Report

On

Comprehensive Study on the Impact of Artificial Intelligence on Education and Skills Development in Nepal

Submitted to:

The Asia Foundation

The Asia Foundation's Data for Development (D4D) Program

Submitted by:

Nepal Applied Mathematics and Informatics Institute for research (NAAMII)

February, 2025

ACKNOWLEDGEMENT

This study would not have been possible without the invaluable contributions of many individuals and organizations. We extend our deepest gratitude to the experts who shared their insights and expertise, enriching our understanding of the impact of artificial intelligence on education and skills development in Nepal.

We sincerely appreciate the efforts of our data collectors, whose dedication and hard work in gathering survey responses and conducting interviews ensured the integrity and reliability of our findings. Likewise, we are grateful to all the interviewees - educators, administrators, policymakers, and industry professionals, who took the time to provide their perspectives and experiences, offering critical insights that shaped this research.

We are especially thankful to our government bodies for their invaluable insights, which played a crucial role in shaping this research.

Finally, we would like to express our sincere appreciation to The Asia Foundation for providing us with this opportunity. Their support and resources enabled us to undertake this comprehensive study, contributing to the ongoing discourse on AI in education in Nepal.

To everyone who contributed in any capacity directly or indirectly, your support and commitment have been invaluable, and we are truly grateful.

CONTRIBUTORS

Name	Responsible As
Dr. Bishesh Khanal	Head of Project
Dr. Sujit Pandey	Human Development Expert
Dr. Shaligram Parajuli	Advisor
Alok Khatri	Digital Infrastructure Expert
Anisha Gyawali	Project Manager
Jatin Bhusal	Research Assistant
Sakshee Rijal	Research Assistant
Dr. Mandira Lamichhane	Policy Expert
Jay Jung Basnet	Policy Expert
Dr. Hari Dhungana	Governance Expert
Umesh Shrestha	Pedagogy Expert
Reman Nembang	Data Collection

ABSTRACT

Artificial Intelligence (AI) is reshaping the global education landscape by offering new opportunities for learning, teaching, and skills development. While AI integration in the education sector of Nepal is still in its infancy, the institutions, educators, and policymakers are navigating both opportunities and challenges. This study provides a comprehensive analysis of AI's readiness in individual level and institutional level for AI education and skills development in Nepal. We have examined institutional readiness, technological infrastructure, faculty preparedness, and student engagement. In this phase, we explored academic institutions inside Kathmandu Valley, private/public/community with both school levels (9 to 12) and University Level (Undergraduate and Graduate) stakeholders, alongside 5 institutions outside of Kathmandu Valley.

Employing a mixed-methods approach, this research gathers insights through structured surveys, interviews, and focus group discussions with key stakeholders, including students, faculty, administrators, government officials, pedagogy experts, and industry professionals. The study explores awareness, accessibility, and adoption of AI tools, as well as perceptions of AI's role in enhancing learning outcomes.

Findings indicate that there are multiple levels of challenges in the integration of AI into education ranging from lack of training for faculties to outdated syllabus and infrastructural barriers. An interesting finding is that though the Actual Usage rate of the faculties were found to be high, their perceived usefulness towards AI tools were found to be low. We also found out that AI indeed has a positive impact in enhancing productivity among its users in educational domains showing good signs if the challenges are resolved. We have also recommended some actionable suggestions and feedback that can help the overall goal of successful and sustainable integration of AI in education and improve the attitude of people towards AI.

By providing data-driven insights, this research aims to assess the current readiness and inform policy recommendations and institutional strategies to maximize AI's role in fostering an innovative and future-ready education system in Nepal.

TABLE OF CONTENT

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

1.1 Background

In recent years AI development has found its way into applications in different fields, with a huge potential for impacting and transforming sectors like education. Whenever the topic of improvement of education comes up, 6 resource groups are engaged primarily: the students, educators, education leaders, industry, the government, and educational stakeholders. Only with careful and rational analysis of the needs and situation of these 6 parties, the scarce gap of education and skills development can be addressed. As we are in the age of AI, the topic of engaging AI with the educational ecosystem to fill that gap is widely being explored and implemented globally.

Artificial Intelligence (AI) can be vaguely defined as automating reasoning based on associations in data. AI has the potential to revolutionize education by enabling personalized learning experiences, automating administrative tasks, and enhancing accessibility. Through adaptive learning systems, AI can analyze student performance data in real-time to tailor content delivery based on individual strengths and weaknesses. AI-driven tools, such as virtual tutors and intelligent content generation, can augment traditional teaching methods, ensuring efficient resource utilization. Furthermore, AI-powered predictive analytics can identify at-risk students early, allowing timely interventions to improve learning outcomes. These technologies collectively empower educators to focus more on teaching and less on logistical challenges, ultimately fostering an inclusive and future-ready education ecosystem.

Nepal has witnessed significant growth in technological adoption in recent years, with the majority of its population (96%) now living under the coverage of telecommunication services. Internet accessibility, a key enabler of digital transformation, has also been on the rise. By mid-2018, approximately 63% of Nepal's population had access to the internet, up from 58.72% in 2017 (News24Nepal, 2017) and 50.11% in 2016 (Pokharel, 2016). This rapid increase reflects a growing integration of modern technologies into daily life, creating new opportunities for

advancements in sectors such as education and skills development. These trends highlight the potential for leveraging artificial intelligence to address challenges in Nepal's education system and to bridge the gap between traditional practices and emerging technological capabilities.

The project "Comprehensive Study On The Impact Of Artificial Intelligence On Education And Skills Development In Nepal" aims to assess the current AI readiness of academic institutions and bodies in Nepal. That will help us identify barriers, recommend suitable policies, and foster collaboration. This can largely contribute to directing and supporting the education and skill development in Nepal using Artificial Intelligence. There will be two focal points of study looking for AI readiness in Nepal:

a. **Institution Readiness**
b. **People Readiness**

In the Institutional Readiness, we will assess the current positioning of multiple institutions and organizations that are crucial in implementing AI as a curriculum in schools and colleges. This will help us to visualize the current scenarios, and devise the plans for future betterments.

In the People Readiness, we will be assessing the awareness of AI and its tools, learning exposures and experiences, and workforce readiness of individuals like students, teachers, administrators and members from government organizations that are directly involved in Pedagogy and AI Readiness R&D in Nepal.

1.2 Objectives of the Study

This study aims to explore the readiness for the integration of Artificial Intelligence into education outcomes, digital literacy, and skills development in Nepal, providing insights and actionable recommendations for integrating AI effectively into the education sector.

a. To identify the challenges and opportunities in Nepal's education system for leveraging AI to improve learning experiences, bridge the digital divide, and enhance access to quality education for all, including underserved communities.

b. To analyze the impact of AI on skills development and workforce readiness, identifying the key areas where AI can enhance training and upskilling initiatives to prepare learners for the future of work.
c. To explore the role of educational institutions, government policies, and partnerships in fostering an adaptive education system that integrates AI-driven solutions, ensuring inclusive and forward-looking education practices.
d. To provide actionable recommendations for policymakers, educators, and stakeholders on creating an AI-enhanced education ecosystem that supports innovation, digital readiness, and inclusive growth in Nepal.

1.3 Scope of Work

The whole scope of the work is going to be centered around the two focal points:

a. **Institution Readiness**
b. **People Readiness**

a. Institution Readiness:

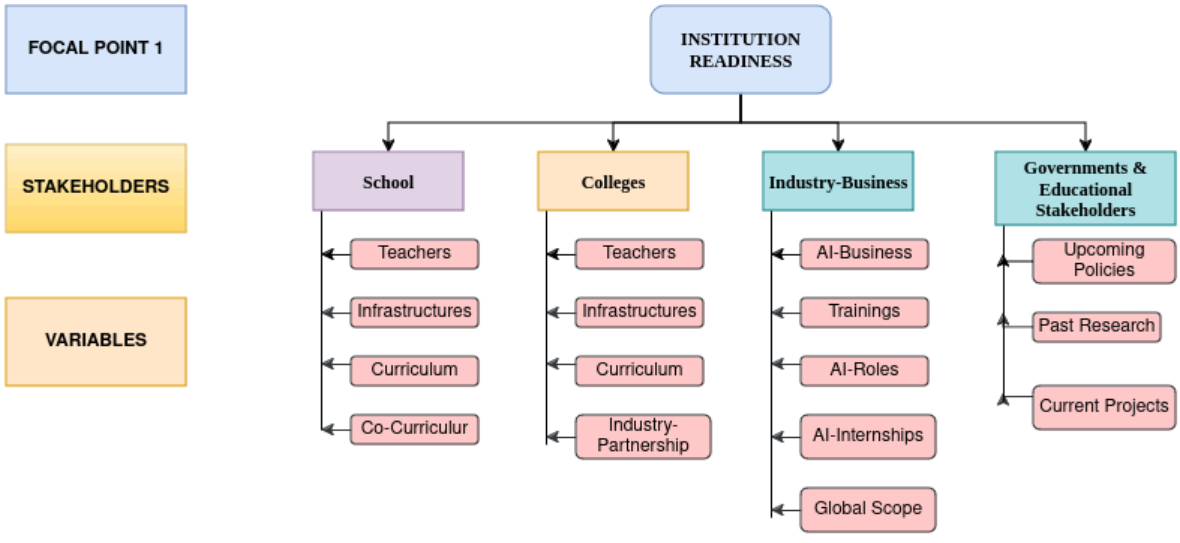


Figure 1: Focal Point 1 - Institutional Readiness

The scope of Institution Readiness would be to assess the institutions directly involved or major stakeholders in Learning, Access to Education, and Workforce Providers in AI. The study of this section will give us a picture of the current AI readiness of the institutions if we aim to integrate AI as a curriculum in academics. The stakeholders include schools, colleges, Industry Readiness, and government and educational stakeholders.

For academic institutions like schools and colleges, we will look into the current state of development and past activities of teachers, infrastructure, curriculum, and co-curricular activities. Queries like

- How familiar are the faculty members with AI?
- Do they have any prior industrial or professional experience in AI?
- What is the current state of infrastructure like computer labs, classrooms, and IoT integrations?
- What exposure do students have to AI through co-curricular activities?
- What is the partnership status of colleges with AI industries?

It will give us a clear picture of what current state we are in, what approaches we can take, and what improvements we can recommend, preparing our institutions if we are to integrate AI into the curriculum.

Only the integration of AI into the curriculum won't suffice if the industry is not aligned with the demand-supply ecosystem. We will be assessing the AI industry of Nepal, with variables being the AI Businesses happening, Training provided by these companies, the volume of AI-specific roles inside, AI internships, and the scope of extending the products and services globally. Also, it is equally crucial to study the readiness of government bodies, policy makers and umbrella institutions of schools and colleges. Variables like upcoming policies, past research in similar domains, and currently running projects will give us a clear insight into where we stand and what can be recommended for betterment.

b. People Readiness

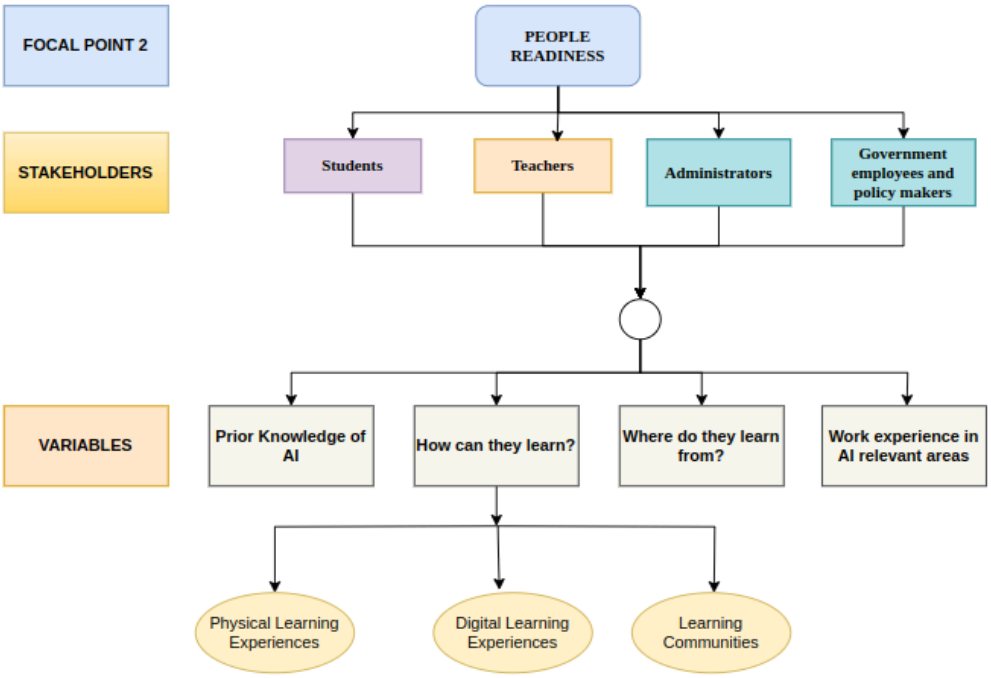


Figure 2: Focal Point 2 - People Readiness

The scope of People Readiness would be to analyze the current skill and awareness of AI foundations and usability at the individual levels. The stakeholders here are the students from government and private schools, colleges, faculties from the same, Administrators from schools and colleges and government officials and policymakers. These are the people who are directly impacted or are effectively involved in AI readiness. We will analyze how familiar they are in terms of access to AI tools, using these tools to make their work better, personalized, and effective.

The variable in this focal point includes:

1. Prior knowledge of AI tools and platforms that can make their work more effective.
2. Current learning opportunities for AI.
3. Sources of AI education.
4. Work experience of faculty members, administrators, and government employees in AI-relevant areas.

CHAPTER 2: DESK REVIEW

2.1 Literature Review

2.1.1 Artificial Intelligence

The term "artificial intelligence" conjures up images of supercomputers, which are computers with enormous processing capabilities, including adaptive behaviour, such as the inclusion of sensors and other stuff that allow them to have human-like cognition and functional abilities, and thus improve the supercomputer's interaction with humans (Chen et al., 2020). Artificial intelligence is the ability of a computer program to learn and think. Everything that involves a program doing something that people would typically think would require the intelligence of a human is considered artificial intelligence (Mitchell, 2019). The benefits of AI are enormous, and it has the potential to revolutionise any professional sector (Makridakis, 2017).

2.1.2 Artificial Intelligence in Education

Within the education sector, there has been increased application of artificial intelligence, going over and above the conventional understanding of AI as a supercomputer to include embedded computer systems (Chen et al., 2020). One of the most important goals of AI in education is to provide personalized learning guidance or support to individual students based on their learning status, preferences, or personal characteristics (Hwang, 2014; Hwang et al., 2020). AI in education also aims to use AI to facilitate the instruction process (e.g., understanding and facilitating computer-supported collaborative learning through discourse analysis and achieving performance prediction through educational data mining), during which instructors are critical, and their acceptance of AI is vital. However, since AI is a relatively new concept for instructors, less-experienced instructors frequently struggle to execute effective, on-the-spot responses to analytics from AI-enabled applications, resulting in their reluctance and lower acceptance of AI. Thus, improving instructors' acceptance of AI systems appears critical (Chen et al., 2022).

As per the concept paper published by the Ministry of Communication and Information Technology (MoCIT), in the context of Nepal, the country is not far behind in the systematic use

and application of AI. Kathmandu University, Madan Bhandari Technical University of Science and Technology and Tribhuvan University's Institute of Engineering are conducting studies and running various AI-related projects while publishing research papers. Some government bodies are experimenting with chatbots. In the private sector, startups are working in the fields of AI and machine learning. However, in the context of Nepal, there are various challenges in developing and utilizing AI. These include a lack of skills, experience, and experts in the field, obstacles in accessing data for implementation, a lack of a favourable ecosystem, low literacy levels, and high costs (MoCIT, 2081).

2.1.3 AI as a tool to be integrated into the education system

Adopting AI in education has created new opportunities for developing more effective learning activities and better technology-enhanced learning applications or environments. There are several essential aspects of AI technology in education, such as teacher feedback, automatic grading systems, adaptive learning, distance learning, and so on (Hwang et al., 2020; Yufeia et al., 2020). Yufeia et al., (2020) also argue that AI in education has been applied in various ways, including automatic grading, interval reminders, teacher feedback, virtual teachers, personalised learning, adaptive learning, augmented and virtual reality, accurate reading, Smart campus, and distance learning (Yufeia et al., 2020).

Many educational settings are increasingly deploying several AI applications powered by machine-learning systems and algorithms, such as personalised learning systems, automated assessments, social media sites, and predictive analytics tools. These AI applications have shown promise in assisting teachers and students in several ways, including providing instruction in mixed-ability classrooms, providing students with detailed and timely feedback on their writing products, relieving teachers of the burden of knowing everything and giving them more room to support their students while they are observing, discussing, gathering information in their collaborative knowledge-building processes, and so on (Akgun & Greenhow, 2021; Miao et al., 2021).

According to the study presented by Chen et al., (2020), the application of AI algorithms and systems in education are gaining increased interest year by year. Fig. 3 shows the rising number

of papers published on the topics ‘‘AI’’ and ‘‘Education’’ from Web of Science and Google Scholar since 2010. Note that the papers published in 2015-2019 accounted for a large proportion, i.e., 70% of all the papers indexed. As education evolves, researchers are trying to apply advanced AI techniques, i.e., deep learning, data mining, to deal with complex issues and customize teaching methods for individual students.

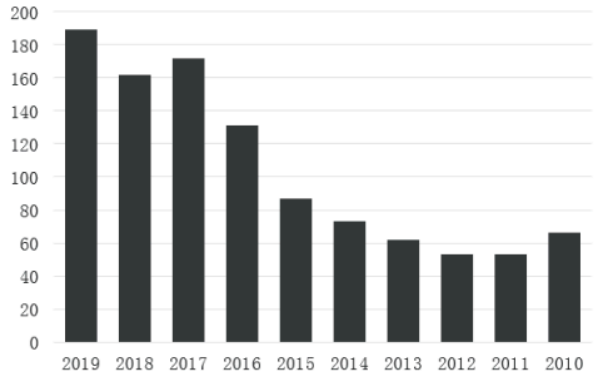


Figure 3: Papers in Web of Science and Google Scholar in the last ten years with key words “AI” and “Education” (extracted from: Chen et al., (2020))

However, in the context of Nepal, much research has yet to be conducted in the field of artificial intelligence within the education sector. While some advancements have been made in integrating technology into education, these efforts are limited and often lack systematic government or institutional support. The findings from the study done by Rana et al. (2019), Rana (2018), and Rana et al. (2018) show that without consistent investment from the government and universities, foreign aid alone cannot ensure the sustainability of these projects or transform the traditional education system. Furthermore, a significant challenge lies in teachers' limited use of information and communication technology (ICT) resources. Rana (2018) highlights that a majority of teachers, especially from the older generation, struggle to incorporate web technologies into their teaching practices, even as their students, particularly in urban areas, become increasingly adept at using these technologies. This gap between teacher capabilities and student expectations underscores the pressing need for targeted skill development and systematic policy interventions.

