Opportunities and Challenges of Artificial Intelligence at Undergraduate Level in English Writing Assignments: A Case Study of Faisalabad, Pakistan

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ABSTRACT

This research work aimed at assessing the impact and challenges of AI tools in improving English writing tasks at the undergraduate level in Faisalabad Pakistan. In the recent decade it has been observed that use of AI tools increased in the student community. A quantitative descriptive research design was adopted. The research is based on theories concerned with educational technologies and application of AI in learning context, with reference to Vygotsky's (1978) Zone of proximal development; where AI can help deliver feedbacks that are within the aptitude of the learners. Data were collected through structured interviews and questionnaire administered to BS students at three universities in Faisalabad: include GCUF, UAF and NUML. Quantitative data were presented descriptively in this study. The results showed that grammar checkers, plagiarism detectors, and content generators are effectively implemented in students' writing practice enhancing both speed and quality. Availability of technology, fear for the accuracy of feedback given by the AI, ethical issues as to whether the use of AI constitutes

plagiarism remain major issues. However, 68% of users claimed that receiving individual feedback was helpful, while 62% of students submitted tasks faster with the help of AI assistance. Results indicated that AI tools play an important role in student's life. About 93% students know about AI tools. Due to widespread use, AI technologies appear to be a highly appreciated and useful tool for students in writing assignments, which probably improve their academic achievement and writing skills. On the other hand they face some difficulties like high cost of premium features, technical issues, accuracy issues, lack of understanding of using AI tools, Over-reliance on AI tools and limited assessment of tools. Our study concludes that special attention is needed to solve these challenges. The present research contributes to the nexus of AI and academic writing particularly focusing the developing country context. It points to possibilities of enhancing writing skills with the help of AI as well as to the limitation in its application. Results can be useful for educators and policymakers as for how to implement the AI tools for getting the most of our learning while coming up with solutions for the potential ethical and accessibility issues.

Keywords: Chatgpt, artificial intelligence, Pakistan, writing skill, undergraduate education, educational technology, AI Challenges, AI Opportunities, English Writing Assignments

Introduction

The combination of artificial intelligence (AI) interested in learning has emerged as the same as a vital improvement into tools within current time. AI serve while controlling implement to boost education strategy appropriate toward this facility in the direction of method huge amount of information, expose, also give modified opinion. Surrounded through the sphere of advanced learning, mostly by the side of the Bachelor of Science (BS) level, AI offers a capable avenue on behalf of humanizing learner education outcomes, reform organizational responsibilities and also couture instructive experience. This Opinion aims to examine the purpose of AI in English writing projects at the BS level in Pakistan, focusing on top of the related opportunities and challenges (Chea & Xiao, 2024).

According to Naved (2023), Pakistan's instructive organization faces frequent

challenges, together with unsatisfactory support, overloaded classrooms and a broad inconsistency in student ability within. The information with the aim of several elevated instruction institutions edify English at the same time as a subsequent verbal communication compounded the complexity for students motivated to master university composition inscription. However artificial intelligence (AI) tools, such as grammar checkers, essay score applications, also adapted wisdom platforms, propose would-be solutions by provide students with direct, in depth opinion and made to order support. On the other hand incorporating AI interested in education too poses considerable hurdle, with literary approval, way in just before equipment and also the possible used for unnecessary reliance going on AI resources.

AI writing tools recommend a quantity of return to facilitate being able to increase student's university presentations. Understudies know how to level out their mistake and furthermore obtain experience since they are rapidly given that they are particular concise participants. Rehman et al., (2019) research says that, this short opinion round is probable to get better student's inscription behavior, dictionary improvement, in addition to intellectual capacity of language rules. Besides, through aiding the supplementary compact organization of contented, these advancements preserve effort happening the meaningfulness along with obligation of the work.

Mohammed et al., (2024) work describes that, realm stands elsewhere in favor of its massive linguistic and educational range as well as its speedily increasing infancy inhabitants. Artificial intelligence (AI) in English writing assignments holds immense would-be-toward deal with presented tribulations in the learning organization, such as a requirement of possessions, a difference in the student's ability level, and also the requirement meant for a consistent evaluation method. It besides provides chance for pupils to work on their scientific literacy, elasticity and moreover significant belief skills, preparing them for a humanity somewhere civilization is rising all the time more interrelated each day of the week.

A considerable improvement to facilitate have the would-be-toward to the highest degree get better student's learning experience in the assimilation of AI tools interested in the classroom. It is imperative on the way to understand the utilization of these instruments, their

manipulation on pupil work, with the difficulty they pretense. Here organize on the way to assist in putting up realistic methods for incorporating. AI tools interested in education practice, this learning attempt to make available this impending. It does this within an attempt to help brood rise beyond obstacles linked to text, develop their intellectual presentation and also lay them down and do things used for achievement in the future Elaish et al., (2017).

The exploration resolve too appears by the probability to facilitate AI technology offer toward increase inscription ability. Labadze et al., (2023) research described that, the settlement of AI tools intended for students be able to contain improved accuracy as well as reliability, further functionalities be fond of contented association with reference management and also further instinctive addict interface. Here classify to make certain with the purpose of each and every student, despite of their monetary circumstances, possibly will do good to beginning these possessions, it be capable of in addition exist accommodating in the direction of suggest additional without doubt accessible complimentary version.

The research examines how artificial intelligence can be individually worn in English writing assignments at BS level in Pakistan, identifies the difficulty students come across, and moreover looks by the side of would-be-conduct toward using AI to get a better learner outcome. Inside classify on the way to increase institution of higher education student's English inscription abilities, this learning attempts on the way to propose insight interested in how AI may well exist effectively included addicted to Pakistan's elevated learning classification through a comprehensive research of the organization of presented text, case study, as well as experiential study Shafique et al.,(2021).

Scope of the Study

In this research study, the emphasis is given to the role of AI tools in writing assignments of English undergraduate students in Faisalabad, Pakistan and the challenges and opportunities which arise from them. Specifically, it examines the usage patterns, benefits, and limitations of AI technologies such as grammar checkers, plagiarism detectors, and content generators among students from three major universities: University of agriculture Faisalabad, Government college university Faisalabad, National University of modern language Lahore. This research is limited to BS-level students with the aim of eliciting first-hand information about the students'

experience with AI in writing tasks and the degree which these tools alter writing competency. Hence, by responding to the questions that cover technological strengths and challenges for AI-based writing support and limitations of AI-access, ethical considerations, and dependency matters, the study intends to offer an accountable view on the effects of artificial intelligence on this type of writing in this particular educational and cultural environment. The research results are meant to inform educators, administrators, and policymakers about improving AI use for the purpose of promoting positive student learning outcomes in similar learning environments.

