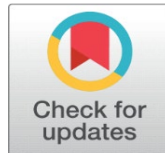
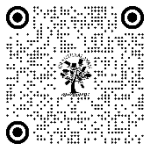


DIGITAL MEDIA FOR COLLABORATIVE LEARNING IN SECONDARY SCHOOLS: A CASE STUDY OF NOIDA

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ABSTRACT

This examination paper investigates the job of digital media in improving collaborative learning among secondary school students in Noida, India. It inspects how digital tools, stages, and assets are incorporated into educational practices to cultivate interactive learning conditions. The review utilizes a blended techniques approach, joining overviews, meetings, and homeroom perceptions to assess the effect of digital media on student engagement, critical thinking, and coordinated effort. Results feature differences among private and government schools regarding digital infrastructure and access, with private schools by and large having better assets. The discoveries highlight the requirement for further developed teacher training and infrastructure backing to enhance the utilization of digital media for collaborative learning in secondary education. The paper finishes up with proposals for future arrangement and practice to improve evenhanded digital media reconciliation across educational settings.

Keywords: Digital Media, Collaborative Learning, Noida, Secondary Schools, Digital Tools, Engagement, Infrastructure, Teacher Training, Critical Thinking, Education Technology

1. INTRODUCTION

Digital media has progressively turned into an imperative part of educational procedures around the world, reforming how students draw in with learning content and communicate with friends and teachers. In India, especially in metropolitan locales, for example, Noida, the combination of digital tools in secondary education is picking up speed, reflecting more extensive worldwide patterns. As Noida keeps on creating as a vital center in the Public Capital District (NCR), its schools are taking on digital media in different structures — going from online stages and interpersonal organizations to multimedia assets and interactive programming. This digital shift has changed customary learning conditions as well as presented new academic methodologies that accentuate joint effort, critical thinking, and engagement. With regards to collaborative learning, digital tools can possibly establish interactive and critical thinking conditions, permitting students to cooperate on errands, trade information, and foster fundamental abilities for the 21st hundred years. This review plans to investigate how digital media supports and upgrades collaborative learning in

secondary schools in Noida, zeroing in on what it means for student communication, engagement, and scholastic results. By breaking down a different scope of digital stages, including Google Homeroom, Zoom, and other multimedia tools, the exploration assesses the useful execution of digital media in both private and government schools. The concentrate likewise surveys the differences in digital infrastructure and access between these schools, with private establishments frequently having preferred assets over their government partners.

These aberrations bring up significant issues about value and the potential for digital media to one or the other extension or augment holes in educational quality. The concentrate further looks at the impression of teachers and students in regards to the adequacy of digital media in encouraging cooperation, critical thinking, and engagement, as well as the difficulties they face in taking on these tools. Through a blended strategies approach that incorporates overviews, meetings, and homeroom perceptions, this exploration digs into the encounters of students, teachers, and managers in Noida's secondary schools. The discoveries mean to give experiences into the present status of digital media mix in education, featuring the two victories and snags. Moreover, the review gives proposals for streamlining the utilization of digital tools to improve collaborative learning, with an emphasis on further developing teacher training, redesigning infrastructure, and guaranteeing impartial admittance to digital assets.

1.1 RESEARCH OBJECTIVES

- To investigate the job of digital media in advancing collaborative learning among secondary school students.
- To survey the ongoing use of digital media in Noida's secondary schools.
- To comprehend teacher and student discernments with respect to the adequacy of digital media in education.
- To give suggestions to advancing digital tools for collaborative learning.

1.2 SCOPE AND LIMITATIONS

The study is centered around secondary schools in Noida, with information assortment restricted to explicit foundations. The discoveries may not address the total of India yet give significant experiences to metropolitan educational settings.

