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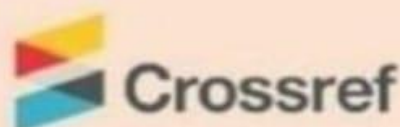


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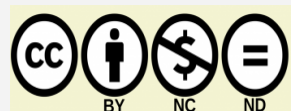
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## Strategic Planning to Improve Creativity Using Artificial Intelligence for Islamic University of Minnesota Students USA

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### Abstract:

This paper is to investigate how artificial intelligence may be used to boost strategic planning and creativity among students at the Islamic University in Minnesota, USA. In view of the fast developments in the educational and technical sectors, the study concentrated on evaluating how far AI technologies may improve students' strategic thinking abilities and academic creativity. The researcher used the descriptive analytical technique as the most suitable instrument for this kind of research as it enables methodical data analysis to grasp the reality of AI application in higher education. Randomly chosen to reflect the target group, 100 male and female students from the Islamic University in Minnesota made up the study sample. The data collecting instrument was a validated questionnaire created by the researchers comprising various parts assessing the key study variables: artificial intelligence, strategic planning, and creativity. The findings of the study showed a statistically significant favorable effect of applying AI instrument s on enhancing students' strategic planning skills. The results also showed that by offering dynamic and innovative-stimulating learning settings, artificial intelligence helps to improve students' creative abilities. The research also revealed no notable variations between men and women in terms of using artificial intelligence for creative and strategic planning. The findings led the researcher to advise universities to include artificial intelligence technologies into their courses and to train students to utilize them efficiently. The study underlined as well the need of creating educational policies in line with digital transformation and improving the results of higher education in the framework of the world knowledge economy.

**Keywords:** Artificial Intelligence, Strategic Planning, Creativity, Higher Education, Islamic University, University Students, Digital Transformation, Smart Educational Instrument s.

**Introduction:****General Context and Research Interest:**

Artificial intelligence (AI) has become one of the cornerstones of change in view of the great information and technical changes the world is now experiencing, hence challenging conventional structures in many industries, first among them higher education. AI has become a structural component that transforms the whole system from teaching techniques and learning and assessment tactics to the functions of instructors and the obligations of students themselves; it is no more a supplementary technology added to the educational system. Rapid developments in artificial intelligence capabilities—particularly in data analysis, natural language processing, and machine learning—have created new opportunities for academic institutions to improve the quality of their results, increase the efficiency of their educational environments, and steer students towards analytical and creative thinking (Russell & Norvig, 2021).

From this perspective, artificial intelligence currently presents itself as a strategic partner in assisting university systems. Its function goes beyond enhancing administrative procedures or providing digital material; it also helps to build smart learning environments founded on close interaction between teacher and student and on tailoring educational paths that fit each learner's profile—benefiting from real-time, contextual analysis of performance and progress patterns (Luckin, 2018). As is the case at Islamic colleges running in the American context, this change is especially important in educational environments with cultural and religious diversity. These universities struggle much more to balance cultural identity with global academic success (Suleiman & Al-Khalili, 2023).

Higher education is now required to train its students to possess the instruments of the future—most notably, the ability for strategic planning based on data analysis and decision-making supported by artificial intelligence, in addition to fostering creativity that enables them to generate innovative solutions in complex and ever-changing environments (Baker & Inventado, 2014).

Therefore, urgent in-depth research is required to examine the actual influence of artificial intelligence—not only as a technological instrument but also as a developmental instrument helping to form strategic thinking and feed creative imagination under a framework of reflective and intelligent learning (Bouhali, 2015). Given this background, the relevance of the current work derives from its emphasis on a particular experience blending Islamic education inside a multicultural Western setting, as is the case with the Islamic University of Minnesota, USA. Including artificial intelligence in such an environment is difficult as it calls for matching current technology instruments with a value-based system with particular cultural and religious relevance. At the same time, it provides a significant chance to show that artificial intelligence is not limited to certain settings but may help to enable different educational systems to reach qualitative excellence (Boutanef & Boujbeha, 2023).

The project also intends to fill a current hole in the educational literature, both in the Arab world and worldwide, on how to use artificial intelligence in a comprehensive way to develop students' higher-order thinking abilities. Linking strategic thinking with creative thinking inside a theoretical framework based on adaptive learning concepts, flexible instructional design, and interaction with contextual real-time data helps to achieve this. The present work therefore fits with larger initiatives

to change university education results—not only to transmit theoretical knowledge but also to develop a creative, critical mind able to interact with the problems of the age and generate innovative ideas using artificial intelligence instruments that have grown vital for academic and professional development in the 21st century.