Problem Statement

The growing presence of AI in learning environments can be the source of multiple opportunities and tons of challenges, welcoming learners from developing countries such as Pakistan. Among the predators which are in the center of attention among students, at the undergraduate level, the AI tools are used as the grammar checker, plagiarism detector, and the content generator of English writing assignments. However, the availability and efficiency of the available tools also depend on the number of problems like restricted technology accessibility, the credibility of the AI-generated feedback, ethical situations connected with originality and a certain level of dependence. For the Pakistani students, such barriers are likely to affect the standard of learning and more importantly that real world writing is impeded. While the adoption of AI is increasing massively in academia, particularly in Pakistani universities, a few empirical studies have been conducted to explore the various aspects of AI in these contexts. Therefore, this study seeks to fill this gap by assessing the experiences of undergraduate students in relation to the use of AI in writing assignments including the advantages and challenges encountered with the view of establishing a basis to enhance use of AI in learning.

Research Questions

Research questions of the study are as follows:

1) What is the role of AI tools in writing assignments in English at BS level in Pakistan?

2) What are the challenges faced by students in using AI tools for writing assignments in English language?

3) What are the opportunities or benefits of using AI tools for writing assignments in

English language in Pakistan?

4) How are students currently using AI tools in writing their assignments in English language?

Literature Review

This assessment of the literature examine the study to facilitate is at this time accessible in the direction of establishing how artificial intelligence (AI) is transforming the English writing familiarity as well as toward having a discussion regarding the resolution in addition to difficulty with the aim of moving toward through it. The use of AI in learning environment has become prevalent and has revolutionized some of the elements of learning and teaching activities, such as language acquisition and writing tasks (McCarthy & Baggins, 2021). Smart tools like Plagiarism checker, writing editor like Grammarly, Turnitin, and translation tool like Google translate have become popular to help student improve their writing. On the whole, research from around the world on AI's capability for improving grammatical performance and supporting non-English speakers (Kukulska-Hulme, 2020) As a result, research on the application of AI in Pakistani undergraduate education, especially in Faisalabad, is limited.

Theoretical Framework

Artificial Intelligence (AI) integration in learning environments has taken form as a disruptive factor in writing ability development and individualization (Luckin et al., 2016). AI solutions for students' writing, for example, auto-grading programs, writing tutors, grammar corrections, help students learn and revise their work quickly and repeatedly (Litman et al., 2020). Nevertheless, apart from a range of strengths with the use of AI in the development of writing proficiency, there are some weaknesses known, including ethical issues, accessibility issues, and the reliance on technology (Smutny & Schreiberova, 2020).

AI in Educational Contexts

Several studies show that AI has a positive impact regarding students' writing by providing them with options that assist in eradicating time-wasting tasks, leaving students more

time to develop other writing skills like argumentation and cohesive structure of their writing (Tang & Huang, 2019). For example, AI language enhancements can effectively identify students' essays about grammatical, syntactical and structural errors and provide feedbacks in real time (McNamara et al., 2015). Moreover, this potential of AI in evaluating big data helps it to provide targeted feedback, which corresponds Vygotsky's Zone of Proximal Development where targeted help is the most effective.

Challenges in Implementing AI in Writing

As it is seen, there are evident advantages in integrating AI in writing assignments; however, it poses definite difficulties in particular for developing countries. Some challenges are best explained by accessibility and digital skills limitations; many students might lack proper technological tools or skills to interact with AI efficiently (Iqbal & Qureshi, 2021). There are ethical concerns too, for example, since writing with the use of artificial intelligence can raise questions on originality, their use in writing becomes a cause for concern as regards cheating in academic work (Baker & Martin, 2022). Additionally, biases of the structural AI algorithms create potential of bias in the assessment results especially for students with ELL backgrounds (Binns et al., 2018).

Opportunities and Potential Impact of AI in Writing

Thus, utilizing AI in writing assignments may help to bring about the more equal distribution of feedback of high quality and improve results of education for students. In a study by Luckin et al. (2016), they agree with the assertion that AI can support the entailing of inclusive education owing to it is the capacity to offer large-scale solutions for individualized learning environments. Indeed, in contexts such as those in Pakistan where resources for education are scarce, AI can fill in for short comings in instruction especially given large classes and poor student teacher ratio. Also, AI's ability to analyze language can enhance the learning of English, which is relevant for overseas job seekers in this current century from Pakistani students (Jabeen & Shah, 2018).

The primary issue and concern, within the scope of this theoretical framework, is the possibility of applying AI in writing-related tasks. It stresses on the appropriateness of utilitarian

approach to capitalize on the advantages being offered by AI while correcting the vices of the technology on ethical, accessibility and cultural perspectives. In light of the discrete elements of writing automation, the goal of this paper is to explore the applicability and relevance for undergraduate education for Faisalabad, Pakistan.

According to Ellis et al. (2022), writing applications that adopt an artificial intelligence technique can enhance vocabulary usage and grammar standard of learners learning English as a second language, finding a similar implication in the research conducted on Pakistani learners by Ahmad et al., (2023). The study further notes that learners in Faisalabad as in many areas of the developing world stand to gain from the ability of AI to trump language issues – this offer an opportunity to practice and learn previously on their own (Ellis et al., 2022). However, such technological advancements are constrained by the availability of quality digital materials and that relatively stable internet connectivity which is still in its development phase in the region (Ahmad et al., 2023).

According to Shi et al., (2020), in the performance field of learning human, beings are possibly going toward going on significantly impacted through AI. Artificial Intelligence is extremely tough as well as having the facility to right use along with extensively origin convert in several sectors of civilization. It is comprehensible to facilitate AI's existence and moreover use in the surroundings of education, wherever it has generated development from corner to corner in all field. Via technology similar to necessary practicality, network-based display places, robotics, show the conferencing, audiovisual collection and major apparatus, Artificial intelligence has been functionally interested in the learning division in the direction of increasing programs of study along with contented as well as information that have enhanced undergraduate education. Students collect additional individualized, thoroughly educated beginning teachers who are supplementary useful along with well-organized.

AI has also been brought up several times to do with fostering academic dishonesty and creativity. For instance, Turnitin is prone to be used in monitoring plagiarism in student's submissions and encourage authorship in academic work (Jones, 2020). The tool has only experienced a slow culture of use in Pakistan but research done to determine this subject states

that attempts to fully diffuse this tool are hindered by institutional limitations and differential archival perception between faculty and students (Khan & Malik, 2021).

As highlighted by Pedro et al., (2019), on the discussion of the Expression Artificial Intelligence in Education (AIEd) entails three key disciplines, namely, the processor ability in sequence, in addition to education. Launching these three domains independently AI Ed is an inter-disciplinary area to encompass a broad spectrum of areas such as cognitive psychology and neuroscience apart from a host of other areas. The three most crucial fields create the association that forms AI Ed, other strongly related subfields are CBE, LA, and EDM.

