

The Positive and Negative Impact of AI Tools in Teaching and Learning Pedagogy and Assessment on the Performance of the Institution

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Abstract: This work of research throws light on the new arenas of education. It is high time for us educators to come forward to help the needy in education. The project collected evidence through the survey done among the students, parents, and the teaching fraternity of the institution to understand the need for change in educational pedagogy and the theories of educational innovations. The research inculcated many modern techniques of teaching with AI - VAK teaching pedagogy and Flipped Classroom, Self-Learning techniques, Collaborative Learning, Crossover Learning, Gamification and Spaced Learning and many more to expand the holistic development of the learners. The Instructional Framework for the institution was made after a rigorous research and trial and error methods to infer SEF (Self Evaluation Framework) with the modern approach of educational innovation touching upon all the areas of improvement for an institution as a whole. The draft of the SEF with 6 PS (Performance Standards) will have Performance Indicators (PIs) with the sources of evidence subject wise. As per the SEF the IDP (Institute Development Program) was made with the achievable goals which can be used as the measure for the successful running of any educational Institution. The bottom line is CHANGE is the only alternative for standing high for the coming generations of learners and teachers in the competency-based innovation of education inculcating the noble and modern steps of Instructional leadership streaming ahead with pride being an integral part in INNOVATION IN EDUCATION.

Keywords: Change, Innovation, VAK Teaching Pedagogy and Flipped Classroom, Self-Learning Techniques, Collaborative Learning, Crossover Learning, Gamification and Spaced Learning .SEF, IDP, PS and PI.

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I. INTRODUCTION

This research led me to a successful creation of a school assessment framework which can be used as a regular AI driven analysis tool for a successful running of any institution. The observations made during this research facilitated to the appraisal on the influence of AI on the academic achievements in the high school students through mixed research analysis to frame a successful Institute Evaluation Framework (IEF). There are various AI tools which can be used in education for a very effective and progressive functioning of an institution. They were mentioned and analysed in detail supporting with many literature reviews.

A literature review summarizes and appraises the content of any of the research topics however the need to do such reviews is by no means limited to any specific research. The scholarly researchers generally carry out literature reviews throughout the research work with a careful analysis which are to be practiced very well before starting any Literature review (Galvan, 2009).

A review of literature is a necessary outline of any research work published over a research community on a particular topic of any study conducted related to the topic of interest. The term can be referred as an occupied research paper or a division of a learned work in the form of books or articles. A literature review provides all the researchers and the readers with broad evidence of a prevailing knowledge of a certain area which can be used as reference for the topic of interest. A better literature review will have a suitable research question a theoretical framework and a preferred investigation method. It helps to locate the contemporary learning within the body of the relevant literature and to provide background of the topic selected for the reader. Creating a literature review is often part of any of the studies in any level of graduation requirement including thesis preparation or a publishing process in journal article. Literature reviews have become the common feature in any of the research proposal or catalogue which can be the document approved before a research scholar formally begins a dissertation or thesis (Baglione, 2012).

As per the study done by Wagner (2023) Artificial Intelligence was reshaping traditional literature reviews from corner to corner various disciplines and the procreative pre-trained transformers like Chat GPT and other Chabots are often used by students learning in the modern pace and the modern era academicians for various appraisal purposes in various projects allocated to the learners as a part of assessment tools and in finding fast answers for any questions raised instantaneously.

Though the engagement of ChatGPT in academic aspects for a speculative reviews is proved challenging due to ChatGPT's disposition to fantasize the users. In retort to this, efforts are being made to moderate these illusions through the incorporation of certain inventions in the form of plugins using ScholarAI for a review in cardiothoracic surgery to get fast and accurate results satisfying the investigators (Rad et. al. 2023).

