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Artificial Intelligence and Blended Learning Approach

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Abstract:

   Artificial Intelligence (AI) has been making waves in various industries and education is no exception. As the world becomes Increasing digital, educators are seeking Innovative ways to enhance learning experiences for students. One such approach is blended learning, which combines traditional face to face instruction with online learning. A1 has the potential to revolutionize blended learning by providing personalized learning experiences, improving student engagement and optimizing of educational resources. AI - powered tools can help create personalized learning experiences for student in a blended learning environment. By analysing data on students learning styles, preferences and performance, AI algorithm can recommend tailored l learning materials & activities. This ensures that each student receives the appropriate level of support and challenge, resulting in a more effective and engaging experiences. For Example: AI- driven adaptive learning platforms can identify areas where a student is struggling and provide targeted remediation while also offering advanced materials for students who are excelling.

Key words: Artificial Intelligence, Blended learning, on-line Learning

Introduction

Artificial intelligence is the science of making machines that can think like humans. It can do things that are considered "smart." AI technology can process large amounts of data in ways, unlike

humans. The goal for AI is to be able to do things such as recognize patterns, make decisions, and judge like humans.   A Combination of AI and blended learning can make education more accessible, engaging and effective in the post-pandemic world. As we stand at the dawn of a new era in education, it is time to re-evaluate the effectiveness of the current smart class technology. The traditional smart classroom, once hailed as harbinger of a progress, now appears outdated in the face of rapid technological advancements.

Need of Blended Learning and Artificial Intelligence

The Covid-19 pandemic has disrupted the traditional education system, forcing educators and student to adapt to online learning while many initially believed, this shift to be a temporary solution, it has become increasingly clear that it is viable, long-term approach to education. Blended learning offers several advantages over traditional classroom learning including flexibility, increased student engagement and personalised learning. However, to fully realise its potential, Classrooms must be equipped with the night technology and tools. Most existing smart classrooms are ill-equipped to support blended learning or harness the full potential of A1 technologies. Blended learning is an innovative educational approach. Technology has enabled the delivery of customized digital content through the use of cutting-edge cognitive technologies such as Artificial Intelligence and Machine Learning.

Blended Learning Techniques to Combine Artificial Intelligence in the Classroom Learning

Catering to Driven se Learning Styles: Every student is unique with individual learning preferences while some may grasp Concept's faster through hand on activities, others might benefit from digital simulations or video lectures Blended learning allows educators to cater to these myriad styles, ensuring Inclusive classroom.

Enhanced Engagement: Digital tools, when integrated effectively can make lessons more interactive and engaging Multimedia presentations, online quizzes and gratified learning platforms can capture students' attention better than traditional method alone.

Flexibility and Accessibility: With the inclusion of online elements, students can access learning material anytime anywhere. This flexibility ensures that learning doesn't remain confined to the four walls of a classroom and can continue at a student's own pace.

Data-Driven Insights: Digital platforms offer action able identity insights into each student's performance. Educators can track progress, areas of improvement and customise Instruction based on real-time data.

Preparing students for the Future: Blended Learning Familiarises students with digital tools, equipping them with skills they'll require in higher education.

Artificial Intelligence and Blended Learning: A Seamless Integration

Enhancing face to face Interaction: Blended learning thrives on combining digital resources with classroom instruction. Instead of simply providing answers it nudges students towards solution, much like a teacher would during a lively class discussion.

Bridging the After-School Gap with 24/7 Availability: while traditional Classroom instruction is limited by school hours, AI sound the clock availability ensures students have continuous access to quality learning resources, bridging the gap between home and school.

Personalised Pacing in a Group Setting: AI Serves as the perfect adjunct, adjusting its teaching methodologies based on individual student requirements, ensuring that no one is left behind.

Enriching Curriculum with Interactive Tools: Blended learning is all about diversifying educational methods. By introducing flash cards, quizzes and work-sheets. AI provides a more varied and interactive experiences that can supplement classroom activities & assignments.

Gratifications Complement Traditional Motivators: with AI gratified approach, student gets an added layer of motivation, turning even tedious topic into exciting challenges.