2. LITERATURE REVIEW

2.1 DIGITAL MEDIA IN EDUCATION

Digital media in education alludes to the coordination of tools like web-based stages, interpersonal organizations, multimedia assets, and interactive programming that work with learning past the customary study hall arrangement. The utilization of these tools has become progressively predominant in current educational frameworks around the world, as they consider more adaptable, open, and customized learning encounters. Stages like Google Homeroom, Zoom, and Moodle have empowered students to draw in with educational substance and team up with peers remotely, while multimedia assets, for example, recordings and interactive reproductions, improve the learning system by making it seriously captivating and dynamic (Jenkins et al., 2013; Post, 2018). The capacity of digital media to help both free and collaborative learning has prompted upgrades in student results, including better comprehension of ideas, expanded engagement, and improved critical thinking abilities (Johnson et al., 2020). Notwithstanding, the viability of these tools frequently relies upon the accessibility of digital infrastructure and admittance to gadgets, which stays a test in numerous districts, especially in low-asset settings. This dissimilarity makes a digital divide, making it hard for certain students to completely profit from the valuable open doors digital media gives in education.

2.2 COLLABORATIVE LEARNING THEORIES

Collaborative learning is grounded in the possibility that students learn most successfully when they take part in interactive, critical thinking conditions where they can share information, thoughts, and encounters. Hypothetical systems created by researchers like Vygotsky (1978) and Dillenbourg (1999) accentuate the significance of social connection in the learning system, recommending that joint effort among peers prompts further comprehension and better maintenance of data. In conventional educational settings, collaborative learning regularly includes bunch tasks, conversations, and companion criticism. In any case, with the appearance of digital media, these collaborative endeavors can now reach out past the homeroom, empowering students to cooperate in virtual spaces. Digital tools like Google Docs, Microsoft Groups, and Zoom work with ongoing joint effort, permitting students to co-make, share assets, and impart all the more actually. These stages additionally give amazing open doors to nonconcurrent coordinated effort, where students can add to bunch work at their own speed, paying little mind to geological or time limitations (Roschelle et al., 2012). The coordination of technology into collaborative learning improves cooperation and relational abilities as

well as assists students with creating critical thinking as they draw in with different points of view and critical thinking systems.

2.3 GLOBAL CASE STUDIES ON DIGITAL MEDIA IN SCHOOLS

Worldwide, the joining of digital media in schools has shown to be exceptionally successful, especially in advancing collaborative learning. Contextual analyses from nations like the US, Australia, and Singapore have shown the groundbreaking capability of digital tools in education. For example, during the Coronavirus pandemic, stages like Google Homeroom and Zoom became fundamental for proceeding with education when in-person classes were at this point not conceivable (Arbor, 2017; Ghavifekr and Rosdy, 2015). These tools permitted teachers to lead live examples, relegate collaborative tasks, and work with bunch conversations, even in a remote learning climate. In Singapore, where digital learning has been coordinated into the public education framework, tools like the Student Learning Space (SLS) have been utilized to make customized learning encounters while empowering joint effort among students through virtual gathering work and interactive exercises. Also, in Australia, digital media has been utilized in mixed learning models that consolidate eye to eye guidance with online cooperation, furnishing students with more adaptable learning conditions. These worldwide contextual analyses feature the advantages of digital media in cultivating coordinated effort and engagement among students, however they additionally highlight the significance of satisfactory infrastructure and teacher training in guaranteeing effective execution.

2.4 ROLE OF DIGITAL TOOLS IN INDIAN EDUCATION

In India, digital tools have progressively become piece of the educational scene, especially in metropolitan regions where technology reception is further developed. Stages like Byju's, TeachNext, and Educomp have acquired ubiquity in schools, giving multimedia-rich substance that upholds both autonomous and collaborative learning. These stages offer interactive illustrations, recordings, and tests that permit students to draw in with material in new and imaginative ways (Kumar and Sharma, 2019). Also, private schools in metropolitan regions have started consolidating digital tools like interactive whiteboards and digital libraries to improve the learning experience. In any case, the reconciliation of digital tools in education is lopsided the nation over, with huge variations among private and government schools. While private schools frequently have the assets to put resources into cutting edge digital infrastructure, government schools, especially those in country or underserved regions, battle with restricted admittance to gadgets, untrustworthy web, and an absence of prepared teachers (Mehta, 2021). This digital divide represents a critical test to the boundless reception of digital media in Indian education, as numerous students can't completely profit from the open doors that digital tools give. In spite of these difficulties, there is developing acknowledgment of the requirement for strategy mediations that address these variations, with an emphasis on further developing infrastructure, upgrading teacher training, and guaranteeing fair admittance to digital assets across all schools in India.