The prospective whereby AI has been intended to enhance education outcomes in addition to experience have completed AI integration interested in learning a subject of increasing consideration going on a worldwide extent. The integration of artificial intelligence (AI) in writing courses for the Bachelor of Science (BS) students is together approaching and challenging in Pakistan, where students are expected to be proficient in English for higher education and for employment. Hoping that through viewing the opportunities and challenges provided by AI technologies, this literature review will try to look into the existing condition of AI in English writing assignments at the BS level in Pakistan.

According to Hameed and Hashim et al.,(2022), taking into consideration several students in Pakistan do not verbalize English as their first language, it is fundamental to make sure that AI tools are intended through their exclusive requirements as well as difficulty within intelligence while rising AI models. Efficacy be able to extensively improve through customizing these tools to the local framework and accumulation essentials to facilitate acquiring interest in explanation of the distinguishing linguistic individuality. Through the use of AI-powered tools, educators will be able to provide their students immediate, customized opinion to facilitate determination and help them identify their areas of limitation in addition to propose suggestions for humanizing their sentence structure, organization and writing method. These belongings know how to as well facilitate student locate along with put together mistake, which determination get better the general competence of their assignments. The literature also points out how important it is to acquire educational as well as associated aspects concerned with

rationalization although AI is intended for writing assignments in Pakistan.

One of the essentially considerable goals of AI in learning is to give all learners individualized intelligence supports otherwise regulation according to their education category, preference, or personal traits Hwang and Chien, (2022).By analyzing a student's learning category or behaviors, correctness learning emphasizes the require of giving avoidance as well as learning techniques to exacting learner, allowing increasing learning systems to facilitate function as capable tutors by utilizing the familiarity along with intellect of experienced educators in the organization assessment assembly method is a significant concern.

However, there are some significant limitations to the integration of AI in writing activity more importantly in the socio economical setting of Faisalabad. According to Kiran and Bhatti (2021), resource constraint and lack of technology know-how are some of the challenges that hinder the efficiency of utilization of AI. However, there is limited localized AI content, particularly for media-consuming non-English proficient learners in Faisalabad, which has implications for both diversification and adaptability (Malik et al., 2022). What's more, AI also offers potential to learn since learning algorithms can self-adapt to meet the needs and learning ability of any student present in a class (Sun et al., 2021). To certain Pakistani universities especially Faisalabad, this dynamism could play an important function in language departments and will afford students faculties more opportunities to interact with English, fluently (Iqbal & Rehman, 2023). Imminent instructors across the region have shown growing concern towards applying AI in the curriculum since there is evidence that it can help in language learning and higher order thinking skills (Ahmed & Shaukat, 2022).

Moreover, it emphasizes how significant it is to adjust the AI tools in the local context and find a central opinion between empowering students to think intended for themselves and contribution in AI assistance. In order to improve the English language education in Pakistan, future research must focus on exploring the potential with challenges of implementing AI tools in writing the projects. Individualized learning opportunities enabled by AI are highlighted in studies like Wang et al., (2021). Personalizing the writing assistance along with the feedback gets better customized learning experiences. On the other hand, there are concerns that relying

too much on AI tools education could worsen the essential writing skill, so discovery of balance is vital.

Undergraduate English writing assignments in Faisalabad have a favorable potential of using AI, however, there are certain constraints associated with the AI availability and flexibility. Further research work should, therefore, involve the continuation of efforts on finding new and better ways of deploying AL in a Pakistani context, including the language used by the students in order to enhance the efficiency of such tools.

Methodology

This section defines the approach which we use inside the current study to facilitate looking interested in the utilize of artificial intelligence (AI) in inscription assignments for BS students in Pakistan‖ through an importance going on the prediction as well as issues. This study integrates both qualitative data by conducting number of interviews as well as numerical data through an ample number of undergraduates. The contributor's demographic information (age & gender), gathering data approaches and software for the analysis of data be the entire described inside specify during the segments below to facilitate we go away following.

Study Design

In current learning, data was collected by mixed-methods approaches, collecting qualitative data by conducting interviews and quantitative data by survey (questionnaire). This policy was designated in direction to attain a detailed knowledge of the statistical designs and actual members who belong to the use of AI tools impact going on inscription tasks.

Participants

This study incorporated 300 applicants' contributions. All the members were in the last semester of bachelor degrees. The members were equally divided among three universities, as given below:

i.   Government College University, Faisalabad (GCUF) : 100 students

ii.   University of Agriculture, Faisalabad (UAF) : 100 students

iii.   National University of Modern Languages (NUML) : 100 students

Furthermore, in-depth twenty interviews were conducted with a subgroup of these students along with the questionnaire in order to get further comprehensive data.

Data Collection Tools

Questionnaires

A well designed survey study was formed to collect statistical data regarding student's perspectives, practices, and thoughts about the use of artificial intelligence in their study chores (presentations, assignments). Numerous segments were added to make a questionnaire:

Demographic Information

The details regarding the learner participant are obtained through the demographic data gathered used for this study which assure that the data will represent the sample perfectly of the diverse Pakistani BS students. These 300 participants were divided in the same way as before: two main universities: Government College University Faisalabad (GCUF), University of Agriculture Faisalabad (UAF), and National University of Modern Languages (NUML); 100 participants each. Thus, the range acknowledging the educational field, university year in addition to femininity was defined during the course of this assessment. In addition, information on students' age, gender, year level, subject of course offered and learning, past experience in speaking through the help of AI technology were also collected. Historically the manner in which certain types of students are able to engage particular attitudes in addition to the use of artificial intelligence in the writing of assignments involving this broad demographic profile of Pakistani BS students. The sample comprised 300 students who were divide in the same way along with three major universities, 100 students since each of the subsequent, Government College University Faisalabad (GCUF), University of Agriculture Faisalabad (UAF), and National University of Modern Languages (NUML). Variety in the educational field, university year, in addition to femininity was definite through this assessment. Student's age, gender, year of enrollment, subject of learning, along with past fluency through AI technology were along with the demographic information gather. Investigative the way in which particular individuals know how to concern student's attitudes in addition to utilizing of AI technology in writing

assignments that make use of this comprehensive demographic outline. Like disciplined next additionally furthermore little experimental consequences continuing on the responsibility as well as control of AI in educational writing at the BS level in Pakistan can be planned achievable by an understanding of the demographic characteristics of the participant.

Age

The average age of the participants demonstrate a broad spectrum of age interest, but people particularly within the 24-26 group is well represented by 50% of the way out. Slightly above three crucial quarters (32 %) of the respondents presently occupy the 21–23 age bracket, with 18 percent currently 27 years old and above. Learner aside preference of ages of their wisdom in adding up to live likely would become saturated with unequal levels of facility as well as relieved by way of skill on which can manifest the technique to conflicting point of view and experience by means of AI tools in writing assignments. It is also possible that such differences are a result of this difference within age groups that we have looked at above.

