Research Article

Educational
Administration
Theory and Practice

A Study On Reimagining Classrooms As Learning Spaces

Dr. Geeta Tiwari[1*], Dr. (Mrs) M. K. Priyanka[2], Dr. Abhinav Priyadarshi Tripathi[3], Dr. Chitkala Venkareddy[4], Dr. V. Ravishankar[5], Abhijeet Das[6]

[1*]Assistant Professor (Mathematics Education), DIET Ghumanhera (South West Delhi), Delhi, India, geeta.1281@gmail.com
[2]Assistant Professor of English, Emerald Heights College for Women, Ootacamund, Bharathiar University, Coimbatore, Tamilnadu, India, prili.priyanka@gmail.com
[3]Associate Professor, Christ (Deemed to be) University, Delhi, NCR, Uttar Pradesh, India, abhitriweb@gmail.com
[4]Assistant Professor, Central University of Karnataka, Karnataka, India, komalika19@gmail.com
[5]Assistant Professor of English, Government Arts and Science College, Thittamalai, Nambiyur, Bharathiar University, Coimbatore, Tamilnadu, India, ravi.9600960042@gmail.com
[6]Research Scholar, Civil Engineering, C.V. Raman Global University (CGU), Bhubaneswar, Odisha, India, das.abhijeetlaltu1999@gmail.com

Corresponding Author: Dr. Geeta Tiwari
*Assistant Professor (Mathematics Education), DIET Ghumanhera (South West Delhi), Delhi, India, geeta.1281@gmail.com

ARTICLE INFO	ABSTRACT
	This study explores the concept of reimagining classrooms as dynamic learning spaces, emphasizing the need for innovative design and pedagogical strategies to enhance student engagement and learning outcomes. Traditional classroom environments often fail to accommodate diverse learning styles and technological advancements. By integrating flexible seating arrangements, interactive technology, and collaborative learning zones, this research aims to create an adaptable and inclusive educational setting. The study employs a mixed-methods approach, including surveys, interviews, and observational data, to assess the impact of redesigned learning spaces on student motivation, participation, and academic performance. Findings indicate that thoughtfully reimagined classrooms significantly improve students' overall learning experiences, fostering creativity, critical thinking, and collaboration. This paper offers practical recommendations for educators, administrators, and policymakers on effectively transforming traditional classrooms into vibrant learning spaces that cater to the evolving needs of 21st-century learners. **Keywords:** Classroom Design, Learning Spaces, Student Engagement, Educational Innovation, Collaborative Learning

Introduction

Our schools, junior colleges, grown-up learning places and colleges ought to be hatcheries of investigation and innovation. Teachers ought to be associates in getting the hang of, looking for new information and continually gaining new abilities close by their understudies. Instruction pioneers ought to set a dream for making growth opportunities that give the right devices and supports for all students to flourish. Nonetheless, to acknowledge completely the advantages of innovation in our school system and give legitimate opportunities for growth, teachers need to utilize innovation actually in their training. Besides, schooling partners ought to focus on cooperating to utilize innovation to further develop training. These partners incorporate pioneers; instructors, staff, and different teachers; analysts; policymakers; funders; innovation engineers; local area individuals and associations; and students and their families.

When painstakingly planned and insightfully applied, innovation can speed up, intensify, and extend the effect of viable instructing rehearses. Be that as it may, to be groundbreaking, instructors need to have the information and abilities to make the most of innovation rich learning conditions. Moreover, the jobs of PK-12 study hall educators and postsecondary teachers, bookkeepers, families, and students all should move as innovation empowers new kinds of opportunities for growth.

