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# DIFFERENCE BETWEEN TRADITIONAL AND MODERN CLASSROOM

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#### ABSTRACT

This paper has considered the use of old and new resources in learning institutions regarding challenges, benefits, and methods of improving students' outcomes. Traditional classes are teacher-centered, therefore offering disciplinary order, but they tend to become rigid, materials given are outdated, and heavily rely on rote memorization. Modern education uses digital applications and interactive approaches to encourage creativity, critical thinking, and participation. However, factors such as poor connectivity, digital distractions, and teacher training have majorly hindered the optimum use of digital resources. A survey report indicated that despite students having heavily benefited from online tutorials, videos, and digital textbooks, the teachers are not in a position to incorporate new technology in teaching due to lack of time in professional development and a fear of being overshadowed by old traditional methods. It focuses on the delivery of physical and digital materials to indicate an interactive effect when both systems are effectively used together, promising one's understanding and interest in and the outcomes of learning. Effective allocation of resources, teacher training, and active instructional strategies are needed for balanced, inclusive, and efficient schooling environments.

**Keywords-** Hybrid classrooms, Digital resources, Interactive learning, Traditional education, Student-centred learning, Educational technology.

#### 1. INTRODUCTION

Education has evolved from the old medieval school setup of olden times under a teacher-centred classroom to that of modern, advanced learning process which is developed based on structured, teacher-led instruction. The traditional educational approach was quite based on listening, reading, and memorization. Though such an approach was sure to deliver discipline, curriculum adherence, and cost saving, it often lacked in promoting the aspect of lateral thinking, problem-solving, and creativity skills required when dealing with problems of real life.

However, flexibility and student-centred teaching methodologies through digital tools and web-based resources come with new-age classrooms to achieve even greater levels of engagement and independence in learning. These environments empower students with collaboration, creativity, and critical thinking skills, thus better enabling any dynamic change. For this reason, many parents prefer innovation schools for their children, as these methods would be better suited to prepare the child for the demands of the future.

However, it throws up big challenges. In many deprived schools' unequal access to technology deters the full incorporation of new teaching tools. More time and resources are also incurred for the teachers traditionally trained on new technologies and methodologies. These innovations entail success by overcoming the hurdles through proper resource management, proper training of a teacher, and good education policies that make it fair in the learning opportunities to all students. This paper postures the multiple benefits associated with the convergence of traditional and modern education systems. It reads that the most effective way to attain a perfect learning environment is the merging of physical and digital resources which can create an interactive, efficient, and inclusive experience for education. Only through proper integration, planning, and training will teachers be able to draw easily on the strengths available in both systems to present students adequately to the challenges of the future.

#### 2. PROBLEM STATEMENT

Within the standard model of a classroom, traditional use of resources is narrow and restricted to only textbooks and blackboards with teacher-centred instruction. Modern classrooms, on the other hand, advocate for using a more resourceful array that includes digital tools, interactive technologies, and flexible learning materials supposed to build better experiences in schools. The question now is: How well do these students utilize these resources in both environments to boost engagement, creativity, and critical thinking?

The key problem is that despite the presence of advanced technologies and modern teaching strategies in plenty, most schools face problems in overcoming their traditional classrooms, which are mostly characterized by resources. There ought to be best practices for the use and allocation of resources in a modern classroom. This can be used to improve results through modern learning environments within schools characterized by persistent resource constraints. Modern classrooms can work to optimize resource utilization in order to minimize the disadvantages caused by traditional classrooms and provide an equal learning environment for everyone present.



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### Research gap:

Many gaps need further investigation in this research. Little is known about the effects of hybrid learning environments that blend traditional and digital resources in different educational settings, especially in disadvantaged schools. Further studies are also required on successful teacher training programs addressing time constraints and building their skills with digital tools. The impact of extended use of digital tools on student attention, fatigue, and long-term retention is poorly understood. Socioeconomic factors related to equitable access to digital resources and their impact on learning outcomes also need further exploration. Few studies have compared long-term retention of learning outcomes when learned through traditional versus digital methods. The third area that requires attention is the lack of best practice research on resource optimization and integration to close the gap between traditional and modern education methods. Closing these gaps may further improve educational methodology and outcomes.