II. REVIEW OF LITERATURE

(Aleven, V., F. Xhakaj, K. Holstein, and B. M. McLaren, 2016) cited with Developing a Teacher Dashboard for use with Intelligent Tutoring Systems.(Aleven, V., McLaughlin, E. A., Glenn, R. A., & Koedinger, K. R., 2016) developed an Instruction based on adaptive learning technologies. (Al-Qadi, M. H. and S. S. Abu-Naser, 2024) who established using deep learning to classify the Corn Diseases in the plants. (Andrea Cueva and Esteban Inga, 2022) illustrated the ICT for education considering the Flipped Learning Model. (Baglione, L., 2012) Writing a Research Paper in Political Science on the usage of AI in education. (Belmonte, J., Pozo Sánchez, S. and Del Pino Espejo, M.J., 2019) projected the flipped learning methodology in the teaching staff of cross-border contexts. (Brown, T. B., Mann, B., Ryder, N., Subbiah, M., Kaplan, J., Dhariwal, P., & Amodei, D., 2020) proved that Language models are few-shot learners for all types of learners. (Celik, I., Dindar, M., Muukkonen, H. & Järvelä, S., 2022) The promises and challenges of artificial intelligence for teachers by A systematic review of research. (Chen, C., Park, H.W. & Breazeal, C., 2020) Teaching and learning with children: Impact of reciprocal peer learning with a social robot on children's learning and emotive engagement. Computers & Education. (Chen, G., Clarke, S., & Resnick, L.B., 2015) Classroom Discourse Analyzer (CDA): A discourse analytic tool for teachers for the Technology, Instruction, Cognition and Learning. (Chrysafiadi, K. and Virvou, M., 2012) Using Fuzzy Cognitive Maps for the Domain Knowledge Representation of an Adaptive e-Learning System. (Ersozlu, Z., Ledger, S., Ersozlu, A., Mayne, F., & Wildy, H., 2021) Mixed-reality learning environments in teacher education: An analysis of TeachLivETM Research. (Galvin, K.A., 2009) Transitions: pastoralists living with change. *Annual review of anthropology*. (Graesser, A.C., DeFalco, J.A. and Cockroft, J.L., 2019. HUMANS, EVOLVING COMPUTATION, SMART INTELLIGENT TUTORING SYSTEMS *Designed Recommendations for Intelligent Tutoring Systems-Self-Improving Systems*.(Holstein, K., McLaren, B.M., & Aleven, V., 2019) Co-designing a real-time classroom orchestration tool to support teacher-AI complementarity.(Hussain A.

Chowdhury, K. Dhruva, Bhattacharyya, 2016) studied Plagiarism: Taxonomy, Tools and Detection Techniques. (Ivanov, D., Chezhegov, A., Kiselev, M., Grunin, A. and Larionov, D., 2022) elaborated Neuromorphic artificial intelligence systems.(James Williams, David Kane, and Gillian Cappuccini-Ansfield, 2008) Made Student satisfaction surveys: The value in taking an historical perspective, Quality in Higher Education. (Jensen, E., Dale, M., Donnelly, P.J., Stone, C., Kelly, S., Godley, A. & D'Mello, S.K. 2020) researched on toward automated feedback on teacher discourse to enhance teacher learning. (Marcus, G.M., Rosenthal, D.G., Nah, G., Vittinghoff, E., Fang, C., Ogomori, K., Joyce, S., Yilmaz, D., Yang, V., Kessedjian, T. and Wilson, E., 2023) Acute effects of coffee consumption on health among ambulatory adults for the automated Grading Systems. (Rad, Arian Arjomandi, Nia, Peyman Sardari, Athanasiou, Thanos, 2023) ChatGPT: revolutionising cardiothoracic surgery research through AI. Interdisciplinary CardioVascular and Thoracic Surgery. (Ramesh R. Naik, Maheshkumar B. Landge & C. Namrata Mahender, 2015) A Review on Plagiarism Detection Tools, International Journal of Computer Applications. (Y., Xu, W., Li, S. and Chen, K., 2022) Augmented and virtual reality (AR/VR) for education and training in the AEC industry: A systematic review of research and applications. (Verbert, K., X. Ochoa, R. D. Croon, R. A. Dourado, and T. D. Laet., 2020) "Learning Analytics Dashboards." on Learning Analytics & Knowledge. (Wagner, Gerit; Lukyanenko, Roman; Paré, Guy, 2022) made a piolet endeavour on Artificial Intelligence and the conduct of Literature reviews.