Furthermore, Nepal's ICT Policy 2072 outlines strategic objectives to integrate ICTs across the education system. The policy states that *"appropriate measures will be taken to facilitate and promote the integration of ICTs within the entire Nepali educational system to support administration, pedagogy, learning, and research, with a view to improving the quality of education and training at all levels and enhancing access to education."* Additionally, the policy emphasizes *"a nationwide E-Schools and other related initiatives will be formulated and launched to promote E-learning and E-Education as well as life-long learning. ICT capacities of tertiary level educational institutions will also be enhanced in a way that helps improve broad learning outcomes."* (National Information and Communication Technology Policy, 2015)

These objectives highlight the government's commitment to fostering an ICT-enabled education system that supports not only formal learning but also life-long education, enhancing access and quality at all levels.

2.1.4 AI as a Product

First, knowing and understanding the basic functions of AI and using AI applications is an organic part of digital literacy for all citizens in an increasingly intelligent society (Ng et al.,2021). AI education can integrate knowledge of different disciplines and multiple technologies simultaneously and has great potential to enrich children's learning (Yang, 2022).

There is neither an established curriculum nor well-defined AI content knowledge for high schools. Research on the curriculum development approaches adopted, the curriculum development processes, and the consequences are necessary for educators to enhance the process of integrating AI topics into K-12 education (Chiu and Chai, 2020). Building on their work, integrating AI has unique challenges in that it is totally new to schools, with the AI content not defined and the teachers having to figure out where it fits in a crowded curriculum. Therefore, designing AI-related school curricula is very challenging for school teachers, school leaders, education officers, policy-makers, and AI experts, and it is important to raise the challenges teachers face to facilitate curricula planning work (Chiu and Chai, 2020). Another reason why AI to date has had so little impact on teaching and learning in higher education is that education tends generally to lag behind where new technologies are concerned. Lack of willingness to take

risks or to adopt new innovations, and lack of funding for anything different from traditional methods of teaching militate against the adoption of new technologies in all sectors of education, learning, and development (Wheeler, 2019. Retrieved from Bates et.al, 2020).

In the context of Nepal, at the University level, both computing and non-computing students are enthusiastic about AI and its technologies. Based on preliminary research and conversations with students, most computing-related students complete an AI-related project as their final year project. In addition, many students self-learn AI skills on their own through boot camps, MOOCs, and special schools, including NAAMII's annual winter school, AI fellowships, and more. Furthermore, the students were asked about their courses related to AI and AI ethics. 34 % of the respondents said they were taking formal courses in AI. Of them, 48 % said they had a formal ethics curriculum, and 26 % said they had an AI ethics curriculum (Paudel, Ghimire, 2022).

Likewise, a survey conducted on the "Study On Navigating NEPAL'S Artificial Intelligence Landscape" by NAAMII showed that 45.6% of respondents studied AI-related subjects as part of their academic curriculum, while 54.4% did not. In addition to that, 66.8% of the respondents are engaged in an AI-related project or research. However, in terms of higher university-level AI education, only 37.8% are working on an AI-related academic thesis or project. Moreover, these data show that students are heavily interested in AI-related coursework and projects in the context of Nepal, highlighting the importance of their perspectives in shaping the future of AI in Nepal.

2.1.5 ICT Training for Teachers in Nepal: Challenges and Gaps

The effectiveness of teacher training programs in Nepal has been widely debated, with concerns about the application of acquired skills in classroom practice. A key issue is that existing training methods remain lecture-dominated and classroom-centered, limiting opportunities for hands-on learning and practical implementation (Chirag, 1995). Furthermore, several initiatives, including the Basic and Primary Education Project (BPEP), Primary Education Development Project (PEDP), and Distance Education Center (DEC), have not been entirely effective in equipping teachers with the necessary skills for effective lesson delivery (Gautam, 2016).

The lack of effective teacher training is particularly concerning in the context of ICT integration in education. Nepal ranks 2.37 in the ICT Development Index (IDI) 2013, significantly below the developing country average of 3.84 in the Asia-Pacific region (International Telecommunication Union, 2014). Given that the use of ICT in school education has been mandated (Ministry of Education, 2013), the pressing need is to train teachers in the safe, effective, and responsible use of ICT (SERU-ICT) (UNESCO, 2015a). Without well-trained educators, ICT implementation in classrooms risks being ineffective or misused, further widening the digital divide.

To address these challenges, teacher education institutions (TEIs) in Nepal must strengthen their capacity to provide ICT-pedagogy integration training for both pre-service and in-service teachers. Developing structured and institutionally supported training programs is the first step in ensuring that teachers are adequately prepared to incorporate digital tools into their teaching methods (Dhakal, 2016). Equipping teachers with the necessary technological and pedagogical competencies will be crucial in making ICT-based education both meaningful and sustainable in Nepal's evolving education landscape.

2.2 Theoretical Framework of the Study and Survey Design

2.2.1 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), developed by Davis in 1989, classically assists in understanding the adoption of new technology. This model proposes that users' decisions to accept and use technology are influenced primarily by its Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). According to Davis (1989), Perceived Usefulness is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance," while Perceived Ease of Use refers to "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1989).

Following the TAM model, the use of technology relates to a user's intention and attitude towards technology. This is based on their perceived usefulness and ease of use of the technology. Over time, TAM has been extended and adapted in various fields, including

education, where it has been used to understand how educators, students, and institutions perceive and accept educational technologies (Venkatesh & Davis, 2000).

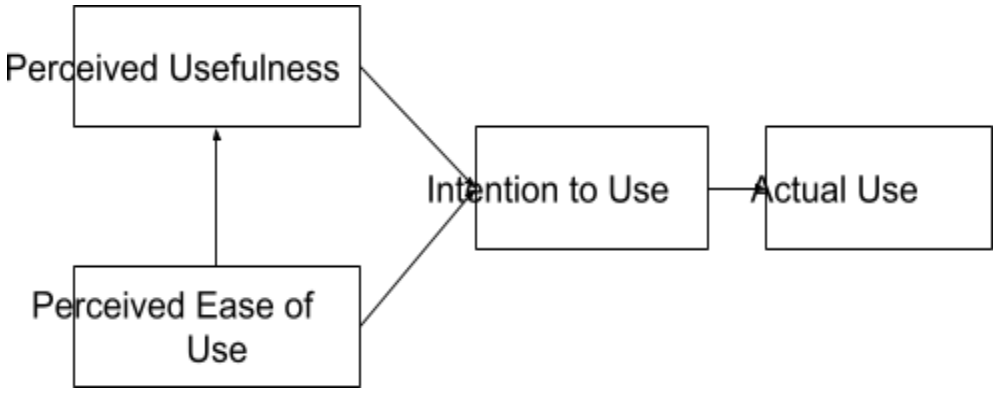


Figure 4: Technology Acceptance Model

Source: https://open.ncl.ac.uk/theories/1/technology-acceptance-model

In the case of AI in education, TAM makes it possible to assess the perception that teachers and students have of AI tools. For a teacher, AI tools are useful if they help in automating administrative tasks, creating personalized content, or gaining insights to make better decisions. Simultaneously, the ease of integrating these tools into existing educational practices (PEOU) plays a crucial role in their acceptance and usage.

- PU: Regarding AI in education, this refers to how teaching and learning processes are perceived to be impacted positively by AI tools to make them more effective and efficient.
- PEOU: This refers to the ease with which the user (educators and students) can operate and interact with the AI tools. The AI has to be well perceived as intuitive and not overly complex for it to be accepted.

The perception of the AI tools is mostly influenced by both people and institution readiness. When a teacher perceives AI tools to be useful, easy to use and there is enough training and

supportive infrastructure, they are more likely to embrace the AI tools. Likewise, students' acceptance of AI learning environments depends on their perceived usefulness and ease of use, which is coupled with the institution's readiness to provide adequate support and resources.

2.2.2 Survey Questionnaire Based on TAM

To investigate the factors influencing the adoption of AI in education, the survey questionnaire for this study was designed based on the key constructs of TAM, namely PU and PEOU, and readiness factors. The survey items were constructed to assess the perceptions of educators, students, and administrators regarding the usefulness and ease of use of AI tools in educational settings.

- **PU:** Items in this section of the survey address how beneficial AI tools are perceived in the field of education. For example, it explores whether they think these tools can improve learning outcomes, save time or make the overall learning experience better.
- **PEOU:** To evaluate how user-friendly AI tools are, this section asks questions about how intuitive respondents find the tools to be, how much effort is required to learn and use them, and whether there is sufficient support available when issues arise.
- **People Readiness:** In order to understand one's ability and attitude towards applying AI tools, the respondents were asked questions related to their knowledge about the AI tools, their readiness to accept new technologies, as well as the use of AI for teaching and learning purposes.
- **Institution Readiness:** To capture institutional support, questions are included to measure the availability of AI training programs, the presence of AI tools within the institution, and the overall institutional climate towards technological adoption.

The survey employs a 6-point Likert scale format for most questions, allowing respondents to rate their agreement or disagreement on a scale (e.g., from "Strongly Disagree" to "Strongly Agree"). This format facilitates the quantitative analysis of how Perceived Usefulness, Perceived Ease of Use, and readiness factors influence the behavioral intention to use AI in education.

2.3 Gap Analysis

Following is the preliminary gap analysis on AI readiness in Nepal for education. The analysis is structured into two main focal areas: Institution Readiness and People Readiness. Also, the recent Sam Altman's 5 stages of AI development (The Last AI, 2024) is being used to assess overall readiness.

Institution Readiness

rameter	**ırrent Status**	**ıps**
Curriculum Integration	Some universities offer AI courses, e.g., Kathmandu University's BTech/MTech in AI. Aside from that, international affiliated universities like Sunway College offer Bachelor's Programs in AI. AI projects exist as final-year capstones. Limited AI education in schools. Private colleges have limited exposure beyond ICT tools. Most courses today are outdated, lagging behind the advanced algorithms and tools that currently dominate the field.Students are losing their trust in the AI curriculum. The	Lack of structured AI curriculum in schools. Absence of AI integration in public secondary schools. Lack of unified framework for AI teaching in schools and colleges. AI is still considered advanced for the school level due to the lack of skilled faculty and the availability of suitable modules tailored for the local faculties and students.

	recent incident where Purbanchal University had to hold the admissions for BTech in AI course due to a lack of students shows the reality (Aryal, M., 2023)	
Infrastructure and Digital Resources	Schools and colleges have basic ICT infrastructure (e.g., computer labs, internet, multimedia projectors). Resources are limited to labs and are not used in regular classrooms. Rural schools face significant resource gaps.	Insufficient AI tools and infrastructure for classroom-level integration. Lack of high-speed internet and AI-enabled devices in rural areas.
Industry Readiness and Collaboration	AI industries focus on outsourcing rather than creating local AI products for education. Some partnerships exist (e.g., NAAMII fellowships, and industry workshops). Very few industries provide lucrative offers to recent graduates compared to international standards. (Gurung, B., 2024. NAAMII)	Limited industry-academic collaboration to develop AI solutions for education. Absence of R&D hubs for AI innovation specific to education. Underpaid and undervalued young professionals who are at the start of their careers.

Government Policies and Strategic Initiatives	Policies like the Digital Nepal Framework 2019 and the Science, Technology, and Innovation Policy mention AI. No practical AI implementation plans exist. Existing laws (e.g., Electronic Transaction Act 2008) are outdated and not AI-specific.	Lack of policy enforcement and clarity on AI's role in education. Absence of funding mechanisms to promote AI in institutions. Poor awareness of AI policies among policymakers. Lack of clear and implemented policies that channel private sector investments into research labs and universities.
Stage of AI Development (Altman's Scale)	Stage 1 (**Chatbots**): AI chatbots are used in banking and customer service Stage 2 (**Reasoners**): Limited AI reasoning tools exist (e.g., recommendation engines). Higher stages (**Agents, Innovators**) are absent in educational institutions.	Education institutions are stuck in basic AI adoption. No institution is progressing toward AI Agents or Innovators to develop transformative AI solutions for classrooms.

People Readiness

rameter	rrent Status	ps
AI Literacy and Awareness	34% of students take formal AI courses; only 26% have AI ethics education. (Paudel, Ghimire, 2022. NAAMII). Teachers have basic digital literacy but lack AI knowledge. (Paudel, Ghimire, 2022. NAAMII). Government employees and policymakers have low AI awareness.	AI literacy is fragmented and confined to urban, tech-focused institutions. Limited AI awareness among teachers and policymakers.
Access to AI Tools and Resources	Students access AI through MOOCs, blogs, and bootcamps. Teachers rarely use AI tools for classroom purposes (e.g., laptops used <14% frequently) (Phyak et al., 2019).	Poor access to AI tools and infrastructure in rural schools.- Limited AI-driven learning environments for students.

AI Training and Skill Development	Teachers receive basic ICT training (only 35.7% trained) (Phyak et al., 2019). Training focuses on MS Word, Excel, and PowerPoint, not AI. Students self-learn AI skills but lack formal training opportunities.	Teachers lack AI-specific training to integrate AI into pedagogy. Students lack advanced AI skill development programs.
AI Ethics Awareness	Students follow AI researchers like Elon Musk, Andrew Ng, but these sources lack relevance to Nepal. Only 41% of students consider real-world AI impacts in their projects (Paudel, Ghimire, 2022. NAAMII).	Limited focus on AI ethics in the local context. Lack of AI ethics courses for students and teachers.
Stage of AI Development Familiarity	Students and teachers are familiar with basic AI concepts (Chatbots, Reasoners). Limited exposure to advanced AI tools or frameworks.	No familiarity with AI Agents or higher stages. Government and administrators are unaware of the potential applications of AI in education.

Overall AI Readiness: Sam Altman's Framework

Stage of AI Development	**stitution Readiness**	**ople Readiness**
Stage1: Chatbots	Emerging: Basic tools like chatbots exist in the industry. No integration into education institutions.	Limited: Students and teachers understand basic tools but do not use them effectively in classrooms.
Stage2: Reasoners	Minimal: Few recommendation tools exist in industry. Limited application in education.	Emerging: Students experiment with basic AI reasoning projects in higher education.
Stage3: Agents	Absent: Institutions lack AI-driven agents for pedagogy or administration.	Absent: Teachers and students are not exposed to AI Agents.
Stage4: Innovators	Absent: No local AI innovators creating education solutions.	Absent: Limited innovation mindset due to lack of AI knowledge and infrastructure.
Stage5: Organizations	Futuristic: Policies exist but lack enforcement. No institutional ecosystems for AI innovation.	Futuristic: Policymakers, teachers, and students lack readiness to drive AI transformation.

Institution Readiness

1. **AI Curriculum Integration**: Develop a structured AI curriculum for schools and colleges, with a focus on practical AI skills.
2. **Infrastructure Development**: Ensure AI tools and internet connectivity are accessible in all classrooms, especially in rural areas.
3. **Policy Implementation**: Update and enforce AI-specific policies to support AI education and innovation.
4. **Industry-Academia Collaboration**: Foster partnerships between educational institutions and AI industries for research and development.
5. **AI Stage Advancement**: Encourage progression from Chatbots to Agents and Innovators by investing in local R&D.

People Readiness

1. **AI Literacy Programs**: Introduce AI literacy and AI ethics courses tailored to the Nepali context for students and teachers.
2. **Teacher Training**: Provide AI-focused professional development for teachers to integrate AI tools into pedagogy.
3. **Access to Tools**: Ensure AI tools and platforms are widely accessible in schools, prioritising underserved areas.
4. **Promote Local AI Ethics**: Develop local guidelines and courses on AI ethics to address contextual challenges.
5. **Raise Awareness**: Conduct workshops and awareness campaigns for policymakers and administrators on the benefits of AI in education.

Moreover, Nepal shows early potential in AI adoption, but significant gaps exist in both institutional and people readiness. With targeted efforts on curriculum integration, infrastructure, and training, the country can progress beyond basic AI tools (Chatbots) and move toward creating AI Agents and Innovators. Aligning policies with implementation and fostering collaboration between industry and education is crucial to unlocking AI's transformative potential in Nepal's education sector.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Research Design

The study used a mixed-methods framework combining quantitative and qualitative methods to obtain an overall perspective of the research problem. This enabled both statistical analyses of the sample with structured surveys and provided deep insights into emerging themes through group discussions and interviews. The design ensured that numerical data could be contextualized with qualitative insights, providing a nuanced understanding of AI readiness in education. The research design was exploratory in nature, aiming to identify trends, challenges, and opportunities in AI integration within Nepal's education sector.

3.2 Study and Population Sampling

The study used purposive sampling, targeting individuals and institutions directly involved in or affected by AI readiness and education alongside diversity like private/public institutions, inside/outside valley and schools/colleges. This ensured that relevant stakeholders who could give valuable insight into this topic were included.

Sample Size:

- Students: 1,300
- Faculty: 140
- Administrators: 50

The institutions from the Kathmandu Valley were taken as the sample, capturing a diverse range of public and private educational settings within this region.

3.3 Research Instruments

The research data was gathered with the help of carefully designed instruments, ensuring consistency and reliability for both qualitative and quantitative data. Each instrument was

pilot-tested before the full-scale data collection to ensure clarity, relevance, and validity. The tools were redesigned in response to the feedback to enhance their effectiveness.

3.3.1 Quantitative Instruments

Survey Questionnaires

The survey questionnaire was structured to capture quantitative data concerning AI which included 17 variables: Awareness of AI, Current use: purpose and extent, Perceived usefulness, Perceived ease of use, Readiness to adopt AI into education (based on Infrastructure including Technological infrastructure and Access to AI training programs, based on Human Capital including Proportion of faculty trained in AI/tech, Average faculty qualifications and Teacher workload and based on Attitude), Expectation of support, Type of education institution, Location, Budget allocation per student, Student-to-Teacher ratio, Socio-economic status of students, Gender Distribution, Average academic performance of students, Familiarity with digital tools, and The propensity of students to use online resources for learning. These variables were selectively included in the questionnaire based on their relevance to each stakeholder group. A 6-point Likert-scale questionnaire was designed, which ranged from Strongly Disagree to Strongly Agree.