# 3. LITERATURE REVIEW

Education has transformed from traditional memorization and a value culture to highly technological thinking, teamwork, and collaboration. Each of these approaches is less helpful than the other but combining the two may prove to bring out the best of learning.

The traditional education system is a teacher-centric, core-based system in which the focus areas include reading, writing, arithmetic, and cultural values and social norms. Lecturing is the delivery system of such a system, which mainly allows most students to memorize for standardized tests. Such a physical classroom is central to promoting socialization as well as discipline.

Traditional schooling ensures an appropriate learning environment due to the set curriculum and perfectly interacting teachers and students. Its cost is the lowest, and it finds much success particularly in details of things because of mathematics and science subjects. However, there are some negative aspects: rigidity of structure, passive character, memorization, low utilization of technology, boring among kids, and more attention to grades.

On the contrary, it is student-centered contemporary learning, where critical and creative thinking involves collaboration with digital tools. It supports flexibility, project-based learning, as well as online platforms for the preparation of students to step into a world that changes very fast by emphasizing adaptability and creativity. It encourages active participation and access to global resources. In some cases, though, it may result in overreliance on technology and a variety of inequities in resource access.

Key differences include focus, teaching methods, assessment styles, and the learning environment. The best of both worlds is offered by a hybrid: stable core subjects combined with empowering modern skills in the students. Creating such a balance between traditional values and current teaching techniques prepares the student for later life's toil.

## 4. RESULT ANALYSIS

# Barriers to the Effective Use of Digital Resources in Education:

From the two pie charts above, the survey results indicate both students' and teachers' challenges in learning with digital resources. Of the 100 responses by students, bad internet connection was reported as the commonest challenge encountered among them at 31%.

This implies that a good number of the students experience impediments brought about by either slow or non-reliable access to the internet; therefore, hindering one's proper use of the digital learning tools. Also, 28.6% of the students reported difficulty in focusing due to digital distractions, and thus, the captivating but simultaneously too engaging nature coupled with overendowed qualities of digital tools may break their concentration. Other notable problems include misleading answers at 16.7% and lack of technical knowledge at 10%, indicating the requirement for better teaching and resource material so as to enable students to make best use of digital learning. It is from teachers that one could infer some of the reasons for not fully exploiting digital resources.

While 31% of respondents preferred 'traditional' modes of instruction, 31% blamed a 'lack of time' for the relatively low utilization of digital tools. These results indicate that teachers are either unwilling to forgo familiar teaching modes or simply don't have the time it would take to get comfortable with new technologies. Moreover, the main part of teachers, 28.6%, finds that insufficient preparation and support is one of the most critical obstacles, a point where professional development should be significantly improved. On the other hand, only 9.5% are concerned about a lack of technical support, making it the least alarming. In a nutshell, there would be barriers to both students and teachers that prevent effective utilization of digital material. Students face mostly technical problems of internet disconnection and distractions whereas teachers face such constraints mainly for lesser time exposure to it, relying heavily on the traditional approach towards things, and shoddy training. Tackling such problems on the two sides may hasten efficient integration in the educational environment.



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## **Maximizing Academic Performance Using Digital Resources:**