III. MATERIALS AND METHODS

For the present research work the following AI tools were studied in detail with the literature reviews which support the implementation of the same for the AI driven assessment and framework used for the evaluation of the holistic development of the targeted students in any institution.

➤ Adaptive Learning Platforms:

Adaptive and Personalized learning constantly appraises all the learner's real-time performance. It generates ever-improving individualised learning path by the machine learning. Artificial intelligence is a tool for the growing students' satisfaction of knowledge. It is the vital and the primary purpose of personal growth of all the learners including the educators too. It is being used for the ultimate target of achieving the satisfactory level of any of the institutional performance through innovative pedagogy and learning. Adaptive learning is a doorway through adaptive teaching where the overall educational system is used in computer systems and artificial intelligence. Adaptive learning tools interact and communicate with the learners and designs a customised learning activities which enhances the necessary resources focusing on the learner's unique needs to engage with special instructions. Adaptive learning involves AI, psychology, brain science, psychometric education and computer science and also other STEM subjects. Various components are utilised describing personalised learning models, which can create a better understanding and

interaction of human machines (Andreas, 2022). Many of this appropriate models were developed on the basis of adaptive learning systems to store the characteristics of the learners like prior knowledge, decision making skills, learning styles, self-learning skills, cognitive and intellectual abilities and problem solving skills, (Chrysafiadi & Virvou 2012).

➤ *Intelligent Tutoring Systems (ITS):*

It provides customized guidance and feedback to students. Intelligent tutoring systems are automated learning settings that integrate computer based models from the cognitive sciences, computer bases etymology, artificial intelligence, and all the other subjects taught in the institutions. An Intelligent tutoring system tracks the psychological states of learners in fine detail including the process which is called as learner modelling. This system helps to incorporate a narrative of the computational mechanisms of each type of intelligent tutoring system making use of available experiential assessments and the impact of these systems on the learning gains of all the students and teachers (Graesser, et.al. 2012).

➤ *Learning Analytics (LA):*

It analyses all the data obtained from machine based teaching pedagogy to gain perceptions into student performance and tailor instruction according to the adaptive skills of all the learners. Mining of educational data, analytics of learning and analytics of academic activities are closely related research areas which can be used as and when need arises. The goal of academic analytics is to support in the process of decision making in institutional activities, operational events and financial processes. The inclusive persistence of learning analytics and educational data mining is to recognize the way students learn entered on the investigation of high level data of the educational scenario to support research and practice in education (Drachsler and Greller, 2016).

Amongst the reviewed reports, Human Centred approaches were usually intended for the identification of all the requirements for learning for the designing of Learning Analytics that might be integrated within web-based tools and learning management systems (LMS). Teachers and students along with their parents were the main target users with the purpose of supporting their awareness and decision-making skills of learners and educators' modern means of learning analytics tools were executed in a sequential way (Aleven et.al. 2016).

➤ *Language Processing Tools (LPT):*

For assisting in language learning and understanding through features like translation and grammar correction language processing tools were highlighted to its maximum. A branch of artificial intelligence is another AI tool recently caught the attention of all the language lovers, Natural Language Processing which is a brim-full of intricate, challenging and sophisticated, tasks related to the language. These tools involves machine translation, question answering systems and summarization methods. Natural language Learning Process contains the designing and execution of models and procedures to solve practical problems for a

detailed understanding of human languages touching upon the remote senses of responses (Ivano et.al. 2022).