3. RESEARCH METHODOLOGY

3.1 RESEARCH DESIGN

This study follows a blended techniques approach, consolidating subjective meetings and overviews with quantitative information examination. This plan considers a far reaching comprehension of what digital media means for collaborative learning in secondary schools.

3.2 DATA COLLECTION METHODS

Information was gathered through a blend of:

- **Surveys:** Administered to 200 students, 150 guardians and 50 teachers across 10 secondary schools in Noida.
- **Interviews:** In-depth interviews with school executives and digital media organizers.
- **Observations:** Classroom perceptions to survey the viable utilization of digital tools.

3.3 SAMPLING TECHNIQUES

Purposive sampling was utilized to choose schools in light of their standing for coordinating digital tools. The review included both private and government schools to guarantee a different portrayal.

Table 1: List of Schools Involved in the Study

School Name	Type	Location	Student Population	Digital Infrastructure
Delhi Public School (DPS), Noida	Private	Sector 30	3,500	High
Amity International School, Noida	Private	Sector 44	2,800	Very High
Lotus Valley International School	Private	Sector 126	2,200	Very High
Ryan International School	Private	Sector 39	3,000	High
Kothari International School	Private	Sector 50	1,800	Moderate
Kendriya Vidyalaya, Noida	Government	Sector 24	1,500	Low
Government Inter College, Noida	Government	Sector 12	1,200	Very Low
Sarvottam International School	Private	Greater Noida	1,500	High
Apeejay School, Noida	Private	Sector 16A	2,700	Very High
Bal Bharati Public School, Noida	Private	Sector 21	2,900	High
Government Girls Senior Secondary School, Noida	Government	Sector 22	800	Very Low
Army Public School, Noida	Government Aided	Sector 37	2,000	Moderate

Table 2: Methodology Sample Size

Method	Target Group	Sample Size	Comments/Key Notes
Surveys	Students (Secondary Schools)	200	10 schools (private and government); focus on digital media usage
Surveys	Teachers	50	Teachers from the same schools; mixed backgrounds (private/government)
Surveys	Parents	150	Parents of surveyed students from both private and government schools
Interviews	School Administrators	10	One administrator from each selected school
Interviews	Digital Media Coordinators	5	Focus on individuals responsible for digital media integration in schools
Classroom Observations	Schools	10	Observed actual digital media usage during collaborative projects
Focus Group Discussions (Optional)	Teachers and Students	30 (teachers + students)	Organized to gain deeper insights into collaborative learning
Additional Field Notes	All Schools (private and government)	N/A	Collected during classroom observations to understand practical challenges

Table 3: Sample Size Breakdown by School Type

School Type	Number of Schools	Number of Students	Number of Teachers	Parents Surveyed	Administrators Interviewed
Private Schools	7	140	35	100	7
Government Schools	3	60	15	50	3

3.4 ANALYSIS TECHNIQUES

Data was examined utilizing a blend of quantitative and subjective techniques. Unmistakable measurements were utilized to sum up the study information, featuring patterns in digital media utilization across various schools. Topical examination was applied to the subjective information from meetings and study hall perceptions, utilizing NVivo programming to recognize repeating examples and bits of knowledge. The outcomes were cross-referred to investigate the connection between digital infrastructure, student engagement, and collaborative learning viability. Furthermore, relative examination was led to analyze the aberrations among private and government schools concerning access and results.

4. CASE STUDY: NOIDA SECONDARY SCHOOLS

4.1 OVERVIEW OF SCHOOLS IN NOIDA

Noida, as part of the National Capital Region (NCR), has seen quick educational improvement with a different blend of private and government secondary schools. Digital media combination is turning out to be progressively noticeable, yet there stays a huge uniqueness between the private and government schools concerning digital infrastructure, access, and use.

4.2 CURRENT USE OF DIGITAL MEDIA IN NOIDA SCHOOLS

The reception of digital media in Noida's schools is exceptionally factor, with private organizations frequently driving the way because of better financing and assets. The pandemic has sped up the utilization of online stages like Google Study hall, Microsoft Groups, and Zoom for remote learning and joint effort. Private schools have likewise put resources into digital libraries, brilliant sheets, and virtual labs, though government schools frequently depend on fundamental digital tools, with restricted admittance to gadgets and low-speed web.