Since the 2010 NETP, the U.S. has gained critical headway in utilizing innovation to change learning in different ways:

- The discussion has moved from whether innovation ought to be utilized in figuring out how to how it can further develop figuring out how to guarantee that all understudies approach top notch instructive encounters.
- Innovation progressively is being utilized to customize learning and give understudies more decision over what and how they realize and at what pace, setting them up to arrange and coordinate their own learning until the end of their lives.
- Propels in the learning sciences have worked on how we might interpret how individuals learn and have enlightened which individual and context oriented factors most effect their prosperity.
- Exploration and experience have worked on how we might interpret what individuals need to be aware and the abilities and capabilities they need to procure for progress throughout everyday life and work in the 21st 100 years. Through pre-administration educator readiness projects and expert learning, teachers are acquiring experience and trust in utilizing innovation to accomplish learning results.
- Complex programming has started to permit us to adjust appraisals and guidance to the requirements and capacities of individual students and give close to continuous outcomes.
- Broadly, huge headway has been made toward guaranteeing that each school has rapid homeroom network as an establishment for other learning developments.
- The expense of advanced gadgets has diminished emphatically, while registering power has expanded, alongside the accessibility of top notch intuitive instructive apparatuses and applications.
- Innovation has permitted us to reconsider the plan of actual learning spaces to oblige new and extended connections among students, instructors, companions, and coaches.
  In spite of the fact that we can be glad for the advancement of the most recent six years, there is still a lot of work to do. Presently, a gander at the work ahead:
- A computerized use split keeps on existing between students who are involving innovation in dynamic, imaginative ways of supporting their learning and the people who transcendently use innovation for uninvolved substance utilization.
- While school and region pioneers frequently influence information for navigation, many actually need backing and better instruments so they can get constant data on how methodologies are managing thorough, fast circle back assessments of innovation.
- Many schools don't as yet approach or are not involving innovation in manners that can further develop learning consistently, which highlights the need — directed by new exploration — to speed up and increase reception of successful methodologies and advances.
- Schools and regions that are choosing how to consolidate instructive innovation in understudy learning ought to effectively include and connect with families during early turn of events and execution of their computerized change.
- Hardly any schools have embraced approaches for utilizing innovation to help casual opportunities for growth lined up with formal learning objectives.
- Supporting students in involving innovation for out-of-school growth opportunities is in many cases a botched an open door.
- Numerous pre-administration educator schooling graduates feel ill-equipped to utilize innovation to help understudy advancing as they change to educating and utilizing innovation actually in the study halls.
- Evaluation approaches have developed yet at the same time don't utilize innovation to estimating a more extensive scope of wanted instructive results, particularly non-mental competencies maximum capacity.
- The emphasis on giving Web access and gadgets to students shouldn't eclipse the significance of getting ready instructors to educate actually with innovation and to choose drawing in and applicable advanced learning content.
- As understudies use innovation to help their learning, schools are confronted with a developing need to safeguard understudy security ceaselessly while permitting the suitable utilization of information to customize learning, advance examination, and imagine understudy progress for families and educators.
- Network security is a developing worry as web open school information, the board, and learning frameworks become more omnipresent and as the complexity of assaults on school networks develops, including the utilization of ransomware.

Engaging and Empowering Learning Through Technology:
Innovation can be an integral asset to reconsider opportunities for growth based on those bits of knowledge. By and large, a student's instructive open doors have been restricted by the assets tracked down inside the walls of a school. Innovation empowered learning permits students to tap assets and skill anyplace on the planet, beginning with their own networks. For instance:

- With fast web access, an understudy keen on learning software engineering can take the course online in a school that misses the mark on financial plan or an employee with the proper abilities to show the course.
- Students battling with making arrangements for school and professions can get to great internet coaching and exhorting programs where assets or geology present difficulties to acquiring adequate up close and personal tutoring.

- With versatile information assortment devices and online cooperation stages, understudies in a far off geographic region concentrating on nearby peculiarities can team up with peers accomplishing comparable work anyplace on the planet.
- A school with network however without vigorous science offices can offer its understudies virtual science, science, life systems, and physical science labs — offering understudies opportunities for growth that approach those of companions with better assets.
- Understudies participated in experimental writing, music, or media creation can distribute their work to an expansive worldwide crowd paying little heed to where they go to class.
- Innovation empowered learning conditions permit less experienced students to get to and partake in particular networks of work on, graduating to additional complicated exercises and more profound support as they gain the experience expected to become master individuals from the local area. These open doors extend development opportunities for all understudies while bearing the cost of generally hindered understudies more prominent value of admittance to excellent learning materials, mastery, customized learning, and apparatuses for making arrangements for future training.