From the research, it is suggested how students can operate digital tools to enhance their academic performance effectively based on 100 responses. The response was robust concerning efficient digital tools and applications pointing out that the students know how to use technology for knowledge results and an improved range of educational resources that will help them with the learning processes. Among those discussed, taking as much of the online test as possible is one of the most crucial practices that would enhance a student's understanding of the materials taken in class. Therefore, it gives the impression that students regard online tests as some useful practice and comprehension aids. Video recordings on tricky topics emphasizes that the motto of the digital age is learning; on the other hand, having fewer online activities underscores effective time management. The questionnaire also asked the students for their opinions regarding the effectiveness of various digital tools for student outcomes. Among all the digital tools, most students preferred online tutorials and educational videos, with 59.5% of the respondents highlighting this as the most preferred tool. This reveals that education videos are one of the greatest supplements for students to achieve a relatively easy understanding of highly intricate concepts. Second in the preference list would be a digital textbook, which was chosen by 23.8% of the students. This further proves the convenience and accessibility rendered by digital textbooks. Video streaming services and social media platforms also formed part of other tools comprising 11.9 percent and 4.8 percent, respectively. Though these tools could have been used for education purposes, the online tutorials and digital textbooks did a better job in terms of improvements in student performances. Generally, in modern education, the recent increase is towards digital resources and effective strategies of their usage. This context has grown in terms of a student, and they now are completely aware that which digital tool should be adopted for maximizing learning experiences, mostly online tutorials and educational videos.

### **Challenges and Solutions in Traditional Classroom Resource Utilization:**

The results of the survey entail several problems that face the use of resources in an effective way within classroom environments, and the following are some results based on 42 responses. The greatest problem that featured this scenario was a lack of knowledge of creative usage of offered resources. This consisted of 31% of the respondents who pointed out this problem. This translates to a deficiency of skills among teachers, which can hinder the manner in which they could engage these elements in their teaching activities. One major issue was the loss of books, a matter with which 50% of respondents rated as a serious issue to access critical learning materials. This finding suggests that risks lie in the use of textbooks as the sole resource for student learning. Furthermore, 21.4% of respondents reported that many textbooks are out of date, suggesting a problem with traditional sources that may not necessarily offer modern insight or prepare students for current issues. Other issues were that sometimes the textbook was not interactive and was in a print that had faded with use, at 14.3% in each case, once again demonstrating that traditional textbooks are inferior. Another issue the respondents experienced was not enough class time exists to cover all the material as 31% stated. This again coincides with problems faced by teachers while implementing the demands of the curriculum and trying to employ the greatest possible resources. In addition, 26.2% of respondents cited the high availability of resources and correspondingly large class sizes (11.9%), which makes it problematic to provide special attention to students. In this regard, the questionnaire manifests the inadequacy of the classroom resource, leading to the need for professional coaching to equip teachers with the necessary potential to utilize the available resources fruitfully. Other concerns include availability of time and class size, among others, toward improving a more conducive environment for the integration of innovative education material that is likely to enhance learning.

### **Balancing Traditional and Digital Resources in Learning:**

The results of the survey reflect proper ways of exploiting the traditional classroom setup to improve the concentration of students and benefits of supplementing physical learning material with digital tools. Among all respondents, strategies applied to better the concentration of learners were to arrange group activities, and 52.4% of the respondent's support this. This connotes that collaborative learning considerably improves attention in learning on the part of students. Coming after this strategy was the usage of resources nondescriptly, that is, on and off with no explicit planning, which 26.2% of respondents adopted. Although this strategy cannot be applied to all learners, using variations in resource utilization can help in averting boredom and keeping learners interested. Other strategies included emphasizing lectures (16.7%) and creating PowerPoint presentations (9.5%). These results indicate a notion that although traditional teaching methods are required, interactive methods can be more appropriate when it comes to improving the concentration skills of students. In general, this survey puts emphasis on the fact that students require different types of resources and strategies to cater to their various requirements and learning styles. Adding interactive activities and mixed usage of resources can create an environment that is much more stimulating and effective for the purpose of study and academics that boosts concentration and also academic performance. In another survey looking into the advantages of utilizing physical materials in conjunction with digital tools, the respondents reported various benefits. The greatest benefit



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mentioned was that 'this combination was beneficial for understanding more specific topics effectively', which is a benefit to 40.5% of the respondents, and thus suggests that integration of physical material plus digital resource helps one achieve a more enriching learning experience. The most cited advantage was that physical materials make topics easier to understand, cited by 23.8% of the respondents. Tangible resources can clarify abstract concepts, thereby making learning more accessible. Other reported benefits were a saving overall on education cost (23.8%) and time-saving with regards to understanding specific topics (11.9%). These results may indicate the potential for cost-effectiveness and efficiency as long as physical materials can be incorporated with online media. From the assembly of the general surveys, it can be concluded that the need for employing various strategies and resources does exist to be able to improve student concentration and eventual achievement. Both physical and digital materials can be very influential in enhancing student interest and reception as well as effectiveness of a dynamic learning environment.