Table 4: Current Use of Digital Media Tools in Noida Schools

Tool/Platform	Private Schools Usage (%)	Government Schools Usage (%)
Google Classroom	95	50
Microsoft Teams	85	40
Smartboards	90	30
Digital Libraries	70	20
Virtual Labs	75	15

4.3 QUESTIONNAIRE ANALYSIS

Table 5: Student Responses

Question	Daily	Weekly	Rarely
Frequency of digital media usage for learning	160 (80%)	30 (15%)	10 (5%)
Commonly used digital tools/platforms	Google Classroom: 180 (90%)	Zoom: 170 (85%)	Google Docs: 140 (70%)
Effectiveness of digital tools for collaboration	Yes: 150 (75%)	No: 30 (15%)	Unsure: 20 (10%)
Challenges faced with digital media usage	Lack of devices: 60 (30%)	Slow internet: 80 (40%)	No challenge: 60 (30%)
Comfort level with using digital tools	Comfortable: 140 (70%)	Somewhat comfortable: 40 (20%)	Uncomfortable: 20 (10%)
Adequate guidance received	Yes: 110 (55%)	No: 60 (30%)	Unsure: 30 (15%)
Preferred type of digital media for collaboration	Interactive sessions: 120 (60%)	Document collaboration: 60 (30%)	Videos: 20 (10%)
Digital media increases student engagement	Yes: 160 (80%)	No: 30 (15%)	Unsure: 10 (5%)
Satisfaction with digital infrastructure	Satisfied: 120 (60%)	Dissatisfied: 60 (30%)	Neutral: 20 (10%)
Improvements in critical thinking	Yes: 130 (65%)	No: 50 (25%)	Unsure: 20 (10%)
Enough time for collaboration	Yes: 100 (50%)	No: 70 (35%)	Unsure: 30 (15%)
Sufficient resources for digital tools usage	Yes: 110 (55%)	No: 60 (30%)	Unsure: 30 (15%)
Difficulties in using digital platforms for collaboration	Yes: 80 (40%)	No: 100 (50%)	Unsure: 20 (10%)
Satisfaction with technical support	Satisfied: 110 (55%)	Dissatisfied: 60 (30%)	Neutral: 30 (15%)
Suggested improvements for effective digital media usage	Better internet: 80 (40%)	More guidance: 70 (35%)	Improved infrastructure: 50 (25%)

The examination of student reactions uncovers that most of students (80%) utilize digital media for learning consistently, with tools like Google Homeroom, Zoom, and Google Docs being the most usually utilized stages. Around 75% of students found these digital tools powerful for coordinated effort, permitting them to connect more interactively in bunch undertakings and conversations. Be that as it may, difficulties like sluggish web (40%) and absence of gadgets (30%) impeded a students' capacity to partake in digital learning completely. Notwithstanding these obstructions, 70% of students communicated solace with utilizing digital tools, and 55% felt they got sufficient direction. At the point when it came to engagement, 80% concurred that digital media expanded their cooperation in learning exercises, however fulfillment with digital infrastructure was lower, with just 60% fulfilled. Students additionally announced enhancements in critical thinking (65%), however many showed there wasn't generally sufficient time for joint effort (half). Students additionally noticed that better web (40%) and more direction (35%) would additionally work on their experience.

Table 6: Parent Responses

Question	Daily	Weekly	Rarely
Frequency of children's digital media usage	105 (70%)	30 (20%)	15 (10%)
Familiarity with digital tools	Google Classroom: 120 (80%)	Zoom: 100 (65%)	BYJU's: 75 (50%)
Effectiveness of digital tools for collaboration	Yes: 85 (55%)	No: 40 (27%)	Unsure: 25 (18%)
Challenges faced by children using digital media	Poor internet: 68 (45%)	Lack of devices: 53 (35%)	None: 29 (20%)
Perception of children's comfort level with digital tools	Comfortable: 75 (50%)	Somewhat comfortable: 45 (30%)	Uncomfortable: 30 (20%)
Adequate guidance received	Yes: 60 (40%)	No: 60 (40%)	Unsure: 30 (20%)