While using this system users had experienced various design theories like the way of AI technologies enhancing the skills in writing in the context of English as a Foreign Language (EFL) education which was elaborated by Verbert et.al. (2020).

➤ *Virtual Reality (VR) and Augmented Reality (AR):*

AR & VR are placed at the top list of the most advanced technologies of the modern world of techno savvy learners to create innovative educational experiences in teaching of all the subjects including art. The implementation of these tools in teaching and learning pedagogy showed the inventive prospects for refining the education system is enormously on the rise in modern years providing tremendous progress of openings to influence technology learning system in the modern educational scenario. (Tan et.al. 2022).

Students were able to realize and connect more easily when they started using VR and AR in their learning process. Curriculum involving VR created a simulated reality empowering the end users to not only see but also interact with it. This inclusion proved to be innovative tools resulted in transforming the way educational materials were delivered to the learners. Many researchers are working on establishing this concept in more effective way where the items are placed together with VR instead of trusting only on definitions of words and diagrams in books. VR education inspires students to learn by themselves instead of passively imbibing unbearable information through traditional teaching and learning pedagogy but through VR and AR inclusion the students will learn by doing and enjoying with the real or virtual images (Awais et.al. 2022).

➤ *Chatbots:*

They offer instant support and information to students, answering questions and providing resources with any sort of help to the end users. The concern in using such devices is the impending of systems augmented by AI to disseminate biases in existing systems and judgement in present fields of research and education. For producing unreliable or biased results AI systems may be misused or manipulated to any level is a risk. The appearance of a new AI system the most familiar word to all the new gen students is the ChatGPT which is considered to be a language-based AI system which has become an integral part of a larger family of AI technologies known as transformers. According to Brown et.al. (2020) transformers are deep neural networks considered to process and produce categorizations of data in the form of text.

AI chatbots shivered the modern world of education with their potential to transform education systems in a countless ways to provide immediate support by answering questions, offering explanations, and providing additional resources. Chatbots can also support the educators through various means pertaining to the fields of virtual teaching assistants. New opportunities, new challenges with potential limitations, concerns, and prospects of using AI chatbots in

educational settings are the benefits of AI chatbots in education. The research findings emphasize the numerous benefits of integrating AI chatbots in education, as per the needs of the standpoints of students and educators. The students largely gain many information from chatbots powered by AI as in homework completion and act as a tool for study assistance, tool for a personalized learning experience, and for the development of various skills.

➤ *Automated Grading Systems (AGS):*

It streamlines the grading process and make it at ease for educators and other evaluators with faster reports ensuring consistency. This system was used extensively in the institution to get the appropriate assessment with learning criteria for each subject teacher. The automated grading and feedback tools for programming education can be categorized on the basis of assessed skills, employed approaches, exploited paradigm of language, executed degree of automation and techniques operated for evaluation. Correctness of assignments in object oriented languages can give accurate results by most of the research assessment tools customizing the self-motivated practice initially employing criteria for the unit testing and provide grades and feedback to the students and their parents online. Such techniques also contain techniques of static analysis to compare a proposal with a reference solution or with a set of correct measures for the student submissions. The feedback of these techniques is often inadequate as it displays to whether the learners have passes the unit tests or failed. The detailed report showcases the predictable and real output and how they vary from the reference explanation with the areas of improvement (Marcus et.al. 2023).

Using code quality metrics in aggregation with grading correctness a few tools assess the maintainability, readability and documentation of the source code as a part of static analysis technique. Most tools presented fully computerized valuation and report to allow prompt feedback and multiple resubmissions if required by the learners, which can upsurge student fulfilment and provide them with more chances to succeed in the approaching valuation techniques. Most of the automated grading tools mainly use student reviews or equate the automatic assessment tools to grades or feedback provided by human graders. It is more difficult to reproduce results and compare tools to a collection of common assignments due to the recurrent unavailability of the evaluation dataset (James et.al. 2008).