Distraction free Digital Learning: It distraction face environment aligns, with the blended learning objectives of providing focused, effective digital Resources to complement classroom instruction.
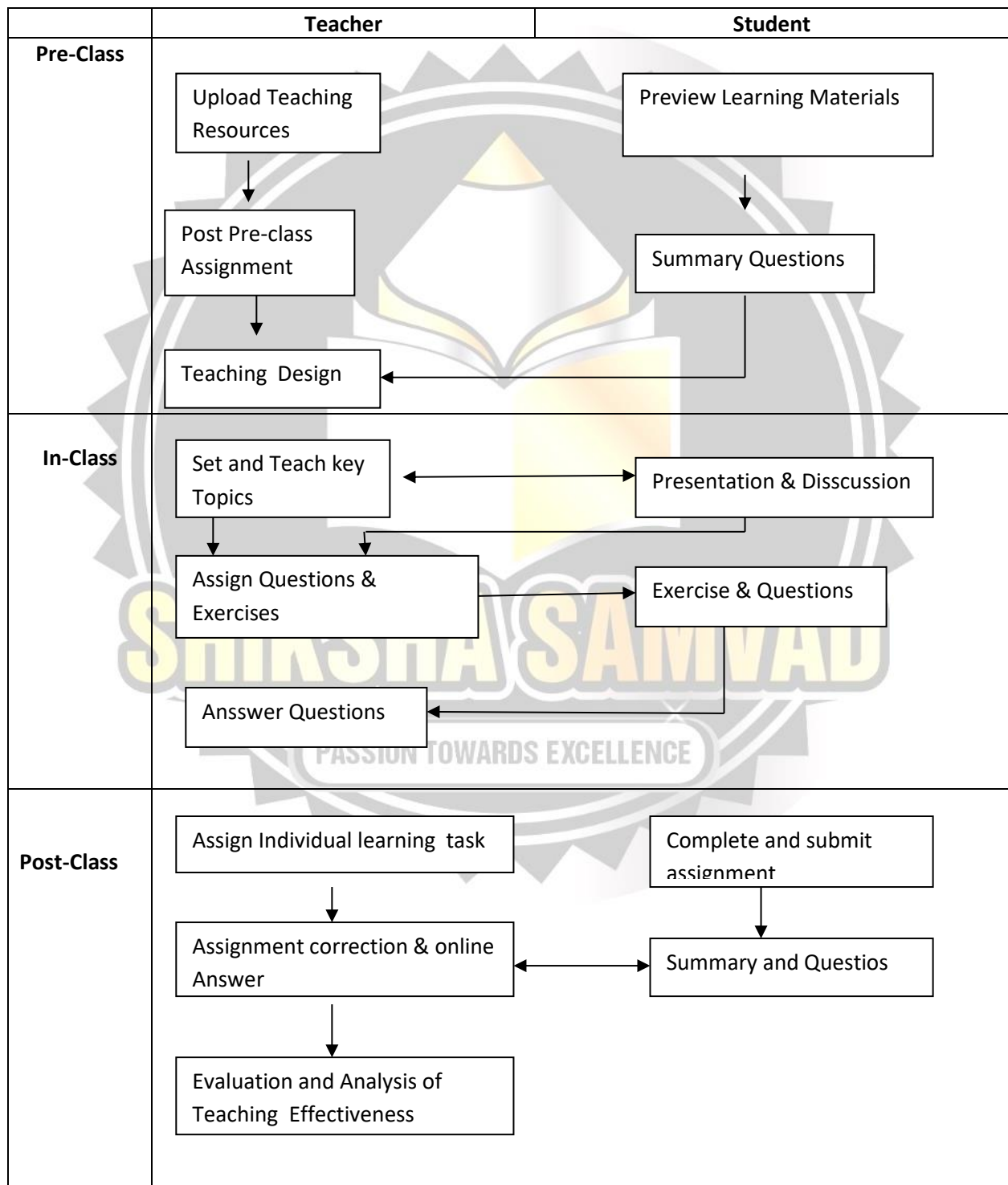
Challenges

Ethical use of student data: As AI relies on large amounts of data to make predictions and recommendations, it is crucial to ensure the student privacy. is protected and the data is used responsibly.

Exacerbate existing inequalities in Education: These are a risk that students who do not have access to these technologies will be left behind. To ensure the benefits of AI one shared equitably, it is essential to invest in infrastructure and resources that makes these tools accessible to all students, regardless of socioeconomic background.

Application of Artificial Intelligence in the Blended Teaching Mode

The goal of blended teaching mode of college Japanese course is to combine traditional mode with online teaching mode, which maintains the original characteristics of the traditional learning method while taking advantage of the online teaching. The online and offline blended teaching is generally divided into two types, one is the combination of offline group classes with online teaching activities of fine classes and the other is the addition of online teaching activities in offline classes. The Current College Japanese language Courses are mainly conducted in former form.

