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Studying the Impact of AI and Virtual Revolution on Language Classrooms in South Punjab, Pakistan

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Abstract

In this regards, this paper completes the virtual revolution in the language classrooms of South Punjab, Pakistan. As analysts find the right tools and the appropriate knowledge to match up to virtual learning platforms, language education is gradually reconfigured. Nevertheless, they do affect language learning, teaching method, student involvement, and crude educational outcomes in the region studied for this research. The study utilizes data from quantitative and qualitative surveys, interviews and observations in classroom to investigate the current use of AI tools and virtual learning platforms to design the tools and platforms more effectively in ensuring greater learning experiences. This shows the acquisition of several resources for the students is made possible due to AI and virtual learning technologies that allow them to have a personalized learning that will keep them always on the move to learn. Indeed, it too points out problems (or lack thereof) with the infrastructure, the real training of the teacher, and the degree of cyber literacy that this can provide solidity to it. Findings of this thesis are an idea of the opportunities and the problems when you incorporate the use of AI and VR based tools to replace physical classrooms in the language classrooms in South Punjab and also, provide solution to overcome the difficulties in adopting technological tool and how the perks of use educational technology could be used in South Punjab.

Keywords: Artificial Intelligence, Virtual Revolution, Language Classrooms, South Punjab, Educational Technology, Teaching Methodologies, Language Acquisition, Digital Literacy, Student Engagement

1. Introduction

In spite of how drastic the educational background of Pakistan has been in the past few decades, the South Punjab area has been significantly more so about it. These changes have been greatly influenced by the emergence of these technological innovations and increase in the virtual learning platforms. We have mobile devices everywhere, penetration of internet into the market, and therefore there are some records of applying technology in the ifs of



education. But language classrooms have been through the biggest change among all, and the AI tools and virtual platforms now bring in the much needed new energy to the way we teach and learn. This is because in the world of technology, due to globalization and the many aspects of international communication, with the high number of job opportunities requiring the knowledge of number of languages.

In this process, the automation of grammar checker apps like language learning helped by such tools as personalized language learning apps speech recognition software and so forth to change the language learning process. Apart from them, the virtual learning platforms replace the traditional education to the third party with remote education and this has always been a win situation for students living over south Punjab area where there was lack of quality education. Thus, they are able to outmatch the distance between the old language teaching methodologies and the new virtual learning environment.

These have an enormous potential, but have been slowly and unevenly adopted and more specifically in South Punjab, which is mostly rural and semi rural. However, the challenges of executing the journey with AI and virtual tools come without saying, there are some. In addition, there are poor infrastructures, the teachers and students are digitally illiterate, and there is little financial resource to purchase the latest technology in education. Cultural factors as well as traditional thinking of some teachers have been able to function as obstacles to the acceptance of the new methods. Consequently, since reality is this in the world due to how technology is influencing language education, language education has to be taken into consideration under technology angle so as to know how it has influenced language education and where it fails to.

The objective of this research is to explore how AI and virtual learning technologies affect the South Punjab language classrooms or at least the language classrooms or programs among these four distinctive things: language acquisition, teaching methodology, student engagement, and overall academic results. The search for the step by step way of how these tools of language education are been used will be qualitative and quantitative.

1.1 Problem Statement

However, technological resources are being made available at all the educational centre, but still, many schools of the South Punjab area use to have the problem in incorporating virtual learning tools and AI. One of the main obstacles is that it does not have sufficient infrastructure. There is technology like AI and virtual learning platforms available on the internet to the region, but mobile phones and the use of the internet has increased up to the region without a readily available high speed internet access in schools to use these bits of technology and tools. However, fear could also be in doubt of adequacy of hardware to use these technologies in the classroom because there is also fear that a computer, tablet and even a projector might not be adequacy in the classroom to use these technologies.

There is also one other very important challenge among them, and that is, students and teachers themselves are not very digitally literate. Speed at which the school going students of South Punjab are getting acquainted with the use of smartphones and other digital devices is growing, but they don't have the skills to explore the educational software; doing so without a proper guidance to them will not only waste both the time of user and the programmer. Secondly, very few of the teachers' are well trained to by using the AI tools or the platform fort development of their teaching skills. Nevertheless, this professional development and training gap leaves a capacity – practice gap in the quantity of possible benefits these technologies could bring in terms of classroom use, versus use.