3.3.2 Qualitative Instruments

Structured Interview

A set of structured and pre-determined questions were prepared for the interviews with government officials, administrators, AI experts, pedagogy experts, and industry representatives. The interview guide focused on key themes such as institutional readiness, infrastructure, and the role of AI in education.

Focused Group Discussion Framework

A well-organized framework was developed to foster discussion during FGDs, such as the Operational Readiness Theme, Activities for Industry Engagement Collaboration, and Innovations in AI Pedagogy.

3.4 Data Collection Methods

3.4.1 Interviews

A structured interview with the following stakeholders was conducted.

- **Government Officials:** The representatives from the Ministry of Communication and Information Technology (MoCIT) and the Ministry of Education, Science and Technology (MoEST), who work with education and technology policy areas.
- **Administrators:** Principals and administrators from schools, colleges, and universities who undertake administrative responsibilities in the institution.
- **AI Experts:** International Professors who are engaged in high quality research and teaching in top universities globally like ETH Zurich, IITs, SUNY and Aberdeen, who were physically present at Annual Nepal AI School 2024, organized by NAAMII
- **Pedagogy Experts:** Experts on methods of teaching and education especially on the use of AI technologies.
- **Industry Professionals:** Representatives from a range of industries, including but not limited to AI-focused companies, who collaborate with educational institutions and provide perspectives on practical AI applications.

These sessions were supported by a structured interview questionnaire, making it possible for all the interviews to have the same focus. The details obtained from the interviews were carefully recorded using audio recordings as well as notes, which were later used in transcribing and analyzing the data.

3.4.2 Surveys

Surveys were disseminated among three stakeholder groups: administrators, faculty, and students, using a Likert-scale questionnaire. The survey targeted both public and private institutions, including schools, colleges, and universities, to ensure broad coverage and representation.

- **Student Surveys:** A total of 1,300 students participated, providing insights into their familiarity with and usage of AI tools, as well as their perceptions of AI's impact on learning.
- **Faculty Surveys:** ResponseSurveys were collected from 140 faculty members to understand their readiness to integrate AI into teaching practices, their training needs, and their perceptions of AI's usefulness in the classroom.
- **Administrator Surveys:** 50 administrators completed the survey, offering perspectives on institutional and people readiness, including infrastructure adequacy, faculty preparedness, and challenges in implementing AI-based solutions.

3.4.3 Focus Group Discussions

Two focus group discussions with the following stakeholders were conducted.

- **Academic representatives:** The participants included representatives, faculties and students from schools, colleges, and universities, including those institutions that are outside Kathmandu Valley.
- **Industry Professionals:** The experts from various industries shared their insights into collaborations between educational institutions and the importance of AI knowledge in a corporate setting.
- **Professors from ANAIS 2024:** University professors working within education and AI provided insights while sharing the importance of these subjects in a pedagogical context.

For these sessions too, a structured interview questionnaire was used, which made it possible for all the discussions to have the same focus. The information obtained from the interviews were carefully recorded by means of audio recordings as well as notes which were later used in transcribing and analyzing the data.

CHAPTER 4: DATA ANALYSIS

We did quantitative and qualitative analyses from the data collected from surveys, FGDs, and interviews.

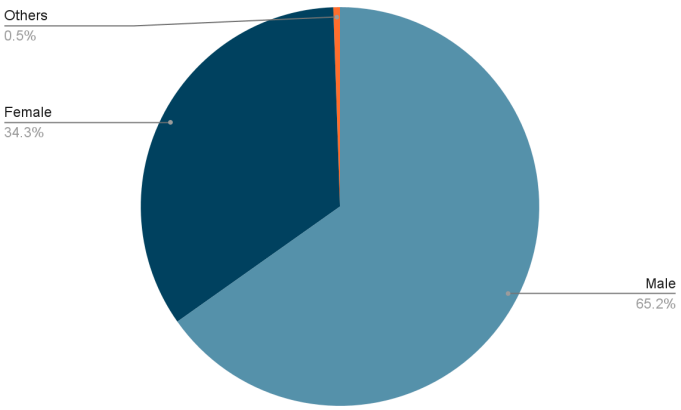
4.2 Quantitative Analysis

4.2.1 Quantitative Analysis of Students

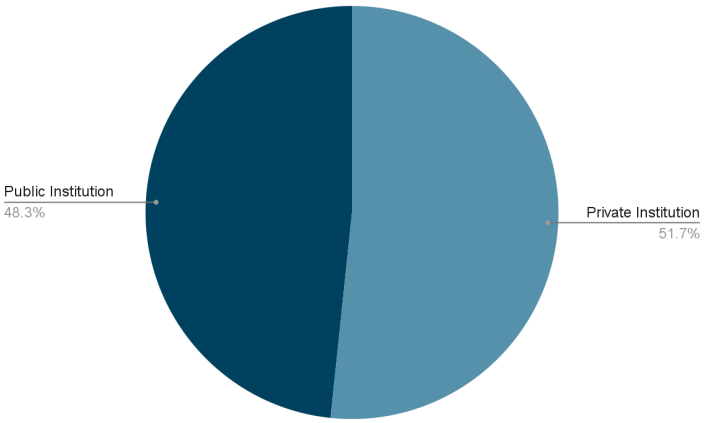
A. Descriptive Statistics

i. Demographic variables

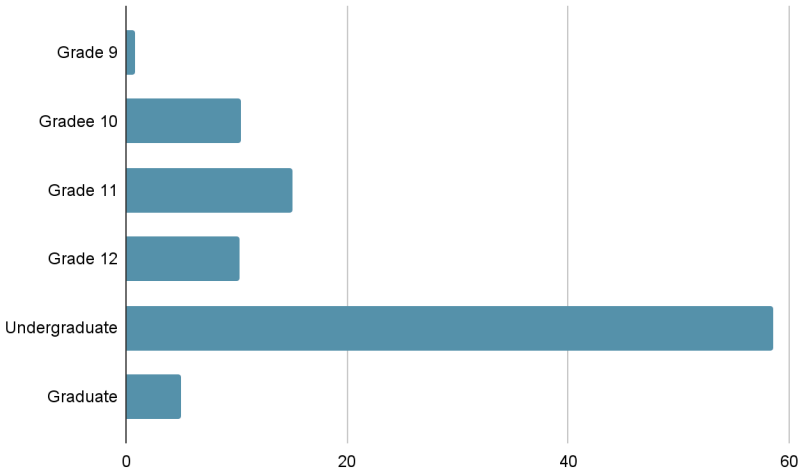
Gender



Institution Type



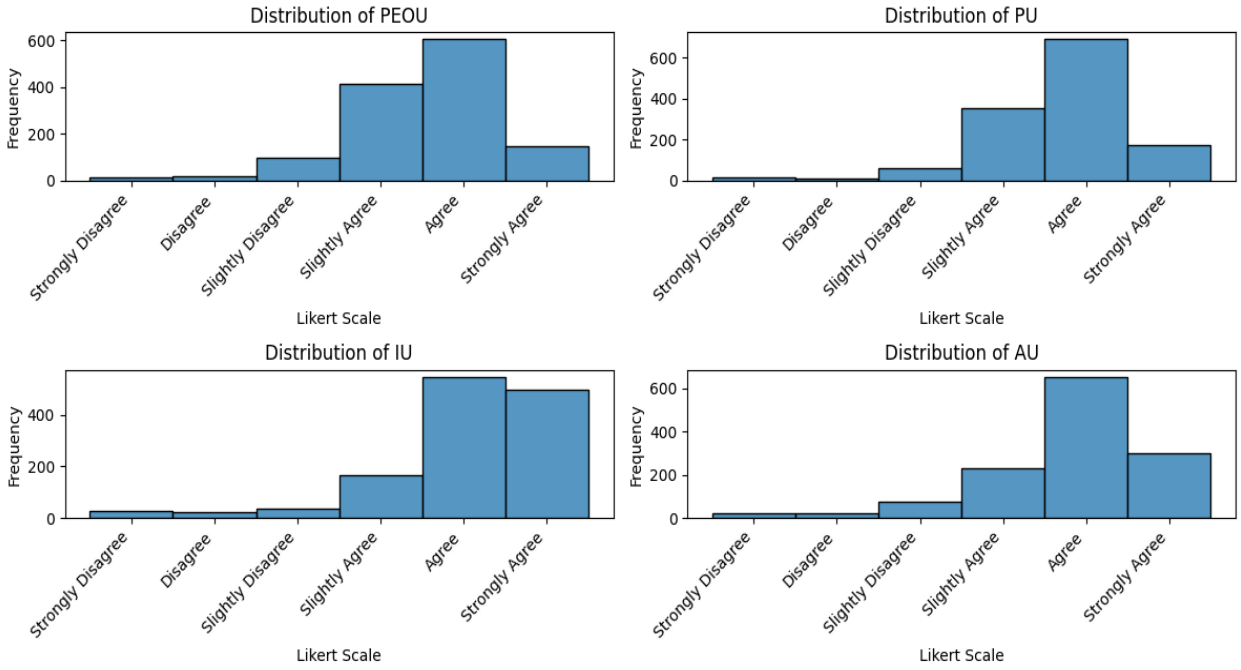
Grade of Study (%)



ii. Descriptive Statistics for Continuous Variables:

Tools	Mean	Median	Std Dev	Min	Max	Skewness	Kurtosis
Intention of Use (IU)	5.07	5.00	1.05	1.00	6.00	-1.70	3.68
Actual Use (AU)	4.62	5.00	1.00	1.00	6.00	-1.28	2.28
Perceived Usefulness (PU)	4.60	4.75	0.82	1.00	6.00	-1.17	3.04
Perceived Ease of Use (PEOU)	4.44	4.50	0.88	1.00	6.00	-0.89	1.62

Histograms:



Analysis:

a. Central Tendency (Mean & Median)-

- High Mean Values:

- Students' Intention to Use AI (IU) is the highest (5.07), meaning most students strongly agree on adopting AI in education.
- Actual Use (AU), Perceived Usefulness (PU), and Perceived Ease of Use (PEOU) are also relatively high (~4.44 to 4.62), showing an overall positive sentiment toward AI tools.
- Median values close to the mean suggest that most students responded consistently, and there are no extreme outliers.

b. Variability (Standard Deviation)

- IU has the highest standard deviation (1.05), meaning opinions on AI adoption vary slightly more than for other variables.
- PU has the lowest standard deviation (0.82), indicating that students' perception of AI usefulness might be relatively consistent.

c. Skewness (Direction of Distribution)

- All variables have negative skewness, meaning the distribution leans towards higher values (agreement with AI use).
- Intention to Use (IU) has the most negative skew (-1.70), implying strong agreement from most respondents.
- Perceived Ease of Use (PEOU) has the least skew (-0.89), suggesting a more balanced distribution of responses compared to IU.

d. Kurtosis (Peakedness of Distribution)

- Intention to Use (IU) has the highest kurtosis (3.68), indicating a peaked distribution where most respondents share similar views.
- Actual Use (AU) has a kurtosis of 2.28, which is still moderately peaked but allows for some variation.
- Perceived Ease of Use (PEOU) has the lowest kurtosis (1.62), showing a more spread-out distribution of responses.

e. General Interpretation

- Students are highly receptive to AI adoption: The high IU mean (5.07) and skewness (-1.70) suggest that most students strongly agree with the idea of using AI tools in education.
- AI tools are perceived as useful and easy to use: PU (4.60) and PEOU (4.44) indicate that students find AI tools helpful and user-friendly, reinforcing their willingness to use them.
- There is a gap between intention and actual use:
    - IU (5.07) is higher than AU (4.62) → This suggests that while students intend to use AI, not all of them are actively doing so.
    - Possible reasons could include lack of access, training, or institutional policies.
- Responses are consistent but slightly varied:
    - The standard deviation values (~1.00) show that students generally agree, though some variance exists.
    - The negative skewness confirms that most students lean toward positive ratings.

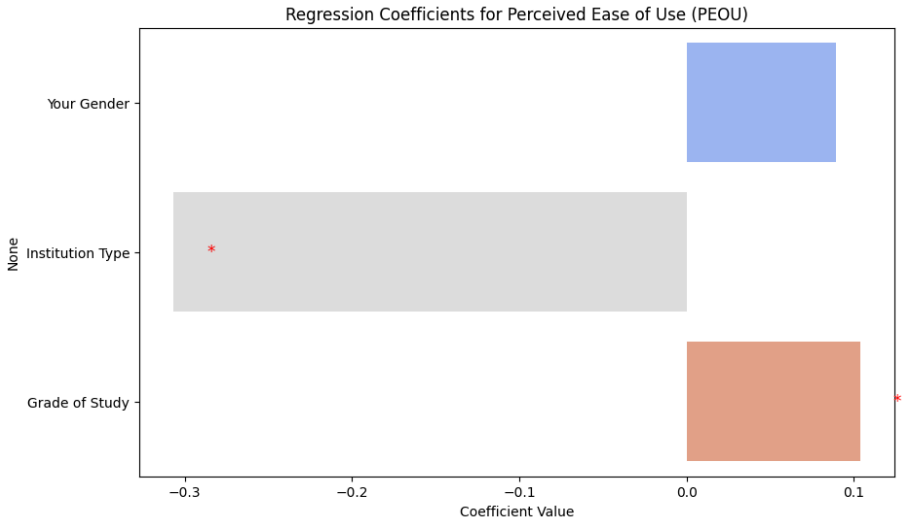
f. Final Takeaways

- Students overwhelmingly support AI in education, but institutions must bridge the gap between intention (IU) and actual use (AU) by ensuring accessibility and proper training.
- High perceived usefulness and ease of use suggest AI adoption might be welcomed, but efforts should focus on ensuring all students benefit equally.

B. Regression and Correlation Analysis

1. Perceived Ease of Use

Variable	Coefficient (β)	Standard Error	t-Value	P-Value	95% CI Lower	5% CI Upper
Constant (Intercept)	4.93189	0.06997	70.48	0.000	4.79462	5.0696
Your Gender	0.08940	0.06267	1.43	0.154	-0.03355	0.2125
Institution Type	-0.30671	0.06244	-4.91	0.000101	-0.42921	-0.1840
Grade of Study	0.10360	0.01311	7.91	0.000569	0.07789	0.1291



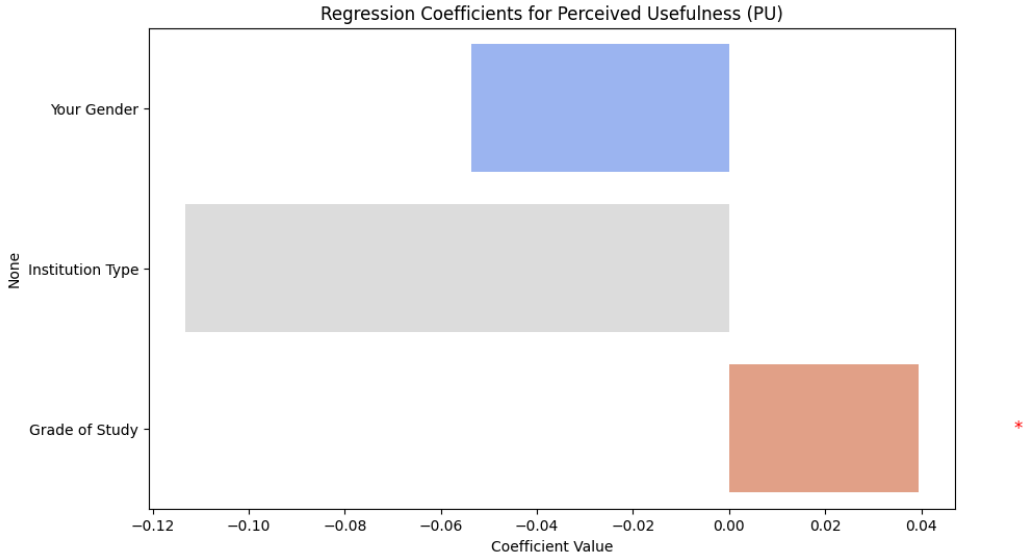
a. Key Interpretations:

- The constant (Intercept) is 4.93, indicating that the baseline Perceived Ease of Use (PEOU) score is quite high when all independent variables are set to zero.
- Institution Type has a significant negative effect on PEOU ($\beta = -0.31$, $p < 0.001$). This means that students from different types of institutions (e.g., private vs. public) might perceive AI tools differently in terms of ease of use.

- A negative coefficient (-0.31) means that public institutions might have been perceiving AI tools as harder to use compared to the private institution.
- Grade of Study has a significant positive effect on PEOU ($\beta = 0.10$, $p < 0.001$).
- Higher grades (or more advanced study levels) might be associated with a higher perceived ease of use.
- This could indicate that students could be comfortable with AI tools as they progress through their education.
- Gender might not be statistically significant ($p = 0.154$).
- This means that gender may not not play a strong role in determining how easy students find AI tools to use.