Picking the apt AGS is the skill of the subject expert depending on the parameters to be evaluated and assessed. The data results in generating a customised progression report of the learner giving suggestions for the improvement. The detailed report will help the teachers, students and their parents also to work upon further progress of each learner.

➤ *Gamification Platforms:*

To make learning more engaging and enjoyable gamification incorporate interesting game elements. Due to development in the digital world of learning and teaching gamification is a recent addition which has become the trend and received increasing attention in the past few years.

Gamification was widely accepted in majority as a vital aspect of the modern educational setting as it played a crucial role in e-learning and machine learning environments. Many researchers had done various studies to address a gap in the existing research on the utilization of gamification in education where the gap was existed due to a lack of studies that monitor the developments and effects of gamification in the present educational environment. Such research studies were mandated to provide guidance for future research in the field of impact of gamification in different fields of education and entertainment. As per a research by Al-Hafdi, (2024) such research work was proved to be more innovation and operative in teaching any subject to any sort of the learners, even those having difficulties in understanding any concepts.

➤ *Content Creation Tools (CCT) and Flipped Learning (FL):*

Content creation tools assist in generating educational content, such as automated lesson planning or interactive simulations and the flipped learning is a trend on the modern teaching pedagogy. As per the demands of the modern and technical society introduction of new AI based methodological resources were included in the teaching and learning process indicating productive advancements in the field of education. The introduction of flipped learning method resulted in a modern way of learning to the students of different learning styles for which the teachers were expected to be technologically sound enough especially in the field of innovative digital resources which can easily support to integrate the modern AI technology in teaching pedagogy. The teachers and students and their parents welcomed the new system where the learning styles were proved to be more productive than the years long traditional teaching (Belmonte et.al. 2019).

CCTs were used widely by almost all the institutions where eLearning was the basic trend. LMS (Learning Management System) is an element where the educators create files for the lesson content in the form of AV highlighting the points with quizzes, self-learning tips, practice sheets and then tools for self-evaluation too. This helped all the learners to learn after their school timings and was a boon for the students who missed out certain topics. Even the parents were also guided to login and help the students to revise the portions at home using the CCTs in the form of AVs, games, quizzes, tests of reasoning etc.

Through combined learning which the was the outcome of suitable ICT integration in flipped learning method illustrated that students could create their own way of learning skills and skills of self-learning by getting motivated. The skills of communication between classmates and with the teachers was favoured boosting self-governing work in the learners by conquering flipped learning methods in education. This system also helped the learners to inculcate the skills of analysis of the contents in each subject taught favouring the production of new knowledge in the learners and the teachers. Studying and researching to find out which ICTs can be assimilated as the most efficient tool in the Flipped Learning Model was very much necessary possible from their classroom experience as it has become the a mandate to all

the teachers to upgrade themselves to the expectation levels of the new generation of technology. Flipped learning helped all sorts of differential approaches in education, where all the learners were divided into small groups within the class and given different topics to discuss and learn after a thorough teaching and learning process.

➤ *Plagiarism Detection Tools:*

Since the research field is full of findings and references plagiarism has become progressively serious problematic issue in the academic and research world which was aggravated by the easy accessibility of information in the internet with the ease of cutting and pasting of variable materials existing in the internet. It has become a trend to take others published materials which was referred as a theft of the research work of others and represent the same as the work of the new owner questioning the integrity and honesty of a researcher. This act of theft suppresses the innovations in the creativity and originality of the work done by any researchers which defeat the factual purpose of education. The act of plagiarism has become a prevalent and growing problem in the research process because the old-fashioned physical recognition of plagiarism by humans is not that easy and not that truthful and a time consuming process as it is difficult for any person to validate with the current data. Modern AI controlled plagiarism detection tools were useful to the progressive academic community to detect plagiarism of others and evade the dishonest activity of stealing the sincere hard work tailored by other researchers to generate information published in the research. Many researchers had described many types of plagiarism and plagiarism detection tools executed by many researchers for producing significant outcomes (Ramesh et.al.2015).