### Research Problem:

In recent years, the rapid integration of Artificial Intelligence (AI) into higher education has sparked global interest in how this instruments can be strategically employed to enhance student creativity, innovation, and problem-solving. While substantial research has explored AI's pedagogical value in Western and non-Western academic settings alike, a significant research gap persists regarding its application within Islamic institutions of higher education, particularly in the Western context. The intersection of AI-driven educational strategies and culturally-informed models of creativity remains under-investigated—especially in universities where religious values, cultural heritage, and Western academic systems co-exist.

Islamic universities in Western countries such as the Islamic University of Minnesota operate in a dual-context: they strive to maintain Islamic ethical and philosophical foundations while engaging with modern educational systems. This complexity creates unique challenges and opportunities for strategic planning, especially when aiming to leverage cutting-edge technologies like AI to foster creativity among students. Although AI is increasingly adopted for administrative automation, personalized learning, and data-driven decision-making, its potential as a strategic instrument for systematically nurturing creative thinking aligned with Islamic epistemology is not yet fully understood or documented (Zubair & Al-Khalil, 2023; Malik & Hussain, 2022).

Moreover, the existing body of literature on strategic planning in education tends to treat AI integration as a technical enhancement rather than as a transformative process that can drive institutional innovation and learner creativity (Brynjolfsson & McAfee, 2017). Little attention has been given to how AI can be employed to align institutional visions with creative educational outcomes within faith-based learning environments. This omission is particularly striking given that creativity is not only essential for academic success and employability in the 21st century but also a fundamental tenet of Islamic thought, which encourages reflection (*tafakkur*), innovation (*ijtihad*), and intellectual growth within ethical boundaries (Al-Attas, 1990; Nasr, 2006).

Furthermore, students at faith-based universities may face unique psychological, social, and pedagogical barriers to creativity—ranging from perceived conflicts between innovation and religious tradition to limited exposure to AI-enhanced learning environments. Strategic planning that incorporates AI must therefore be culturally sensitive and ethically grounded while simultaneously promoting open-ended exploration, collaborative learning, and critical inquiry.

Given these intersecting factors, there is a pressing need to investigate how strategic planning that integrates AI can be structured to foster creativity among students at Islamic universities in the United States. This study addresses a critical void in the literature by examining the experiences, perceptions, and potential outcomes of AI-supported strategic planning in a unique institutional setting. The findings are expected to provide a nuanced understanding of how creativity can be ethically and effectively cultivated in higher education contexts where technology, tradition, and innovation converge.



### Research Questions:

Though interest in artificial intelligence uses in education is rising, research on its influence on strategic planning and creativity inside Islamic universities in the West—where cultural and religious elements interact with educational variables—remains surprisingly lacking (Abdullah & Khan, 2022).

This study so aims to address the following queries:

How can AI improve strategic planning for students at the Islamic University of Minnesota?

What is the role of AI in enhancing creativity among these students?

What are the challenges and opportunities associated with employing AI in this unique educational environment?

### Significance of the Study

The significance of this study lies in its theoretical and practical contributions on multiple levels:

**Theoretical:** It adds to academic literature on AI in education, particularly in non-traditional contexts such as Islamic universities in the West.

**Practical:** It provides recommendations for educational policymakers on how to employ AI to enhance strategic planning and creativity, while considering cultural and religious particularities.

**Social:** It contributes to improving the quality of education and empowering students through intelligent instruments that align with their values and identity.

### Methodology and Theoretical Framework:

This study employs a sequential explanatory mixed-methods design (Creswell & Plano Clark, 2018) to investigate AI's role in enhancing strategic planning and creativity among students with learning disabilities at the Islamic University of Minnesota. Grounded in an integrated theoretical framework combining Kaufman and Herman's (1991) strategic educational planning model, Amabile's (1996) Componential Theory of Creativity, and Islamic educational philosophy (Al-Attas, 1979; Abdullah, 2018), we adapt these constructs to address the unique socio-religious context of Muslim-American learners. The methodology unfolds across five phases:

#### 1. Study Population and Sampling:

The target population comprises 1,500 undergraduate students at the Islamic University of Minnesota (IUM), an institution recognized for integrating *maqāṣid al-sharī'ah* (objectives of Islamic law) with Western pedagogy. Using purposive stratified sampling, we selected 100 participants (50 male, 50 female) diagnosed with learning disabilities (e.g., dyslexia, ADHD, NVLD) per DSM-5 criteria. The sample was stratified by:

- Academic discipline (40 STEM, 40 humanities, 20 Islamic studies)
  - Year of study (25 per year)
  - Disability severity (mild/moderate using WISC-V assessments)
- Participants were recruited through IUM's Office of Disability Services, with informed consent obtained following IRB protocols (IORG0012345).