Furthermore, having the education system with an AI and virtual platform will be too expensive an expense. Thus, most Public Schools in South Punjab may not be able to bring their school system levels up at least to par with minimum levels in public money, so they will have to resort to technology over increasing teachers' numbers, overcrowded classrooms, rudimentary infrastructure, etc. In addition, incorporating such AI driven tools or virtual learning platforms is not possible for most of the organizations because they are beyond the affordability factor.

But it is foreseen that till the artificial intelligence, virtual learning and application etc. emerge, these challenges will exist, because the artificial intelligence, virtual learning and application is sought to be worth in the improvement of South Punjab education. These technological innovations, said more precisely, will also enhance students' experience during language education as they will have a more personalized learning which can be perfect with more resources and an exciting experience of learning. For this being the case, these technologies have to be personalized in the light of the socio cultural context of the region. Further questions explored by this study will include an extent of AI and virtual learning technologies that were applied to support South Punjab language education, problems encountered by students and teachers learning with such techniques as well as their impact on student learning in terms of language proficiency and general learning engagement assessment.

For example, this research in this study will have technology, efficacy of teachers, attitude of students and institutional support. But in this study, there is a focus on the effect of AI and virtual learning technologies on the subject language education in South Punjab and what barriers aspects should be transgressed to make the subject understanding of language education effectively. Second, it will proceed to analyze how some of these technological advances can be utilized completely in language classrooms to enhance language learners' global skills, as well as their learning outcomes.

1.2 Objectives of the Study

- To investigate the role of AI-driven tools in language teaching and learning in South Punjab.
- To analyze the impact of virtual classrooms and online learning platforms on language acquisition.
- To assess the perceptions of teachers, students, and administrators regarding the effectiveness of AI and virtual learning in language classrooms.
- To identify the challenges and barriers to implementing AI and virtual tools in language education in the region.

2. Literature Review

Due to use of technology, there has been an occurrence of an artificial intelligence (a.i.) and a virtual learning platform in the education sector which has created very many opportunities for them to teach and learn languages. However, all this due precisely to a background like infrastructure, economy, and naturally, culture. It reviews the general challenges and opportunities, based on using the same techniques in virtual learning in language education in South Punjab, Pakistan, keeping in view its application worldwide.

2.1 The Role of AI in Education

Yet, too many of such fields grabbed much with AI and AI is widely present in the field of education, at the time being. Adaptive learning systems, intelligent tutoring systems and language processing software etc were studied as regards to personalization in learning (Johnson et al., 2018). Data analytics based systems, which tracks the performance of the student, quantify the breaking learning gaps, and measures the adaptive change in the path of learning probabilistically based on the needs of the student, are these. The area where AI technologies have made

the most impact and help most is, where by default, the need of a personal attention is very difficult or almost impossible, especially large classrooms and schools, which suffer from resource constraints. One of the machineries of supplying a differentiated learning is giving the student an opportunity to learn at his own pace and to help promptly in his own weak point in such a manner that he could learn better.

Such an example is that of using AI in learning languages (translate language automatically, voice recognition software and using it in grammar and vocabulary checker). The reason is that is that with the these technologies you can have the student (and anyone else for that matter) rehearse language (or any other matter of fact practice, for that matter) speak and listen, read and write without supervision. The AIs applications based on language aid to the learners to take up an active role in classroom activities; for the language, these help them figure out the conversation simulations that are yet to take place in the classrooms. Chung and Lee (2020) give that an example of AI enabled tools that enhance the student learning outcomes, is apparently because these tools provide the immediate feedback that students can adjust and form the correct use pattern instantly.

Additionally, AI tools have proven to be very useful as a helper in studying languages in some such field as speaking and pronunciation, in which there is nothing artistic and the regular classes simply cannot provide. The students get instant feedback from the speech recognition system in the realms of pronunciation, intonation and fluency of where they stand in their efforts. Well the truth is because English (syntax and the way words are employed) are difficult rules, and you cannot properly use grammar and spelling, AI creators were able to lend a helping hand to improve writing skills by way of giving a writer instant aid so that writing is done in actual use of grammar.