2. Perceived Usefulness:

Variable	Coefficient (β)	Standard Error	t-Value	P-Value	95% CI Lower	5% CI Upper
Constant (Intercept)	5.38907	0.0652	82.5966	0	5.26107	5.51707
Your Gender	-0.0536	0.0584	-0.9174	0.3590	-0.1682	0.061
Institution Type	-0.1131	0.0582	-1.943	0.052	-0.2274	0.0010
Grade of Study	0.0393	0.0122	3.2182	0.0013	0.0153	0.0633

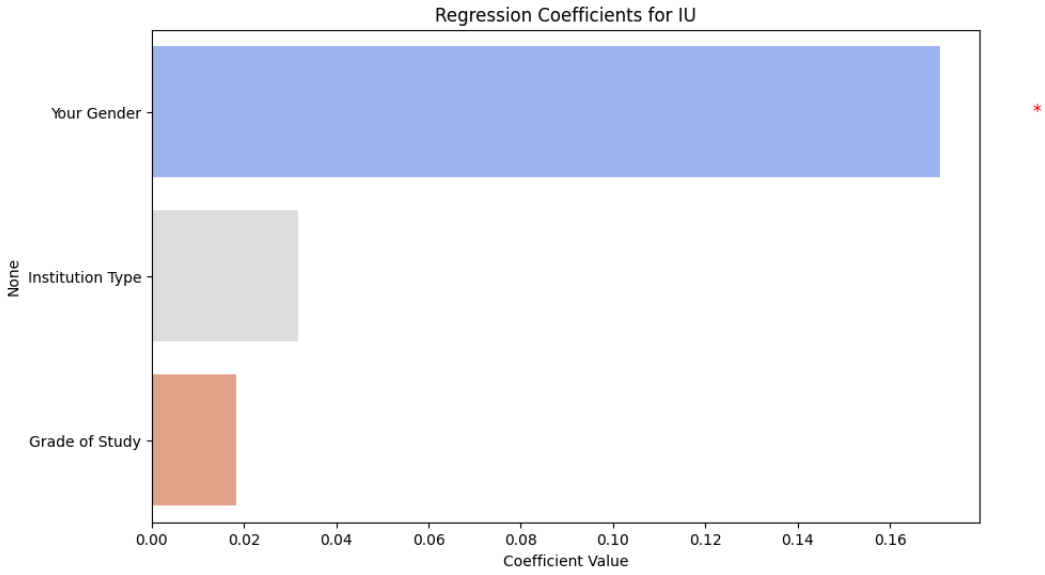


a. Key Interpretations:

- The constant (Intercept) is 5.39, indicating that the baseline Perceived Usefulness (PU) score is quite high when all independent variables are set to zero.
- Institution Type has a marginally significant negative effect on PU ($\beta = -0.11$, $p \approx 0.052$).
- This suggests that students from different types of institutions (e.g., private vs. public) perceive AI tools differently in terms of usefulness.
- A negative coefficient (-0.11) means that students in private institutions may perceive AI as slightly less useful compared to public institutions.
- However, the effect is only marginally significant ($p \approx 0.052$), meaning it is not a strong determinant of PU.
- Grade of Study has a significant positive effect on PU ($\beta = 0.039$, $p = 0.001$).
- Higher grades (or more advanced study levels) might be associated with a higher perceived usefulness of AI tools.
- This implies that students in higher academic levels might recognize more benefits of AI in their learning process.
- Gender is not statistically significant ($p = 0.359$).
- This means that gender might not play a strong role in determining how useful students find AI tools.
- Both male and female students perceive AI usefulness similarly.

3. Intention to Use

Variable	Coefficient (β)	Standard Error	t-Value	P-Value	95% CI Lower	5% CI Upper
Constant (Intercept)	5.799	0.0805562	71.9871	0	5.64097	5.95704
Your Gender	0.170827	0.0721517	2.36761	0.0180503	0.0292795	0.312375
Institution Type	0.0317356	0.071891	0.441441	0.658968	-0.109301	0.172772
Grade of Study	0.0183772	0.015088	1.218	0.223448	-0.0112226	0.0479769



a. Key Interpretations:

- **The Constant (Intercept)**
  - The intercept ($\beta = 5.80$, $p < 0.001$) is high, suggesting that even when all independent variables are set to zero, students generally have a high baseline Intention to Use (IU) AI tools in education.
- **Gender**

- Statistically significant (β = 0.17, p = 0.018).
- Positive effect: Male and female students may have different levels of intention to use AI, with male showing slightly higher intent as compared to female groups.
- However, the effect size is relatively small, meaning gender plays a role but is not the strongest predictor.

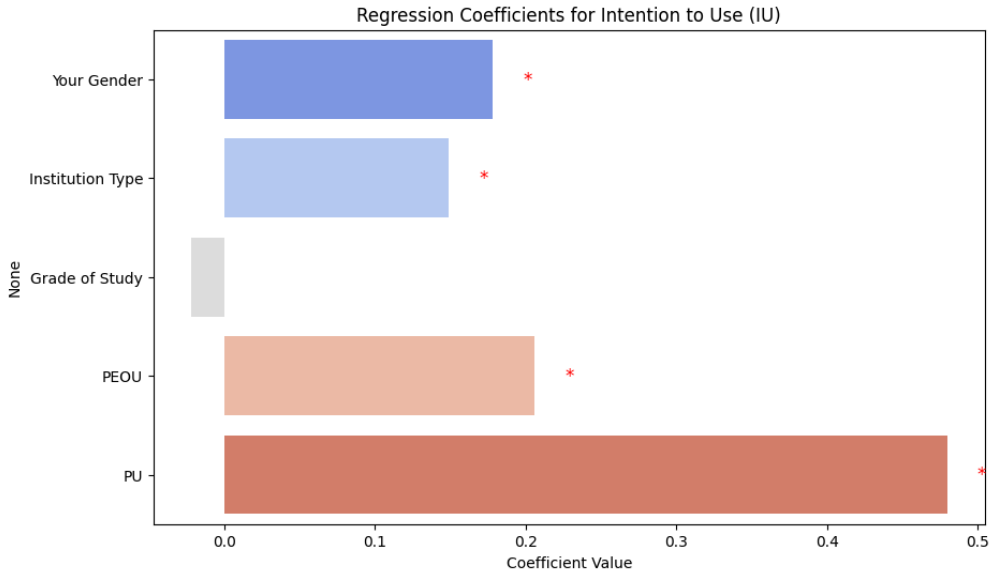
- **Institution Type**
  - Not statistically significant (β = 0.03, p = 0.659).
  - The type of institution (private or public) does not significantly influence students' intention to use AI tools.
  - This suggests that access to AI tools or attitudes towards AI are relatively consistent across institution types.

- **Grade of Study**
  - Not statistically significant (β = 0.018, p = 0.223).
  - Students in higher academic levels do not necessarily have a stronger or weaker intention to use AI.
  - This could indicate that AI adoption interest is stable across different grade levels.

4. Relationship of IU with PEOU and PU as independent variables

Variable	Coefficient (β)	Standard Error	t-Value	P-Value	95% CI Lower	5% CI Upper
Constant (Intercept)	2.19697	0.179842	12.2161	1.49768e-32	1.84415	2.54979
Your Gender	0.178112	0.0619596	2.87464	0.00411142	0.0565586	0.299664
Institution Type	0.149269	0.062181	2.40056	0.0165115	0.0272817	0.271256
Grade of Study	-0.0218509	0.0132504	-1.64907	0.0993773	-0.0478457	-0.0478457
PEOU	0.206193	0.0346127	5.95717	3.30752e-09	0.13829	0.274097

PU	0.479696	0.479696	12.923	5.21304e-36	5.21304e-36	0.552517



a. Key Interpretations:

- **Perceived Ease of Use (PEOU)**

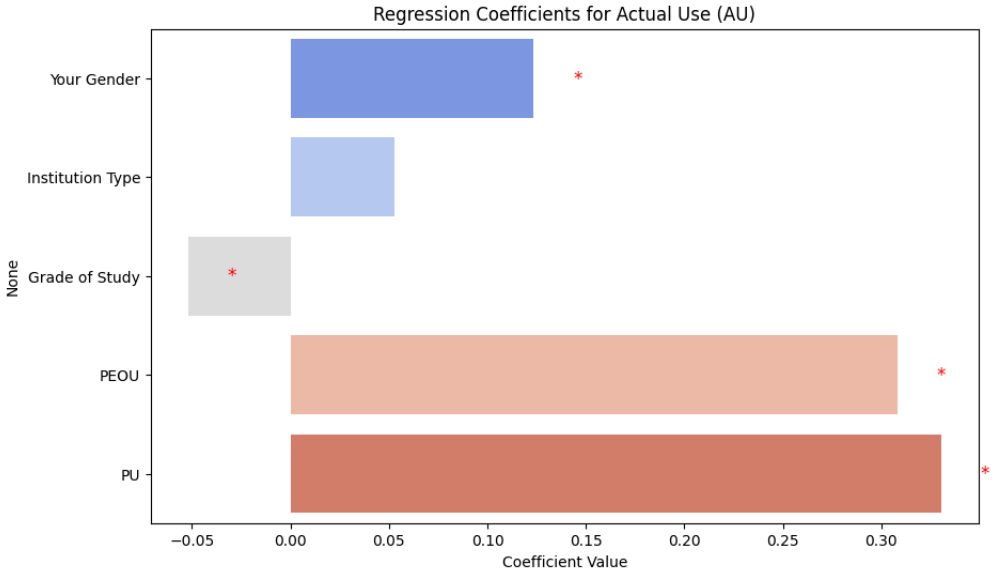
- Strong positive effect ($\beta = 0.21$, $p < 0.001$).
- Students who find AI tools easier to use have a significantly higher intention to adopt them.
- This aligns with the Technology Acceptance Model (TAM), which states that ease of use encourages adoption.

- **Perceived Usefulness (PU)**

- Extremely strong positive effect ($\beta = 0.48$, $p < 0.001$).
- PU is the strongest predictor of students' intention to use AI.
- This means that students who believe AI tools will be useful for their education are much more likely to intend to use them.

5. Relationship of AU with PEOU and PU as independent variables

Variable	Coefficient (β)	Standard Error	t-Value	P-Value	95% CI Lower	5% CI Upper
Constant (Intercept)	2.182	0.181	12.064	7.9739e-32	1.827	2.537
Your Gender	0.123	0.062	1.981	0.0478	0.001	0.246
Institution Type	0.053	0.063	0.842	0.400	-0.070	0.175
Grade of Study	-0.052	0.013	-3.893	0.000	-0.078	-0.026
PEOU	0.308	0.035	8.849	2.86658e-18	0.240	0.376
PU	0.330	0.037	8.847	2.90671e-18	0.257	0.403



a. Key Interpretations:

- **Perceived Ease of Use (PEOU)**

- Strong positive effect (β = 0.31, p < 0.001).
- Students who find AI tools easier to use are significantly more likely to actually use them.
- This aligns with the Technology Acceptance Model (TAM), which states that ease of use drives actual adoption.

- **Perceived Usefulness (PU)**

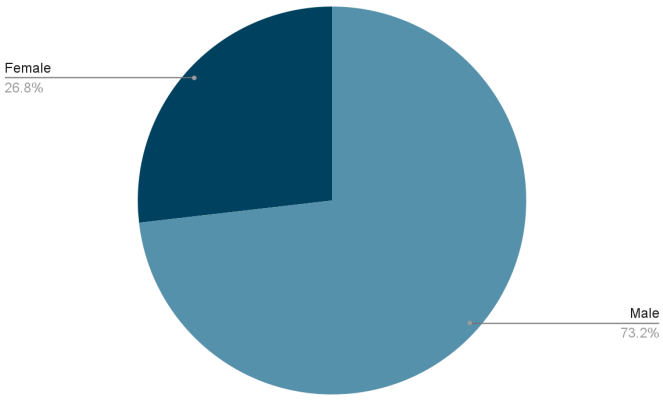
- Strong positive effect (β = 0.33, p < 0.001).
- Students who perceive AI tools as useful are much more likely to actually use them.
- This suggests that practical benefits of AI (e.g., automation, efficiency) are key drivers of adoption.

4.2.2 Quantitative Analysis of Faculty

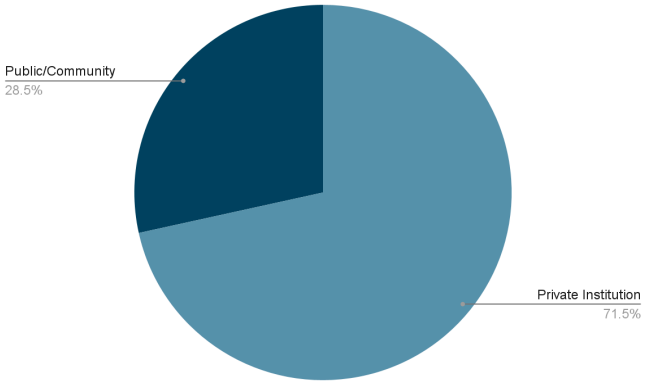
A. Descriptive Statistics

i. Demographic variables

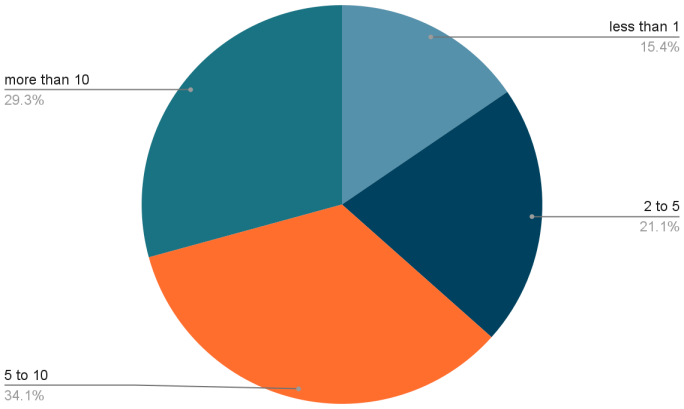
Gender



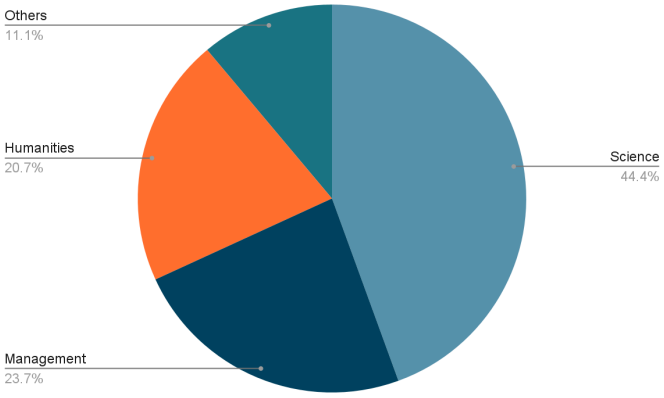
Institution Type



Years of Experience in Teaching



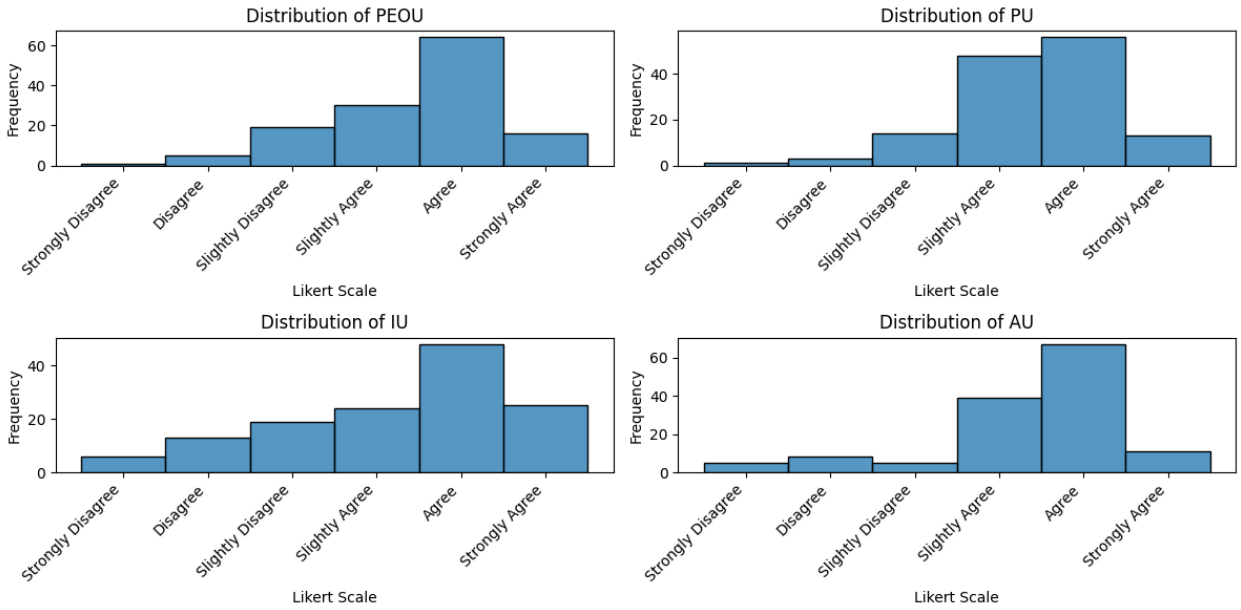
Teaching Subject



ii. Descriptive Statistics for Continuous Variables:

	Mean	Median	Standard Deviation	Min	Max	Skewness	Kurtosis
IU	4.26	5.00	1.40	1.00	6.00	-0.67	-0.44
PU	4.28	4.50	0.90	1.00	6.00	-0.49	0.78
PEOU	4.33	4.50	0.99	1.00	6.00	-0.84	0.64
AU	4.39	5.00	1.13	1.00	6.00	-1.35	1.78

Histograms:



Analysis:

a. Central Tendency (Mean & Median)-

- Moderately High Mean Values:
- Faculties' Intention to Use AI (IU) has a mean of 4.26, indicating a generally positive attitude towards adopting AI in education.
- Perceived Usefulness (PU) (4.28) and Perceived Ease of Use (PEOU) (4.33) suggest that faculties recognize both the benefits and the ease of using AI tools.
- Actual Use (AU) (4.39) is slightly higher than IU, indicating that some faculties are already using AI tools in practice.
- Median Values Close to the Mean:
- Median values for IU, PU, PEOU, and AU range between 4.5 and 5.0, meaning that most faculties responded positively.
- This consistency suggests that there are no extreme outliers, and responses are fairly balanced.

b. Variability (Standard Deviation)

- IU has the highest standard deviation (1.40), meaning there is some variation in faculties' willingness to adopt AI.
- PU and PEOU have relatively lower standard deviations (0.90 and 0.99, respectively), suggesting that most faculties have a consistent perception of AI's usefulness and ease of use.
- AU has a standard deviation of 1.13, indicating that actual AI usage varies more among faculties than their perception of AI.

c. Skewness (Direction of Distribution)

- Negative skewness means that most faculties lean towards positive responses (agreeing with AI adoption).
- AU has the most negative skew (-1.35), indicating that many faculties already use AI, but a smaller group is still hesitant.
- PEOU (-0.84) shows that faculties generally find AI tools easy to use, but a small portion may face usability challenges.
- IU (-0.67) suggests that while many faculties intend to use AI, some are still unsure or resistant.

d. Kurtosis (Peakedness of Distribution)

- AU (1.78) has the highest kurtosis, meaning responses are concentrated around high agreement levels, but some variation exists.
- PU (0.78) and PEOU (0.64) have lower kurtosis, meaning responses are slightly more spread out compared to AU.
- IU (-0.44) has the lowest kurtosis, suggesting more diversity in faculties' intention to use AI - some are highly inclined, while others are still skeptical.

e. General Interpretation

- Faculties are generally positive about AI adoption:

- The mean values around 4.3 to 4.4 indicate that faculties find AI useful, easy to use, and have a strong intent to integrate it into their teaching.