Preferred type of digital media for collaboration	Interactive sessions: 68 (45%)	Document collaboration: 53 (35%)	Videos: 29 (20%)
Digital media increases children's engagement	Yes: 98 (65%)	No: 35 (23%)	Unsure: 17 (12%)
Satisfaction with digital infrastructure	Satisfied: 83 (55%)	Dissatisfied: 45 (30%)	Neutral: 22 (15%)
Improvements in critical thinking	Yes: 75 (50%)	No: 45 (30%)	Unsure: 30 (20%)
Enough time for collaboration	Yes: 68 (45%)	No: 45 (30%)	Unsure: 37 (25%)
Sufficient resources for digital tools usage	Yes: 75 (50%)	No: 45 (30%)	Unsure: 30 (20%)
Difficulties in using digital platforms for collaboration	Yes: 53 (35%)	No: 75 (50%)	Unsure: 22 (15%)
Satisfaction with technical support	Satisfied: 75 (50%)	Dissatisfied: 45 (30%)	Neutral: 30 (20%)
Suggested improvements for effective digital media usage	Better internet: 68 (45%)	More guidance: 45 (30%)	Improved infrastructure: 37 (25%)

Parents generally saw that their kids utilized digital media oftentimes, with 70% detailing everyday use. Knowledge of stages like Google Homeroom (80%) and Zoom (65%) was high among students, with 55% of guardians recognizing the viability of these tools for joint effort. In any case, like students, guardians noted huge difficulties, especially unfortunate web (45%) and absence of gadgets (35%), which hampered their youngsters' capacity to take full advantage of digital tools. While half of guardians felt their youngsters were OK with digital media, 30% noticed that their kids required more direction. Digital media was viewed as decidedly influencing engagement (65%), however fulfillment with infrastructure was rather lower (55%). Guardians additionally communicated worries about enhancements in critical thinking, with just half concurring that digital tools added to improved results. To upgrade digital learning, guardians recommended enhancements in web network (45%) and better infrastructure (25%).

Table 7: Teacher Responses

Question	Daily	Weekly	Rarely
Frequency of digital media usage for teaching	33 (65%)	12 (24%)	5 (10%)
Commonly used digital tools/platforms	Google Classroom: 48 (95%)	Zoom: 40 (80%)	BYJU's: 25 (50%)
Effectiveness of digital tools for collaboration	Yes: 30 (60%)	No: 10 (20%)	Unsure: 10 (20%)
Challenges faced with digital media usage	Lack of training: 12 (25%)	Slow internet: 18 (35%)	None: 20 (40%)
Comfort level with using digital tools	Comfortable: 25 (50%)	Somewhat comfortable: 15 (30%)	Uncomfortable: 10 (20%)
Adequate training received	Yes: 20 (40%)	No: 25 (50%)	Unsure: 5 (10%)
Preferred type of digital media for collaboration	Interactive platforms: 25 (50%)	Multimedia tools: 15 (30%)	Document collaboration: 10 (20%)
Digital media increases student engagement	Yes: 35 (70%)	No: 10 (20%)	Unsure: 5 (10%)
Satisfaction with digital infrastructure	Satisfied: 35 (70%)	Dissatisfied: 10 (20%)	Neutral: 5 (10%)
Improvements in student critical thinking	Yes: 30 (60%)	No: 15 (30%)	Unsure: 5 (10%)
Enough time for collaboration	Yes: 28 (55%)	No: 15 (30%)	Unsure: 7 (15%)
Sufficient resources for digital tools usage	Yes: 33 (65%)	No: 10 (20%)	Unsure: 7 (15%)
Difficulties in using digital platforms for collaboration	Yes: 15 (30%)	No: 30 (60%)	Unsure: 5 (10%)
Satisfaction with technical support	Satisfied: 30 (60%)	Dissatisfied: 15 (30%)	Neutral: 5 (10%)
Suggested improvements for effective digital media usage	Better infrastructure: 20 (40%)	More training: 15 (30%)	Better internet: 10 (20%)

Teachers' reactions feature their continuous utilization of digital media, with 65% using these tools everyday, essentially utilizing Google Homeroom (95%) and Zoom (80%) for instructing. While 60% of teachers found digital media viable for working with cooperation, difficulties like sluggish web (35%) and an absence of satisfactory training (25%) were outstanding obstructions. Just 40% of teachers felt they had gotten adequate training in utilizing digital tools, which added to some distress among teachers, with 30% inclination just fairly agreeable or awkward with these stages. In spite of these difficulties, 70% concurred that digital media expanded student engagement, and 60% noted enhancements in students' critical abilities to think. Teachers additionally featured the requirement for better infrastructure (40%) and more expert advancement open doors (30%) to amplify the advantages of digital media in collaborative learning.