Figure 1

*Demographic information regarding age groups (results are significant; p≤0.05)*
Gender
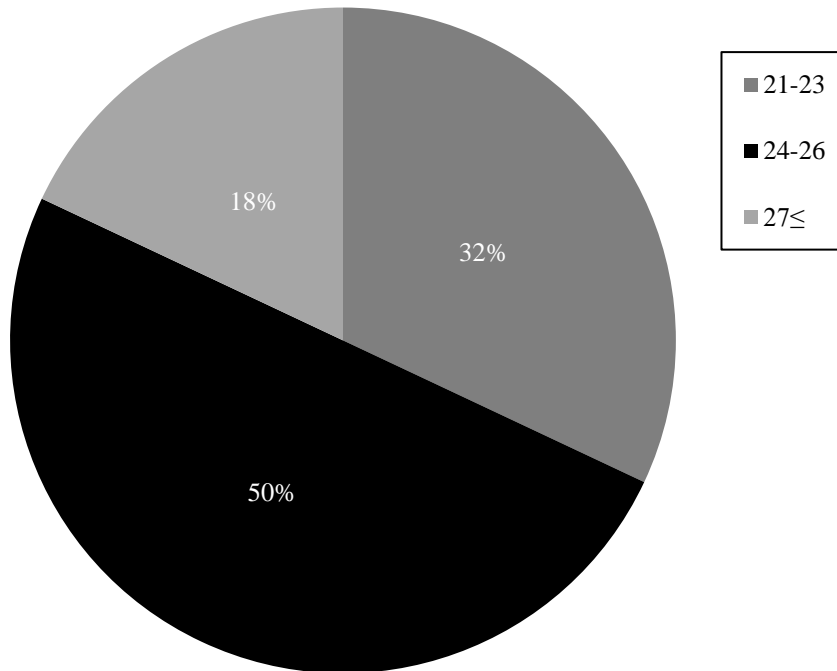
The gender distribution shows that the female students use the services more than the male students, of the total 114 respondents, 63 are female students and 37 are the male students. Such a gap may well be true within the larger confines of the enrolment patterns amongst Pakistani BS students where the female turnout may be dominated by certain programs of study. Another factor could be the fact that there were more girl's students to be reached or more willing to complete this particular poll. Since survey outcomes should be analyzed with regard to gender-related requirements and perceptions of AI technologies' application in writing assignments, it is essential to understand the gender distribution in this group.

Figure 2

Gender split in accordance with demographic information (results are significant; p≤0.05)
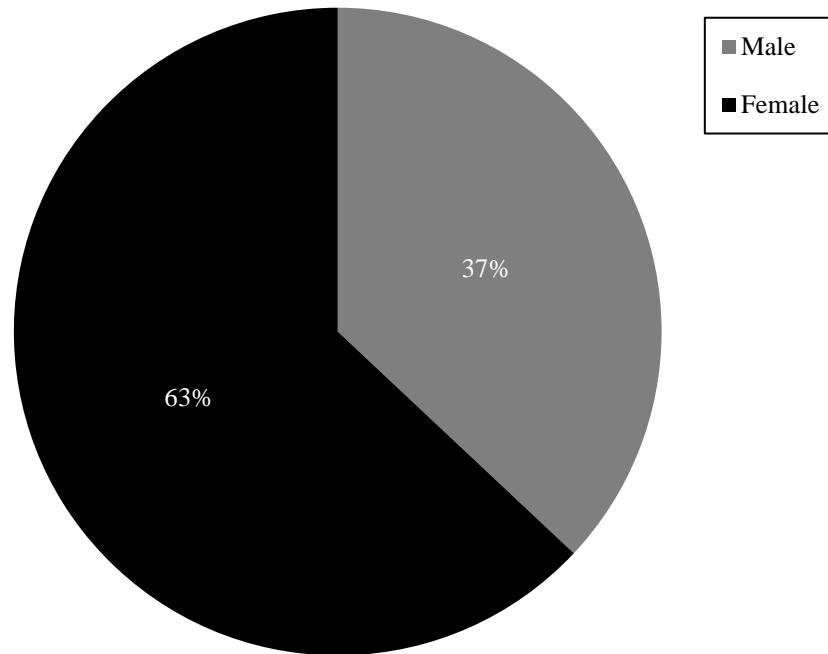
Data Analysis Techniques

Quantitative Data

The quantitative data that was collected by administering the surveys was analyzed using statistical software for example SPSS. The demographic data collected in addition to basic trends was aggregated by use of graphic statistics. Moreover, inferential statistics such as chi square tests and t-tests were employed to test for statically significant differences ($p \leq 0.05$) and associations of all of the research variables.

Qualitative Data

When collecting qualitative data, thematic analysis was employed to undertake the interviews. In the case of this undertaking, it was necessary to code the transcripts to ascertain essential themes and pat terms regarding the employments of AI tools in writing tasks. Furthermore, the research work data has been grouped under more generalizable themes.

Ethical Considerations

The study was filed with the ethical standards to protect the applicant's identity and

ensure his/her recognition. For this reason, the concept of learned consent was aimed at getting consent from all the participants before data collection was commenced. The purpose of the study, the applicant's right to withdraw at any one time and the planned use of their data were explained to the applicants. In addition, all collected data were anonymized so that all participants might not be identified easily Shahid et al., (2022).

Having provided an overview of the applicant's demographics, data collection instruments (questionnaires) and the analysis processes that are to be followed in this study; this chapter has systematically outlined the organizational agenda of the study. The study employing a mixed-methods approach needed to provide an elaborate picture about the opportunity and challenges of the use of AI tools in writing projects or tasks at the BS level in Pakistan by covering several perspectives. The outcomes of the discussed operational methodology will be revealed in the further chapters of the work, contributing to the consideration of the given allegation of AI tools in the educational contexts.

Data Analysis

Awareness of AI Tools

According to the data, 93% of individuals who responded understood they were conscious of AI tools, signifying that the aim of the community is to be extremely conscious of them. There is immediately an incredibly tiny percentage (1.33%) who don't be familiar with it, as well as 5.33% who don't familiar with it.