With high use of internet technology worldwide, the growth of data availability is also growing rapidly on any topic of research which are accessible very easily just a click away. It attracts few people to steal the data and use it as it is generated by them with the availability of ready data in the internet or in other resources. The students and teachers use the existing information and commit plagiarism where it is found not only in education but also in various topics of research fields. It is an important task to perform Plagiarism detection at various levels to control the theft of data and maintain the novelty of the source of information. For this purpose various research has already been initiated for many years. Many tools and techniques have been developed to detect plagiarism at every level over the period of time. Because of many reasons such as language, availability of data, availability of highly sophisticated algorithms still there are many issues present for detecting plagiarism. Plagiarism based research which is also called as syntactic level as it is based on only words and their forms within the text there is much research performed on detection of Plagiarism based on world level. However there is less research done for detection of plagiarism at semantic level as per the studies done by Hussain et.al. (2016).

Integration of any of these tools augment the learning experience of any learner catering to diverse styles of learning in research and in writing skills which can be used to

streamline administrative tasks for educators. This ultimately will lead to the easy valuation of the learners and for implementing innovative teaching pedagogy in a differential and integrated projects to the learners. All these modern AI tools were accomplished in the modern education system as and when a prompt, easier and accurate result of any of the assessments were required. It was felt by all the stakeholders that using modern tools in teaching pedagogy, assessments and in various projects which was mandated the necessity for 21st century skill enhancement in the future education scenario.

In the present research work many of the literature reviews were made available and it is a humble submission to make the modern researchers aware of the plagiarism and anti-plagiarism tools used at any levels to check the truthfulness of any of the research work in any field.

➤ *Throughout the Present Research Process of Using AI Tools, the Following Imperative Themes were Explored:*

• *Prospects and Perils*

Strict strategies should be framed and should be displayed in prominent places of the institution so that everyone can go through frequently and follow strictly for a better functioning of the institution. The framed strategies should focus on the most treasured advancements in educational while moderating risks. All these policies should be there in the institute calendar to make all the stake holders well-versed with each policy.

• *Faith and Reliability*

Being faithful and the act of protection are particularly essential in education because we have many commitments to retain students out of any harm upcoming on any way and give precautions to them and their learning experiences. It is the prime duty of all the teachers to take the responsibility of the holistic development of the students whom the teachers handle.

• *Excellence of AI Models*

In any institution the developing process and then process of applying any model is of the prime importance of any AI system. Along with the alignment of AI system to the set objectives for teaching and learning during the procedures of educational acceptance and use in the institution the policies also need to support evaluation of the qualities of AI models in all the institutions.

The possibilities for automated actions executed by AI tools are expanding as the current personalization tools may automatically adjust the order, steps, clues, or path through learning experiences. Actions in the future might look like an AI system or tool that helps a student with a fast completion of all the homework allocated at the institution and a teaching assistant which reduces the workload of the by endorsing lesson plans that fit to the needs of the teachers and the learners. AI-enabled assistant may appear as an additional partner in a small group of students who are working together on a collaborative assignment (Celik et.al.2022) which may also help teachers with complex classroom routines like

project work, framing innovative questions and ideas in the classroom (Chen et.al.2020). AI tool may help teachers with rewriting the movement of students from a full class discussion into small groups and making sure each group has the materials needed to start their work at the same time with a differential assessment tools for the differentially learning students (Holstein et.al.2019).