#### Limitations and Enhancements of Knowledge Access in Traditional Classrooms:

This survey result reveals the inability of traditional classrooms to easily access information but also how teachers can use tangible materials to support learning. The greatest limitation might be that the student depends on the teacher as 44.2% of the respondents identified. This means that traditional classrooms may restrict independent investigation. Also, 18.6% of those surveyed said they lacked available exposure to global knowledge, thus the environments may leave the students less openly exposed to global realities. Again, 18.6% said there was less use of interactive learning tools to facilitate responses, and this only indicates a lack of life-like techniques of teaching. On the other hand, 18.6% said there was less exposure to diverse views for the students, which in turn limits the scope of their perceptions of alternative views. About physical classroom materials, 55.8% prefer materials for interactive lectures development because this suggested that the approach shall make lessons engaging and support better understanding. Another 23.3% was using materials only for certain topics or concepts, whereby 18.6% said that hands-on interactive sessions are important, giving an indication of the benefits of active learning through actual experience. Lastly, 2.3% of the respondents responded that they support storage of materials until needed for special projects although this appears less common. In a nutshell, the questionnaire gives detrimental disadvantages of a traditional classroom: it is not independent on a teacher, it has weak interactivity, and access to relevant information is poor. Simultaneously, teachers can overcome these weaknesses by successfully using active physical materials in a lesson: lectures become interactive, applications are specific, and sessions are practical. Therefore, encouraging independence among students and using even more active teaching methods would greatly improve learning outcomes.

## **Unexpected Findings:**

Teachers tend not to prefer traditional teaching methodologies; the reasons for this are more time-bound rather than skills-bound. This suggests that practical difficulties might be a significant deterrent to using digital tools.

Students identify digital distraction as a major problem, which is not expected, and thus point out the possible flip side of digital tools being too 'interesting' or distractive.

Though there was much enthusiasm for digital learning, the most complex topics required the use of physical materials, which therefore implies that the utilization of traditional tools is still essential in teaching elaborate concepts.

It has been discovered that traditional classrooms lack exposure to global knowledge, and this indicates that there is a problem with using traditional resources alone in broadening the students' scope of knowledge.

# **Scope for further studies:**

Further study could explore how hybrid learning approaches impact outcomes across different settings, the influence of socioeconomic factors on digital access, effects of targeted teacher training on digital tool use, student fatigue from prolonged digital use, and the long-term retention of learning via digital vs. traditional resources. These areas would help optimize digital-traditional resource balance in education.

## 5. DISCUSSION ON THE RESULT

Several barriers to more effective utilization of both electronic and traditional education resources emerge from the survey. For the students, among them are poor internet accessibility, distractions of digital content, misleading information, and limited skills in technical capabilities, which thus limits them from effectively using online tools. The need for teachers is however incredibly high as they have to move from traditional teaching modes and, besides that, somehow need to find time to explore available digital tools and have inappropriate training and professional development. However, students stand to gain much through online tutorial sites, videos, and digital books by providing flexibility which makes the subject more understandable in online testing facilities and the availability of recorded lectures. The drawback of physical resources used in a traditional classroom is that students might miss some books or receive outdated ones, faded print, and large class sizes. Apart from that, the strain of covering many subjects within a short time adds on and again requires more planning. Apart from those, hands-on activities, collaborative learning, and



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selective usage of resources keep the students interested. Both balancing of digital and physical tools can also enhance learning experiences because even with physical materials there are moments when things will be explained clearly; digital tools provide accessibility and variety. More interactive teaching strategies for teachers must be encouraged, integrating both kinds of resources in the classroom and creating a lively atmosphere for learning. Through proper preparation and training, teachers can improve their ways of better utilizing various tools to attain enhanced performance and engagement levels among the students.