Figure 3

Awareness split of AI tools (results are significant; p≤0.05)
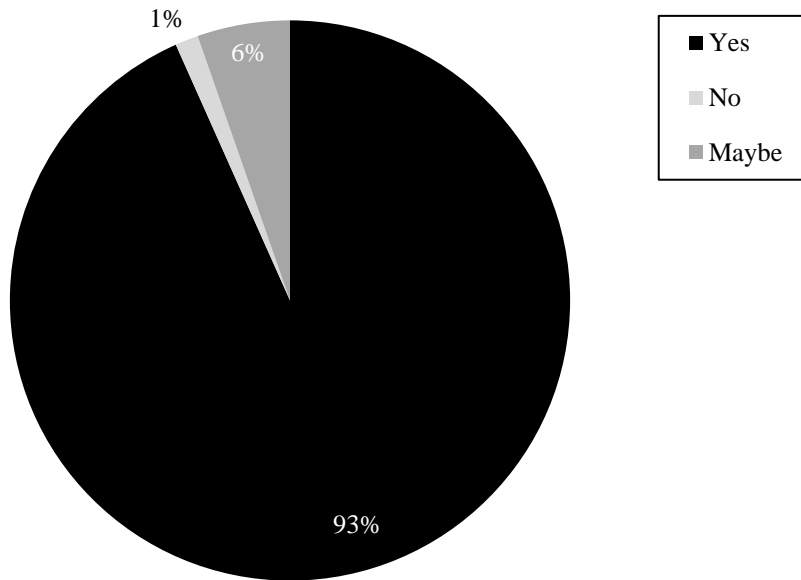

Usage of AI Tools for Writing Assignments

No more than a tiny percentage of students (3.5%) perform not make the most of AI tools by the side of the entire, although the information to facilitate the immensity of students polled (85.7%) utilize them intended for their writing projects. In addition to 10.71% of individuals who understood the survey, they almost never utilized AI technologies.

Figure 4

*Over all usage of AI tools in writing assignments (results are significant; p≤0.05)*
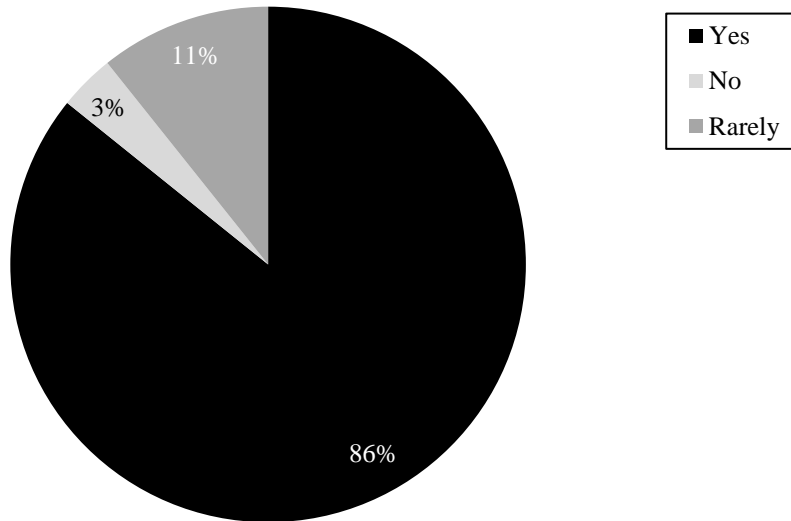
Use of Specific AI Tools

According to the study, Grammarly, as well as Quillbot/Paraphraser are two AI tools with the aim of students make use of the majority, through relevant procedure rates of 39.6% along with 36.19%. It is marked with the Chatgpt is significant and moreover helpful in writing development for the reason that a considerable proportion of the respondents (22.22%) make use of it at the same time as well. 1.85% of respondents, or the "other" alternative, indicate to facilitate an insignificant fraction of students preferring to use different AI technologies.

Figure 5

Split of specific used AI tools among students (results are significant; p≤0.05)
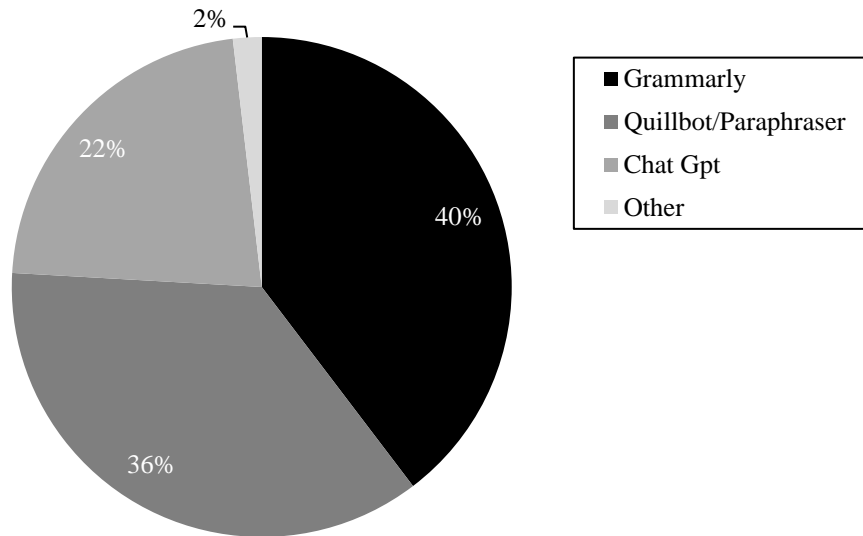
***Challenges faced during usage of AI Tools***

The highest frequency of response in this aspect identifies high cost of premium features (35.56 %) as a barrier, which indicates that use of advanced AI functions is hampered by costs. Fear for the impact on the student 'self-skills is evidenced by over-reliance on the tools (22.59%). Technical difficulties are the most prominent problem (15.93%) that prove the need for better reliable and friendly artificial intelligence systems; accuracy issues are also widely reported (10.74%). Other but highly relevant concerns that suggest areas for support and resource improvements for the user experience as a whole include restricted access to tools (8.89%) and unawareness of the proper usage of tools such as AI Tools (6.30%).

As it turns out, students have numerous ethical concerns regarding the use of AI for writing assignments. The last but not the least frequent concern is the attitude towards those resources, where students claim that they rely on AI too much (38,52% of respondents). The second significant matter which is the misrepresentation of one's own work (30.74%) represents the school's doubt towards the credibility of the contents created by AI. Insignificant is clearly outdistanced by concerns with plagiarism (19.26%) as students reported concern with the possibility of accidental plagiarism. Lastly, although not very frequent as the others, the issue of data security is still a concern for some students, this is shown by the 11.48 percent of the

students who are concern with privacy of their data. These observations raise awareness of the multifaceted ethical context that the student and educators should deal with while using AI technologies in learning context.