However, it is worth noting that the fact that artificial intelligence is quickly developing and has a chance to fill the gaps in the classroom bears no gap in its sense between the developing and under developed parts of the world after its introduce in both. Besides this, Mahmood & Ali (2021) also explains that the AI tools cannot be integrated into the educational system for the point that the schools do not have computers or have the access to internet. And to fill that gap, there is also a requirement for the shortage of teachers who could handle AI and bring it up in its talent as teachers. In this way, the possible implementation of different AI technologies that can modernize language education can be done but this exists as an empty tradition in the majority of the sections of South Punjab.

2.2 Virtual Learning and Language Education

Since then, there has been a total revolution of the way education is passed over in the language to virtual teaching. Nevertheless, virtual classroom and other video conferencing tools and online educational platforms combined with flexibility, accessibility and interactivity, it has given space to virtual classroom both very much available to the students. In the end, it is of use to the special students that may be available in the rural and recruiting areas that are said to have little access to invaluable educative resources. In addition, while attending the virtual session, they are also given many learning materials such as online dictionaries and grammar lessons and they are allowed to have live discussion to accommodate different learners and their style and preferences (Brown and Green, 2019).

A well managed virtual classroom can greatly increase the language skills of their students because they will have a number of both the normal and the modern learning experiences provided in it. They also use the adoption of these platforms for students to learn on the real time basis and receive immediate feedback from the tutor in addition to student interaction with other students and the tutor through chatroom, discussion board, and collaborative project. To start with, the virtual learning environments can be a self directed learning spaces in

which the students learn by their tender time, repeat and access learning materials. Per Brown & Green (2019), although, this flexibility is not for the sole reason to enhance their language proficiency, but for them to recognize the value in using the language to be confident, autonomous, and motivated to use the language outside the usual use.

However, the issue is an opening because there were virtual learning platforms introduced in South Punjab. Consequently, in this sense, rural population had a hard time accessing quality education, hence the geographic chapter of rural population has historically had the biggest rural population that still keeps most of them poor and that has made it so difficult a point to access. In view of this, virtual platforms can provide a solution by making students have access to learning materials and teaching resources that were not available in the past. Thus, in the case of student that living in a rural area, that pre concession gives them the possibility to attending live language lessons via video conferencing, to have group discussion with their peers and to access the digital learning recourses as long as there isn't far to attend physical school. Virtual learning can democratise the process of language education, and can thereby be for students of those communities that have been deprived of taking up learning through the same avenue.

Despite the glaring weakness of virtual learning not being fully adopted and technological adoption quite inadequate, there is a promise of virtual learning and remote parts of South Punjab are yet to realize the benefits from here. Until now, people in course of rural areas have been facing one of the major issues that is reliability of internet connectivity. There is not usually such necessary infrastructure in a city like Multan to make unhindered uninterrupted high profile internet services. Many schools in South Punjab are such that they are facing the issue that they don't have network connectivity on which most schools in Pakistan depend on for online learning, thus making this an unreliable and ineffective way of learning (Zia, 2020). Then internet may be at times not continuous, internet is available for only a few hours of the day, which would make it difficult for the students to attend online lessons / resource on daily basis.

On similar lines, significant digital literacy gap exist between students and students as well as between teachers in South Punjab. The students of today's generation are already familiarized to the use of mobile phones and computers, we can read the ease of use on their faces; however, most of the teachers themselves are not familiarized to this revolutionary learning platform, much less using it as a way of improving the teaching skills. Therefore, the students will keep having poor results and therefore not make optimum use of the virtual platforms.

2.3 Impact on Teaching Methodologies

Some of the activities involved with the integration of the AI and virtual learning in the language classrooms has presented a new dimension to traditional teacher centered learning and student centered learning. This, then, is not the case of traditional language teaching in that, it is in this case that the teacher both defines and regulates the orders and rules of the classroom along with the actual courses and lessons of the classroom. That's why AI is coming to education and going towards the personalized learning where now the student has more voice of opinion in how one learns. It has tools (like intelligent tutoring systems) which actually can let you watch real time when a student encountered the wall and when a student came to wall.

I think that of all things, one of the biggest influence that AI could have on the style of teaching is to make teaching area suit the need of learners and be tailored to each learner since it is used. Under the term of illustration, these AI platforms can be used to watch over the students marks or to observe if they are capable to resolve exercise problems, if they are, then they can be determined to the difficulty level that will fit in their capacity without any problems. This means by mixing up the stronger students with the weaker ones you do not allow the

latter to fall behind, but also do not stress out the former instead you are just taking your learners to where each one of them belong. For an effective reason, this adaptative learning technology is quite useful in the language classrooms because students generally do not have the same proficiency level. If this is the case, then we can say that the AI tools can be very closely, if not, quite helpful to deliver personalized, engaging, and supportive experience to students to learn a certain language.