- Perception vs. Actual Use:
  - IU (4.26) is slightly lower than AU (4.39) → More faculties are actually using AI than those intending to use it.
  - This contrasts with students' data, where intention was higher than actual use.
  - This suggests that faculties who see the benefits of AI are more likely to act on it, while students may face institutional barriers.
- Responses are slightly varied but mostly consistent:
  - The standard deviations indicate some diversity in responses, especially for IU, but overall, faculties tend to agree on AI's benefits.
  - The negative skewness suggests that the majority are leaning towards agreement with AI adoption, but some resistance remains.

f. Final Takeaways

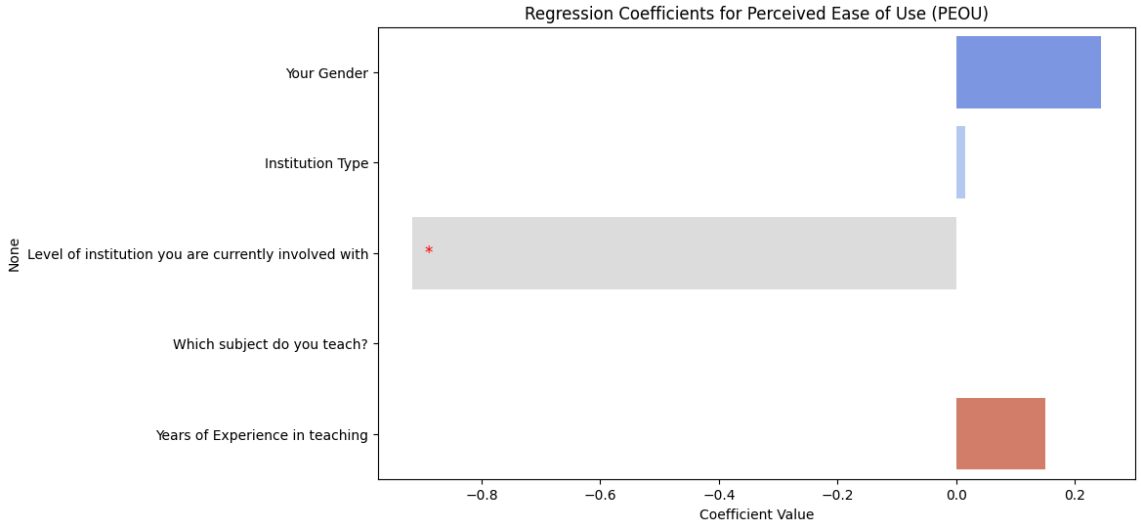
- Faculties are actively using AI: Unlike students, where IU was higher than AU, faculties' actual use slightly exceeds their intention, meaning they are already integrating AI into their teaching.
- Perceived Ease of Use & Usefulness Drive Adoption: PU (4.28) and PEOU (4.33) show that faculties trust AI tools and find them helpful, which directly influences their actual use.
- Some faculties remain hesitant: The slight negative skew in IU (-0.67) and its higher standard deviation (1.40) suggest that a portion of faculties are still reluctant or face barriers to AI adoption.

B. Regression and Correlation Analysis

1. Perceived Ease of Use

Variable	Coefficient (β)	Standard Error	t-Value	P-Value	95% CI Lower	5% CI Upper

constant	5.0998	0.348	14.656	0.000	4.411	5.788
Gender	0.2430	0.233	1.041	0.300	-0.219	0.705
Institution Type	0.0146	0.224	0.065	0.948	-0.428	0.458
Level of Institution currently involved in	-0.9168	0.223	-4.110	0.000	-1.358	-0.475
Subject	-0.0007	0.005	-0.148	0.883	-0.010	0.008
Years of experience	0.1493	0.096	1.547	0.124	-0.042	0.340



-)U) score is quite high when all independent variables are set to zero.
    - This suggests that, on average, faculty members already perceive AI tools as relatively easy to use, regardless of their gender, institution type, teaching subject, or experience.
- Level of institution involvement has a significant negative effect on PEOU ($\beta = -0.92$, $p < 0.001$).
    - This means that faculty members from higher-level institutions perceive AI tools as less easy to use.

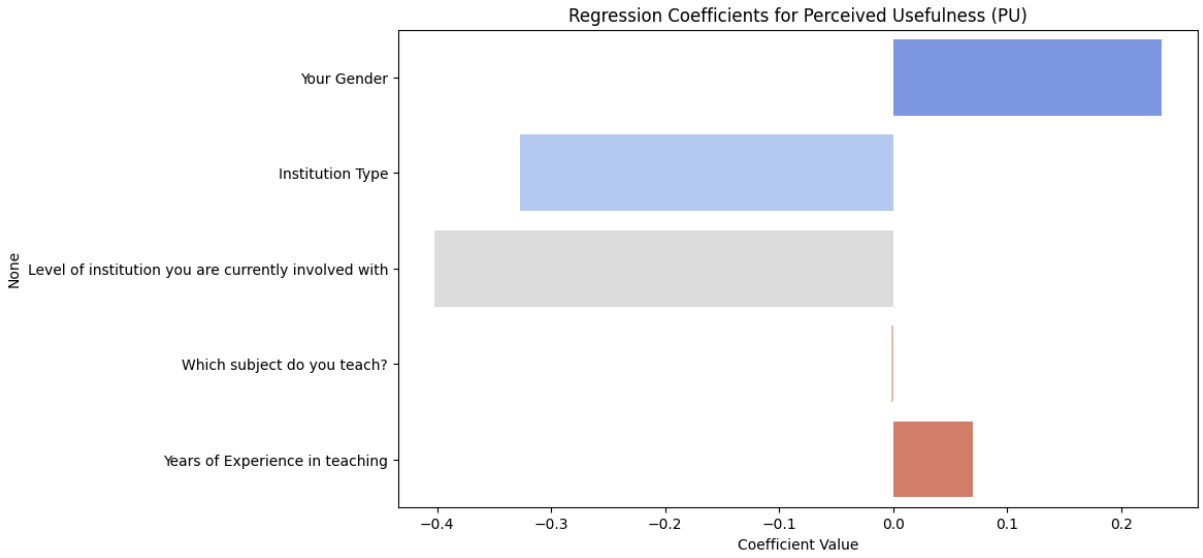
- A negative coefficient (-0.92) suggests that as faculty members move to higher institutional levels, their perceived ease of AI use decreases.
- This could indicate that higher education roles involve more complexities or administrative barriers that hinder seamless AI adoption.

- Your Gender is not statistically significant (β = 0.24, p = 0.300).
  - This means that gender does not play a strong role in determining how easy faculty members find AI tools to use.
  - Male and female faculty members experience similar levels of comfort in using AI.
- Institution Type is not statistically significant (β = 0.01, p = 0.948).
  - Whether a faculty member is from a public or private institution does not significantly impact their perceived ease of using AI tools.
  - This suggests that institutional infrastructure or policies do not strongly influence faculty perceptions of AI usability.
- Teaching Subject does not have a significant impact on PEOU (β = -0.0007, p = 0.883).
  - The subject a faculty member teaches (Science, Management, Humanities, etc.) does not significantly impact their perceived ease of AI use.
  - This suggests that AI tools are perceived as equally user-friendly across disciplines, meaning faculty from different fields likely have similar learning curves when adopting AI.
- Years of Experience in Teaching is not statistically significant (β = 0.15, p = 0.124).
  - While the coefficient suggests that more experienced faculty members might find AI slightly easier to use, the effect is not statistically significant.
  - This suggests that experience alone does not determine AI usability - perhaps exposure to AI training or digital literacy plays a bigger role.

2. Perceived Usefulness:

Variable	Coefficient (β)	Standard Error	t-Value	P-Value	95% CI Lower	5% CI Upper

constant	5.1162	0.333	15.352	0.000	4.457	5.776
Gender	0.2351	0.223	1.052	0.295	0.295	0.677
Institution Type	-0.03278	0.214	-1.528	0.129	0.129	0.097
Level of Institution currently involved in	-0.4024	0.214	-1.884	0.062	0.062	0.020
Subject	-0.0013	0.004	-0.292	0.771	0.771	0.007
Years of experience	0.0703	0.092	0.761	0.448	0.448	0.253



a. Key Interpretations:

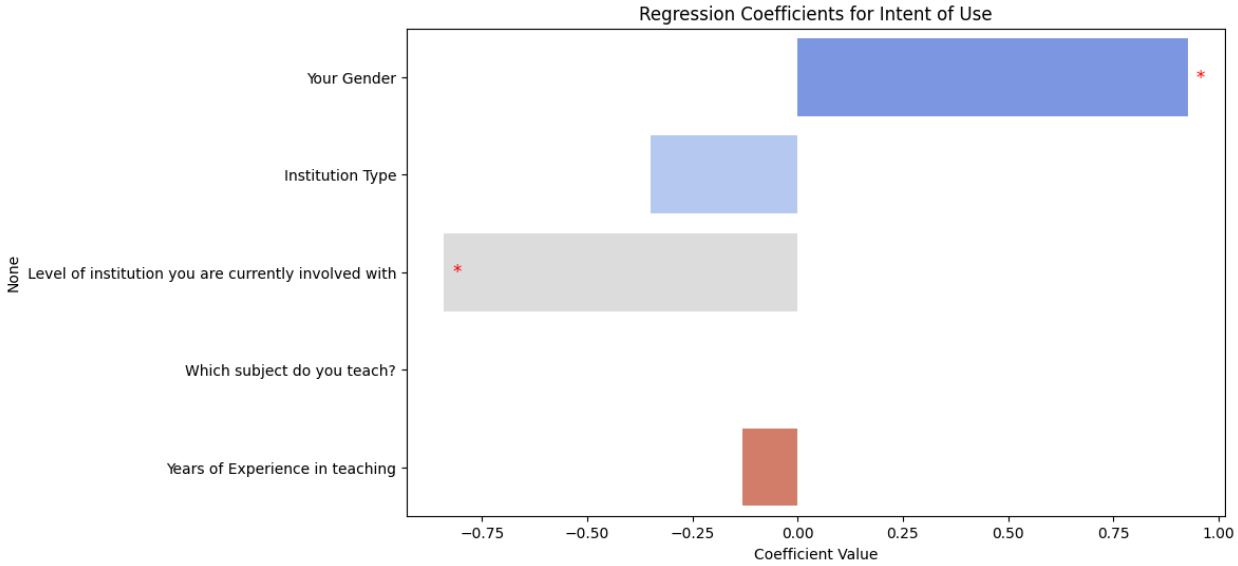
- The constant (Intercept) is 5.12, indicating that the baseline Perceived Ease of Use (PEOU) score is quite high when all independent variables are set to zero.
    - This suggests that, on average, faculty members already find AI tools relatively easy to use, regardless of their demographic or institutional background.
- Institution Type has a negative but non-significant effect on PEOU (β = -0.33, p = 0.129).

- Faculty members from different types of institutions (e.g., public vs. private) may perceive AI tools differently in terms of ease of use, but the effect is not statistically significant.
    - A more in-depth study may be needed to determine if certain institution types have better access to AI training or resources.

- Level of Institution Involvement has a negative but marginally significant effect on PEOU ($\beta = -0.40$, $p = 0.062$).
    - Faculty at higher institutional levels may perceive AI tools as slightly harder to use.
    - This may indicate that higher education roles involve more complex responsibilities that make AI integration more challenging.
    - Although not significant at the 0.05 level, it is very close ($p = 0.062$), suggesting a possible trend that could become significant with a larger sample.
- Your Gender is not statistically significant ($\beta = 0.24$, $p = 0.295$).
    - Gender does not play a major role in determining how easy faculty members find AI tools to use.
    - This suggests that both male and female faculty members experience similar levels of comfort with AI tools
- Teaching Subject is not statistically significant ($\beta = -0.0013$, $p = 0.771$).
    - The subject area (Science, Management, Humanities, etc.) does not significantly impact faculty perceptions of AI usability.
    - This suggests that AI tools are generally perceived as equally user-friendly across disciplines.
- Years of Experience in Teaching is not statistically significant ($\beta = 0.07$, $p = 0.448$).
    - More teaching experience does not necessarily mean that faculty find AI tools easier to use.
    - This suggests that AI adoption is likely more influenced by exposure to AI tools and training rather than teaching experience itself.

3. Intention to Use

Variable	Coefficient (β)	Standard Error	t-Value	P-Value	95% CI Lower	5% CI Upper
constant	4.9337	0.508	9.715	0.000	3.929	5.939
Gender	0.9264	0.341	2.720	0.007	0.253	1.600
Institution Type	-0.3497	0.327	-1.070	0.287	-0.996	0.297
Level of Institution currently involved in	-0.8409	0.326	-2.583	0.011	-1.485	-0.197
Subject	-0.0006	0.007	-0.083	0.934	-0.014	0.013
Years of experience	-0.1311	0.141	-0.931	0.354	-0.410	0.147



a. Key Interpretations:

- The constant (Intercept) is 4.93, indicating that when all independent variables are set to zero, the baseline Intention to Use AI (IU) score is quite high.

- This suggests that, on average, faculty members already have a strong inclination toward using AI tools in education, even before considering other factors.

● Gender has a significant positive effect on IU ($\beta = 0.93$, $p = 0.007$).

- Male faculty members have a significantly higher intention to use AI tools compared to female faculty members.
- This suggests that gender disparities in technology adoption still exist, and female faculty members may require more targeted support or encouragement to adopt AI tools.

● Institution Type has a negative but non-significant effect on IU ($\beta = -0.35$, $p = 0.287$).

- The type of institution (e.g., public vs. private) does not significantly affect faculty intention to use AI.
- This implies that faculty members from both public and private institutions have similar intentions toward adopting AI.

● Level of Institution Involvement has a significant negative effect on IU ($\beta = -0.84$, $p = 0.011$).

- Faculty members at higher institutional levels are less likely to intend to use AI compared to those at lower levels.
- This could suggest that higher-level faculty members may be more resistant to change or have concerns about AI integration into existing teaching methods.

● Teaching Subject is not statistically significant ($\beta = -0.0006$, $p = 0.934$).

- The subject area (Science, Management, Humanities, etc.) does not significantly impact faculty intention to use AI tools.
- This suggests that AI adoption is not discipline-specific and that faculty across all fields have similar attitudes toward AI use.

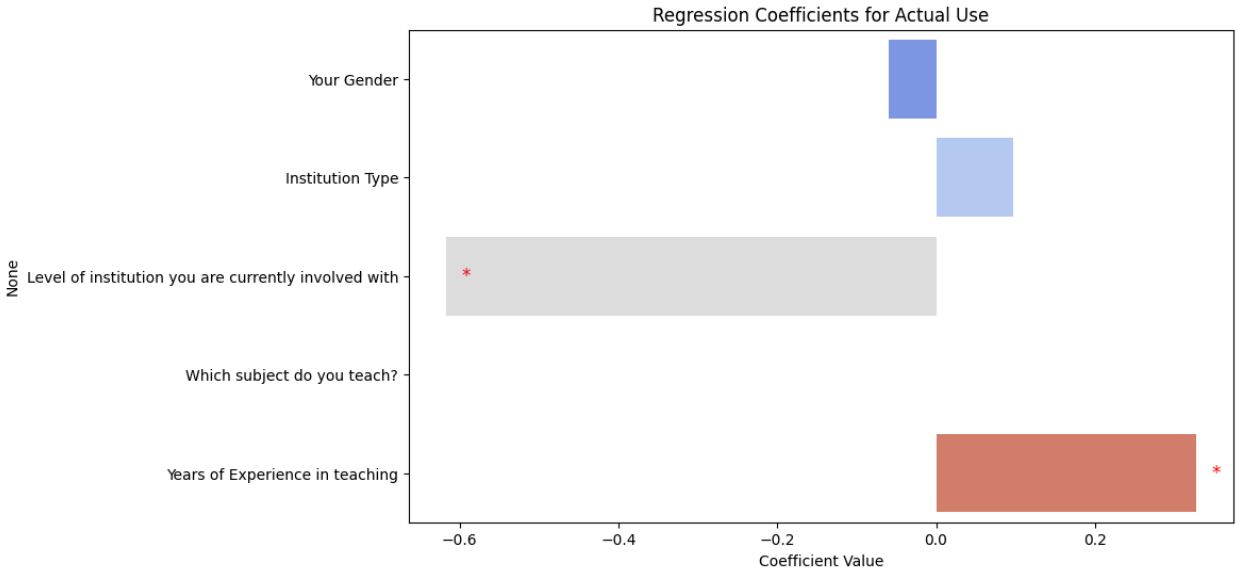
● Years of Experience in Teaching is not statistically significant ($\beta = -0.13$, $p = 0.354$).

- More teaching experience does not necessarily mean faculty members are more willing to use AI.

- This suggests that faculty openness to AI is not driven by experience but possibly by training, exposure, or institutional encouragement.

