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Review Article

Personalized Learning and Its Impact on Academic Learning Approaches among Higher Education Students in West Bengal

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Abstract: This study examined the effects of individualised learning on academic learning strategies among Higher education students in West Bengal. In response to varied student profiles and rapidly evolving academic contexts, personalised learning—which emphasises learner autonomy, individual needs, and adaptable teaching strategies—has become a prominent educational paradigm. The review emphasised how self-regulation, inspiration, and active engagement are fostered by individualised learning techniques, which impact students' deep, superficial, and strategic learning approaches. Conventional teacher-centred pedagogies, examination-oriented practices, and sociocultural expectations still shape students' learning habits in West Bengal. However, there is potential to revolutionise academic learning techniques through the progressive integration of learner-centred pedagogies, flexible curriculum, and technology-enabled individualised learning. The study highlighted how, when matched with students' institutional and cultural contexts, individualised learning may promote critical thinking, deeper knowledge, and autonomous learning. This conceptual study emphasised the importance of striking a balance between conventional educational principles and creative, individualised techniques to improve learning outcomes by synthesizing available material. The results indicated that to promote meaningful and long-lasting academic learning techniques among West Bengal higher education students, context-sensitive, individualised learning implementation is crucial.
Keywords: Personalised Learning, Academic Learning Approaches, Higher Education Students, Learner-Centred Learning, Self-Regulated Learning, West Bengal, Educational Technology.

INTRODUCTION

The quality of learning outcomes in higher education is greatly influenced by the learning strategies that students choose. From surface-level memorising to deep and strategic learning centred on comprehension and application, academic learning techniques often reflect how students see, process, and interact with learning activities (Biggs & Tang, 2011). The effectiveness of conventional, consistent teaching approaches has been under scrutiny in recent years due to the increasing diversity of student backgrounds, learning requirements, and expectations. Because of this, customised learning has attracted interest as a cutting-edge strategy that can accommodate individual differences and foster meaningful learning opportunities.

According to Pane *et al*., (2017), personalised learning is an educational strategy that adjusts curriculum, learning paths, speed, and support to each learner's requirements, preferences, and skills. Personalised learning places more stress on learner agency, self-regulation, and active engagement in the learning process than traditional teacher-centred methods. According to research, students are more likely to embrace deep learning techniques characterised by critical thinking, conceptual understanding, and intrinsic motivation when they are given opportunities for individualised learning (Hattie, 2009). In higher education, where students are expected to interact with complicated concepts, independent investigation, and problem-solving, such techniques are especially pertinent.

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Higher education in India, and especially in West Bengal, has long been influenced by traditional pedagogical approaches that place a premium on rote learning, exams, and syllabus fulfilment. These deeply ingrained historical and cultural customs frequently promote surface-level learning strategies that prioritise memory over comprehension (Chattopadhyay, 2019). Although these approaches have ensured academic discipline and coverage of the topic, they may limit students' opportunities to develop their capacity for self-directed learning, creativity, and higher-order thinking. As a result, even in higher education, many students still depend on instructor supervision and required course materials.

However, teaching and learning methods at higher education institutions in West Bengal are beginning to change due to recent technological developments and educational reforms. Personalised learning tactics can now be implemented in new ways thanks to the combination of digital platforms, learning management systems, and adaptive technology. These advancements impact students' academic learning strategies by enabling them to access personalised information, receive timely feedback, and progress at their own pace (Dede, 2014). Students may become active knowledge builders rather than passive information consumers in personalised learning settings.

Sociocultural influences significantly influence students' perceptions and adoption of individualised learning in West Bengal. Students' motivation and learning practices are frequently influenced by institutional standards, family expectations, and the emphasis society places on academic achievement. Many students may find it difficult to fully engage in autonomous and self-regulated learning due to restricted access to individualised learning materials, particularly those from rural or socioeconomically disadvantaged areas (Banerjee, 2018). Collectivist cultural norms, on the other hand, may promote peer-supported and collaborative learning, which, when skillfully included, may enhance individualised techniques.

Even as customised learning becomes increasingly important, a comprehensive understanding of how it affects academic learning methodologies in certain regional and cultural settings remains lacking. By analysing the connection between academic learning methodologies and individualised learning among West Bengal higher education students, this conceptual review aims to close this gap. The study aims to offer insights into how customised learning can be tailored to improve deep learning, learner autonomy, and academic engagement by combining theoretical perspectives with current empirical research. To create pedagogical practices and policies that promote meaningful learning in West Bengal's higher education system, it is imperative to understand this link.