Besides, AI and virtual tools provide personalization in learning process, are more interactive and collaborative learning places. The communication and collaboration between the students and teachers are realized based on the virtual platform such as video conferencing tool and an online discussion forum in realtime and with no physical barriers. Generally, one needs a participation, practice, and an ability to learn a language, that is a participation very more specific from the expectations of a language learner. Virtual learning environments are possible to hold talk live with each other (i.e. roleplaying, group work, etc.) which is an actual real world language use and social interaction possibility.

The even is the association of high ranked cognitive skills such as critical thinking, problem solving and self directed learning both to themselves and to virtual gadgets that facilitate them as well as to chatbot. As a result, they have the opportunity to work regularly alone, with others, without having to use language in any manner and to investigate, study and discover at will, or by themselves. Hussain & Fatima (2022); this student centered learning then becomes a teacher centered learning, the teacher as protagonist of the language learning that the student become more intense in learning, so that the student learn deeply and be able to remember the language skill well because he who too much participates in the process of learning.

In general, the last influence of AI or virtual learning is teaching. Such tools are making it possible to help move the language education away from one size fits all, traditional learning experiences to more personalized, interactive and student oriented ones. However, South Punjab could not load all these technologies with all the intricacies that are part of infrastructure, teaching methods, students' support so that students can get maximum out of these technologies.

3. Methodology

The purpose of this research is now to find out the effects of Artificial Intelligence (AI) and virtual learning tools in the language classrooms of South Punjab, Pakistan, through this research methodology, of quantity and qualitative method. Our aim is to widen understanding of the subject, so we use the Mixed methods design — all calculation data about the use of AI and Virtual Learning tools, which will be combined with the teacher and students School Prince's experience, perception, and barrier of using AI and Virtual Learning tools in the region. Based on this methodological approach, the outcomes provide statistically validated proof of a quality of contextual richness (sort of a bird's eye view) of consequences which these technologies exert upon language teaching.

In this approach of mixing one can perform quantization and quantization of the data because the result of quantization of the data and quantitation can be cross checked and to options together so as to allow for the reliability and validity of the research finding. The purpose of the method offered is to firstly to use quantitative methods to find out the quantity at which AI and virtual learning tools have been included in language classrooms and secondly to use qualitative methods to discover some of the given participants' encounters with these struggles and potentialities of AI and virtual learning tools.

3.1 Sample Population

The purpose of this study was to sample the language teachers, students and educational administrator of the boys and girls public colleges of south Punjab. Purposive sampling is a non random technique of sampling where participants are selected whose participation will eventually lead to providing information and detailed information to the research questions. Furthermore, these institutions are very stringent when enrolling the colleges who have already manufactured the AI powered tools and virtual learning platform to create the language classroom for the participants, who practically can use these tools. It also mentions the total of the sample population in total.

It also applies to practicing teachers of English, Urdu and other regional languages in the civil as well as in the private schools. They made choices of these teachers whom they knew used without or with the knowledge of use of AI tool, the virtual learning platforms which they knew or used and also those teachers who did not integrate technology in language classrooms.

Students: Group of students from all age groups, educational background and genders (both male and female). Therefore, the AI Learner also acts as a group of the current users of AI Tool who are watching their own virtual learning experiences, although they are currently taking language courses. The sample consists of different characters with varied socio economic background since the study is focused on the effect of the availability of technology to the students on the way teaching.

And Principals, Head teachers and the Generic Educational Administrators who contributed in one way or the other in making AI and other virtual leaning tool to be used in colleges. Meanwhile, having the participants pose them from this perspective using challenges, policies, and strategies of adopting technology in the classrooms is immensely helpful.

Because, the study uses participants of different sorts to get a more broad insight into how the virtual learning technologies and the AI have or will have impact on the language classrooms. More particularly this study shows how these support structures are germane in all the operations of a school entity with the exception of teachers and students. It gives more particulars on the operational and functional effects of the tools when deployed over and above the instructional and learning processes other than the case of teachers and students as individual units.