In this study, the designed teaching mode of the College Japanese Course is divided into three teaching session: pre-class, in-class and post class as shown in fig. In order to realize a blended teaching mode that can link online and offline course through these three class sessions, an online college Japanese course was established through chaining learning platform. In this work learning reinforcement based method for recommending learning material to students based on their learning status was proposed.
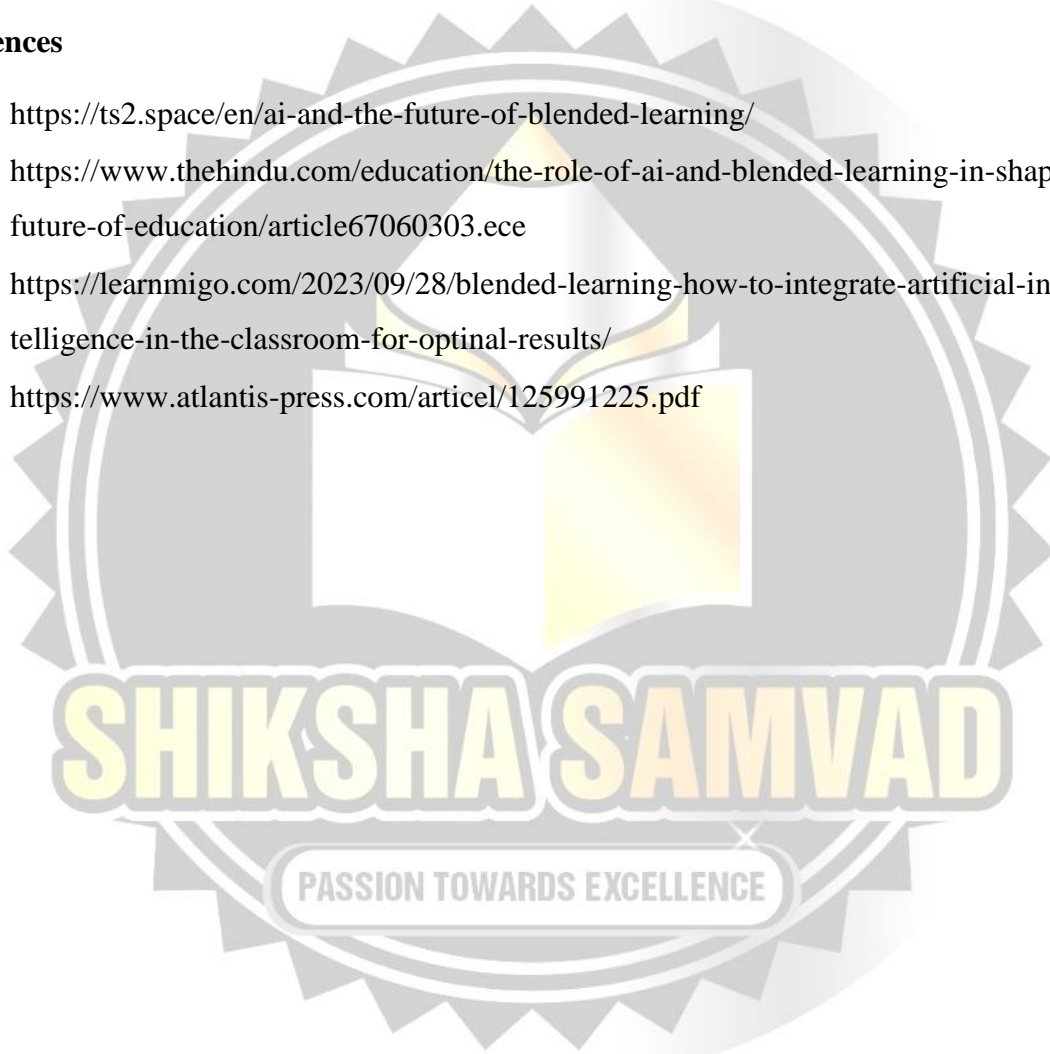
	Teacher	Student
Pre-Class	Upload Teaching Resources → Post Pre-class Assignment → Teaching Design	Preview Learning Materials → Summary Questions
In-Class	Set and Teach key Topics ↔ Assign Questions & Exercises → Answer Questions	Presentation & Disscussion → Exercise & Questions
Post-Class	Assign Individual learning task → Assignment correction & online Answer ↔ → Evaluation and Analysis of Teaching Effectiveness	Complete and submit assignment → Summary and Questios

Conclusion

In Conclusion, AI has the potential to significantly shape the future of blended learning by offering personalized learning experiences, improved student engagement and optimizing the use of educational resources. However, it is crucial to address the ethical concerns and potential inequalities associated with use of AI in education. By doing. So, we can harness the power of AI to create more effective and engaging. Blended learning environments that benefit all students.

The future of education lies in embracing and developing these new technologies. The time has come to reimagine education and the revolution starts now.

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