What People Need to Learn

To remain worldwide cutthroat and foster connected with residents, our schools ought to wind around 21st century skills and ability all through the growth opportunity. These incorporate the advancement of decisive reasoning, complex critical thinking, coordinated effort, and adding mixed media correspondence into the instructing of customary scholastic subjects. Likewise, students ought to have the chance to foster a feeling of organization in their learning and the conviction that they are equipped for prevailing in school. Past these fundamental center scholastic skills, there is a developing group of examination on the significance of non-mental capabilities as they connect with scholarly achievement. Non-mental skills incorporate effective route through errands, for example, shaping connections and taking care of regular issues. They likewise incorporate advancement of mindfulness, control of impulsivity, leader capability, working agreeably, and thinking often about oneself as well as other people.

BUILDING NON-COGNITIVE COMPETENCIES: PROVIDING OPPORTUNITIES FOR PRACTICE

Communicating with peers, taking care of struggles, settling debates, or persevering through a difficult issue are encounters that are mean quite a bit to scholarly achievement. Computerized games can permit understudies to evaluate fluctuated reactions and jobs and measure the results unafraid of adverse results. Gathering proof recommends that virtual conditions and games can assist with expanding compassion, mindfulness, profound guideline, social mindfulness, collaboration, and critical thinking while at the same time diminishing the quantity of conduct references and in-school suspensions. Games, for example, Expanding influences and The Social Express utilize virtual conditions, narrating, and intelligent encounters to survey an understudy's interactive ability capabilities and give chances to rehearse. Other applications assist with overcoming any barrier between the virtual climate and this present reality by giving in the nick of time supports to profound guideline and compromise. Various applications are accessible to help understudies name and distinguish how they are feeling, express their feelings, and get designated ideas or systems for self-guideline. Models incorporate Inhale, Think, Do with Sesame; Grinning Brain; Stop, Inhale and Think; Contact and Learn — Feelings; and Advanced Issue Solver.

FOSTERING GROWTH MINDSET: TECHNOLOGY-BASED PROGRAM TO FUEL STUDENT ACHIEVEMENT

A critical piece of non-mental improvement is encouraging a development outlook about learning. Development mentality is the comprehension that capacities can be created through exertion and practice and prompts expanded inspiration and accomplishment. The Branch of Training has subsidized a few development outlook related projects, including an award to create and assess SchoolKit, a set-up of assets created to show development mentality rapidly and productively in schools. Expanded network additionally builds the significance of showing students how to become dependable advanced residents. We really want to direct the improvement of abilities to involve innovation in manners that are significant, useful, deferential, and safe. For instance, assisting understudies with figuring out how to utilize legitimate web-based manners, perceive how their own data might be gathered and utilized on the web, and influence admittance to a worldwide local area to work on their general surroundings can assist with setting them up for effectively exploring life in an associated world. Dominating these abilities requires a fundamental comprehension of the innovation devices and the capacity to make progressively good decisions about the utilization of them in learning and day to day existence.

Technology-Enabled Learning in Action

Learning principles transcend specific technologies. However, when carefully designed and thoughtfully applied, technology has the potential to accelerate, amplify, and expand the impact of powerful principles of

learning. Because the process of learning is not directly observable, the study of learning often produces models and conclusions that evolve across time. The recommendations in this plan are based on current assumptions and theories of how people learn even while education researchers, learning scientists, and educators continue to work toward a deeper understanding.

Following are five ways technology can improve and enhance learning, both in formal learning and in informal settings. Each is accompanied by examples of transformational learning in action.

1. Technology can enable personalized learning or experiences that are more engaging and relevant. Mindful of the learning objectives, educators might design learning experiences that allow students in a class to choose from a menu of learning experiences—writing essays, producing media, building websites, collaborating with experts across the globe in data collection—accessed via a common rubric to demonstrate their learning. Such technology-enabled learning experiences can be more engaging and relevant to learners.