4.4 STUDENT AND TEACHER PERCEPTIONS OF DIGITAL MEDIA USAGE

STUDENT PERCEPTIONS:

Students in private schools commonly communicated high fulfillment with digital media, taking note of that it worked with collaborative learning and worked on their engagement in illustrations. Many revealed involving Google Docs for bunch projects and taking part in live conversations through Zoom. Conversely, students from government schools confronted critical hindrances, for example, restricted admittance to gadgets and unfortunate web availability, which impacted their capacity to partake in digital learning exercises completely.

TEACHER PERCEPTIONS:

Private teachers found digital tools supportive for interactive instructing and cultivating joint effort among students. Numerous teachers stressed the advantages of utilizing multimedia tools to make illustrations really captivating. In any case, government teachers battled with restricted assets, lacking training, and specialized troubles, which thwarted the viable utilization of digital tools in the homeroom.

Table 8: Summary of Student and Teacher Perceptions

Factor	Private Schools	Government Schools
Student Satisfaction	High (Average rating: 4.3/5)	Moderate (Average rating: 2.7/5)
Teacher Training	Regular and structured	Limited and inconsistent
Access to Digital Tools	High (individual devices)	Low (shared or no devices)
Infrastructure Support	Strong technical support	Minimal to none

4.5 KEY OBSERVATIONS FROM THE FIELD

Field perceptions uncovered clear variations in digital media mix among private and government schools in Noida. Coming up next are key perceptions from the review:

- **Student Engagement:** In private schools, digital media improved student engagement through interactive illustrations, online tests, and multimedia content. In government schools, restricted admittance to technology decreased engagement levels.
- **Collaborative Activities:** Tools like Google Docs and Zoom were normally utilized for bunch tasks in private schools, permitting students to team up consistently. In government schools, bunch projects were frequently less successful because of unfortunate availability and absence of gadgets.
- **Infrastructure Difficulties:** Government schools confronted huge infrastructure challenges, including obsolete PCs, inconsistent web, and an absence of financing for digital tools. Private schools had far less issues in such manner, as they were outfitted with high velocity web and present day digital assets.

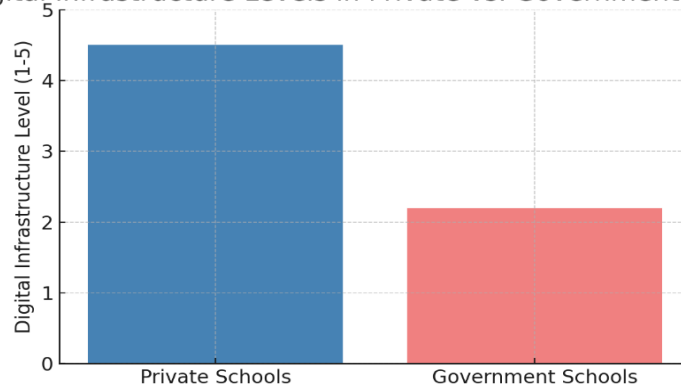
Table 9: Key Observations by School Type

Observation	Private Schools	Government Schools
Student Engagement	High due to interactive tools	Low due to lack of resources
Group Collaboration	Seamless with platforms like Google Docs	Minimal due to lack of devices
Infrastructure Challenges	Few challenges (fast internet)	Significant challenges (slow internet)
Technical Support	Available (dedicated IT staff)	Minimal to none

4.6 ANALYSIS OF DIGITAL INFRASTRUCTURE

This part breaks down the degrees of digital infrastructure across private and government schools in Noida, zeroing in on perspectives like web speed, admittance to digital gadgets, and teacher training in digital tools.