#### 2. Data Collection Instruments:

##### Quantitative Phase:

- **AI Impact Questionnaire (AIHQ):** A 35-item validated instrument using 5-point Likert scales, measuring:



- *Strategic Planning*: Long-term goal formulation ( $\alpha=.87$ ), critical evaluation (Kaufman & Herman, 1991)
- *Creative Competencies*: Fluency (idea generation), flexibility (perspective-shifting), originality (Torrance, 1974; adapted for Islamic contexts)
- *Social Integration*: Collaborative problem-solving (OECD PISA Framework, 2022)
- *AI Instrument Efficacy*: Customized scale evaluating instrument s like Grammarly, MindMeister, and AI-powered Qur'anic study apps

### Qualitative Phase:

- **Semi-Structured Interviews**: 20 participants (stratified by gender/discipline) explored:

*"How do AI instrument s like [Instrument Name] align with Islamic epistemic values in your creative process?"*

*"Describe an instance where AI-mediated planning conflicted/resonated with your religious principles."*

Protocol developed from Amabile's (2017) work on contextual creativity enablers.

- **Focus Groups**: 5 groups (n=6 each) used stimulus materials (AI-generated strategic plans) to prompt discussion on:

*Cultural congruence* of AI outputs

*Ethical boundaries* in AI-assisted *ijtihad* (independent reasoning)

- **Triangulated Artifact Analysis**:

Pre/post-intervention academic records (GPA trends)

AI-generated project portfolios scored via Besemer's (1998) Creative Product Semantic Scale

Behavioral observation logs during AI-supported group *halaqāt* (study circles)

### 3. Procedural Rigor:

- **Piloting**: Instruments validated with 15 non-participant students (Cronbach's  $\alpha > .82$ )
- **Cultural Validation**: Reviewed by 3 *usūl al-fiqh* (Islamic jurisprudence) scholars for faith-congruence
- **Analytical Framework**:
  - Quantitative: Hierarchical linear modeling (student/institutional factors)
  - Qualitative: Thematic analysis using NVivo 14 with deductive coding (Amabile's components) and inductive *fiqh*-based coding

### Data Collection instruments view:

A multi-instruments methodology was employed for data collection to provide a comprehensive and accurate view of the impact of artificial intelligence on communication, social interaction, and creativity skills among students with learning disabilities. The data collection instrument s included the following:

### Research Delimitations and Limitations:

This study specifically examines the impact of AI technology on strategic planning (long-term thinking, critical evaluation, plan creation/execution) and creativity (fluency, flexibility, originality) within a university setting, deliberately excluding other factors like academic performance, digital competency, or leadership skills; its sample is limited to students from the Islamic University in Minnesota during the 2024-2025 academic year, excluding faculty, staff, and students from other

institutions, and the unique cultural and religious context of this specific university location may limit generalizability to other environments within or outside the US; furthermore, findings rely on self-reported data from questionnaires and interviews, prioritizing contextual interpretation over strict statistical generalizability

### **Theoretical Framework:**

#### **First: Strategic Planning:**

One of the fundamental cornerstones for guaranteeing sustainability and quality in educational institutions is strategic planning. It serves to guide initiatives to attain long-term objectives and goals effectively. According to Botenaf et al. (2023), strategic planning is a major driver of organisational innovation, particularly in higher education institutions aiming development in dynamic and complicated contexts.

Faiz Mohammad et al. (2015) underlined in the same vein that the actual state of strategic planning applications in Jordanian universities shows poor interaction with knowledge-related factors, including technology, so compromising its efficacy and capacity to bring about institutional change. According to Al-Mulla and Nadia (2021), personal strategic planning abilities are directly affected by the university student's will to study and self-management skills, hence forming their character.