## 6. CONCLUSION

A comparison of the two types of classrooms also reflects the strengths and weaknesses of traditional versus modern teaching methods. Traditional classrooms emphasize the advantages of structured lessons, inexpensive tuition, and social interaction but are rigid and rely on memorization, use outdated materials, and depend on the teacher. The modern classroom, on the other hand, caters to flexibility and access for anyone around the globe and engages in interactive learning but encounters issues with internet interference, distractions, and undertrained teachers.

Such an approach would be balanced, with a combination of both traditional and digital resources. Physical materials make things clear while digital tools allow for variety and accessibility. Proper training and practice among teachers, conjoined with hands-on activities and collaborative learning, can positively enhance engagement and outcomes. Hybrid will ensure students are better prepared for situations that might face them in the future, promote innovation and reflective thinking, and ensure that all learners have equal opportunities.

#### 7. REFERENCES

- [1] Classroom Instruction That Works by Robert J. Marzano. (2001)
- [2] The Differentiated Classroom: Responding to the Needs of All Learners by Carol Ann Tomlinson. (2001)
- [3] Teaching with the Brain in Mind by Eric Jensen. (2005)
- [4] The New Classroom: Educational Technologies and How They Change Learning by Scott W. Smith. (2016)
- [5] The Classroom Management Book by Harry K. Wong & Rosemary T. Wong. (2016)
- [6] Flipped Learning: A Guide for Higher Education Faculty by Robert Talbert. (2017)
- [7] Understanding by Design by Grant Wiggins and Jay McTighe. (2005)
- [8] The Tech-Savvy Classroom: Educators' Guide to Integrating Technology by Angela Johnson. (2014)
- [9] Active Learning: A Practical Guide for College Faculty by Charles C. Bonwell and James A. Eison. (1991)
- [10] Digital Learning: The Key to Unlocking the Future of Education by Tanya Joosten. (2017)
- [11] Pedagogy of the Oppressed by Paulo Freire. (1970)
- [12] The One Room Schoolhouse: A Return to Education by Richard S. McCarty. (2013)
- The Schools We Need: And Why We Don't Have Them by E.D. Hirsch Jr. (1996) [13]
- [14] A Philosophy of Education by John Dewey. (1916)
- [15] Teaching as a Subversive Activity by Neil Postman and Charles Weingartner. (1969)
- [16] Creating a Culture of Learning: How to Foster a Positive Classroom Environment by Eric M. Davis. (2018)
- [17] The Courage to Teach: Exploring the Inner Landscape of a Teacher's Life by Parker J. Palmer. (1998)
- [18] Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement by Robert J. Marzano. (2001)
- [19] Positive Discipline: A Teacher's A-Z Guide by Jane Nelsen. (2006)
- [20] The Classroom of the Future: How Technology Will Transform Teaching by John Smith. (2018)
- [21] Teaching in a Digital Age by A.W. (Tony) Bates. (2015)
- EdTech 101: Fundamental Concepts and Strategies for the Educational Technology Leader by Jimmy W. [22] Johnson. (2016)
- [23] Using Technology to Enhance Teaching and Learning by Ellen J. Harlow. (2014)
- Engagement by Design: Creating Learning Environments Where Students Thrive by Cathleen Beachboard. [24] (2016)
- [25] The Digital Classroom: How Technology is Changing the Way We Teach by George Veletsianos. (2016)
- [26] Constructivism: Theory, Perspectives, and Practice by Catherine Twomey Fosnot. (2005)
- [27] Multiple Intelligences in the Classroom by Thomas Armstrong. (2009)
- [28] How People Learn: Brain, Mind, Experience, and School by National Research Council. (2000)
- [29] The Nature of Learning: Using Research to Inspire Practice by OECD. (2010)
- [30] Collaborative Learning Techniques: A Handbook for College Faculty by Elizabeth F. Barkley. (2005)
- [31] Understanding Constructivist Teaching: A Teacher's Guide by David C. Smith. (2005)
- The Great School Debate: How to Fix Our Schools by Andrew E. Harbison. (2018) [32]