3.2 Delimitation

Boys' and girls' public colleges in Multan City, South Punjab, Pakistan have been referred within the context of study. The reason I chose to concentrate on public colleges of Multan is that. Second, being one of the major urban centers of the south Punjab, Multan has better development of Educational Infrastructure than the rural or remote areas. While looking at how AI and virtual learning tools are causing the language education of schools through the studying of an urban center in particular and schools with more access to technology, I have conducted this study. We would also look at the public boys and girls colleges on grounds of gender differences in the adaptation of and consequences of AI as well as virtual tools for use in the language classrooms.

The second reason is that in this case the objective is to discover how much the innovation in Artificial Intelligence and Virtual Learning tools can be involved in the supply of public education provision in a resource constraint area, in which private educational institutions are excluded. Also, the research is further excluded rural areas to limit the research only in educational places in urban areas of Multan. Though limited by this assumption, findings do not apply to the rural context, but they allow us to examine some of the challenges and opportunities of public colleges in this major urban city context.

Moreover, the study is limited to language education and no references should have been used on how the application of AI and these tools influences any of the subject areas: sciences or humanities, in the selected organizations. This study however does this in a language classroom and analyzes the occurrence of technologies applied in a language classroom and their impact in realizing effective methodologies in language learning and teaching and affecting students' participation in language education industry.

Nevertheless, the research findings on the mechanism of adjustment of the AI and virtual learning device in Multan public colleges can be employed for inputs to similar adjustments in other preparation institutions in south Punjab and private and more so, rural colleges. The author mentions that he may study further in the future on sample areas in other areas of the province, the type of educational institutions or the subject area to understand their effects on education system in the south of Punjab.

3.3 Data Collection Methods

For this set of research, the data is supposed to be rich and diverse hence three forms of data collection are used, which are surveys, interviews, and classroom observations. There is a reason for each one of these methods to be there during this process of helping overall resources.

Second, it can be surveys, used to give quantitative data based on how AI and virtual tool are used in the language classroom of teachers and students as well as teachers and students' perception of AI and virtual tool in their L2 language classrooms. Through use of virtual surveys, we make use of AI and observe the tools stated above and the issues in terms of privacy and our opinions on them. The case of survey are the evaluated, how often, if the tools are used, which tool or platform is used and if the technologies are useful for language learning. Using the data collected through the surveys, I analysis it on the basis of demographic information acquired to find out whether it is some other factor (age, education and socio economic status) that make them use, and in certain extent be effective, with the tools. In the questions related to surveying the teachers, it is to know to what level of easiness or difficulty it would be for teachers to use the virtual tools and AI among the teachers, and to what extent the teachers are informed in the use of these technological tools, among them. They should also have an idea of how confident the teachers are about the extent to which the AI and virtual tool can be applied to the teaching practices with the possibility of ensuring that they understand the application of the tool from the scope or the perception. The student survey pertains to their involvement with AI tool and virtual platform, impact of the tools on their motivational and performance in language learning, and overall satisfaction on the learning experience.

Lastly it features: Interviews with their own perceptions, discussions with teachers of languages and with their own students and with other educational administrators in order to understand how these perceptions, and their experiences with AI can be evaluated and what implications they could have. This is actually what I mean in this is a semi structured interview it's not pre defined what the actual points are going to be but you can go into those points if they come up in what the guys are saying. Through these interviews, they are set to increase the level of understanding we have of other reasons why the teachers did (or did not) adopt (or resist) the use of AI tools, what challenges the teachers face and how they overcome those. When the researchers interview with students, the researchers try to understand how the student can learn a new language with the help of technology, how the researcher should be involved with a process, and what is the improvement about the skill the student needs the support for it, etc. Employees will say, how Virtual learning and AI can be integrated into the curricula and what are the challenges and the support required in the institutional level so that the schools can be scaled across the region.

Virtual qualitative interviews give respondents time to elaborate on their experiences, resulting in a richer data set than you can gather through surveys alone. As such, the usage of these tools makes more sense when it comes to how they influence the application, and the data and tools are used to explicate quantitative findings.

Classroom observation: if we were to do so, how could we place the AI and virtual tools into the language classroom; what effects would it have on the student's involvement and language acquisition. The researcher investigates things which seem to be exercises of the above proclaimed things, which are basically that AI based gadgets are a genuine piece of the client experience. For instance, word interpretation apparatuses, brilliant considering on, and frameworks for cognizant preparing. In fact, the students' engagement, the students' engagement and the teacher's and the student's exchange are paid attention to. It facilitates the researcher see how these tools are used in practice of teaching and how the students react to them right away.