Review of Literature

Because it may better meet the requirements of a wide range of learners and enhance academic learning outcomes, personalised learning has become an important strategy in higher education. Students' learning strategies, including deep, surface, and strategic approaches, significantly impact their academic performance and cognitive growth (Biggs, 1987). Individual differences in learning pace, motivation, and cognitive styles may not be adequately supported by traditional higher education institutions, which often rely on homogeneous instructional approaches. By tailoring training to students' skills, interests, and objectives, personalised learning aims to overcome these limitations (Pane *et al.*, 2017).

Research shows that promoting deeper engagement with the material significantly impacts students' academic learning strategies. Students who are exposed to learner-centred environments are more likely to embrace deep learning strategies that emphasise comprehension, critical thinking, and information integration, according to Entwistle and Ramsden (1983). On the other hand, teacher-centred, examination-oriented systems frequently encourage surface learning, in which pupils prioritise memorisation over conceptual understanding. Students can transition from surface to deep learning techniques with the support of personalised learning environments that offer flexibility and autonomy (Hattie, 2009).

Constructivist and socio-cultural learning theories are strongly related to the theoretical underpinnings of individualised learning. According to Vygotsky's (1978) socio-cultural theory, learning occurs through social interaction and is shaped by contextual and cultural factors. By acknowledging students' prior knowledge, cultural backgrounds, and social contexts during the learning process, personalised learning supports this viewpoint. Similarly, self-determination theory emphasises the importance of relatedness, competence, and autonomy for intrinsic motivation, which, in turn, promotes deeper learning strategies (Deci & Ryan, 2000). By enabling students to take charge of their educational journeys, personalised learning promotes autonomy and raises academic engagement and motivation.

Numerous studies have shown how individualised learning affects academic achievement and self-regulated learning in higher education. Personalised instructional tactics encourage self-monitoring, goal-setting, and reflective thinking—all essential elements of strategic learning approaches, according to Zimmerman (2002). Technology-supported individualised learning settings improve students' capacity to successfully apply information and control their learning processes, according to research by Dede (2014). Individualised feedback and pace are further supported by digital platforms and adaptive learning

systems, allowing students to participate more fully in academic assignments (Walkington, 2013).

Higher education in India has always placed a strong emphasis on summative evaluations, teacher authority, and a uniform curriculum. These methods frequently promote surface learning strategies, especially rote learning (Chattopadhyay, 2019). Long-standing cultural norms, including respect for instructors, passing exams, and following prescribed texts, have moulded West Bengal's educational system. These ideals may restrict chances for autonomous study and critical inquiry, even as they support academic rigour and discipline. Even at the postsecondary level, research shows that many students in the area rely heavily on the direction and organised resources provided by their lecturers (Banerjee, 2018).

However, West Bengal's higher education institutions are increasingly adopting individualised learning approaches, driven by recent legislative measures and technological developments. More adaptable and customised learning experiences have been made possible by the use of learning management systems, internet resources, and blended learning approaches. According to research by Bhattacharya and Sanyal (2016), students exposed to flexible, learner-centred teaching methods exhibit greater conceptual comprehension and academic engagement. These results suggest that by encouraging active engagement and reflective learning, individualised learning has the potential to revolutionise academic teaching methods.

In West Bengal, socio-cultural factors significantly influence the effectiveness of individualised learning. Students' motivation and learning strategies are often influenced by society's emphasis on academic achievement and family expectations. Students may favour peer-supported and collaborative learning over completely individual learning in collectivist cultural contexts (Hofstede, 2001). When collaborative components are incorporated into personalised learning, learning outcomes may improve, and cultural preferences can be accommodated. Research indicates that collaborative, customised learning environments facilitate social interaction and deep learning, especially in culturally diverse contexts (Johnson & Johnson, 2009).

Their socioeconomic status and language also influence students' engagement with individualised learning. Learning strategies may differ depending on the instructional medium and language proficiency in West Bengal, where many pupils are bilingual in Bengali and English. According to research, students may not fully benefit from technology-based, customised learning systems if they have limited access to digital resources (Ray & Ghosh, 2013). These differences underscore the need to use individualised learning methodologies in a context-sensitive and inclusive manner.