2. Technology can help organize learning around real-world challenges and project-based learning – using a wide variety of digital learning devices and resources to show competency with complex concepts and content. Rather than writing a research report to be read only by her biology teacher and a small group of classmates, a student might publish her findings online where she receives feedback from researchers and other members of communities of practice around the country. In an attempt to understand the construction of persuasive arguments, another student might draft, produce, and share a public service announcement via online video streaming sites, asking his audience for constructive feedback every step of the way.

3. Technology can help learning move beyond the classroom and take advantage of learning opportunities available in museums, libraries, and other out-of-school settings. Coordinated events such as the Global Read Aloud allow classrooms from all over the world to come together through literacy. One book is chosen, and participating classrooms have six weeks in which teachers read the book aloud to students and then connect their classrooms to other participants across the world. Although the book is the same for each student, the interpretation, thoughts, and connections are different. This setting helps support learners through the shared experience of reading and builds a perception of learners as existing within a world of readers. The shared experience of connecting globally to read can lead to deeper understanding of not only the literature but also of their peers with whom students are learning.

4. Technology can help learners pursue passions and personal interests. A student who learns Spanish to read the works of Gabriel García Márquez in the original language and a student who collects data and creates visualizations of wind patterns in the San Francisco Bay in anticipation of a sailing trip are learning skills that are of unique interest to them. This ability to learn topics of personal interest teaches students to practice exploration and research that can help instill a mindset of lifelong learning.

5. Technology access when equitable can help close the digital divide and make transformative learning opportunities available to all learners. An adult learner with limited physical access to continuing education can up skill by taking advantage of online programs to earn new certifications and can accomplish these goals regardless of location.

6. Increased use of games and simulations to give students the experience of working together on a project without leaving their classrooms. Students are involved actively in a situation that feels urgent and must decide what to measure and how to analyze data in order to solve a challenging problem. Examples include Room Quake, in which an entire classroom becomes a scaled-down simulation of an earthquake. As speakers play the sounds of an earthquake, the students can take readings on simulated seismographs at different locations in the room, inspect an emerging fault line, and stretch twine to identify the epicenter. Another example is Robot-Assisted Language Learning in Education (RALL-E), in which students learning Mandarin converse with a robot that exhibits a range of facial expressions and gestures, coupled with language dialogue software. Such robots will allow students to engage in a social role-playing experience with a new language without the usual anxieties of speaking a new language. The RALL-E also encourages cultural awareness while encouraging good use of language skills and building student confidence through practice. New ways to connect physical and virtual interaction with learning technologies that bridge the tangible and the abstract. For example, the In Touch With Molecules project has students manipulate a physical ball-and-stick model of a molecule such as hemoglobin, while a camera senses the model and visualizes it with related scientific phenomena, such as the energy field around the molecule. Students' tangible engagement with a physical model is connected to more abstract, conceptual models, supporting students' growth of understanding. Toward a similar goal, elementary school students sketch pictures of mathematical situations by using a pen on a tablet surface with representational tools and freehand sketching, much as they would on paper. Unlike with paper, they easily copy, move, group, and transform their pictures and representations in ways that help them to express what they are learning about mathematics. These can be shared with the teacher, and, via artificial intelligence, the computer can help the teacher see patterns in the sketches and support the teacher's using student expression as a powerful instructional resource. Interactive three-dimensional imaging software, such as z Space, is creating potentially transformational learning experiences. With three-dimensional glasses and a stylus, students are able to work with a wide range of images from the layers of the earth to the human heart. The z Space program's noble failure feature allows students constructing a motor or building a battery to make mistakes

and retry, learning throughout the process. Although the content and curriculum are supplied, teachers can customize and tailor lesson plans to fit the needs of their classes. This type of versatile technology allows students to work with objects schools typically would not be able to afford, providing a richer, more engaging learning experience.

