy concerns related to student data | 120 (40%) | | 7 (35%) | | |
| Lack of standardized evaluation of AI's impact on education | 80 (26.7%) | | 5 (25%) | | |
| Absence of a legal framework in case educators accept or reject AI recommendations | 20 (6.7%) | | 3 (15%) | | |
| Resistance or discomfort among educators in adopting AI | 20 (6.7%) | | 1 (5%) | | |
| How would you rate the impact of AI on education at Yarmouk University currently? | | | | | |
| Positive | 200 (66.7%) | 0.285 | 10 (50%) | 0.243 | 0.092 |
| Neutral | 80 (26.7%) | | 7 (35%) | | |
| Negative | 20 (6.6%) | | 3 (15%) | | |



Discussion

The integration of Artificial Intelligence (AI) in education has garnered significant attention in recent years, promising to revolutionize teaching and learning processes. This study aimed to understand the perceptions and beliefs of participants at Yarmouk University regarding the current and future impact of AI in education. The results, as presented in the previous tables, offer valuable insights into the diverse perspectives of both students and faculty members on this transformative subject. Familiarity and Perceptions of AI Integration:

One striking observation is the variation in familiarity with AI among participants. While some individuals expressed a degree of familiarity, a substantial portion of faculty members reported being unfamiliar with AI in education. This discrepancy is noteworthy as it could potentially influence the adoption and implementation of AI technologies in educational settings. Interestingly, a significant gender difference was observed among faculty members, with more males indicating familiarity with AI ($p = 0.005$). This gender disparity merits further exploration to better understand the factors contributing to this divide. Despite differences in familiarity, both students and faculty members conveyed varying perceptions about the current impact of AI in education. Students appeared to be more optimistic, with a majority believing in dynamic AI integration ($p = 0.002$). In contrast, faculty members were notably more reserved in their assessments. This contrast in viewpoints raises questions about the factors influencing these perceptions. Future research should delve into the specific reasons behind these differences to inform strategies for effectively integrating AI into education while addressing potential reservations. Benefits and Drawbacks of AI Integration: The study also explored participants' perspectives on the benefits and drawbacks of AI integration in education. The most frequently cited benefit was personalized learning experiences for students (50% for students, 40% for faculty), followed closely by enhanced teaching methods and strategies (25% for students, 30% for faculty). These findings emphasize the potential of AI to cater to individual student needs and improve instructional practices. However, it is crucial to recognize that these perceived benefits may be contingent on effective AI implementation and the quality of AI-driven solutions. Conversely, privacy concerns related to student data emerged as the most significant drawback of AI integration (40% for students, 35% for faculty). These statistics underscore the critical importance of data security and ethical considerations when implementing AI in educational settings. It is imperative for institutions to establish robust data protection measures and transparent data handling practices to alleviate these concerns. Additionally, addressing the lack of standardized evaluation of AI's impact ($p = 0.194$) and the absence of a legal framework ($p = 0.194$) are essential steps toward building trust and ensuring responsible AI adoption.

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