Personalised learning promotes academic success and student engagement across disciplines, according to additional empirical research. Adaptive and individualised education significantly improves student learning outcomes, according to a meta-analysis by Kulik and Fletcher (2016). Personalised feedback and learner control also have a significant impact on students' academic perseverance and cognitive engagement, according to Bernard *et al.,* (2014). These results support the claim that, when successfully incorporated into higher education courses, customised learning can encourage in-depth, strategic learning.

Overall, research shows that encouraging learner autonomy, motivation, and deep engagement significantly influences academic learning techniques. Cultural values, conventional educational approaches, and socioeconomic factors continue to influence students' learning behaviours in West Bengal. Designing individualised learning settings that are both pedagogically successful and culturally sensitive requires an understanding of these contextual factors. To encourage long-term changes in academic learning strategies among West Bengal higher education students, future research should examine how personalised learning models can be tailored to local conditions.

Theory Incorporating Personalised Learning
Several psychological, cognitive, and educational theories that describe how students learn, manage their learning, and interact with academic assignments form the foundation for personalised learning. All of these theories emphasise the uniqueness, autonomy, and contextual factors that affect learning.

According to Piaget's theory of cognitive development, learning is an active process in which students construct knowledge based on their developmental stage. According to Piaget, learners advance through four stages: sensorimotor, preoperational, concrete operational, and formal operational. Over time, they become more adept at comprehending abstract ideas (Piaget, 1952). This approach is supported by personalised learning, which allows students to interact with materials that correspond to their intellectual and developmental stages by tailoring the pace and substance of education to their cognitive maturity.

Vygotsky's socio-cultural theory highlights the importance of social interaction, language, and cultural instruments in learning. He introduced the notion of the zone of proximal development (ZPD), which describes the difference between what students can do on their own and what they can do with the help of teachers or peers (Vygotsky, 1978). Personalised learning incorporates this principle by providing personalised assistance, scaffolding, and feedback tailored to individual learners' needs, enabling them to advance effectively within their ZPD.

According to constructivist learning theory, rather than just absorbing information, students actively create knowledge via experiences and introspection. According to Bruner (1961), education should be structured such that students can independently discover topics. By enabling students to investigate material in line with their interests, prior knowledge, and learning preferences, personalised learning environments promote inquiry- and discovery-based learning.

According to self-determination theory, which emphasises motivation, relatedness, competence, and autonomy are essential psychological requirements for successful learning (Deci & Ryan, 2000). By offering students options for learning pathways, activities, and evaluations, personalised learning fosters autonomy. Students are more likely to use deep learning strategies and exhibit more academic engagement when they feel in charge of their education.

Information Processing Theory emphasises how information is received, stored, and retrieved by comparing the human mind to a computer (Atkinson & Shiffrin, 1968). By providing knowledge in digestible chunks and tailoring training to students' processing abilities, personalised learning systems leverage this theoretical framework. This method improves understanding and retention while lowering cognitive overload.

According to the cognitive load theory, working memory capacity affects how well students learn. Sweller (1988) argued that instructional designs should minimise unnecessary cognitive load to allow learners to focus on essential information. This notion is supported by personalised learning, which optimises cognitive load by tailoring instructional tactics, tempo, and topic complexity to each student.

According to Gardner's Multiple Intelligences Theory (1983), people have a variety of intelligences, including linguistic, logical-mathematical, spatial, interpersonal, and intrapersonal. By providing a variety of teaching strategies and evaluation styles, personalised learning recognises these variations and allows students to interact with the material in ways that play to their strengths.

The notion of experiential learning emphasises learning through reflection and experience. According to Kolb (1984), learning is a cycle that includes active exploration, abstract conception, reflective observation, and concrete experience. Learners are encouraged to participate in experiential activities, reflect on what they have learned, and apply it to real-world situations in personalised learning settings.

The self-regulated learning hypothesis highlights students' ability to organise, track, and assess their own learning processes. Academic achievement is higher for self-regulated learners, according to Zimmerman (2002). By giving students tools for goal-setting, progress monitoring, and tailored feedback, customised learning encourages self-regulation and empowers them to take charge of their education.