Figure 6

Challenges faced by students during usage of AI tools (results are significant; p≤0.05)
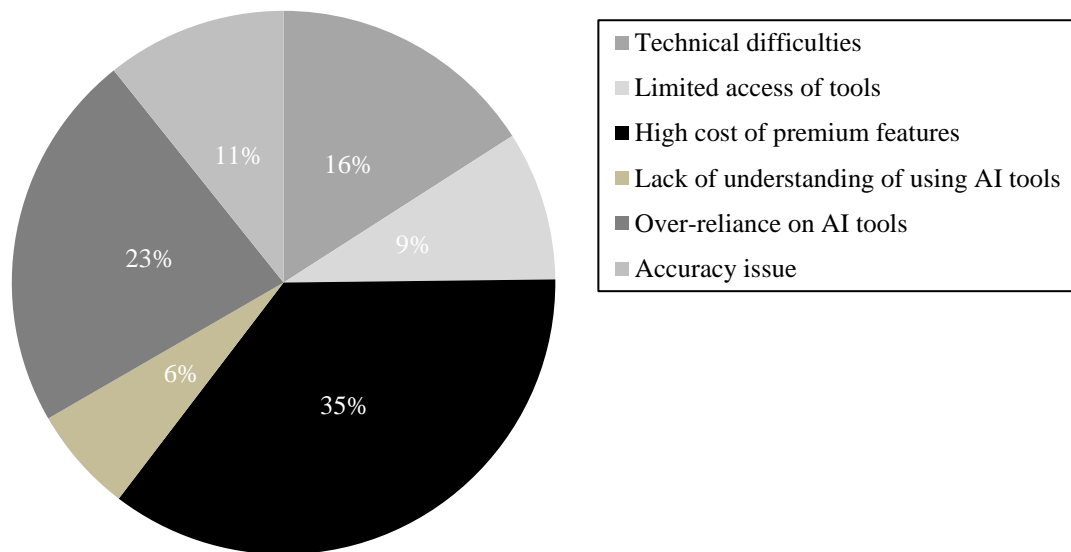

Ethical concerns faced by using of AI tools

Figure 7 below shows the pie chart of ethical issues that students face when using AI tools in writing assignments, and the visibility of the impact of these issues is (p < 0.05)'. According to the data, 39% of students' main concern is cheating on own work, which seems to signify how AI tools can misused or may become over reliant while developing an assignment. This correlative with the findings of this study where students may inadvertently risk falling into the vice of utilizing AI generated content thus negating the real essence of writing Their fears as seen in the study show that 31% of students have concerns in place that they are likely to over rely on the AI tools diminishing their writing skills. Moreover, 19% said they were concerned about plagiarism, pointing out concern for the undeveloped ethical concerns when it comes to relaying information via AI in a way that emulates information theft. Lastly, 11% of students raise concerns on privacy which covers the use of data by the AI tools on student similarly rare but important. The current study highlights the need to explain the shift in ethic usage to the students so that they do not use the AI in the wrong way to avoid real academic work.

Figure 7

*Ethical concerns students face by using AI tools (results are significant; p≤0.05)*
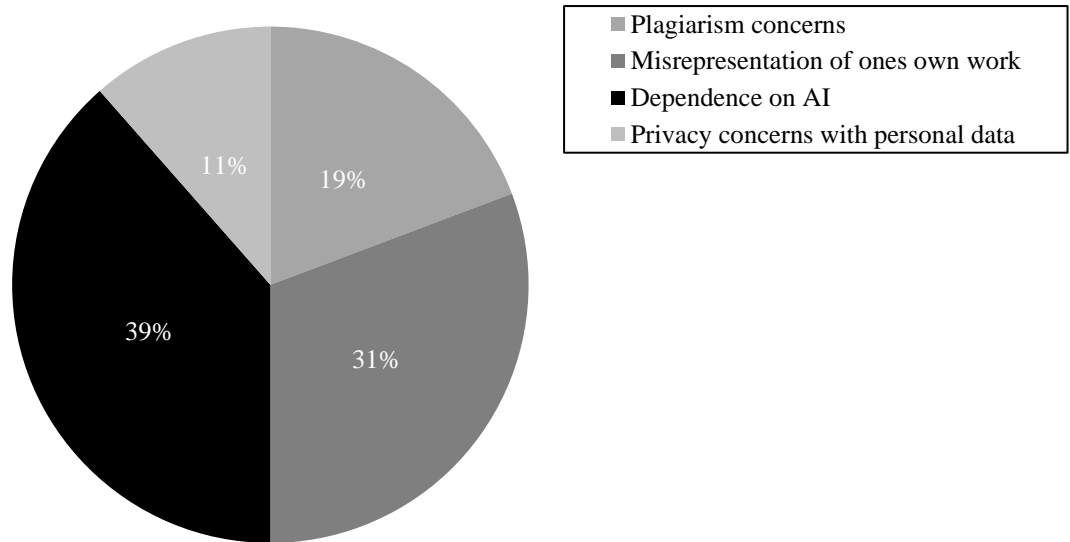
Recommendation of AI Tools

According to the direction of the result, for most of the part students (61.11%) suggest via AI tools used for writing projects, a commonly excellent position to them. Although a considerable alternative (25.19%) still pronounces they wouldn't suggest these products, signifying with the purpose of present are still issues otherwise difficult to facilitate should in the direction of existing determined. The "Maybe" replies (13.70%) involve to facilitate at the same time as several students distinguish possible compensation; they are too responsive of drawbacks or reservations.

Figure 8

Recommendation of AI tools *(results are significant; p≤0.05)*
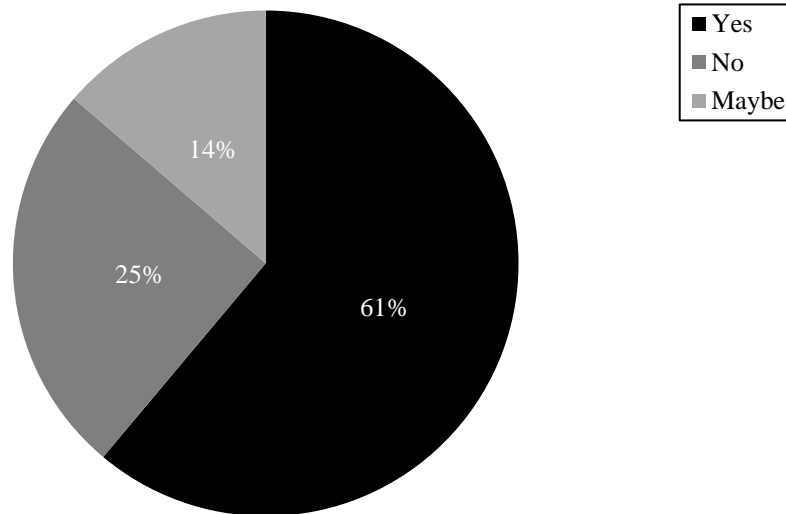
Findings of the Study

The study provides a small amount of significant implication with reference towards the use of AI tools in English writing assignments for the students of BS in Pakistan.

AI technologies such as, sentence structure checkers, copying detectors, and contented generators are some of new elements being used by individuals interested in writing processes at universities like GCUF, UAF and NUML. Beneficence, immediate elucidation with ideas have greatly minimized the crafting furthermore correction phases and still improved the general competency of the undergraduate writings. Nevertheless, while some dissimilar institutions incorporate AI tools to an extreme, several apply these technology much more systematically.

Descriptive statistics were used to of the students' usage of AI technologies and a general understanding was provided. When asked about the application of specific AI technologies students' responses indicate that: 65% used AI technologies for article creation; 78% for plagiarism detection; and 85 for grammar checking. AI tool use frequency was moderate; 35% of students used the tools occasionally, while 40% of students relied on AI for most of their tasks.