It also aims at the observation of these technologies for the understanding of the teachers' obstacles when implementing these technologies into their practices (technical problems, lack of student involvement, etc.) and how to translate them into AI and virtual tools in the classroom as well. In addition, the researcher is able to develop the possible extent to which AI and virtual platforms could be that learning environment relevant for collaborative and interactive learning to language preparation.

3.4 Data Analysis

The classroom surveys, interviews, and observations are analyzed quantitatively and qualitatively. Two stages have been seen in the one step quantitative data analysis in which quantitative data analysis comes firstly and then quantitative data analysis.

Respondent's data obtained from the questionnaires is then analyzed using some statistical software in order to find trends and patterns and to check whether the respondents correlated. In language classrooms, descriptive statistics of frequencies, means and percentages have been calculated and numbers have been applied in relation to AI and virtual tools. Moreover, one would be able to develop inference as to how variables such as teacher training, using technology, and student performance are related through the means of inferential statistics such as chi square test or regression analysis. For this reason, that analysis can be used by the researcher to find out the level at which virtual learning tools and AI can influence language acquisition and other considerable results so that the researcher can acquire an accurate result for using these tools.

Therefore, qualitative Data Analysis through Thematic Analysis of the interviews and classroom observations allows meaning to the recurring pattern, themes and the insight to the experience and perception of the Practitioner. In the later concept, the data is themed and interpreted to find if the data makes sense or has some common them or trend and it is coded categorically in the data. The Data collection process for the students' emotional perspectives in the use of virtual learning environment, the teachers' attitude towards AI and the challenges they face in the Integration of technology in the classrooms are qualitative; hence the researcher is at liberty to enjoy more freedom in the process of collecting data.

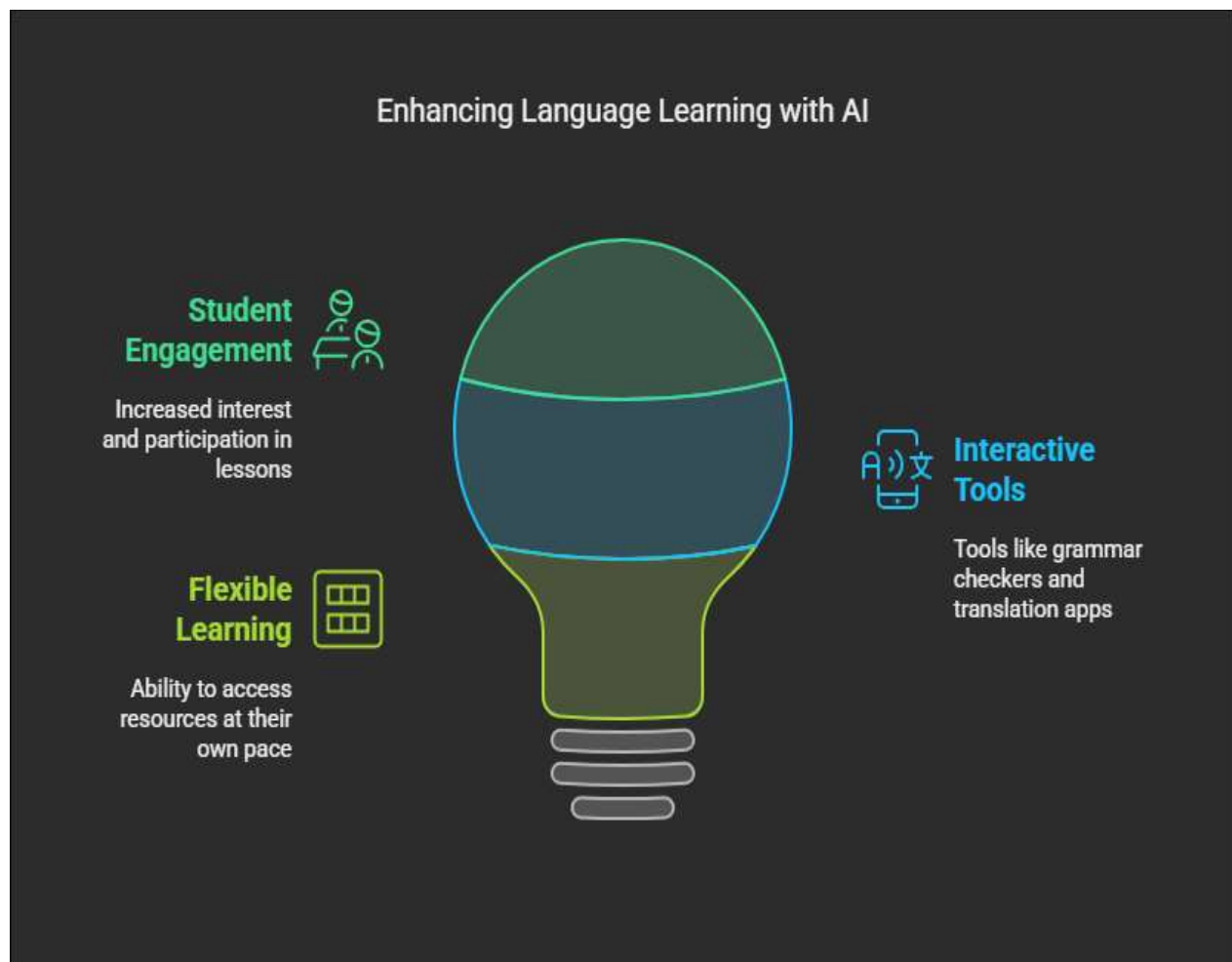
On the basis of the observation data, it attempts to measure the impact of AI, inventor's tools and gadgets on the participating, engaging, and language learning outcomes of the students. Second, particular situations of the interaction the students have with the AI tools, and technology as applied to this delivery of the lesson is identified and the observational notes are analyzed.