According to situated learning theory, learning is closely tied to the social and contextual settings in which it occurs. According to Brown, Collins, and Duguid (1989), social interaction and real-world activities facilitate meaningful learning. By combining contextualised information, group projects, and real-world tasks, personalised learning increases the relevance and significance of learning for students.

A contemporary learning paradigm for the digital era, connectivism emphasises learning through digital connections and networks. According to Siemens (2005), learning entails navigating and creating links between information sources since knowledge is dispersed throughout networks. To facilitate ongoing, adaptable learning, personalised learning systems use digital technology to connect students with a variety of materials, peers, and educational opportunities.

Overall, the conceptual underpinnings of individualised learning are supported by these ideas taken together. They place a strong emphasis on contextual relevance, motivation, adaptive assistance, learner-centred education, and cognitive efficiency. Integrating these theoretical views can improve academic learning methodologies and foster deep, meaningful, and self-directed learning in higher education, especially in culturally diverse contexts such as West Bengal.

Academic Learning Strategies of Higher Education Students

To comprehend material, handle assignments, and succeed academically, higher education students use a range of academic learning strategies. Learners' cognitive capacities, motivation, disciplinary requirements, cultural background, and learning settings all influence these tactics. Both cognitive processes—how students understand and absorb information—and metacognitive processes—how students organise, track, and assess their learning—are involved in academic learning techniques (Biggs & Tang, 2011). According to research, students use a variety of strategies, depending on the task at hand and the learning environment, rather than relying solely on one.

The surface learning approach, which emphasises memory and knowledge replication, is one often employed tactic. According to Entwistle and Ramsden (1983), this tactic is frequently used when students feel that learning assignments are exam-oriented or when time is of the essence. Before a test, for instance, students could read their notes several times or memorise key terminology without fully grasping the material.

Surface methods may improve performance in the near term, but they frequently impair conceptual comprehension and long-term memory.

Deep learning techniques, on the other hand, entail critical thinking, analysis, and the integration of new information with existing knowledge to interact meaningfully with the learning material. Instead of just memorising information, students who use deep learning methodologies aim to comprehend concepts (Biggs, 1987). A student studying education, for example, may apply theoretical ideas to real-world scenarios, consider their consequences, and connect them to classroom experiences. By letting students study subjects at their own pace and in line with their interests, personalised learning environments often promote deep learning (Hattie, 2009).

By planning study time, establishing objectives, and coordinating learning activities with assessment needs, strategic or achievement-oriented learning techniques aim to maximise academic success. Students who utilise this strategy prioritise key subjects, meticulously organise their study schedules, and use evaluation criteria to direct their learning (Entwistle, 2000). For instance, while still striving for conceptual clarity, a student getting ready for semester exams can choose high-weightage subjects and schedule study time appropriately.

Academic learning heavily relies on cognitive learning techniques, including organisation, elaboration, and practice. To improve comprehension and recall, elaboration involves putting concepts into one's own words, drawing connections, and providing examples (Weinstein & Mayer, 1986). To properly organise information, organisational techniques include summarising, outlining, and creating idea maps. Factual knowledge is frequently retained through rehearsal techniques such as note memorisation and repetition, especially in areas with substantial content.

Effective academic learning relies heavily on metacognitive techniques. Planning how to approach a learning activity, keeping an eye on understanding while learning, and assessing results once the job is finished are some of these tactics (Zimmerman, 2002). To enhance performance in the future, a student can, for instance, outline the framework of a research paper before beginning, track their progress while writing, and evaluate criticism after submitting it. Research indicates that students who actively employ metacognitive techniques have improved self-regulation abilities and greater academic success (Pintrich, 2004).

Self-regulated learning techniques incorporate motivational, metacognitive, and cognitive elements. Self-regulated learners take ownership of their education through goal-setting, time management, feedback-seeking, and strategy adjustments when challenges emerge (Zimmerman, 2002). By providing variable learning routes, tailored feedback, and opportunities for reflection, personalised learning significantly promotes self-regulation. Students who use digital learning platforms, for example, may monitor their progress, review challenging material, and select learning materials that best meet their needs.