4. Actual Use:

Variable	Coefficient (β)	Standard Error	t-Value	P-Value	95% CI Lower	5% CI Upper
constant	5.0009	0.402	12.433	0.000	4.205	5.797
Gender	-0.0593	0.270	-0.220	0.826	-0.593	0.474
Institution Type	0.0974	0.259	0.376	0.707	-0.415	0.609
Level of Institution currently involved in	-0.6169	0.258	-2.393	0.018	-1.127	-0.107
Subject	0.0004	0.005	0.069	0.945	-0.010	0.011
Years of experience	0.3269	0.112	2.931	0.004	-0.206	0.548

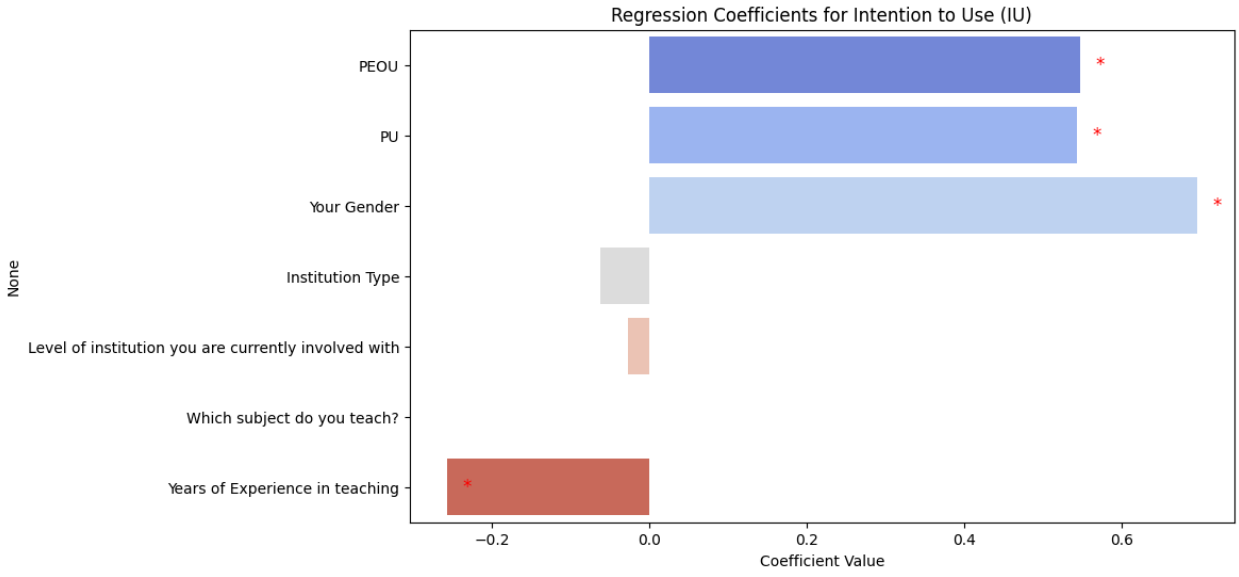


a. Key Interpretations:

- The constant (Intercept) is 5.00, indicating that when all independent variables are set to zero, the baseline Actual Use (AU) score is quite high.
  - This suggests that, on average, faculty members actively use AI tools in their teaching, even before considering other influencing factors
- Gender has no significant effect on AU ($\beta = -0.059$, $p = 0.826$).
  - This means that male and female faculty members use AI tools at similar rates.
  - Unlike Intention to Use (IU), where gender had a significant effect, actual usage does not show gender-based differences
- Institution Type has no significant effect on AU ($\beta = 0.097$, $p = 0.707$).
  - Faculty members from different institution types (public vs. private) do not differ significantly in their actual AI use.
  - This suggests that institutional policies or infrastructure may not be major barriers to AI adoption.
- Level of Institution Involvement has a significant negative effect on AU ($\beta = -0.617$, $p = 0.018$)
  - Faculty members at higher institutional levels use AI tools significantly less than those at lower levels.
  - This suggests that senior faculty may be less inclined to incorporate AI in their teaching, possibly due to traditional teaching methods, lack of training, or perceived difficulty in adopting new technologies.
- Teaching Subject is not statistically significant ($\beta = 0.0004$, $p = 0.945$).
  - Faculty members across different subject areas use AI tools at similar rates.
  - This indicates that AI adoption is not limited to specific academic disciplines.
- Years of Experience in Teaching has a significant positive effect on AU ($\beta = 0.327$, $p = 0.004$).
  - Faculty members with more teaching experience use AI tools significantly more.
  - This contradicts the assumption that older faculty members might resist technology and suggests that experienced faculty may integrate AI into their teaching practices effectively.

5. Relationship of IU with PEOU and PU as independent variables

Variable	Coefficient (β)	Standard Error	t-Value	P-Value	95% CI Lower	5% CI Upper
constant	-0.647	0.720	-0.898	0.371	-2.073	0.780
PEOU	0.547	0.132	4.128	0.000	0.284	0.809
PU	0.543	0.130	4.168	0.000	0.285	0.801
Gender	0.696	0.264	2.635	0.010	0.173	1.218
Institution Type	-0.062	0.265	-0.235	0.814	-0.586	0.462
Level of Institution currently involved in	-0.027	0.267	-0.101	0.920	-0.557	0.503
Subject	-0.0003	0.005	-0.052	0.959	-0.011	0.010
Years of experience	-0.257	0.105	-2.443	0.016	-0.466	-0.049

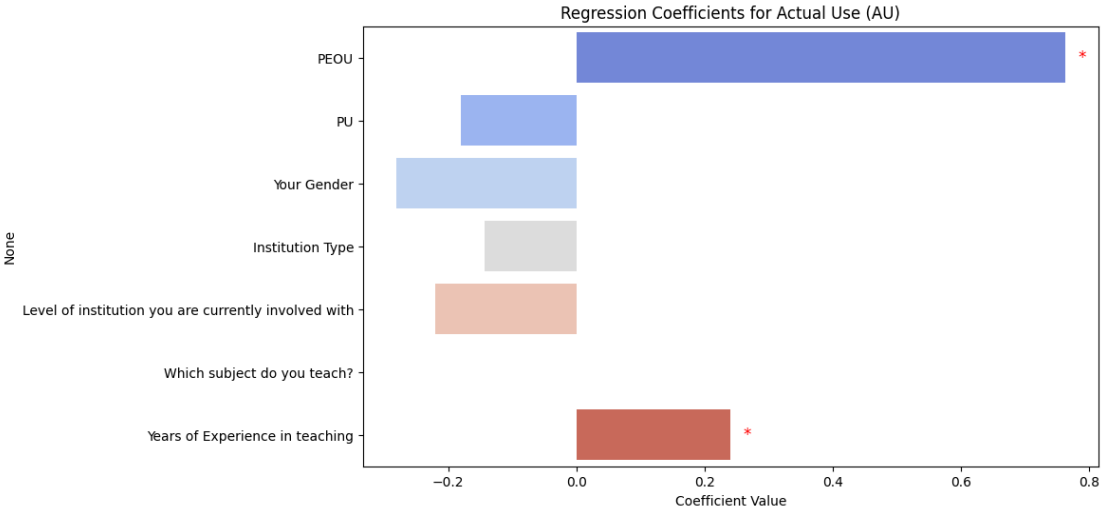


a. Key Interpretations:

- Perceived Ease of Use (PEOU) has a significant positive effect on IU ($\beta = 0.547$, $p < 0.001$).
  - Faculty members who find AI tools easy to use are significantly more likely to intend to use them.
  - This aligns with Technology Acceptance Model (TAM) theory, which states that ease of use is a major predictor of technology adoption.
- Perceived Usefulness (PU) has a significant positive effect on IU ($\beta = 0.543$, $p < 0.001$).
  - Faculty who believe AI tools improve teaching and learning are more likely to intend to use them.The effect size is almost the same as PEOU, reinforcing that both usability and utility influence AI adoption equally.

6. Relationship of AU with PEOU and PU as independent variables

Variable	Coefficient (β)	Standard Error	t-Value	P-Value	95% CI Lower	5% CI Upper
constant	2.1187	0.666	3.182	0.002	0.800	3.438
PEOU	0.7624	0.122	6.225	0.000	0.520	1.005
PU	-0.1804	0.120	-1.498	0.137	-0.419	0.058
Gender	-0.2807	0.244	-1.150	0.252	-0.764	0.203
Institution Type	-0.1436	0.245	-0.587	0.558	-0.628	0.341
Level of Institution currently involved in	-0.2203	0.247	-0.891	0.375	-0.710	0.269
Subject	0.0006	0.005	0.122	0.904	-0.009	0.010
Years of experience	0.2398	0.097	2.461	0.015	0.047	0.433



a. Key Interpretations:

- **Perceived Ease of Use (PEOU)**

- Perceived Ease of Use (PEOU) has a strong positive effect on AU ($\beta = 0.762$, $p < 0.001$).
    - Faculty who find AI tools easy to use are significantly more likely to actually use them in their teaching.
    - This reinforces the Technology Acceptance Model (TAM), which suggests that ease of use is crucial for technology adoption.
    - The effect size is quite large (0.762), meaning that for every 1-unit increase in PEOU, actual AI use increases substantially.

- **Perceived Usefulness (PU)**

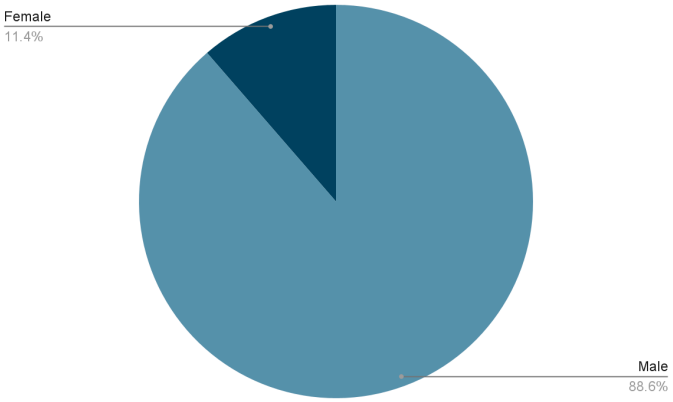
- Perceived Usefulness (PU) is not statistically significant ($\beta = -0.180$, $p = 0.137$).
    - Unlike PEOU, PU does not have a strong impact on actual AI use among faculty.
    - This suggests that faculty members may still be hesitant to implement AI tools in practice, even if they recognize their benefits.
    - Possible barriers could include lack of institutional support, time constraints, or resistance to change.

4.2.3 Quantitative Analysis of Admins

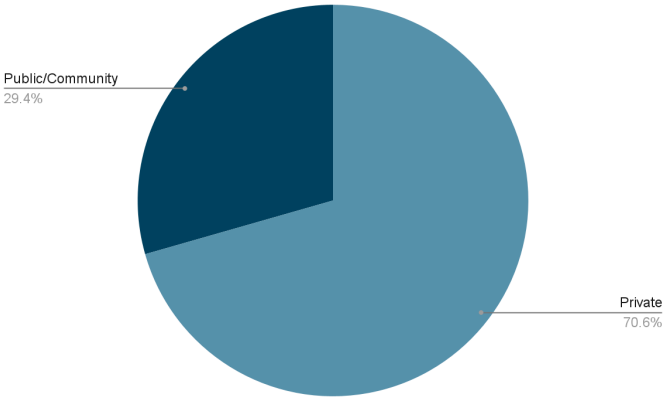
A. Descriptive Statistics

i. Demographic variables:

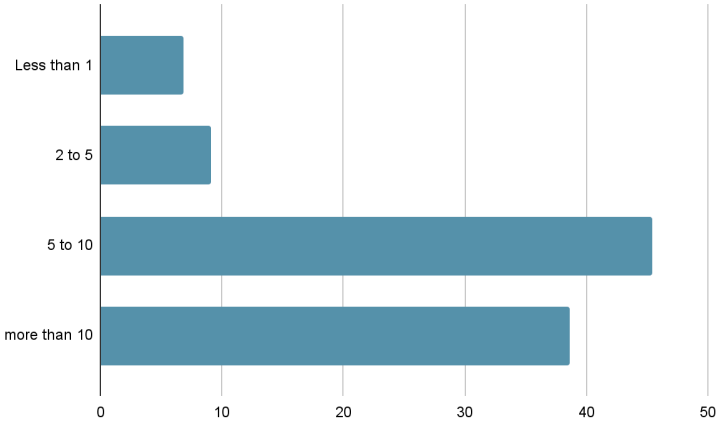
Gender



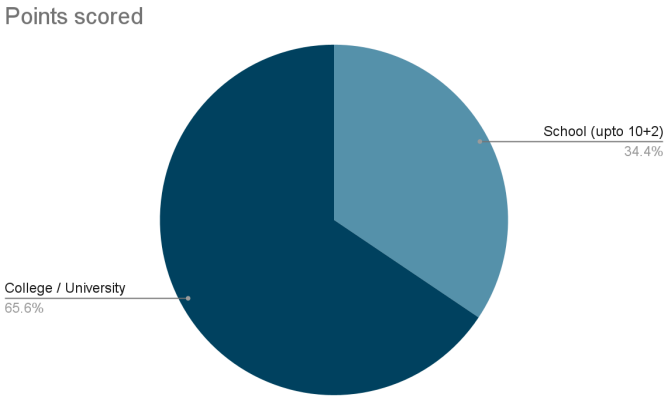
Institution Type



Years of Experience in the position (years)



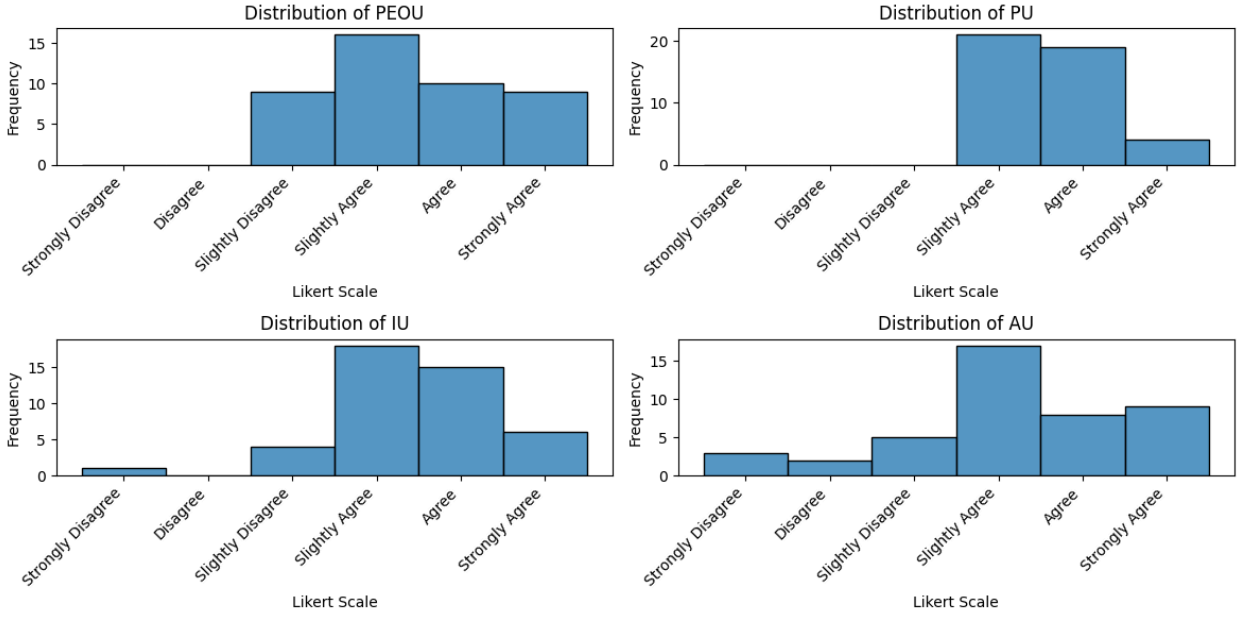
Level of Institution currently involved in



ii. Descriptive Statistics for Continuous Variables:

	Mean	Median	Standard Deviation	Min	Max	Skewness	Kurtosis
IU	**4.45**	**4.00**	**1.00**	**1.00**	**6.00**	**-0.75**	**2.06**
PU	**4.52**	**4.50**	**0.75**	**3.50**	**6.00**	**0.31**	**-1.08**
PEOU	**4.30**	**4.12**	**1.02**	**3.00**	**6.00**	**0.50**	**-1.17**
AU	**4.18**	**4.00**	**1.39**	**1.00**	**6.00**	**-0.62**	**0.15**

Histograms:



a. Key Interpretations:

i. Central Tendency (Mean & Median)

- Moderately High Intention to Use AI (IU) Mean (4.45):
- Admins members show a moderately strong intention to use AI tools in education.

- The median (4.00) is close to the mean, indicating consistent responses with minimal extreme variations.

● Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are also relatively high (4.52 & 4.30):

- Admins members generally perceive AI tools as useful and easy to use.
- The median (4.50 for PU and 4.12 for PEOU) is near their respective means, meaning responses are fairly consistent.

● Actual Use (AU) is slightly lower (Mean = 4.18):

- Admins members are using AI tools, but at a slightly lower rate than their stated intention.
- This suggests a gap between intention and actual implementation of AI in teaching.

ii. Variability (Standard Deviation, Min & Max)

● PEOU has the highest standard deviation (1.02):

- Responses varied more on ease of use, meaning some admin members find AI very easy, while others struggle.

● PU has the lowest standard deviation (0.75):

- Admin members are more consistent in their perception of AI's usefulness, with less disagreement compared to other variables.

● AU has a relatively high standard deviation (1.39):

- This variation in actual AI usage suggests that while some admin members use AI regularly, others do not.

iii. Skewness (Direction of Distribution)

● Negative skewness for IU (-0.75) and AU (-0.62):

- Most admin members lean towards agreeing with AI adoption and usage.
- However, the distribution suggests that a small portion of admin members still report low AI usage.

● PU (0.31) and PEOU (0.50) have slight positive skewness:

- A small group of admin members perceive AI tools as less useful or harder to use compared to the majority.

iv. Kurtosis (Peakedness of Distribution)

- IU has a high kurtosis (2.06), meaning responses are peaked:
- Most admin members share similar opinions on their intention to use AI, with few extreme outliers.
- AU has a low kurtosis (0.15), indicating a flatter distribution:
- Responses are more spread out, meaning admin members have mixed levels of AI adoption in their teaching.
- PU (-1.08) and PEOU (-1.17) have low kurtosis:
- Responses are more varied, meaning admin members do not unanimously agree on AI's usefulness and ease of use.

General Interpretation

- Admin members are moderately open to adopting AI in education
- The high IU mean (4.45) and negative skewness suggest most admin members are inclined toward AI adoption.
- Perceived usefulness and ease of use influence AI adoption
- Admin members generally believe AI tools are beneficial and easy to use, which can encourage future adoption.
- Gap Between Intention and Actual Use
- IU (4.45) is slightly higher than AU (4.18), meaning some Admin members intend to use AI but do not actively implement it.
- Potential barriers: Institutional constraints, lack of training, or resistance to technology.
- Mixed opinions on ease of use (PEOU) and usefulness (PU)
- Some admin find AI intuitive and helpful, while others struggle or remain skeptical.
- Efforts should focus on training and user-friendly AI tools to bridge this gap.

Final Takeaways

- Ensure admin members have access to AI training and support to enhance actual usage (AU).
- Bridge the gap between IU and AU by removing technical and institutional barriers.
- Monitor admin perceptions over time to adapt AI policies and implementation strategies effectively.

4.3 Qualitative Analysis

4.3.1 Thematic Analysis

1. **Main Theme 1: AI Awareness and Adoption**

Sub-Theme: Faculty Perception of AI

Faculty showed mixed reactions regarding the integration of AI into education. While most acknowledge the transformative potential of this technology in pedagogical practice, they still raise concerns over its reliability, ethical implications, and the challenges of learning to use new technologies. Younger faculty are mostly more open toward AI, noting its helpfulness in grading automation, interactive lesson design, and student feedback in real time. However, for faculty members in older age groups who have been with traditional models of teaching for years, adapting to AI has generally proved difficult. Some of them viewed it as diminishing the role of the human educator and expressed their concern about dependency issues with the student.