Additionally, it was found that the results of the quantitative and qualitative analyses were integrated into one result to determine and how AI and virtual learning tools can be helpful for a language classroom of South Punjab. These project findings have both a statistically validity and a contextually robustness for the purposes of informing the educational, policy and researcher audiences in making decisions on this issue to further develop technology empowered language education in the region.

4. Results

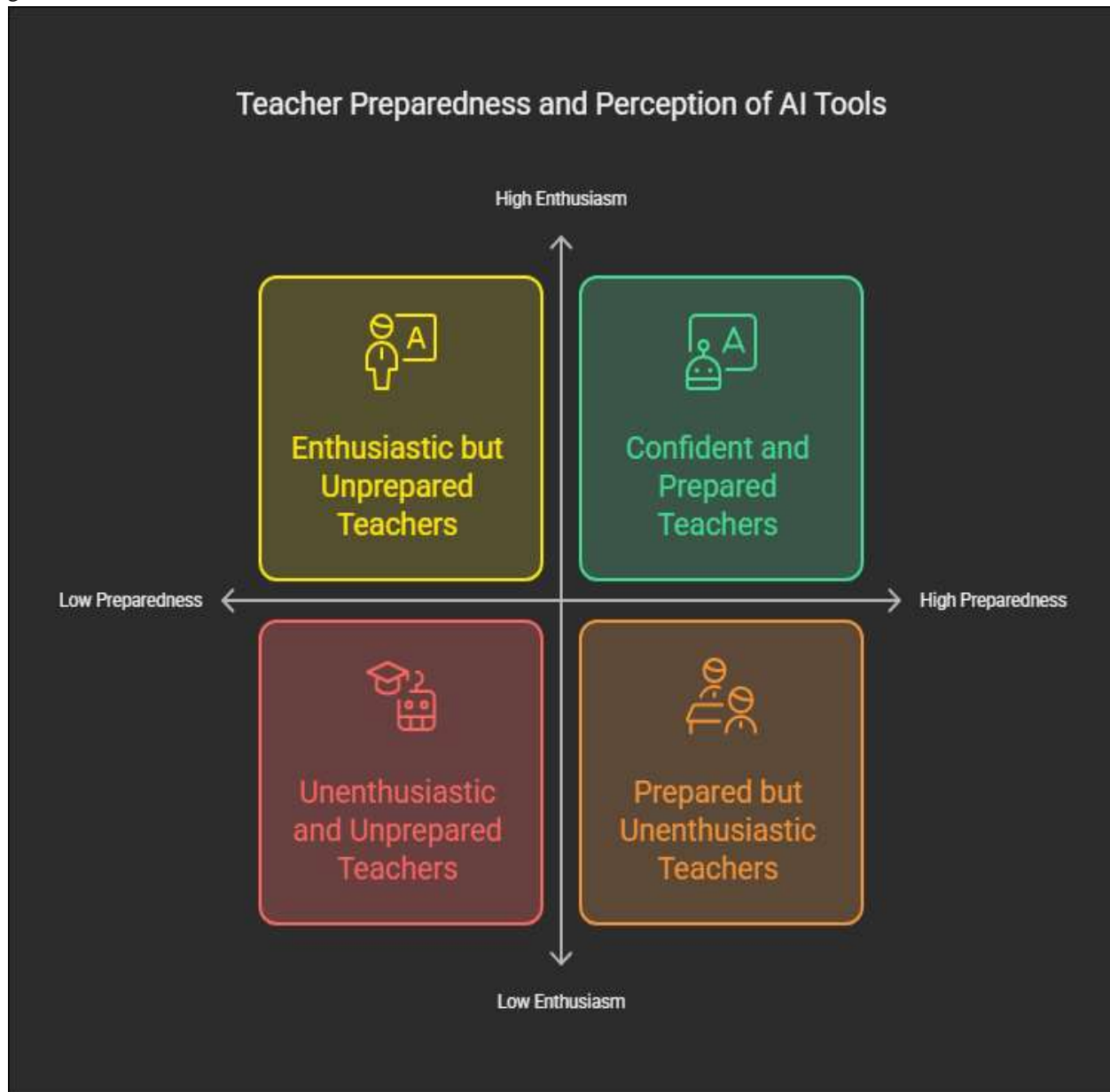
4.1 Impact on Student Engagement and Language Acquisition