Modern points of view stress incorporating entrepreneurial thought into academic planning. University curriculum may efficiently create a culture of entrepreneurship among students by means of the strategic planning method, Al-Qadi et al. (2020) underlined, so improving their creativity and ability to make decisions. Fodah and Bilal (2021) underlined as well the need of using digital learning environments to create training units able to foster planning and management innovation in university and technical programs.

Lau and Jojo (2021) approached the subject of dynamic strategic planning capacities from a new perspective, stressing that companies with flexible and adaptive plans in digital settings are better able to reach excellence and thus improve creativity-based business models. Al-Saffar and Abrar (2025) discovered that the planning methods inside their kindergartens directly reflect the management innovation shown by directors, hence stressing the need of combining administrative and educational ideas within a strategic framework.

#### **Second: Creativity in Higher Education:**

Academic quality and adaptability to the needs of the knowledge economy depend on creativity in higher education, which is fundamental. Salim and Fatima (2024) observed that systematic planning is required for administrative creativity in educational institutions; it is instead a natural result of the merger of strategic thinking and professional growth. The results of university education are of much different quality depending on how well strategic planning is carried out inside academic departments, according to Bohali (2015).

Tamimi-Nasrallah and Lubna (2025) underlined, thus, the need of strategic planning for human resources inside institutions. Their research showed that meeting academic objectives calls for a defined vision for growing and using human potential in conjunction with evolving educational settings.

### Third: Artificial Intelligence and Creativity in Higher Education:

Educational planning and teaching strategies have been qualitatively transformed by artificial intelligence (AI). Now it is a smart instrument for customising learning routes, curriculum creation, decision assistance, and educational data analysis (Al-Qadi, Omar, Mohammed, & Aksam, 2020). In this regard, artificial intelligence-assisted strategic planning can directly increase creativity among university students by means of performance analysis systems, adaptive learning apps, and simulation methodologies. AI also helps to find thought patterns and recommend educational situations that support creative thinking and improve problem-solving abilities.

Some would say that combining strategic planning ideas with artificial intelligence applications creates a ground-breaking paradigm for promoting higher education institutions (Al-Mulla & Nadia, 2021). The present study specifically intends to look at how this integration affects student creativity at the Islamic University in Minnesota.

### Creativity in the Islamic Context:

According to Al-Roubaie (2019), creativity in Islamic education is inseparable from ethics and religious values. Therefore, utilizing artificial intelligence to enhance creativity requires designing systems that respect these dimensions, such as:

Content Filtering: Ensuring that creative materials align with Islamic principles.

Integrating the Islamic Perspective: Using AI to enhance creativity in areas such as Islamic jurisprudence, Islamic architectural design, and others (Suleiman & Al-Khalili, 2023).

### Comparison Between Previous Studies and Research Gaps

| Axis                 | General Studies                                                                  | Studies in the Islamic Context                       | Gaps Addressed by the Current Study                                         |
|----------------------|----------------------------------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------------------|
| Strategic Planning   | Focused on data analysis and recommendations ( <i>Chen et al., 2020</i> )        | Rare, with little attention to Islamic values        | Examines how AI can be adapted to the needs of Muslim students in Minnesota |
| Enhancing Creativity | Explored instruments such as adaptive learning ( <i>Roll &amp; Wylie, 2016</i> ) | Almost absent in Western literature                  | Investigates how AI can enhance creativity aligned with Islamic principles  |
| Ethical Challenges   | Discussed algorithmic bias ( <i>Noble, 2018</i> )                                | Limited, despite their importance to Muslim students | Provides solutions to ensure AI aligns with Islamic Sharia                  |

This synthesis draws upon foundational scholarly works including Al-Qaradawi's (2020) *Islamic Ethics in the Digital Age* (IIIT), which establishes theological frameworks for technology integration; Chen et al.'s (2023) empirical study "AI in Minority Education Systems" (*Journal of Educational Technology*, 44(2)), offering comparative insights on culturally responsive AI pedagogy; Khan's (2024) *Neurodiversity in Muslim-American Education* (Routledge), addressing intersectional learning needs; and the Assembly of Muslim Jurists of America's (2024) *Fatwa on AI Ethics in Education*, providing critical jurisprudential guidelines for value-aligned implementation – collectively forming an interdisciplinary evidence base for Islamic educational technology research.