Sub Theme: Student Familiarity and Usage

Students demonstrate a high level of familiarity with AI tools like ChatGPT, Gemini, DeepSeek, and Canva. They primarily use these tools for research, assignment completion, and content generation. While students acknowledge AI's ability to simplify complex topics and provide alternative explanations, they also recognize its limitations. Many express skepticism about

AI-generated content, citing concerns about reliability and biases in AI responses. There was a general observation that participants depicted that since AI lacks emotional intelligence, it can not replace human mentorship.

Sub Theme: Actual Usage vs Perceived Usefulness among the faculties

Despite frequent AI usage among faculty members, a significant gap exists between actual utilization and perceived usefulness. Educators rely on AI tools like ChatGPT for content updates, plagiarism detection, and activity-based learning. However, many view AI as a passive support tool rather than an integral part of the teaching-learning process. The potential of AI to enhance pedagogy, personalize assessments, and foster innovation remains underappreciated. Faculty training programs must emphasize AI's role in improving teaching methodologies rather than merely automating repetitive tasks.

AI has also been increasingly used in assessment and grading, offering a more efficient approach to evaluating student performance. While AI-generated reports and grading systems are recognized for their time efficiency, there is a lack of structured training on how educators can use AI for assessments while maintaining academic integrity. Furthermore, AI is slowly being integrated into school curricula, especially in problem-solving and innovation projects. Some institutions encourage students to use AI but require them to supplement AI-generated content with their own insights. AI adoption is higher in public schools for administrative purposes, such as hiring processes, while private schools have shown more resistance to student and faculty use of AI.

To ensure effective AI integration, institutions must incorporate AI literacy training, promote critical thinking in AI usage, and implement ethical AI use policies. Faculty development programs should be structured to enhance AI-driven pedagogical skills, enabling educators to create challenging assessments, provide meaningful feedback, and utilize AI for deeper engagement with students. Additionally, localized AI solutions must be developed to cater to Nepal's specific educational needs, ensuring AI tools align with the context and language requirements of the region.

2. Main Theme 2: Barriers to AI Integration

Sub Theme: Faculty Readiness and Training Needs

One of the most significant barriers to AI adoption in education is the lack of awareness and training among faculty members. Many teachers remain unfamiliar with basic AI functionalities, leading to misconceptions and resistance. AI is often perceived as a tool that encourages cheating rather than a learning aid. Additionally, while educators may have a general proficiency in IT, they struggle with pedagogical applications of AI, lacking the ability to design AI-integrated assessments that challenge students effectively. The absence of AI research labs further limits faculty engagement with AI beyond surface-level applications.

Infrastructure gaps further exacerbate the digital divide. While some institutions have well-equipped computer labs, there is no dedicated AI research space to foster innovation. Many teachers also lack access to basic digital tools, with some struggling to perform simple technical tasks like resetting a Gmail password. This highlights a broader issue of digital literacy, where the availability of technology does not necessarily translate into effective usage. Additionally, universities that have procured AI tools often face financial barriers in disseminating them to affiliated colleges, as these institutions must bear the cost of software access.

Ethical concerns and policy limitations add to the complexity of AI integration. There is an ongoing debate about the acceptable level of AI use in education, with students being penalized for AI-generated work while faculty AI usage remains largely unregulated. The absence of clear AI policies in academic institutions leads to inconsistent adoption and implementation. Questions around data protection, AI bias, and vulnerability to misinformation also contribute to hesitancy in AI adoption. Government intervention is needed to establish comprehensive AI policies, integrate AI into non-IT subjects, and provide infrastructural support for AI research.

The financial aspect of AI adoption presents another challenge. While AI tools are not necessarily unaffordable, they are perceived as expensive, leading to selective adoption. Institutions must balance AI investments with practical applications, ensuring faculty receive adequate training on how to maximize AI’s potential while maintaining academic integrity.

Faculty teams must also develop a deeper understanding of AI as a teaching tool rather than merely a convenience, ensuring that AI is used to enhance critical thinking rather than replace traditional learning methods.

To overcome these barriers, institutions must promote structured AI training, establish AI research labs, and create inclusive policies that regulate AI usage among both students and faculty. Government support in the form of infrastructure funding, policy development, and AI localization efforts will be crucial in bridging the digital divide. Additionally, faculty development programs must emphasize AI's role in education, ensuring that educators can use AI tools critically and effectively to enhance student learning outcomes.

Sub Theme: Digital Divide in Student Access

The problem of the digital divide arises as the major issue in achieving the goal of equitable AI adoption. While students in urban areas can access AI tools quite easily, students in rural areas still face challenges like poor internet connectivity and a lack of awareness about the usage of AI tools. Furthermore, it has remained confined to STEM disciplines as students from other nontechnical fields are not getting adequate exposure to it. This is really setting an uneven ground so that only a restricted group of students can explore all the facets of AI.

Sub Theme: Pedagogical and Curriculum Gap

The curriculum and pedagogical approach of the Nepalese educational system has remained unchanged for a long time. With the development of AI and its tools, it is now necessary to integrate AI as a curriculum, not only as a technical subject but also into other fields and domains too. Also, the teaching frameworks and pedagogy must be upgraded and integrated with suitable AI tools enhancing the overall teaching and learning experience.

3. **Main Theme 3: AI's Role in Workforce Readiness**

Sub Theme: Industry Expectations and Skill Gaps

Industry professionals highlight the growing demand for AI-skilled graduates, particularly those proficient in AI-driven decision-making and automation. Most employers believe that the education system in Nepal is failing to prepare students to work in AI-driven workplaces. They emphasize the need for universities to bring the AI curricula in line with industry requirements through the integration of real-life case studies, internships, and practical projects that bridge the gap between academia and industry.

Sub Theme: Challenges in Hiring AI Talent

Hiring AI talent in Nepal remains a problem because of gaps in the curriculum and a lack of qualified graduates. Although students have theoretical knowledge about AI, they have never worked with AI tools in actual practice. Employers say it is tough to find a candidate who can integrate AI into business processes. Another concern is the lack of formal AI certification programs, which makes it difficult for companies to assess applicants' AI competencies. Many professionals suggest that universities introduce AI certification programs in collaboration with industry leaders to address this issue.

4. **Main Theme 4: Ethical and Policy Concerns**

Sub-theme: Plagiarism and AI Misuse:

Lack of clear ethical guidelines regarding the use of AI in education is one major concern as shown by the faculties. Many of them are afraid that AI might facilitate plagiarism and academic dishonesty by the students, not critically evaluating the content created by AI. Besides, the resistance from elderly faculty members is also contributing to slowing down the integration of AI-based teaching models. Other infrastructures, such as limited access to AI-powered learning management systems, also contribute highly to limiting the effective adoption of AI. In addition to such challenges, the lack of governmental policy guidelines on AI education and engagement has worsened the situation, since on-campus AI adoption is not guided by any legal or administrative imperatives from the government.

Sub-theme: Policy Gaps and Governance Issues :

Industry representatives have time and again demanded a complete change in the education system of AI in Nepal. One way of going forward would be through collaboration between industry and academia, through which companies would co-design training modules on AI with universities. A section of professionals also note the need for ethical AI education to make the students aware of issues such as data privacy, bias mitigation, and AI transparency. Failure to do this may make many people lag far behind in a world driven more by AI with each passing day.

5. Main Theme 6: Government and Policy Makers Insights

The Government and respective ministries acknowledge the lack of AI integration projects for students, despite possessing ten years of educational data across 36,000 schools and 100,000 teachers. While some initiatives, such as the CTEVT curriculum revision and local ICT training for science teachers, are in place, AI training remains a fragmented effort. A significant challenge is the lack of targeted awareness programs and the difficulty older teachers face in adapting to AI-based teaching. The government has been investing in computer labs, with 80% of public schools now having one, but the maintenance and teacher training ecosystem remains weak. The high student-to-school ratio in public schools further complicates effective AI adoption. The Curriculum Development Center (CDC) is evaluating the effectiveness of current policies, providing an opportunity for AI advocacy. The Ministry of Communication, Information, and Technology (MoCIT) recognizes AI's potential in education, personalized learning, and competency-based training, but acknowledges significant skill gaps and infrastructure limitations. AI applications such as adaptive learning, intelligent tutoring, and AR-based visualization could revolutionize education, but issues like GPU access, internet infrastructure, and cyber security need urgent attention. Though the government aims to provide AI related trainings, due to the shortage of skilled AI trainers, these trainings are not being able to be implemented effectively. The government is working on AI governance, emphasizing the need for talent development, exposure, and collaboration. However, AI policy development is being rushed, often finalized just before the annual budget, raising concerns about strategic planning and long-term impact.

4.3.2 Comparative Analysis:

a. Inside and Outside Valley Institutions

AI adoption in Nepalese education shows a stark contrast between inside Valley institutions and those outside the Valley. Educational institutions in urban centers benefit from higher AI adoption rates, structured faculty training programs, and stronger industry collaborations, enabling better AI infrastructure and hands-on workshops. In contrast, outside the Valley, institutions face limited AI exposure, weak infrastructure, and traditional exam-centric learning approaches, which hinder AI integration. Faculty and students lack access to AI training and digital resources, creating a readiness gap. Internet connectivity issues further restrict AI-driven education, making government intervention crucial to bridge the urban-rural AI divide through policy changes and financial support.

b. Faculty Readiness vs Students' Familiarity and Usage

Faculty AI readiness lags behind students' AI familiarity due to training gaps, infrastructure limitations, and slower adoption rates in teaching methodologies. While students, especially in private and urban institutions, are more digitally exposed and adaptable to AI-driven tools, faculty—particularly in public and rural institutions—struggle with AI integration due to limited training and technical barriers. Inside the Valley, institutions benefit from better AI adoption, industry collaborations, and structured training programs, whereas outside the Valley, faculty and students face resource constraints, weaker digital infrastructure, and a traditional exam-centric approach to learning. Public faculty members are less AI-ready than their private counterparts, mirroring the disparity in student AI exposure between public and private institutions. Despite students being familiar with AI, their formal AI education is inconsistent, requiring a structured curriculum to enhance AI competency. To bridge the faculty-student AI gap, targeted faculty training and comprehensive AI education programs are essential for ensuring effective AI integration in learning.

CHAPTER 5: STATE OF READINESS

5.1 Institutional Readiness

a. Adoption of AI in Administrative Process

A significant portion of institutions have begun integrating AI into administrative processes, particularly in grading, attendance management, and communication between students, faculty, and administration. The majority of administrators recognize AI's efficiency, with over 50% expressing confidence in AI's ability to streamline managerial tasks. However, challenges remain, as 26% of administrators still find AI complex to integrate. Institutions in urban areas are leading in AI adoption, whereas those in rural regions face infrastructure-related hurdles, such as limited access to reliable internet and a lack of proper training materials.

b. Infrastructure and Technological Preparedness

More than 50% of institutions report having adequate infrastructure, including internet access, devices, and labs, necessary for AI implementation. However, disparities persist between institutions, particularly between private and public institutions, with private institutions demonstrating more uniform AI adoption. Institutions that lack sufficient funding have struggled with integrating AI tools effectively. Budget constraints remain a major hurdle, with a majority of institutions reporting insufficient allocation for AI programs and training.

c. AI in Curriculum Development

While there is growing interest in integrating AI into curricula, collaboration between academic institutions and AI-based industries remains low. This gap limits the practical exposure of students to AI applications in real-world scenarios. Industry professionals have voiced concerns over the lack of AI-skilled graduates, emphasizing the need for institutions to incorporate hands-on AI training, internships, and certification programs. Over 65% of institutions have initiated AI training programs, but these efforts are scattered and inconsistent across different educational bodies.

d. Faculty Training and Readiness

Faculty members have shown high levels of AI familiarity, with over 50% actively using AI tools in lesson planning, grading, and student engagement. Younger faculty members are more open to AI integration, while senior educators, particularly those with extensive teaching experience, tend to rely on traditional methods. One of the primary barriers to faculty AI adoption is the lack of structured training. While training resources are available, some faculty members find them inadequate, with more than 50% agreeing that AI training materials need improvement.

e. Policy and Ethical Concerns

Institutional policies on AI usage remain underdeveloped. Many institutions lack clear ethical guidelines on AI integration, raising concerns about plagiarism and AI misuse. Resistance from older faculty members and limited governmental policies further hinder AI adoption. Stakeholders emphasize the need for AI governance frameworks that define AI's ethical role in education.

Key Gaps in Institutional Readiness

- Lack of structured AI policies to govern AI usage in academic settings.
- Unequal infrastructure and funding disparities between urban and rural institutions.
- Inconsistent faculty training programs, with older faculty members requiring more support.
- Limited collaboration with industry, restricting AI practical exposure for students.
- Concerns over ethical AI use, including plagiarism and academic dishonesty.

5.2 People Readiness

a. Student AI Adoption and Familiarity

Students demonstrate high levels of AI adoption, with over 70% using AI tools for academic and non-academic purposes. The familiarity with digital platforms directly correlates with AI adoption, meaning students who regularly engage with digital tools are more likely to integrate

AI into their learning habits. AI's role in simplifying complex subjects is widely recognized, with over 80% of students agreeing that AI tools help them understand difficult concepts.

Despite widespread use, some students struggle with AI accessibility and troubleshooting. Around 20% of students lack confidence in resolving AI-related issues, and 8% of students report minimal interaction with AI due to usability concerns. These gaps indicate a need for better AI guidance, training, and interactive tutorials to improve student readiness.

b. Faculty and Administrative Readiness

Faculty members are generally open to AI adoption, with a strong correlation between AI familiarity and usage. The majority are comfortable exploring AI features, though some face technical barriers. Faculty from non-STEM backgrounds often find AI training materials more challenging to grasp. To address this, institutions need to develop discipline-specific AI training programs.

Administrators play a crucial role in AI integration, with over 50% expressing readiness to implement AI-based tools. However, some still struggle with the complexity of AI systems, indicating a need for simplified training and clearer documentation for non-technical stakeholders.

c. AI Perception among Stakeholders

AI perception plays a crucial role in adoption. Students who believe AI enhances learning are significantly more likely to use it regularly. Similarly, faculty members with a positive view of AI tend to integrate it into their teaching practices. However, skepticism remains among some faculty and administrators, particularly regarding AI's ethical implications and over-reliance on technology.

d. Workforce Readiness and Industry Expectations

Industry professionals emphasize the urgent need for AI-trained graduates. Most employers believe that current university curricula do not align with AI industry demands, leading to a

shortage of AI-skilled candidates. Despite theoretical AI knowledge, many graduates lack practical AI experience, making it difficult for companies to find candidates who can seamlessly integrate AI into business processes. A key recommendation is for institutions to establish AI certification programs and collaborate with industries to ensure students gain hands-on experience.

Key Gaps in People Readiness

- Digital divide among students, particularly between urban and rural areas.
- Limited AI troubleshooting skills, affecting some students' ability to use AI effectively.
- Lack of structured, inclusive AI training programs for faculty and administrators.
- Skepticism among faculty and administrative staff regarding AI's role in education.
- Mismatch between university curricula and industry needs, leading to an AI talent gap.

CHAPTER 6: COMPREHENSIVE RECOMMENDATIONS FOR AI READINESS IN EDUCATION

Based on the detailed AI readiness report and analysis from faculty, students, administrators, and qualitative research, it is evident that AI adoption in education requires targeted improvements in multiple areas. This document presents comprehensive recommendations categorized into major themes necessary for institutional AI integration, stakeholder preparedness, and workforce alignment. Each recommendation is derived from the existing gaps and challenges identified in the analysis and is structured to be specific, applicable, and actionable. The insights from Quantitative and Qualitative methods are well aligned and give similar insights.

1. Digital Equity and Accessibility Measures

a. Bridging the Digital Divide Between Urban and Rural Students

- This should be the very first step if the goal is to increase quality and productivity in the Nepalese education system using AI. Without closing the digital divide gap, no new technology, be that AI, can be implemented and use it to the full potential.
- Provide subsidized internet access for students in underserved areas.
- Equip rural schools with low-cost AI tools and open-source AI softwares.
- Computer science and similar technical subjects should be taught from grade 2 or 3, with updated labs and trained professionals.
- Offer special scholarships and AI development programs targeted at students from low-income backgrounds.

b. Ensuring AI Tools are User-Friendly and Inclusive

- Improve AI user interfaces to be intuitive and accessible for students with disabilities.
- Develop AI tools with multilingual capabilities, ensuring inclusivity for students in non-English-speaking regions.

- Incorporate adaptive AI learning models that cater to diverse learning styles and cognitive abilities.
- The government should design and implement a standard framework for inclusive technology, which should be strictly made compulsory for tech companies and products.

2. Strengthening Institutional Infrastructure for AI

a. Enhancing AI Administrative Capabilities

- Implement AI-driven automation for attendance tracking, grading, and administrative processes to improve efficiency. Students can be motivated to develop and innovate these via hackathons and competitions.
- Train administrative staff in AI-powered institutional management systems, ensuring seamless integration and reducing workflow complexity.
- Establish centralized AI governance units within institutions to oversee AI adoption and provide technical support.

b. Allocating Adequate Budget and Resources for AI Adoption

- Increase institutional budgets to prioritize AI training, software acquisition, and infrastructure development.
- Seek public-private partnerships with AI industry leaders to fund AI research, development, and implementation in education.
- Develop an AI funding model where institutions apply for grants to support AI integration.

3. Faculty Training and AI Literacy Programs

a. Establishing Comprehensive AI Training for Faculty

- Introduce mandatory AI literacy training for faculty across all disciplines, not just STEM fields.
- Basic AI awareness workshops that are short for faculty, focusing on practical applications and fundamental theories that are relevant for novices.
- Identifying faculties that are good in AI and train them as AI mentors. Each trained member will then train at least another 10 faculty members.
- Develop 5-day bootcamps on AI-integrated pedagogy with simple AI tools. Focus on practical classroom use cases like AI-assisted lesson planning and assessment generation.
- Provide interactive AI workshops, covering AI-assisted lesson planning, grading automation, and student engagement strategies.
- Encourage faculty members to integrate AI tools into research and explore how AI can enhance pedagogical methodologies.
- Training should be designed based on the years of experience, requirement and background. Faculties will only find AI valuable if the tools actually help them in the areas they mostly spend time on. A teacher teaching a certain subject majority of the time will find AI integration useful if and only if their workloads and repetitive tasks are reduced with tools that are customized to their subject or domain.

b. Addressing Faculty Hesitation and skepticism

- Develop mentorship and peer-support systems where AI-proficient educators train and guide others.
- Implement certification-based AI training programs, allowing faculty to gain formal AI credentials. Enrolling them in micro credentials on LinkedIn and EdX might be a good step.
- Conduct awareness campaigns showcasing real-world applications of AI in teaching to dispel myths and misconceptions. And focus on small wins along the way.

c. Personalizing AI Training Based on Experience Levels

- Provide beginner, intermediate, and advanced AI training tracks tailored to faculty members' proficiency levels.
- Offer self-paced online AI training modules for faculty who prefer flexible learning.
- Partner with AI industry experts to provide hands-on training with real-world case studies and applications.

d. Executing TOT programs for preparing AI Trainers.