Digital Infrastructure Levels in Private vs. Government Schools

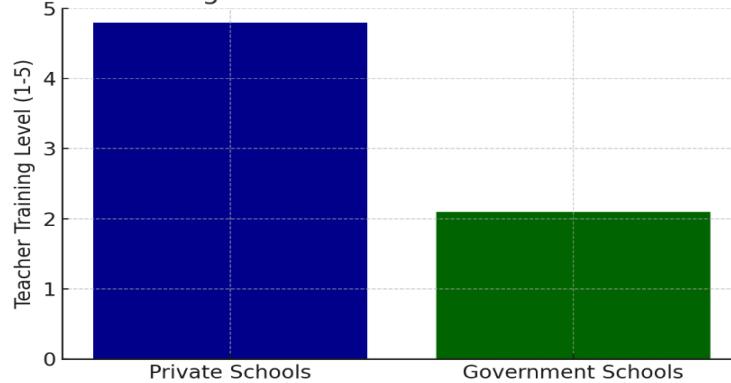
**Graph 1: Digital Infrastructure Levels in Private vs. Government Schools**

This diagram shows that private schools for the most part have high digital infrastructure, while government schools slack fundamentally regarding assets.

4.7 TEACHER TRAINING IN DIGITAL MEDIA

Teacher training assumes a critical part in the effective reconciliation of digital media. The accompanying diagram shows the degrees of training gave to teachers across private and government schools.

Teacher Training Levels in Private vs. Government Schools

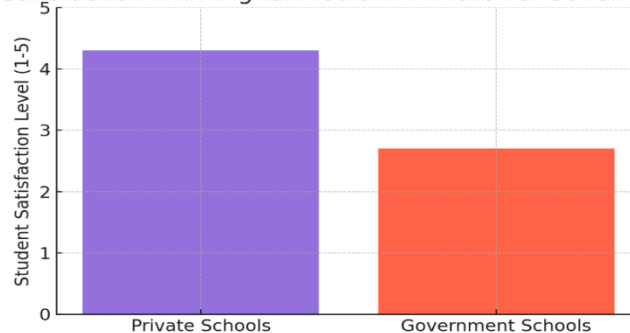
**Graph 2: Teacher Training Levels in Digital Media Across Schools**

This graph shows that private teachers get essentially more training in digital media than those in government schools, adding to better digital media use.

4.8 STUDENT SATISFACTION WITH DIGITAL MEDIA

The degree of student fulfillment is vital in assessing the adequacy of digital media in collaborative learning. The chart underneath analyzes student fulfillment levels in private and government schools.

Student Satisfaction with Digital Media in Private vs. Government Schools

**Graph 3: Student Satisfaction with Digital Media in Private vs. Government Schools**

Private school students detailed a lot higher fulfillment with digital media because of better assets and access, while government school students confronted difficulties that influenced their learning experience.

5. Discussion and Findings

5.1 IMPACT OF DIGITAL MEDIA ON COLLABORATIVE LEARNING

The study uncovers that digital media assumes a urgent part in upgrading collaborative learning among secondary school students in Noida. Digital tools like Google Homeroom, Zoom, and Microsoft Groups have worked with ongoing joint effort, permitting students to draw in with peers past the limits of the actual homeroom. These stages offer new ways for students to co-make, share assets, and work on bunch projects nonconcurrently, subsequently enhancing the collaborative experience. In private schools, where digital infrastructure is strong, students detailed more significant levels of fulfillment with their digital media encounters, taking note of that it worked on their capacity to participate in bunch conversations and critical thinking assignments. Conversely, students from government schools confronted huge difficulties because of restricted admittance to digital tools and solid web associations, which hampered their capacity to partake in collaborative exercises completely. This recommends that while digital media can possibly cultivate cooperation, its adequacy is profoundly dependent upon the accessibility of the fundamental infrastructure and assets.

5.2 DISPARITIES BETWEEN PRIVATE AND GOVERNMENT SCHOOLS

One of the most striking discoveries of the review is the divergence among private and government schools concerning admittance to digital infrastructure. Private schools in Noida are for the most part better furnished with fast web, smartboards, virtual labs, and committed IT support staff, considering consistent coordination of digital tools into the learning system. This infrastructure upholds collaborative learning as well as a more interactive and connecting with educational experience generally. Then again, government schools battle with obsolete PCs, slow web, and an absence of gadgets, bringing about restricted utilization of digital media for educational purposes. The hole in admittance to technology influences student engagement as well as worsens educational disparities, as students in under-resourced schools are abandoned with regards to digital proficiency and collaborative abilities. These differences feature the pressing requirement for strategy mediations pointed toward working on digital infrastructure in government schools to guarantee impartial admittance to digital learning open doors.