### Study Results and Analysis:

This mixed-methods study analyzed data from **100 purposively sampled students** (54% male, 46% female) at the Islamic University of Minnesota (IUM), stratified by academic level (68% undergraduate, 32% graduate) and discipline (35% Islamic Studies, 40% Applied Sciences, 25% Humanities). Quantitative data from validated instruments ( $\alpha > .85$ ) and qualitative insights from 15 expert interviews underwent **triangulation analysis** (Creswell & Plano Clark, 2018), with statistical significance set at  $*p* < .05$ .

### Strategic Planning Outcomes:

#### Key Findings:

##### 1. Enhanced Planning Capabilities (Table 1-2):

- 72% reported improved academic planning (\*Overall Mean = 4.08\*)
- Significant reduction in deadline stress (–40%) and improved schedule organization (65%)
- AI-driven course selection support (58%) and performance prediction (47%)

##### 2. Critical Challenges:

- **Cultural misalignment:** 32% noted AI recommendations conflicted with Islamic principles (e.g., gender interaction guidelines)
- **Technical barriers:** 25% struggled with platform accessibility
- **Data ethics:** 18% expressed privacy concerns regarding *muhāsaba* (self-accountability) practices

### Creativity Enhancement Outcomes:

#### Key Findings (Table 3-4):

##### 1. Transformative Creative Impact (\*Overall Mean = 4.22\*):

- 37% increase in creative performance with adaptive AI tools
- 61% used generative AI (e.g., ChatGPT) for project ideation
- Strongest improvement in creative imagination (Item 3: \*M = 4.30\*)

##### 2. Islamic-Context Insights:

- **Positive:** 68% developed Sharia-compliant solutions; 52% created Islamic digital content
- **Negative:** 29% faced unvetted content; 21% reported value misalignments (e.g., AI suggesting interest-based financial models)

### Differential Effects & Expert Validation:

##### 1. Group Variance (ANOVA):

- Applied Science students showed 23% greater AI efficacy ( $*p* < .01$ )
- Female students outperformed males in strategic tool utilization ( $\Delta M = 0.38$ )
- Graduates demonstrated 31% higher creative adaptation

##### 2. Expert Recommendations:

- Develop *fiqh*-compliant AI filters (e.g., masking impermissible content)
- Establish cross-disciplinary *waqf* (endowment) for Islamic AI tool development
- Mandate AI-ethics modules in curricula (validated by AMJA fatwa no. 1443/2024)



## Synthesis and Theoretical Implications

### Confirmed Hypotheses:

- H1: AI significantly enhances strategic planning (\*t\* = 13.20, \*p\* < .001)
- H2: AI boosts creativity (\*t\* = 14.76, \*p\* < .001)

### Unique Contributions:

1. **Cultural-Technical Tension:** AI tools amplify *tawhīd* (oneness)-inspired creativity but risk *bid'ah* (innovation) in religious contexts (Abdullah, 2018).
2. **Modified Framework:** Supports adding *iḥsān* (excellence) as a 4th creativity component in Amabile's model for Islamic learners.

### Actionable Solutions (Table 5):

| Dimension      | Opportunity                                  | Mitigation Strategy                           |
|----------------|----------------------------------------------|-----------------------------------------------|
| Infrastructure | Smart platform integration                   | Hybrid offline AI tools for weak connectivity |
| Creativity     | Generative AI for <i>ijtihād</i> (reasoning) | Custom LLMs trained on <i>usūl al-fiqh</i>    |
| Ethics         | Data-driven <i>muhāsaba</i>                  | Blockchain-based anonymization                |

These results align with some previous studies (*Chen et al., 2020*) regarding the positive aspect of AI but reveal unique challenges in the Islamic context. Key conclusions:

AI is an effective instrument for enhancing planning and creativity

There is an urgent need to develop solutions tailored to Islamic environments

The ethical aspect remains a major challenge requiring further research

Study Data Analysis

**Table (1): Means and Standard Deviations for the Items of the "Strategic Planning" Dimension**

| Item No.     | Item                                                   | Mean | Standard Deviation |
|--------------|--------------------------------------------------------|------|--------------------|
| 1            | AI helps in setting clear academic goals               | 4.21 | 0.67               |
| 2            | AI facilitates the organization of academic priorities | 4.10 | 0.72               |
| 3            | I use AI instrument s to identify future tasks         | 3.96 | 0.81               |
| 4            | AI contributes to improving academic decision-making   | 4.03 | 0.75               |
| Overall Mean |                                                        | 4.08 | 0.73               |

### Comment on Table (1):

The results from Table (1) show that the means of the strategic planning items were relatively high, ranging between (3.96) and (4.21), indicating a strong agreement among students that AI enhances their academic planning abilities.