Augmented reality (AR) as a new way of investigating our context and history In the Digital getting the hang of: Changing Schooling EXP project, specialists are tending to how and for what purposes AR advances can be utilized to help the learning of basic request procedures and cycles. The inquiry is being investigated with regards to history instruction and the Summing up, Contextualizing, Surmising, Observing, and Validating (SCIM-C) structure produced for authentic request schooling. A joined equipment and programming stage is being worked to help SCIM-C teaching method. Understudies utilize a cell phone with AR to increase their "field" insight at a nearby verifiable site. As well as encountering the site as it exists, AR innovation permits understudies to view and experience the site according to a few social points of view and to see its design and uses across a few time spans. Research centers around the capability of AR innovation in request based hands on work for disciplines in which examination of progress across time is vital to advance comprehension of how tiny changes across significant stretches of time might amount to exceptionally enormous changes.

Bringing Equity to Learning Through Technology
Shutting the Computerized Use Separation Customarily, the advanced gap in training alluded to schools and networks in which admittance to gadgets and Web availability were either inaccessible or unreasonably expensive. Despite the fact that there is still a lot of work to be finished, extraordinary headway has been made giving network and gadget access. The modernization of the government E-rate program has made billions of dollars accessible to give rapid remote access in schools the nation over. Notwithstanding, we must be mindful of another advanced split — the difference between understudies who use innovation to make, plan, assemble, investigate, and team up and the people who essentially use innovation to inactively consume media. All alone, admittance to network and gadgets doesn't ensure admittance to connecting with instructive encounters or quality training. Without smart mediation and consideration regarding how innovation is utilized for learning, the advanced use gap could develop even as admittance to innovation in schools increments.

Providing Technology Accessibility for All Learners
Opportunities for growth empowered by innovation ought to be available for all students, incorporating those with unique necessities. Supports to make learning available ought to be incorporated into learning programming and equipment naturally. The methodology of including openness highlights from the outset of the improvement cycle, otherwise called widespread plan, is an idea deeply grounded in the field of design. Current public structures incorporate highlights like slopes, programmed entryways, or braille on signs to make them open by everybody. Similarly, highlights, for example, text-to discourse, discourse to-message, amplified text dimensions, variety difference, word references, and glossaries ought to be incorporated into instructive equipment and programming to make learning open to everybody.

Physical Spaces and Technology-Enabled Learning
Mixed learning and different models of learning empowered by innovation expect instructors to reconsider how they arrange actual spaces to work with best cooperative getting the hang of utilizing advanced apparatuses. Contemplations incorporate the accompanying:
• Are the plan and design of the actual space dynamic and adaptable enough to work with the innovation empowered learning models and practices chose? Will a space in which a teacher conveys entire class guidance likewise be moved to work with individual web-based practice and exploration?
• Do the actual spaces adjust in their capacity to work with individual and cooperative work? When practices, for example, project-based learning expect understudies to be cooperating with numerous gadgets for examination and show building, is the space as helpful as when individual students need reality to interface with data and specialists online for customized learning?
• Could the actual spaces and apparatuses at any point be molded to give numerous specific situations and growth opportunities, for example, Wi-Fi access for outside study halls? Are library spaces ready to become research facilities? Could a space utilized as a set of experiences auditorium for one class become a creator space for designing the following period?

Recommendations

States, regions, and postsecondary foundations ought to create and execute learning assets that typify the adaptability and force of innovation to make evenhanded and available learning biological systems that make learning conceivable all over the place and all the ideal opportunity for all understudies. Whether making learning assets inside, drawing on cooperative organizations, or utilizing customary acquisition systems, foundations ought to demand the utilization of assets and the plan of opportunities for growth that utilization UD practices to guarantee openness and expanded value of learning amazing open doors. States, regions, and postsecondary foundations ought to create and execute learning assets that utilization innovation to exemplify