Higher education also extensively uses collaborative learning techniques, especially in group projects, seminars, and assignments. Through social engagement, collaborative learning enables students to exchange ideas, build understanding, and share information (Johnson & Johnson, 2009). Students frequently favour group learning, peer debate, and cooperative study techniques in collectivist cultural contexts such as West Bengal. When used properly, these techniques improve comprehension, communication abilities, and academic interest.

Resource management, which is making efficient use of educational materials including textbooks, scholarly publications, internet resources, libraries, and peer or teacher support, is another crucial tactic. When confronted with difficult subjects or new ideas, students often seek additional resources (Pintrich, 2004). Students can select materials that fit their academic requirements and learning preferences when they have access to a variety of adaptive resources in personalised learning environments.

In higher education, critical thinking techniques are crucial for higher-order learning. These tactics include information analysis, evidence evaluation, perspective comparison, and logical conclusion drawing (Ennis, 1987). For instance, rather than taking study findings or theoretical claims at face value, students in the social sciences should critically analyse them. By encouraging inquiry-based assignments, reflection activities, and learner autonomy, personalised learning fosters critical thinking.

Strategies for goal-setting and time management are especially crucial for managing academic workload and reducing stress. Effective students set reasonable deadlines, prioritise their work, and strike a balance between their personal and academic obligations (Broadbent & Poon, 2015). Effective time management increases a student's likelihood of deep learning and sustained academic success.

Lastly, students may enhance their learning over time through reflection and feedback-based techniques. Through reflective activities, students may assess their strengths and shortcomings, understand their mistakes, and adjust their methods for future assignments (Kolb, 1984). Students' learning strategies are greatly influenced by feedback from peers and teachers, particularly when it is timely, targeted, and helpful.

Students in higher education generally employ a variety of dynamic and multifaceted academic learning methodologies. These tactics show how motivation, cultural context, cognitive processes, and teaching methods interact. By encouraging autonomy, self-control, deep engagement, and contextual relevance, personalised learning can improve successful academic learning. In addition to helping students achieve academic success, strengthening these tactics can help them acquire lifelong learning skills crucial to today's knowledge-based society.

Personalised Learning and Its Impact on Academic Learning Approaches among Higher Education Students: Worldwide Perspective

Personalised learning is now widely acknowledged as a successful teaching strategy for improving academic learning methods in higher education and addressing learner diversity. Higher education institutions are gradually moving away from traditional teacher-centred instruction toward learner-centred, adaptable learning models across many nations and educational systems. In a time of rapid technological progress and knowledge expansion, this shift is motivated by the desire to foster deep learning, critical thinking, and self-regulated learning (Dede, 2014).

Research from throughout the world shows that by promoting greater interaction with learning materials, customised learning has a substantial impact on students' academic learning techniques. Research from Europe, North America, and East Asia shows that students are more likely to adopt deep learning approaches that are marked by conceptual understanding, integration of ideas, and reflective thinking when they are given personalised learning pathways, flexible pacing, and tailored feedback (Entwistle & Ramsden, 1983; Hattie, 2009). Standardised teaching approaches, on the other hand, often encourage surface learning, in which students focus primarily on memorisation to meet assessment criteria.

Digital platforms, adaptive learning systems, and learning analytics are often used to promote individualised learning in technologically sophisticated higher education systems, including those in the US, UK, and Australia. Students' self-regulated learning skills, such as goal-setting, time management, and self-monitoring, are improved by these technology-enabled tailored settings, according to research (Zimmerman, 2002). For instance, students in STEM fields can advance based on competence rather than time spent, thanks to adaptive learning technologies, which have a favourable impact on academic perseverance and strategic learning techniques (Kulik & Fletcher, 2016).

From a theoretical standpoint, research worldwide regularly connects constructivist and sociocultural theories of learning with individualised learning. Personalised instructional design has extensively utilised Vygotsky's zone of proximal development theory, particularly in collaborative and blended learning settings across Europe and Asia (Vygotsky, 1978). According to this research, customised learning works best when it incorporates social engagement and individual assistance, allowing students to co-create knowledge while retaining autonomy.

Research from Asian nations, such as China, South Korea, and Japan, demonstrates that cultural factors affect the effectiveness of tailored learning. Personalised learning is frequently combined with group-based activities, peer evaluation, and collaborative learning techniques in collectivist societies. According to studies, these hybrid techniques align with cultural norms to promote social peace and group success while fostering deep learning (Hofstede, 2001; Johnson & Johnson, 2009). These results imply that customised learning must be culturally adjusted to local learning norms rather than operating as a stand-alone, individualistic approach.