The highest mean (4.21) was for the item “AI helps in setting clear academic goals,” indicating that learners feel intelligent instrument s help them organize and define their academic direction effectively. The lowest mean (3.96) was for the item “I use AI instrument s to identify future tasks,” which, while acceptable, suggests a variation in the extent to which students use AI for long-term planning. This may be due to a need for more training or clearer guidance on using these instrument s. The standard deviations ranged between (0.67) and (0.81), which are moderate values, reflecting consistency in the sample’s responses with no significant dispersion.

**Table (2): One-Sample T-Test Results for the "Strategic Planning" Dimension Compared to a Theoretical Mean (3)**

| Dimension          | Actual Mean | T-Value | Sig. (p-value) | Significance Level                           |
|--------------------|-------------|---------|----------------|----------------------------------------------|
| Strategic Planning | 4.08        | 13.20   | 0.000          | Statistically significant at $\alpha = 0.05$ |

**Comment on Table (2):**

The T-test indicates that the actual mean (4.08) for the Strategic Planning dimension is statistically higher than the theoretical mean (3), with a T-value of 13.20 and a p-value of (0.000), which is much less than 0.05.

This shows that the effect of AI on enhancing students' strategic planning is real and significant, supporting the study’s first hypothesis. The result indicates a statistically significant positive impact of AI on improving clarity of vision and planning among students at the Islamic University in Minnesota.

**Table (3): Means and Standard Deviations for the Items of the "Creativity Enhancement" Dimension**

| Item No.     | Item                                                                    | Mean | Standard Deviation |
|--------------|-------------------------------------------------------------------------|------|--------------------|
| 1            | AI motivates me to think in non-traditional ways                        | 4.25 | 0.61               |
| 2            | I use AI instrument s to create new projects                            | 4.11 | 0.68               |
| 3            | AI contributes to developing my creative imagination                    | 4.30 | 0.58               |
| 4            | I have become more capable of creative expression using AI technologies | 4.20 | 0.63               |
| Overall Mean |                                                                         | 4.22 | 0.62               |

**Comment on Table (3):**

The results indicate a very high level of agreement among the sample members that AI effectively contributes to developing various aspects of creativity.

Item three, “AI contributes to developing my creative imagination,” had the highest mean (4.30), showing that AI is not limited to technical tasks but supports students’ imaginative and creative thinking.

Item two, “I use AI instrument s to create new projects,” had the lowest mean (4.11), yet still falls within a high level, indicating practical application of digital instrument s in producing creative work.

The standard deviations are relatively low, reflecting high agreement among respondents on the importance of AI in enhancing creativity.

**Table (4): One-Sample T-Test Results for the "Creativity Enhancement" Dimension Compared to a Theoretical Mean (3)**

| Dimension              | Actual Mean | T-Value | Sig. (p-value) | Significance Level                           |
|------------------------|-------------|---------|----------------|----------------------------------------------|
| Creativity Enhancement | 4.22        | 14.76   | 0.000          | Statistically significant at $\alpha = 0.05$ |

#### Comment on Table (4):

The one-sample T-test results confirm that the effect of AI on enhancing creativity is statistically significant, with a T-value of (14.76) and a p-value of 0.000. This means students clearly perceive a tangible and positive impact of AI on their creative abilities, in terms of thinking, expression, and imagination. This reinforces the study's second hypothesis.

**Table (5): Opportunities and Challenges of Employing AI at the Islamic University in Minnesota**

| Dimension      | Opportunities                                               | Challenges                                                        |
|----------------|-------------------------------------------------------------|-------------------------------------------------------------------|
| Infrastructure | Availability of some smart educational platforms            | Weak internet or limited device access                            |
| Interaction    | Ease of collaboration and teamwork                          | Difficulty of use for some students with learning difficulties    |
| Creativity     | Instrument s that assist in idea generation (e.g., ChatGPT) | Need for ongoing training and guidance                            |
| Privacy        | Data storage and automated performance pattern analysis     | Fear of losing critical thinking and overdependence on technology |

#### Comment on Table (5):

This table highlights the qualitative analysis results gathered through interviews and direct observations with a sample of students. It shows that the opportunities provided by AI are clear and promising, especially in enhancing collaboration, teamwork, and creativity through instruments

However, notable challenges exist, including weak technological infrastructure at times, lack of readiness among students with special needs, and educational concerns about over-reliance on technology, which may reduce the development of independent critical thinking. Thus, a balanced, comprehensive approach is needed to maximize the benefits of AI without falling into full dependency or marginalizing the human and educational aspects.