The long-standing edtech vision and the modern education systems perceive the students as active learners making them to participate in discussions by advancing their understanding skills for any difficult concepts. They relate the concepts to the real world through the tools of using visualizations and simulations to explain any concepts. This system influence the learners by being helpful for scaffolding and providing timely feedback as they proceed the path of learnings. The people of the advanced technology world want technology to align to build on such ways of research-based understandings of how people learn. A key goal must be bordered to support learning for those who have experienced unfavourable circumstances for learning by wider inequalities as the modern education system shapes AI-enhanced edtech around research-based learning in many institutions. The modern educators must think of a system which uphold the forms of learning with the most benefit for the learners in their future lives in public and factories inculcating more competency levels of skill enrichment. The modern education system should be at par with the AI-based tutoring for students as many of the students solve math problems based on intellectual learning theories, whereas learners with special needs will be adopting the methods of learning based on the universal design framework and related theories created especially for them. Computer Supported Collaborative Learning (CSCL) is very much prevalent in many of the institutions which has been recognized as a key way in which technology can improve learning in the modern education system (Aleven et.al. 2016).

IV. RESULTS AND DISCUSSION

As per the report reviewed by McKinsey (2020), it was suggested that initial benefit of AI in education was to reduce all the unwanted burdens of the teachers in administration and clerical work and improve the real dedicated teaching jobs aimed at the holistic development of the learners. The report also suggested that recovered time from AI-enabled technology should be used effectively towards more instructional hours to get more positive outcomes from each learner by providing them personal attention.

A good teacher is the one who master all levels of details in differential teaching pedagogy as they have to be more conscious for handling low-level details to ease teaching burdens and increase focus on the progress of the special need children too. When working with a particular student, the teacher should be well acquainted to send that student a helpful learning resource with the expected learning outcome. A voice assistant or other forms of AI assistant could make it easier to make the teacher more organized by classifying simple voice notes customized as per the need of the learner for teachers to make a regular follow up even after

the regular instructional teaching hours in the institution. As modern educators the teachers could do many simple tasks to focus more towards the personality development of the learners as AI enabled voice assistants are used widely which are availed in the market. These tasks can include keeping the records of the students, for an effective recapitulation with the stages of activities, controlling and updating all the displays inside and outside the classroom, electronic good and technologies available in the modern classroom, providing various reminders. The teachers are the most deserving folks among the people of efforts to ease their jobs now using AI assistants for teaching pedagogy and assessment of the learner performance as many other workers are eventually using these assistants to make their jobs easier.

If given the limited number of hours before the next school day teachers always wanted to do more with each student than they can. The modern teachers tend to extend beyond the teacher's availability for their students continuing to deliver on the teacher's commitment to an expected levels of the learners as the modern tools of AI are available to them any time. A typical teacher always wish to devote more time for the student as they practice more math problems, giving them ongoing support and feedback during the extended extra time. If the teacher can do only a few math problem with allocated time with the learners perhaps they could delegate to an AI-enabled learning system to help with the rest. The teachers can indicate what types of support and hints and feedback they wanted the students to receive while studying after school hours through AI assistance because teachers cannot be at their call any time help with homework completion. AI assistant can ensure that students have that support wherever and whenever they do homework or practice skills on their own. AI assistance could be helpful for teachers who may wish to provide more extensive personal notes to families or the caregivers with drafts based on students' recent classroom work. The teacher could review the AI-generated comments and quickly edit where needed before returning it to the student for another draft. To help teachers with language translation to work with all parents and caregivers of their students AI tools can support. The AI tools might also help teachers for all sort of assessments and evaluations generating reports for each subject as it is not easy that teachers always know what's going on with each student. However emerging products of AI might send reminders as signals to the teacher when a student or even a teacher need some more personal attention or personal updates.

Emerging products are already enabled many of the teachers helping them to record the activities in classroom through AI algorithm to highlight classroom discussion worth reviewing with a professional development coach renovating teacher professional development more productive and fruitful (Chen et.al.2015). As per a study by Jensen et.al. (2020) it was difficult for a teacher to calculate the performance of the pupil during a lesson, AI can compute metrics such as whether students have been talking more in the classroom or getting distracted by any other means. For teachers who want to increase student engagement, these metrics can be a valuable tools for any further analysis on the students' performance even after many years for comparison.