Personalised learning is increasingly recognised as a means of enhancing educational fairness and access in developing nations, such as parts of Africa and South Asia. According to research, students from diverse socioeconomic backgrounds may engage more successfully with higher education courses when they have access to open educational materials and flexible learning pathways (UNESCO, 2021). The global literature, however, also highlights issues such as inadequate digital infrastructure, inconsistent faculty preparedness, and evaluation systems that continue to emphasise memorisation. These elements may limit how deeply and strategically academic learning techniques may be altered by customised learning.

Strong empirical evidence for the beneficial effects of individualised learning on academic outcomes is provided by meta-analyses and systematic reviews. According to Bernard *et al.*, (2014), as compared to standard education, individualised and blended learning models greatly increase cognitive engagement and learning performance. In a similar vein, Pane *et al.*, (2017) found that students in individualised learning settings exhibit higher levels of academic confidence, autonomy, and motivation—all of which are strongly linked to successful learning.

Notwithstanding these favourable results, international research clearly highlights the significance of institutional support and instructional alignment. When learning objectives, instructional techniques, and evaluation procedures are all in harmony, personalised learning works best. Even in individualised settings, students could still rely on surface learning techniques in the absence of such alignment (Biggs & Tang, 2011). Therefore, curriculum revision and faculty professional development are crucial elements of a successful global deployment of customised learning.

Overall, the global perspective indicates that encouraging learner autonomy, active participation, self-management, and reflective thinking significantly influences academic learning techniques. However, educational design, technology infrastructure, and cultural context all affect its effectiveness. These global insights offer a useful starting point for investigating personalised learning in particular regional contexts, such as West Bengal, where complex interactions among outdated educational practices, cultural values, and emerging digital initiatives shape students' academic learning approaches.

Personalised Learning and Its Impact on Academic Learning Approaches among Higher Education Students: West Bengal Perspective

West Bengal higher education has always used an educational style that is teacher-centred and examination-oriented, with standardised tests and a homogeneous curriculum controlling the learning process. Although this technique guarantees topic coverage, it often promotes surface-level learning strategies, such as memorisation and knowledge replication, rather than in-depth comprehension. Recent technology developments and pedagogical reforms have made it possible to reconsider this strategy, highlighting customised learning as a viable educational paradigm.

A teaching strategy known as "personalised learning" adapts lessons to each student's unique requirements, interests, skills, and learning rate. Personalised learning, in contrast to the "one-size-fits-all" approach, promotes flexibility in the delivery of materials, learning activities, and evaluation techniques while acknowledging learners' uniqueness. Personalised learning is especially important in West Bengal, as students in higher education come from diverse linguistic, socioeconomic, and intellectual backgrounds. To achieve academically, students from rural regions, first-generation learners, and those studying in vernacular media often need tailored support.

Academic learning techniques describe how students interact with learning activities. These methods are frequently divided into three categories in research literature: surface, deep, and strategic learning. Deep learning stresses comprehension and meaning-making; surface learning concentrates on rote memorisation and test preparation; and strategic learning employs structured study techniques to achieve academic success. Because of syllabus-heavy curriculum and summative testing systems, traditional teaching methods have mostly reinforced superficial and strategic approaches in West Bengal's higher education institutions.

The advent of customised learning might greatly impact these academic learning methodologies. Students are more likely to engage in reflective thinking and conceptual knowledge when given the freedom to select their own learning materials, learn at their own pace, and receive ongoing feedback. Deep learning methodologies are supported by personalised learning environments that help students connect new information to existing knowledge. For instance, project-based learning and flexible assignments allow students to investigate subjects that interest them, which boosts intrinsic motivation and meaningful engagement.

In West Bengal's higher education system, digital technologies are crucial for facilitating individualised learning. Students can review material multiple times thanks to learning management systems, online lecture recordings, and digital reading materials. This is especially helpful for students who require more time to understand difficult ideas. Students at the state's universities and colleges have benefited from blended and online learning programs, which have helped them develop self-regulated learning skills, including scheduling their studies, tracking their progress, and assessing their learning.