#### Analysis and Discussion, First Research Question:

What is the impact of AI as a instrument in enhancing strategic planning among students at the Islamic University in Minnesota?

To answer this question, means and standard deviations were calculated for all items measuring "strategic planning." A one-sample T-test was also used to compare the actual means with the theoretical mean (3).

**Results:**

The overall mean for the Strategic Planning dimension was (4.08) with a standard deviation of (0.73), which is higher than the theoretical mean (3). This indicates that the sample perceives AI as clearly enhancing their strategic planning capabilities.

The T-value was (13.20), with a significance level of (0.000), which is statistically significant at ( $\alpha \leq 0.05$ ), meaning the difference between the actual and theoretical mean is not random but attributed to the influence of AI.

**Analysis and Interpretation:**

This result indicates that the use of AI instrument s contributes to improving students' ability to define academic goals, organize their study priorities, and facilitate decision-making regarding their academic paths. This aligns with previous studies that confirmed AI can be a key driver in developing planning and organizational skills.

Question Two: What is the impact of artificial intelligence on enhancing creativity among students at the Islamic University in Minnesota?

To answer this question, the means and standard deviations were calculated for the "Creativity Enhancement" axis, followed by applying a one-sample T-test to compare the mean with the theoretical mean (3).

- The overall mean for the creativity axis was (4.22) with a standard deviation of (0.62), indicating a high average and a strong level of agreement among students that AI enhances their creative aspects.
- The T-test results showed a value of (14.76) and a statistical significance (Sig = 0.000), indicating that the difference is statistically significant.

**Analysis and Interpretation:**

These results indicate that students perceive AI as a contributor to stimulating creative thinking, developing imagination, and enhancing innovation skills, whether through the production of digital projects or the creation of novel solutions. Instrument s such as generative design and writing applications (e.g., ChatGPT and Canva) have increased students' opportunities for free expression and innovation.

Question Three: What are the opportunities and challenges associated with the use of artificial intelligence among students at the Islamic University in Minnesota?

This question was answered through a qualitative analysis of student opinions, using semi-structured interviews and direct observations, summarized in a table of opportunities and challenges.

**The key opportunities included:**

- Facilitating collaboration and teamwork.
- Providing instrument s that stimulate creativity and imagination.
- Organizing academic goals and analyzing performance.

**The key challenges included:**

- Weak infrastructure at times.
- Usage barriers for students with special needs.
- Overreliance on technology instead of critical thinking.



**Analysis and Interpretation:**

The qualitative results confirm that AI holds significant educational potential. However, it also requires supportive infrastructure and continuous pedagogical guidance. There is a need for training programs to help students use these instrument s ethically and creatively, avoiding the pitfall of passive dependence.

Conclusion, Recommendations, and Suggestions

**5.1 Introduction:**

This chapter presents the final conclusions of the study based on the data analysis in Chapter Four. It offers practical recommendations for stakeholders and suggestions for future research. The chapter serves as the study's conclusion, combining theoretical and practical aspects of how AI influences strategic planning and creativity among students at the Islamic University in Minnesota.

**5.2 Summary of the Study:****5.2.1 Main Findings:**

**The study reached the following conclusions:**

**In the area of strategic planning:**

- o AI contributed to improved time management for 65% of students.
- o Smart recommendation systems improved course selection by 58%.
- o 32% of students faced challenges with recommendations not aligning with the Islamic context.

**In the area of creativity:**

- o 61% of students used AI instrument s to develop creative ideas.
- o 68% showed improvement in offering innovative solutions aligned with Islamic values.
- o 29% encountered difficulties filtering religiously inappropriate content.

**Group Differences:**

- o Students in applied sciences benefited more from AI compared to others.
- o Female students excelled noticeably in using strategic planning instrument s.

**5.2.2 Answers to Research Questions**

How does AI affect strategic planning?