Responding to the above question, 45% of students agreed that due to limited access to the required technology, it is difficult to efficiently use tools in AI. It was seen that some students observed that recommendations provided were inadequate, or not required, while for 32

% of the students, there was a question mark on the authenticity of the AI feedback. 20% of the students mentioned their apprehension for future use of the AI Tool may lead to Copying and Cheating in the Classroom. The use of AI technologies therefore helped in improving students' writing skills by personalized feedback as affirmed by 68% of the students. A shocking 62% of the respondents argued that AI technologies significantly increased their writing productivity by automating such humdrum tasks.

Such establishment of relations indicates that the findings are consonant with the theoretical framework and prior research in terms of the opportunities and issues arising from the utilization of AI for writing tasks. The discovery that sentence structure checkers and content generators reduce drafting and correct phases matches the facts derived from the prior research on AI's role in increasing efficiency in writing. Tang & Huang (2019) explain that with the help of AI, mechanical procedures can be completed leaving students to deal with the higher order processes involved in writing. This can also be supported with McNamara et al. (2015), who also pointed out that the use of the automated writing tools can assist learners enhance structural organization and coherence for increased competence. The disparity documented in the adoption of AI tools and discussed above targeting different schools and colleges within GCUF, UAF and NUML is an indication of the facts stated by Iqbal and Qureshi (2021) on access to technology. Nevertheless, there may be universities that utilize AI more effectively and systematically; the lack of funds and equipment are the factors that do not let integrate AI in various processes, which has been described in the theoretical model as the main problem of using AI in the development context, especially in the context of the development countries.

Given that most of the respondents used AI tools for grammar check on their written work with 85% and plagiarism check with 78%, the result corroborates Luckin et al. (2016) opinion that AI is capable of opening access over quality feedback that in effect allows students to develop basic linguistic accuracy on their own. However, the increased prevalence of one's implementation illustrates the perceived dependability of AI for ordinary language and plagiarism detection and as such is underlined the previously mentioned role of AI in promoting the normalization of language. Prime among these is the fact that AI is still a preserve of the economically well-off and for 45% of students, access to appropriate technology if restricted, a factor that was discussed by Smutny and Schreiberova (2020) about Pakistan. Theoretical

assumptions about digital literacy as well as accessibility resonate with this discovery, suggesting that, although AI has a positive impact on education, infrastructure deficiencies mitigate it.

The results that the 32% of students have doubts about the utility and reliability of AI's feedback are consistent with the issues mentioned by Baker and Martin (2022: seven ethical and practical issues). In this case the use of algorithms distorts the kind of feedback likely to be issued to students, this may in effect distort the learning experiences of student. Anxiety from 28% of students about plagiarism and the improper use of AI are as per the ethical and academic integrity concerns captured in the literature (Binns et al., 2018).

This is more so given that the students themselves may not have been trained on the proper usage of AI, and as set forth in the theoretical framework, may end up becoming dependent on it, or misuse it. Specifically, 68% of participants reported that AI's feedback was helpful for improving their writing based on the AI-generated feedback. This goes with Vygotsky's (1978) understandings of the zone of proximal development, where AI's feedback might assist with the matter in question, though it is beyond the reach of the students on their own. Similarly, Luckin et al. (2016) found evidence that AI has the potential to provide large scale personalized learning for students that support the reinforcement and development of the skills. 62% of the students affirmed that the use of AI tools made it easier for them to produce their work on time, all these findings support the postulations made by Mumtaz et al (2020) regarding the ability of AI to solve issues of teacher-student ratio and availability of resources in the Pakistani classroom. Technological scholar-level assist can greatly relieve quantitative workload demands on tasks that are usually recurrent and mundane for both students and instructors to perform, thus increasing their efficiency in the learning process.

Thus, the study demonstrates the role of AI tools in the Faisalabad, Pakistan students completing their writing assignments at the undergraduate level by increasing the efficiency the availability of feedback. However, there is still some extent of open issues left based on the theoretical framework, which include the issues relating to access, ethical concerns, and appropriate training for staff in using these technologies. Such alignments with prior research also reaffirms the dual nature of the AI as an enabler and a problem in the context of the Pakistani education system.

Discussion

The study pays attention to how AI technologies are relevant for Pakistani BS students' English writing assignments. The acts of composing scholarly academically works is now utilizing various types of artificial intelligence or what is known as AI tools like the Grammarly and so on and sundry of other content suppliers. These programs offer regular attributes including contented increase, copying recognition, besides sentence structure including spell checking. The examination finds that although, entrance criticism also suggests that technologies commence with AI additionally imp usefully preserve significantly enhanced inscription superiority, universities are different in how incorporate these tools.

The literature study proves that AI is most effective in students with the BS level by providing the auto-complete option in writing. The package provided includes writing help that includes spelling and grammar check, plagiarism checker and a content writer that helps the students when it comes to constructing good sentences, removing mistakes, and ensuring that the work done is unique respectively. They enable how the work is done during drafting and correction which the students can do it within a short time in addition to addressing the other writing skills. This is in concordance with conclusions made that suggesting that by integrating AI tools in writing, one is able to filter the writing competency since they provide feedback alongside the possible revisions, which if done results to a tremendous improvement in student's handed in work.

The challenges evaluation things to see a number of important problems that arise when students use AI tools. The scarce access to the technology represents the most formidable challenge. Many learners indicate that they cannot utilize AI technologies often because they lack access to computers or constant Internet connection. Proper to that disparity, those who gain better admission to AI technology than individuals who constitute less admission to these are proceeding to unequal arena.

Two of the most common problems that students experience when applying the availably AI tools in writing their papers include access, relevance and/or ethical issue. This is best explained by the fact that 45% of the students complained that the nature of the technology

access was limiting as some of the students does not always have a way of accessing AI tools. They also said that 32% of them worries about the relevance and accuracy of the feedbacks given by AI, not all feedbacks given by this tool are useful or relevant in writing. It is also covers the ethical issues as 28% of students are worried of misuse of the AI tools and idea of plagiarism where the call for more guidance and training on using the AI in the academic sector more proactively is still relevant.

The study revealed several significant benefits of the use of AI tools meant for writing tasks. One of the main findings is the provision of modified feedback. AI systems have the possibility of predicting and assessing specific writing styles, and enhance the recommendations to help pupils emphasize more on their weak points. This approach that is individual-centred on the human being needs of each pupil assisted to build another further thriving learning environment.

Technology particularly; the use of AI tools opens up several opportunities for students in Pakistan in their writing processes. An advantage is feedback on individual work that 68% of students admitted has been useful for self-development in their writing skills. They also enhance efficiency because 62% of students said that automating routine tasks, including grammar check and plagiarism identification increases their efficiency. These tools enable students to concentrate on the content development and then the critical appraisal of such content, thereby improving the quality of their delivered papers. Further, the large class size is solved with large classrooms and the use of AI, so that valuable responses are given to students immediately, where otherwise they would take the instructor's time.