In West Bengal, cultural factors also influence the effectiveness of tailored education. Due to the significant influence of conventional educational standards, students often prefer structured guidance and instructor support. Therefore, learner autonomy combined with academic mentorship and collaborative learning is the most effective way to implement personalised learning. Instead of total independence, guided customisation helps pupils gradually build self-assurance, critical thinking skills, and autonomous learning habits.

Despite its benefits, several obstacles stand in the way of implementing customised learning in West Bengal. Large class numbers, inadequate staff training, stringent university curricula, and poor digital infrastructure in some areas may hamper meaningful customisation. Furthermore, students may be deterred from fully participating in deep learning activities by evaluation systems that prioritise final exams. It will take institutional support, curricular flexibility, and teacher professional development to overcome these obstacles.

In conclusion, personalised learning has a significant impact on academic learning approaches among higher education students in West Bengal. By accommodating learner diversity and promoting autonomy, reflection, and conceptual understanding, personalised learning can shift students from surface to deep and strategic learning. However, its successful implementation depends on contextual adaptation, cultural sensitivity, and systemic support within the state's higher education framework.

Educational Implication

Personalised learning has significant educational implications for higher education students in West Bengal, as it promotes deep, strategic, self-regulated learning while accommodating diverse

academic, linguistic, and socioeconomic backgrounds. Personalised learning promotes reflective thinking, critical analysis, and understanding of concepts by adapting learning pathways, instructional pacing, and feedback to students' needs, moving students away from rote retention and exam-based learning, which have historically dominated West Bengal's higher education system. Educational policymakers can apply personalised learning principles to develop strategies that promote flexible curricula, incorporate technology-driven adaptive learning, increase faculty capacity, and implement competency-based, learner-centred assessments, thereby fostering inclusive, engaging, and future-ready higher education in West Bengal. The use of digital technologies, such as Educational Management Systems, adaptive educational platforms, online resources, and virtual collaboration tools, improves accessibility and enables students to engage with information at their own pace, promoting equality and inclusiveness. Culturally responsive strategies, such as balancing student autonomy with guided mentoring, collaborative projects, peer discussion, and scaffolded instruction, help students navigate society's emphasis on structured guidance and respect for authority while also encouraging independent problem-solving and critical thinking. Personalised learning necessitates faculty training, curricular flexibility, and formative, competency-based assessments, consistent with NEP 2020's vision of learner-centred, interdisciplinary, outcome-based education that stresses the development of skills, critical inquiry, and lifelong learning. Higher education institutions in West Bengal can improve student engagement, promote holistic learning approaches, and equip graduates to meet the changing demands of the global workforce while concurrently addressing regional disparities in digital access, prior educational preparation, and resource availability by putting strategies like goal-setting exercises, reflective journals, project-based tasks, and adaptive assessments into practice. All things considered, customised learning provides a revolutionary framework that aligns with NEP 2020 requirements and worldwide best practices, enabling West Bengal pupils to develop higher-order thinking, autonomy, and lifelong learning capabilities.

CONCLUSION

By greatly improving academic learning strategies among West Bengal students, personalised learning is a revolutionary approach in higher education. Personalised learning encourages deep engagement, critical thinking, self-regulation, and strategic learning by adjusting instruction, pace, and evaluation to each learner's unique requirements. This helps students go beyond rote memory and exam-focused techniques. By addressing regional differences in socioeconomic background, language, and prior academic preparation, the combination of digital technology, adaptive learning platforms, and blended pedagogical approaches further fosters flexible, inclusive, and equitable learning. To ensure that individualised learning aligns with West

Bengal's sociocultural context while promoting autonomous problem-solving and lifelong learning skills, culturally responsive methodologies strike a balance among learner autonomy, guided mentoring, and collaborative learning. The goals of NEP 2020, including a learner-centred curriculum, transdisciplinary exposure, competency-based assessment, and improved faculty development, closely align with the educational implications of personalised learning. To create an inclusive, adaptable, and future-ready educational environment, policymakers may use these findings to guide higher education policies that incorporate technology, flexible curricular frameworks, formative assessments, and capacity-building initiatives. All things considered, implementing personalised learning in West Bengal bridges the gap between traditional educational methods and contemporary, student-centred learning paradigms, while also improving academic outcomes and equipping students with the social, cognitive, and metacognitive skills they need to thrive in an increasingly complex and globalised world.

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