Teachers can practice their skills in realistic situations as classroom simulation tools are also emerging and can be easily enabled by the teachers whenever and whenever required (Ersozlu et.al.2021). AI simulators can be used to exemplify any concepts in any subject of teaching from a real classroom. Such situations can be used by changing the faces and voices of the participants through gamification and enacting so that teaching situations can be shared and discussed among other teachers or the parents without revealing identities.

Facing these circumstances, the present customized, all-inclusive and adaptable research methodology was used meritoriously to promote supportable assessment design in various regions of the country. The guidelines and checklist framed have been already companionable with other aging educational climate change helping other strata of educators and aging populations of other regions too. Due to the same distinctive features of the modern research methodology with the traditional ones already used in the institution, this framework can also be readily customized to adapt to predicted impacts in each region caused by various educational changes. Hence, it is anticipated that this practice will be used in various regions and countries to smoothen a sustainable educational assessment designs as per the need and parameters followed by the regional inspection Teams.

V. CONCLUSION

The present research study has successfully revealed the effects of the modern methodology of teaching and learning on achieving sustainable evaluation tools for the overall performance of the learners and in turn the overall performance standards of the institution. However, in order to confirm the impacts and the possible conclusions there is a need to conduct more case studies applying to both newly employed and traditional existing systems in various institutions in different parts of the world. Moreover, if needed it should be highlighted to revise the guidelines and checklist as and when the requirement arises. By using such processes of revision it will be helpful to examine how to revise these systems efficiently by catering through the latest tools in various institutions. It is theoretically possible to apply this procedure to other types of educational institutions, which are regarded as the complexity of higher education systems where spatial rubrics are used for the assessment of both the learners and the institution. It is also aimed to relate this practice to more intricate and higher scale educational institutions to check the sustainability of the present educational assessment system prevailing worldwide.

Hoping for more customised Institute Development Plans (IDP) and Self Evaluation Formats (SEFs) as per the modern teaching and learning pedagogy, internal and external assessment patterns and as per the need of the institution to result in a superior checking formats of the holistic performance of all the learners, teachers, parents, management and the institution as a whole. As and when the modern system of AI development and its involvement in the educational scenario is concerned, the sky cannot be the limit to go on adding more and more devices as the inspection tools

for a better assessment on the progress in the educational institution. The ultimate intention of any ideal educator should be that the teacher should be more sincere and upgrade to the modern methods of teaching pedagogy so that we as educators can cater to the 21st century kids to their maximum expectations to raise the bar of the educational levels competent enough for the futuristic educational revolution to transpire anytime. As we are all aware that using any AI tools is just like using, misusing or over using any electronic device. The proper usage of any device will give the predictable result however over usage or misusing any device can jeopardise the entire system. Thus as an ideal educator it is our prime duty to display the positive and negative of using the AI tools not only in education but also in daily life. The unlimited usage of AI in almost all the arenas will definitely fetch us more and more rapid results. However, depending on the areas used, it should be highlighted about the lagging behind in the holistic development of the human beings without any psychological and fundamental growth of the gen next kids without any human feelings. The misusing, over using and unlimited using of any AI tool in any field would result in poor mental growth and other health and mental ailments in our gen next leading to an uncertain outcomes. The proper usage of any AI should be the sole responsibility of the end users with a timely calibration, proper vigilance, scrutiny and validation by an authorised firm for a positive usage of any AI tools. The billion dollar question still remains unanswered whether Science is a Boon or Bane, discerning the other side of the coin. It will be the sole discretion of the person who is using the apt AI tool for a genuine purpose in an amicable way to categorically contribute as a boon to the educational community for generations after generations.

“AI in education can only grow at the speed of trust.”
—Dr. Dale Allen

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