- Plan and execute Training of Trainers (TOT) programs for skilled AI professionals.
- The program should prepare the trainers to deal with diverse variables like STEM and Non-STEM background, rural vs. urban participants and so on.
- Prepare other mediums of AI learning like online platforms that can deliver personalized AI lessons keeping all variables into consideration.

4. AI Curriculum Development for Students

a. Introducing AI as a Core Subject Across Disciplines

- Integrate AI into all fields of study, including business, humanities, and social sciences, rather than limiting it to STEM.
- Develop interdisciplinary AI courses that blend AI with traditional subjects like law, ethics, healthcare, journalism, and economics.
- Include AI literacy as part of general education requirements for all undergraduate students.

b. Hands-On Learning and AI Skill Development

- Create AI lab environments where students experiment with machine learning models, neural networks, and data analytics.
- Introduce capstone AI projects where students apply AI to solve real-world educational and societal problems.

- Establish AI internship opportunities with leading technology firms and AI-driven industries.

c. Certification and Credentialing for AI Proficiency

- Implement official AI certification programs, enabling students to graduate with AI competency credentials.
- Offer stackable micro-credentials that students can accumulate toward full AI qualifications.

5. Strengthening AI Policy and Ethical Guidelines

a. Establishing Institutional AI Governance Frameworks

- Create AI governance boards within institutions to monitor ethical AI implementation.
- Define clear policies on plagiarism, academic dishonesty, and AI-generated content.
- Develop a compliance mechanism to ensure AI tools align with educational standards and ethical norms.
- Making international transactions easy and

b. Promoting Ethical AI Education

- Include AI ethics and responsible AI usage as a mandatory part of AI education.
- Train students and faculty on bias mitigation, transparency, and ethical decision-making in AI.
- Collaborate with legal experts to develop policies addressing data privacy, AI fairness, and accountability.

6. Strengthening Industry Collaboration for Workforce Readiness

a. Aligning AI Education with Industry Needs

- Partner with AI-driven companies to co-develop AI course materials and training programs.

- Establish AI advisory boards consisting of academic and industry leaders to guide curriculum updates.
- Integrate real-world AI case studies and problem-solving activities in coursework.
- Conduct periodic AI skill demand surveys among employers to ensure curriculum relevance.

b. Expanding AI Internship and Apprenticeship Opportunities

- Facilitate AI-based internship programs where students work on AI-driven projects within companies.
- Encourage universities to collaborate with industries to create AI incubator labs.
- Develop AI research collaborations between students, faculty, and corporations.

c. Encouraging AI Entrepreneurship and Innovation

- Establish AI innovation hubs where students develop AI-driven startups.
- Provide funding and mentorship programs for student-led AI initiatives.
- Encourage hackathons and AI competitions to foster practical AI skills and innovation.

CHAPTER 7: Feedback on the National Artificial Intelligence Policy 2081

The National Artificial Intelligence Policy 2081, drafted by the Ministry of Communications and Information Technology (MoCIT), Government of Nepal is a significant step toward establishing an AI-driven ecosystem in Nepal. While the policy highlights key challenges, opportunities, and strategic actions for AI integration, further refinements are necessary to ensure AI's effective and inclusive implementation in education and skills development. This chapter provides expert feedback, primarily focusing on AI in education, curriculum integration, human resource development, and policy improvements.

7.1 Key Recommendations

7.1.1 Refinements in Identified Problems and Challenges

Problems (Section 2.1)

- The current draft mentions the lack of awareness, expertise, and literacy regarding AI. We suggest reframing this as "limited awareness, expertise, and literacy" to acknowledge that foundational knowledge exists but remains insufficient.
- The policy highlights a shortage of skilled human resources in AI development and application. We recommend refining this to "limited skilled human resources", emphasizing the existing talent pool while recognizing its constraints.
- **New Problem Addition:** There is a limited career development opportunity in public services for AI experts, as there are no sanctioned AI-related positions within the government system. Addressing this issue would promote AI adoption across public institutions.

Challenges (Section 2.2)

The policy outlines challenges related to ethics, infrastructure, workforce, and collaboration. We suggest adding:

- "Developing trust for public-private and academic partnerships in promoting AI applications in Nepal."

- This is crucial to fostering coordinated efforts between the government, universities, and private sector to drive AI research and development.

7.1.2 Enhancements in Opportunities and Strategic Objectives

Opportunities (Section 2.3):

- The policy currently includes "inability to maintain data security and privacy due to excessive dependence on technology" as an opportunity. This does not align with the "opportunities" section and should be removed to maintain logical consistency.

Mission Statement (Section 4):

- Current: *"Harnessing the Transformative Potential of AI to Achieve Social and Economic Growth."*
- Suggested Edit: *"Harnessing the Fullest Utilization of AI to Achieve Transformative Social and Economic Development of the Country."*
- This revised mission broadens the scope and emphasizes AI's transformative role in national development.

Goal (Section 5):

- Current: *"Promoting innovation and entrepreneurship, strengthening existing structures, and enhancing sectoral coordination and collaboration to increase the contribution of the AI sector to the overall GDP."*
- Suggested Edit: *"Achieving a Healthy and Prosperous Nepal through the Transformative Application of AI."*
- This rewording strengthens the policy's connection to broader national development.

Objectives (Section 6):

- Objective 6.2: Current: *"Develop human resources, education, research, innovation, and entrepreneurship in the field of AI."*

- Suggested Edit: *"Develop human resources in the field of education, research, innovation, and entrepreneurship for promoting AI use across all sectors, including economic, social, and healthcare."*
- This modification ensures AI's integration beyond just technical fields and into critical societal areas like education and healthcare.

7.1.3 Strengthening AI in Education and Human Resource Development

Policy (Section 7):

- Existing Policy (6.7): *"The promotion of studies, research, innovation, and entrepreneurship in the AI sector will be encouraged."*
- Suggested Edit: *"Increase investment for the promotion of studies, research, innovation, and entrepreneurship using AI."*
- This recommendation highlights the need for active financial support to develop AI research ecosystems.
- New Policy Addition (6.12): *"AI applications will be made sensitive, responsive, and transformative to Gender Equality, Disability, and Social Inclusion (GEDSI)."* This ensures AI development remains inclusive and benefits marginalized communities.

Strategic Action: Actions Related to Strategy 8.8:

- **9.42**: *"Integrate AI-related subjects into school-level curricula."*
- **9.43**: *"Implement AI-related academic programs in universities to develop skilled human resources."*
- We support these provisions but recommend additional steps:
    - AI curricula should be regularly reviewed and updated (at least annually) to reflect emerging global trends.
    - Universities should collaborate with schools to introduce AI concepts at the K-12 level, ensuring early exposure and foundational learning.
    - Faculties from local universities should be engaged in AI training and capacity-building programs, promoting local expertise in AI education.

7.1.4 Institutional Recommendations

AI Regulatory Council (Section 10.1):

- The council currently lacks representation from key sectors. We recommend adding:
    - Ministry of Health and Population
    - Ministry of Women, Children, and Senior Citizens
    - Professional Research Councils (e.g., Nepal Health Research Council - NHRC, Nepal Agricultural Research Council - NARC, Nepal Academy of Science and Technology - NAST)
    - Ministry of Defence
    - Representatives from Universities

National AI Center (Section 10.2):

- The center should include one representative each from Nepal's academic sector and the private sector to guide AI policies.
- The center's proposed partnership with universities should also:
    - Support curriculum development tailored to Nepal's local context.
    - Ensure regular updates to AI education curricula to align with global trends.
- Engaging local academic faculty in training and capacity-building programs will enhance the sustainability of AI education.

Moreover, the National Artificial Intelligence Policy 2081 is a progressive initiative that provides a strong foundation for AI adoption in Nepal. However, enhancements in education, curriculum integration, institutional representation, and financial investments are required to maximize AI's transformative potential. By incorporating these refinements, Nepal can establish a well-structured AI ecosystem that drives economic and educational transformation while ensuring inclusivity, ethical implementation, and global competitiveness.

CHAPTER 8: CONCLUSION

The findings from this comprehensive analysis of AI readiness in educational institutions provide a clear picture of our current state in terms of institutional preparedness, faculty and student engagement, administrative integration, and industry alignment. AI adoption in education is progressing but remains uneven, with significant disparities in infrastructure, training, and policy frameworks. While faculty members and students exhibit a growing interest and engagement with AI tools, institutional barriers, lack of structured training programs, and ethical concerns hinder full-scale AI integration.

A major takeaway from this study is that faculty and students are willing to embrace AI, but technical barriers, training gaps, and administrative hesitancy create challenges in adoption. Public institutions tend to have greater variation in AI engagement, whereas private institutions show more consistent AI utilization. Students are active users of AI for learning and non-learning activities, but unequal access and digital literacy levels limit the equitable use of AI tools across different demographics.

From an industry perspective, employers recognize the growing need for AI-skilled graduates, but many express concerns about the lack of practical AI experience among students. The misalignment between academic curricula and industry requirements continues to create a workforce gap, underscoring the need for real-world AI exposure, internships, and certification programs.

Despite these challenges, the enthusiasm for AI among stakeholders is evident. Institutions that take proactive steps to invest in infrastructure, implement AI-centric training, and align AI education with ethical policies and industry standards will be better positioned to prepare students for an AI-driven world. However, this transformation requires structured policy reforms, increased funding, and collaborative efforts between educators, industry leaders, and government bodies.

This study was conducted primarily within institutions in the Kathmandu Valley, providing valuable insights into AI adoption trends within urban academic settings. However, to gain a

comprehensive understanding of AI readiness across Nepal, this research must now be expanded to regional and rural institutions. Future studies should focus on:

- Assessing AI adoption disparities between urban and rural educational institutions.
- Evaluating AI infrastructure and access in underprivileged areas.
- Understanding the digital divide in AI training and literacy.
- Comparing AI readiness levels across provinces and at national level.

Finally**,** the successful integration of AI into education requires collaborative, long-term efforts involving institutions, faculty, students, government bodies, and industry stakeholders. The enthusiasm for AI is evident, but for Nepal to become a leader in AI-driven education, strategic investments, targeted policies, and industry-academia collaborations must be prioritized. With the expansion of this study to a national level, Nepal has the opportunity to build a robust AI ecosystem that ensures equal access, prepares students for future AI-driven careers, and positions the country at the forefront of AI education innovation.

REFERENCES

Akgun, S., & Greenhow, C. (2021). Artificial intelligence in education.

Aryal, M. (2023, April 17). Purbanchal University stopped AI course after students didn't enroll. *ICT Frame.*

Bates, T., Cobo, C., Mariño, O., & Wheeler, S. (2020). Can artificial intelligence transform higher education? *International Journal of Educational Technology in Higher Education.*

CHIRAG. (1995). *Primary education teacher training in Nepal: A status report.*

Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: A review.

Chiu, T. K., & Chai, C. (2020). Sustainable curriculum planning for artificial intelligence education: A self-determination theory perspective.

Concept Paper on the Use and Application of Artificial Intelligence (AI) in Nepal. (2081). *Ministry of Communication and Information Technology, Government of Nepal.*

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology.

Dhakal, R. K. (2016). *Assessment of teacher education curricula in Nepal: An ICT perspective. SSRN Electronic Journal.*

Gautam, G. R. (2016). *Teacher training in Nepal: Issues and challenges.*

Gurung, B., Khanal, B., Pant, A., Bist, D., Tamang, M., Rai, P., Aryal, U., Khatri, K., Nagarkoti, S., & Aryal, A. (2024). *Study on navigating Nepal's artificial intelligence landscape. NepAI Applied Mathematics and Informatics.*

Hwang, G. J. (2014). Definition, framework and research issues of smart learning environments: A context-aware ubiquitous learning perspective.

Hwang, G. J., Xie, H., Wah, B. W., & Gašević, D. (2020). Vision, challenges, roles and research issues of artificial intelligence in education.

International Telecommunication Union. (2014). *Measuring the information society report: 2014.* Geneva, Switzerland: Author.

Limna, P., Jakwatanatham, S., Siripipattanakul, S., Kaewpuang, P., & Sriboonruang, P. (2022). A review of artificial intelligence (AI) in education during the digital era.

Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education.*

Makridakis, S. (2017). *The Forthcoming Artificial Intelligence (AI) Revolution: Its Impact on Society and Firms.*

Ministry of Education. (2013). *Information and communication technology (ICT) in education: Master plan 2013-2017.* Kathmandu, Nepal: Author.

Mitchell, M. (2019). *Artificial intelligence: A guide for thinking humans.*

National Information and Communication Technology Policy. (2015). *Ministry of Information and Communication, Government of Nepal.*

Ng, D. T. K., Leung, J. K. L., Chu, S. K., & Qiao, M. S. (2021). Conceptualizing AI literacy: An exploratory review. *Computers and Education.*

Paudel, Ghimire, S., & Aatiz. (2022). AI ethics survey in Nepal. *NepAI Applied Mathematics and Informatics.*

Phyak, P., Gurung, Y., Khanal, P., & Mabuhang, B. K. (2019). *The existing situation of digital literacy and use of ICT in public secondary schools: A baseline study. Center for Alternative Development Studies (CEADS).*

Pokharel, B. (2016). Everyday 15 thousand new internet subscribers in Nepal [translated from Nepali to English]. *Kantipur.*

The Last AI. (2024). OpenAI's new 5 stages of AI development, AGI, and the AI adoption pyramid.

UNESCO. (2015a). *Fostering digital citizenship through safe and responsible use of ICT: A review of current status in Asia and the Pacific as of December 2014*. Bangkok, Thailand: Author.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal studies.

Yang, W. (2022). Artificial intelligence education for young children: Why, what, and how in curriculum design and implementation.

Yufei, L., Saleh, S., Jiahui, H., & Abdullah, S. M. S. (2020). Review of the application of artificial intelligence in education.

Appendix I: Stakeholders for Interviews and FGDS

8.1 Focused Group Discussions:

8.1.1. Students:

1. Vivek Gupta Symbiosis International College BBA, Finance and Marketing
2. Rahessa Pradhanaga, Networking and IT Security, Islington College BSCIT
3. Nischal Mainali - VTU - Mechanical Engineering
4. Varsha Sharma - Kantipur City College - Computer Engineering
5. Mamata Maharjan - Pulchowk Campus - Computer Engineering
6. Rishikesh Gautam - Electronics Communication and Information Engineering - Kantipur Engineering College
7. Sashwat Thapa - BMSIT Bangalore - BEISE (Information Science and Engineering) / Islington
8. Reman Nembang - Islington College -MBA

8.1.2. Academic Leaders and Faculties:

1. Sarthak - King's College - Corporate Finance
2. Sandesh Shrestha, Siddhartha International College, Butwal
3. Mani Niraula - Kathford - Electrical Engineering
4. Bigendra Shrestha - (Prime College) - Principal - Business
5. Alok Giri - NCIT - Software Testing
6. Habish - Cosmos College - Project Management
7. Dipshan Pokhrel (IIMS) - Web Development
8. Bidhan Chandra Bhattarai (IIMS) - Data Science/ Intelligent Systems / Statistics
9. Aakash Khatiwada - Islington - Advertising / Emerging Technology
10. Hikmat Budha Chhetri, Faculty, Kopila Valley School, BirendraNagar, Surkhet
11. Laxman Pokharel - CEO/Principal, Techspire
12. Khushal Regmi - Director, Sunway College

13. Simoli Gautam Desai - Head of Operations, Sunway College
14. Umesh Kanta, HoD, Department of Electronics and Computer Engineering, IOE Thapathali Campus
15. Manoj Pandey - Tech program Lead, King's College
16. Ajay Kumar Jha - Dean of Academics, Patan College for Professional Studies

8.1.3. Industry

1. Drabid Subedi, SecurityPal, Customer Operations Lead / AIESEC
2. Abiral Timilsina, SecurityPal, Customer Operations Lead / Vairav Tech
3. Utsav Aryal, SecurityPal, Customer Operations Lead
4. Suraj Raj Pandey - Revamp Nepal, CEO
5. Adhip Poudel - SaralMind, CEO
6. Bishadh Koju, Nhu.AI, CEO
7. Udit Chandra Aryal, Grants Manager, NAAMII
8. Pushpa Raj - Turtle Innovations Pvt. Ltd.

8.1.4. AI Experts Present at ANAIS 2024.

1. Dr. Binod Bhattarai, Research Scientist/Professor, NAAMII/University of Aberdeen, UK
2. Dr. Ashutosh Modi, Professor, IIT Kanpur
3. Dr. Kilian Koepsell, CIO, Caption Health/GE Healthcare, USA
4. Dr. Francois Rameau, Research Scientist/Professor, NAAMII/SUNY, South Korea
5. Dr. Yash Raj Shrestha, Professor, University of Lausanne/ETH Zurich, Switzerland
6. Dr. Danda Pani Paudel, Research Scientist/Professor, NAAMII/INSAIT Bulgaria, ETH Zurich, Switzerland.

8.2 Interview

8.2.1 Administrators of Schools and Colleges

1. Abhyukta Khanal
2. Bigendra Shrestha, Principle, Prime College
3. Sonu Kumar, Managing Director, Monastic School/College, Janakpur Nepal

8.2.2 AI Experts

1. Dr. Shiva Ram Dubey, Professor, IIIT, Allahabad India

8.2.3 Pedagogy Experts

1. Umesh Shrestha, Pedagogy Expert, King's College

8.2.4 Industry Experts

For the purpose of anonymity of the respondents, following are the roles of industry experts were the part of our interview:

a. Technical Writer
b. CSOC Team Lead
c. Backend Developer
d. Backend Developer
e. 3D Artist
f. Real estate Property developer
g. Senior Security Research Analyst
h. Security Research Analyst
i. Security Research Analyst

8.2.5 Ministry of Communication and Information Technology

1. Dr. Shaligram Parajuli, IT advisor, MoCIT

Appendix II: Captures of FGDS and Interviews