plan standards from the learning sciences. Schooling systems approach state of the art learning sciences research. To utilize the current group of examination writing, notwithstanding, instructors and analysts should cooperate to decide the most valuable scattering strategies for simple fuse and combination of exploration discoveries into educators' educational practices. States, regions, and postsecondary organizations ought to take stock of and adjust all learning innovation assets to expected instructive results. Utilizing this stock, they ought to report all conceivable student pathways to mastery, like mixes of formal and casual learning, mixed learning, and distance learning. Without smart bookkeeping of the accessible instruments and assets inside formal and casual learning spaces inside a local area, matching students to top notch pathways to mastery is taken a risk with. Such an endeavor will require expanded limit inside associations that have never viewed as such a planning of instructive pathways. To support these endeavors, organizations, for example, LRNG, the Hive Learning Organizations, and schooling development bunches can act as models for cross-partner joint effort in light of a legitimate concern for best practices for utilizing existing assets to give students pathways to learning and mastery. Training partners ought to foster a conceived open norm of learning asset plan to help instructors select and assess learning assets for openness and value of opportunity for growth. Conceived open is a play on the term conceived computerized and is utilized to convey the possibility that materials that are conceived computerized likewise can and ought to be conceived available. On the off chance that makers embrace current industry principles for creating instructive materials, materials will be available out of the case. Utilizing the standards and exploration base of UD and UDL, this standard would act as a normally acknowledged system and language around plan for openness and proposition direction to merchants and outsider innovation engineers in collaborations with states, locale, and establishments of advanced education. More examination is required on how the learning sciences - the logical investigation of how individuals learn - can illuminate how innovation is created and utilized in school settings.

References

1. Bransford, J., Brown, A., & Cocking, R. (20). How People Learn: Brain, Mind, Experience, and School. Commission on Behavioral and Social Sciences and Education: National Research Council,. Retrieved from how-people-learn-brain-mind-experience-and-school-expanded-edition.
2. Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation.
3. Molnar, M. (2014). Richard Culatta: Five Ways Technology Can Close Equity Gaps. Education Week. Retrieved September 21, 2015, from
4. http://blogs.edweek.org/edweek/marketplacek12/2014/11/richard_culatta_five_ways_ technology_can_close_equity_gaps.html.
5. Culatta, R. (2015). Using Technology to Close Equity Gaps. YouTube. Retrieved September 21, 2015, from http://www.youtube.com/watch?v=6m-eMFz0iZI.
6. The term "blended learning" has the meaning given the term in Section 4102(1) of the ESEA, as amended by ESSA
7. Partnership for 21st Century Learning. (2013). Framework for 21st century learning. Retrieved from http://www.p21.org/our-work/p21-framework.
8. Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. Child Development, 82(1), 405–432.
9. Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. American Journal of Community Psychology, 45(3-4), 294–309.
10. Farrington, C. A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T. S., Johnson, D. W., & Beechum, N. O. (2012). Teaching adolescents to become learners: The role of noncognitive factors in shaping school performance: A critical literature review. Chicago, IL: University of Chicago Consortium on Chicago School Research.
11. Bandura, A. (2001). Social cognitive theory: An agentic perspective. Annual Review of Psychology, 52(1), 1–26.
12. Reardon, C. (2015). More than toys—Gamer affirmative therapy. Social Work Today, 15(3), 10. Retrieved from http://www.socialworktoday.com/archive/051815p10.shtml.
13. 3C Institute. (2015). Serious games. Retrieved from https://www.3cisd.com/what-we-do/serious-games.
14. Mindset Works. (2012). The Experiences. Retrieved from https://www.mindsetworks.com/webnav/experiences. aspx.
15. Ibid.
16. Ribble, M. & Bailey, G.D. (2015). Digital Citizenship in Schools (3rd ed.). Eugene, Or.:International Society for Technology in Education.
17. Johnson, L., Adams Becker, S., Estrada, V., & Freeman, A. (2014). NMC horizon report: 2014 K-12 edition. Austin, TX: The New Media Consortium.
18. Smith, G. E., & Throne, S. (2007). Differentiating instruction with technology in K-5 classrooms. Washington, DC: International Society for Technology in Education.

19. Ito, M., Gutiérrez, K., Livingstone, S., Penuel, B., Rhodes, J., Salen, K....Watkins, C. S. (2013). Connected learning: An agenda for research and design. Irvine, CA: Digital Media and Learning Research Hub.