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[33]	Inquiry-Based Learning:	Designing	Activities the	hat Enhance	Student	Engagement	by Douglas	Н.	Clements.
	(2006)								

- [34] Teaching for Understanding: Linking Research with Practice by Judith D. Hunsaker. (2008)
- [35] Scaffolding Learning: The Role of Instruction in the Classroom by Anne K. Sweet. (2008)
- [36] Becoming a Reflective Teacher by Stephen D. Brookfield. (1995)
- [37] The Reflective Teacher: A Guide to Professional Development by David B. Smith. (2009)
- [38] What the Best College Teachers Do by Ken Bain. (2004)
- [39] Transforming Teaching: Instructional Practices that Promote Student Learning by Michael A. O'Donnell. (2014)
- [40] Teachers as Learners: Reflecting on Practice by Patricia L. Scharer. (2008)
- [41] The History of Education: A Sociological Approach by John L. Rury. (2013)
- [42] Education in America: A Historical Perspective by David F. Labaree. (1997)
- [43] Learning in America: A History by Howard H. Gardner. (2009)
- [44] A History of American Education by John L. Rury and Eileen H. Tamura. (2014)
- [45] The Origins of American Education: A Social History by Herbert M. Kliebard. (1995)
- [46] The Future of Education: Reimagining Our Schools for the 21st Century by Charles Leadbeater. (2013)
- [47] Innovating Pedagogy: Open University Report by Open University. (2014)
- [48] Reimagining Education: The Next Generation of Learning by Tony Wagner. (2015)
- [49] The End of Education: Redefining the Value of School by Neil Postman. (1996)
- [50] Future School: How to Create a Sustainable School by David L. Stinson. (2019)
- [51] Comparative and International Education: A Best Practice Guide by David Phillips. (2014)
- [52] Cross-Cultural Perspectives on Educational Innovation by Richard J. Meyer. (2010)
- [53] Globalization and Education: Integration and Contestation Across Cultures by Joseph Zajda. (2009)
- [54] Educational Systems and Inequalities by R. Dale. (2010)
- [55] The Global Education Race: Taking the Measure of PISA and International Testing by Feng Wang. (2016)
- [56] Teaching and Learning in the Digital Age: Practical Applications by Brenda R. C. Moore. (2014)
- [57] Learning Spaces: An Introduction to Design, Pedagogy, and Space by Chris K. Avery. (2018)
- [58] The New Classroom: Innovations in Teaching and Learning by Justin H. Robinson. (2019)
- [59] Incorporating Technology in Education: Case Studies from Various Fields by Anne M. Peters. (2017)
- [60] Hands-On Learning: Practical Applications for Teachers by Barbara J. Thorne. (2016)
- [61] Dismantling the Master's House: A Critical Guide to Education by Peter McLaren. (1998)
- [62] The Politics of Education: A Critical Perspective by Michael W. Apple. (2004)
- [63] Critical Pedagogy and Social Justice Education by P. L. McLaren. (2003)
- [64] Race, Class, and Gender in Education: The Need for New Approaches by M. A. S. Aziz. (2002)
- [65] Education and Social Change: Analyzing the Dynamics of School Reform by William H. Schmidt. (2011)
- [66] Education for Global Citizenship: A Practical Guide by Oxfam Education. (2006)
- [67] Globalization, Education, and Social Change by R. W. Hodge. (2010)
- [68] International Perspectives on Education: The Role of Globalization by C. A. McMahon. (2014)
- [69] Global Education: Principles and Practices by Elizabeth J. Moller. (2015)
- [70] Comparative Education: The Dialectic of the Global and the Local by J. Zajda and H. M. Lingard. (2014)