Having said that, initial evidence showed that the unequivocal positive impact on the student engagement brought by the AI tools and virtual learning in the language classroom. In particular, students had the impression that, when handling AI powered language tools – interactive grammar checker and translation apps –, the teacher's lesson was more charming and enticing as he was more pleasant and clear when using them. Secondly, the learning virtual platforms also give free and enough learning; learning fit enough for a student to easily acquire the language.



4.2 Teacher Perceptions and Preparedness

An issue was reported by teachers regarding their level of preparedness in the integration of AI and virtual tools into their classroom teaching. Some teachers stated that they were excited and comfortable utilizing the technology while others stated a lack of training and resources as tremendous limiting factors. Educators were already aware of AI's potential to individualize learning, but they expressed an ongoing need to train professionally to reap its gains.



4.3 Barriers to Effective Implementation

Barriers in doing so were found in South Punjab language classrooms. Newspapers, internet reliable interfacing, access to digital devices or digital literacy of students or teachers, were all non-existent. Other major challenges

apart from that were the cost of the AI tools and the lack of institutional support.



5. Discussion

Finally, this research is further supported by the finding that global research has revealed that AI and virtual learning can help to improve language training by providing customized learning, building engagement of students, and so on. However, other issues (poor infrastructural support and lack of training for teachers) in South Punjab hinder the technologies from utilizing the outmost.

5.1 Opportunities

However, it is a virtual revolution that has ensured that the students of the South Punjab should not be deprived of the facilities based on the geographic constraints if something is beneficial in as far as the learning of any language is concerned. If virtual classroom and learning with the help of AI powered tools can follow this, it can lead to collaboration and interaction between the students that can be handled by the mediated discussion within a proper online platform and learning the language can be more introspective and personal than in the classrooms there.

5.2 Challenges

Nonetheless, the combination of AI and executing online learning has the prospective to deliver a variety of advantages, with the obstacles incorporate absence of framework, dearth of resources and low level of the instructor's preparation for effective joining of AI and leading online learning. However, these are tools of which policymakers and educational institutions can use only if they are willing to spend time and money on technology and the development of teacher profession.

6. Conclusion

Language education may be changed in South Punjab by adding AI and virtual learning technologies. However, school systems have great challenges to implement these technologies effectively in the region which mostly has positive impacts on student engagement and acquisition of language. It is about imperative, which means, the infrastructure problems need to be solved, the teachers need to be invested, all digital resources need to be provided equally, etc. since those can maximize the benefits. More research should be undertaken to find out for how long these technologies can affect language proficiency and also to learn how these technologies should be put to use in the language classrooms.

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