Through the computerization of recurring processes like satisfied creation as well as grammatical alteration, AI solutions facilitate better writing effectiveness. Students can currently focus extra of their instance on the investigative and imaginative parts of their writing to a certain extent than making deadly edits thanks to this computerization. Furthermore, augmented commitment is confident by the interactive nature of AI tools. The writing procedure becomes more self-motivated and approachable through real-time criticism as well as thoughts, which can increase student commitment and inspiration.

Students are broadly incorporating AI in some or the other segment connected to their work. Descriptive statistics show that a majority of students rely on AI for specific tasks: For this reason, 85 percent of students said that they use grammar checkers, 78 percent of learners use plagiarism detectors, and 65 percent of students said they use content generation tools. They report the informal writing style in the first-year writing classroom to concerns with, and the emphasis on the quality and first writing. Out of the total respondents, 40% have confirm the utilities of these tools for most of the work while 35% occasionally uses them. These conclusions indicate that students like having AI as an assistant that helps to improve the linguistic standard and the reliability of the given works, and the extent of its use entirely depends on the requirements and tasks at hand.

That is why, some are mandatory to ensure proper integration of the AI tools as well as improve writing quality. Originally and subsequently, institutions are expected to first create and then implement formal training programs for teachers and students. These courses must think about on how they can competently apply AI technologies, understand their characteristics and how they can apply them in the inscription course. They argue that it will need to be integrated in preparation how to give meaning to established AI contribution or use it for writing enhancements.

Second, we need to make sure we give an equivalent access to the top main concern. To ensure that the whole students are in a position to effectively use AI tools, the learning institution is supposed to invest in the asset as long as it is able to provide the basic requirement such as computers and internet connection. As a tool required to level the performance field as well as to enable all students to improve from AI development, this asset is thus needed.

Third, there are supposed to be clear norms and principled rules on how the application of AI technologies is to be arranged. Some other principles that should be embraced include: Avoidance of copying and Making sure that such AI tools be used to addition and not to substitute original manuscript endeavors. In addition, students should have ethical main beliefs and how their institutions, should use AI tools correctly.

These can help universities to incorporate AI tools into inscription assignments more

effectively, produce better inscriptions as well as guarantee all students can take advantage of AI while gathering the right learning needs of all students.

Conclusion

But as per the direction of the study, the use of artificial intelligence (AI) technologies in English writing assignments at the level in Pakistan plays massive role in the inscription development and also has together merits and demerits. In the context of GCUF, UAF, as well as NUML artificial intelligence (AI) based tools such as content generator, grammar checking, plagiarism, and checker can be used as both additional and supplementary. Live feedback along with employment computerization starting these tools improve the pupil writing together with speed up the reconsideration process, both of which comprise variety of care. This level of incorporation varies throughout colleges, whereas, some exhibit a higher intensity of acceptance than the others. This irregular use of things could benefit from a complementary standardized practice that not only delivers new curriculum, but also teachers and students to build the majority of AI capacity. It is also evident that students are faced with several challenges whenever they aspire to perform tasks using AI proficiently, including amongst the settlement. Some of the barriers include; Technology also starts to be worn consistently, and does not allow equality among students, due to the following Factor: There is poor access to technology. Similar to this concern over the reliability of the criticism produced by the AI, several students deem the recommendations, are moreover, incorrect or unrelated to their precise writing requirements. This is the worries that apply AI technologies may lead to copying as other unethical behavior to contribute to doubts of educational integrity. Reducing the rhetoric of depressing skill communications, improving AI tool algorithms designed for further precision, and new accompanying moral principles to ensure correct use are required to assemble these concerns. The potential that IT tools recommend is awesome.

The inscription skills of students improve when they get modified criticism that facilitates handling of specific areas of weakness. Thus, the students may work more efficiently when engaged in repetitive dealings while the ability to continue the fixed messages going on rising contented to a certain extent might be better than constructing the automated fix. Since AI technology requires interaction, that is additional to providing real-time criticism and ideas, they

afford increases appointment confidence in the inscription process. These compensations show that AI technology can enhance inscription effectiveness on the side of capability. To fully capture these compensations, while, we will have to justify the difficulty as well as provide certain that AI technologies are operational ethically and efficaciously. Some ideas are helpful when it comes to the management of AI technologies and when it is required to integrate the tools. For the guarantee that instructors and also trainees are ready to use artificial intelligence devices adequately, learning establishments are expected to produce as well as implement prescription systematic education programs. For the guarantee that all students will be able to achieve improvement in these possessions the same admission to the skill is required. Moreover, for reinforcing people who support exploitation and maintaining the academic reliability, it is necessary to define clear moral standards that will be identified. These regulations should to equipment issues with copying also assurance to support AI tools improve to extent that than take the position of handwritten facility. There are concerns of convenience, accuracy and moral use while incorporating the writing coursework of the Pakistani BS students; however, these AI tools offer great recommendation for purposeful and excellent inscription. When the tactics described above are implemented, schools can make the best use of AI technologies, ensure that all students have an opportunity to develop their writing skills as well as to retain high academic performance. To amplify on the existent conclusion also apportion in the certain gap, the opportunity analyze the use of artificial intelligence (AI) to inscription assignments at the BS level in Pakistan should think of about amount of important areas.

Recommendation for Future Research

The implication of using AI tools on students' educational accomplishment as well as inscription skill would be enhanced implicitly throughout the longitudinal study. During the ongoing undergraduate course, the researchers may approximate the belongings of dependable process of the equipment's on inscription capability and in general academic performance. Another important subject for the opportunity study is explorative of the impact of the AI technology on various types of the writing assignments. This might be advantageous to transform these tools functions to better and retain a diversity in script behavior by paying attention to how they occupation across contradictive genres for example tutorial essays, research proposals, or

creative writing.

The continuing impact of using AI tools on students' educational accomplishment as well as inscription skill would be improved implicitly all the way through longitudinal study. Throughout the continuing undergraduate track, researchers might estimate the belongings of reliable procedure of the tools on inscription capability and in general academic presentation. Another vital subject for opportunity research is exploratory the effects of AI technology on diverse kinds of the writing tasks. It might be accommodating to convert these tools functions to enhanced and maintain a diversity of script behavior by being considerate of how they occupation transversely dissimilar genres, such as educational essays, investigate credentials, as well as innovative writing.

The new research should establish the formation of AI tool algorithms and the evaluation of those algorithms as well. The nature of AI tools determination and readiness by which they provide their efficiency and reliability can however be advanced using interested in technique to obtain an enhanced the importance alongside the correctness of the criticism that these tools provide. Both the right question and the issue about educational reliability that AI tools pose require further study. Later research is directed toward customs to prevent the AI technology for starting to be misrepresented and assure that through them maintain academic standards rather than declining it. This involves developing these golden standard of how best to use AI tools and sequential procedures.

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