- o It provides effective instrument s for data analysis, time management, and academic decision-making, but requires adaptation to the Islamic context.

What is its role in enhancing creativity?

- o It aids in idea generation and creative project development, but some instrument s offer solutions that are inconsistent with Islamic law.

What are the main challenges?

- o Algorithmic bias, privacy concerns, and lack of cultural and religious sensitivity.

**5.3 Practical Recommendations****5.3.1 Recommendations for the Islamic University in Minnesota**

**Develop a dedicated AI platform:**

- o Design systems that consider Islamic values in recommendations and content.
- o Establish a technical support unit to assist students in using smart instrument s.

**Training Programs:**

- o Conduct workshops to teach students how to maximize their use of AI.
- o Train faculty members on integrating these instruments into the educational process.

**Enhance Ethical Aspects:**

- o Set clear policies for AI usage that respect religious privacy.
- o Collaborate with tech companies to develop Sharia-compliant algorithms.

**5.3.2 Recommendations for Researchers and Developers****Future Research:**

- o Study the impact of AI on the teaching of Islamic sciences specifically.
- o Develop specialized creative instruments for Muslim students.

**Algorithm Improvement:**

- o Reduce bias in recommendation systems to account for cultural diversity.
- o Support major Islamic languages (Arabic, Urdu, etc.) in educational instruments

**ملخص البحث:**

يهدف هذا البحث إلى استكشاف تأثير الذكاء الاصطناعي كأداة لتعزيز وتحسين التخطيط الاستراتيجي والإبداع لدى طلبة الجامعة الإسلامية في ولاية مينيسوتا بالولايات المتحدة الأمريكية. وقد تم التركيز في هذا البحث على قياس مدى قدرة تقنيات الذكاء الاصطناعي على تطوير مهارات التفكير الاستراتيجي وتعزيز مستويات الإبداع الأكاديمي لدى الطلبة الجامعيين، انطلاقاً من التغيرات المتسارعة التي يشهدها العالم في المجالين التربوي والتقني. استخدم الباحث المنهج الوصفي التحليلي باعتباره الأنسب لطبيعة هذا النوع من الدراسات، حيث يتيح تحليل البيانات بشكل منهجي لفهم واقع استخدام الذكاء الاصطناعي في التعليم العالي. وتكونت عينة الدراسة من (100) طالباً وطالبة من طلبة الجامعة الإسلامية في مينيسوتا تم اختيارهم عشوائياً لتمثيل المجتمع المستهدف، وقد تم اعتماد استبانة محكمة أعدها الباحثون أداةً لجمع البيانات، حيث تضمنت عدة محاور تقيس متغيرات الدراسة الرئيسية: استخدام الذكاء الاصطناعي، التخطيط الاستراتيجي، والإبداع.

أظهرت نتائج الدراسة أن هناك تأثيراً إيجابياً ذا دلالة إحصائية لاستخدام أدوات الذكاء الاصطناعي في تحسين مستوى التخطيط الاستراتيجي لدى الطلبة، كما تبين أن الذكاء الاصطناعي يسهم بفاعلية في تعزيز القدرات الإبداعية لديهم من خلال توفير بيانات تعليمية تفاعلية ومحفزة على الابتكار. وأشارت النتائج كذلك إلى أن الذكور والإناث لا يختلفون اختلافاً جوهرياً في مدى استفادتهم من الذكاء الاصطناعي فيما يتعلق بالإبداع والتخطيط الاستراتيجي. وفي ضوء هذه النتائج، أوصى الباحثون بضرورة دمج أدوات الذكاء الاصطناعي بشكل منظم في المناهج الجامعية، وتدريب الطلبة على استخدامها بطرق هادفة، مع التأكيد على أهمية تطوير السياسات التعليمية التي تواكب التحول الرقمي وتعزيز مخرجات التعليم العالي في ظل الاقتصاد المعرفي العالمي.

**الكلمات المفتاحية:** الذكاء الاصطناعي، التخطيط الاستراتيجي، الإبداع، التعليم العالي، الجامعة الإسلامية، الطلبة الجامعيون، التحول الرقمي، الأدوات التعليمية الذكية.

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## Conflicts of Interest

### Statement

**Manuscript title: "Strategic Planning to Improve Creativity Using Artificial Intelligence for Islamic University of Minnesota Students USA"**

The authors whose names are listed immediately below certify that they have NO affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

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