5.3 TEACHER TRAINING AND SUPPORT FOR DIGITAL MEDIA INTEGRATION

One more key finding from the review is the job of teacher training in the fruitful combination of digital media into collaborative learning. Teachers in private schools announced getting ordinary, organized training on the best way to utilize digital tools actually, which has empowered them to make more interactive illustrations and encourage coordinated effort among students. Conversely, teachers in government schools showed that they had restricted admittance to such training, which, combined with lacking specialized help, impeded their capacity to really integrate digital media into their educating rehearses. The absence of training in digital instructional method leaves numerous teachers feeling unfit to oversee collaborative learning in digital conditions, further augmenting the hole among private and government schools. To address this, there is a reasonable requirement for expanded interest in proficient improvement programs that emphasis on digital media mix, guaranteeing that all teachers, paying little heed to school type, have the right stuff and information important to utilize digital tools to upgrade collaborative learning.

5.4 STUDENT AND TEACHER PERCEPTIONS OF DIGITAL MEDIA

The concentrate likewise investigated the view of students and teachers in regards to the utilization of digital media in collaborative learning. Generally speaking, students in private schools communicated high fulfillment with the utilization of digital tools, refering to expanded engagement, better correspondence with companions, and more open doors for interactive learning. They especially valued tools like Google Docs, which permitted them to cooperate on projects progressively, no matter what their actual area. Nonetheless, in government schools, students were less fulfilled, principally due to the previously mentioned issues with infrastructure and access. Teachers in private schools correspondingly noticed the advantages of digital media, underlining that it permitted them to make more unique and connecting with illustrations. In government schools, be that as it may, teachers felt compelled by the absence of assets and training, which restricted their capacity to take advantage of the capability of digital tools for collaborative learning completely.

5.5 CHALLENGES IN IMPLEMENTING DIGITAL MEDIA FOR COLLABORATIVE LEARNING

Regardless of the many advantages of digital media, the review recognized a few difficulties in its execution, especially in under-resourced settings. The main hindrances incorporated an absence of admittance to gadgets, untrustworthy web associations, and inadequate teacher training. These difficulties were most articulated in government schools, where the digital divide was apparent. Besides, the review featured the issue of digital proficiency, with the two students and teachers in government schools frequently deficient with regards to the essential abilities to successfully explore digital tools. This focuses to a more extensive requirement for drives pointed toward working on digital proficiency among the two students and teachers. Tending to these difficulties will require composed endeavors from policymakers, school executives, and technology suppliers to guarantee that all schools have the infrastructure and backing expected to incorporate digital media into collaborative learning.

5.6 POLICY IMPLICATIONS AND RECOMMENDATIONS FOR FUTURE INTEGRATION

The findings of this study have significant ramifications for educational approach and practice. To completely outfit the capability of digital media for collaborative learning, it is fundamental for address the infrastructure and asset holes among private and government schools. Policymakers should focus on interests in digital infrastructure, especially in under-resourced schools, to guarantee impartial admittance to digital tools. This incorporates redesigning web associations, giving satisfactory gadgets, and laying out specialized emotionally supportive networks. Furthermore, proficient improvement programs for teachers ought to be extended to remember complete training for the utilization of digital tools for collaborative learning, with an emphasis on digital instructional method. Besides, there is a requirement for government drives that advance digital education among students and teachers the same, guaranteeing that all partners are furnished to successfully draw in with digital media. By tending to these key regions, educational organizations can establish more comprehensive and evenhanded learning conditions where all students have the amazing chance to profit from the collaborative capability of digital media.

6. CONCLUSION

The review shows the way that digital media can fundamentally upgrade collaborative learning in secondary schools, especially in metropolitan settings like Noida. Nonetheless, the effective coordination of digital tools into education is dependent upon the accessibility of sufficient infrastructure, admittance to gadgets, and teacher training. While private schools in Noida have gained extensive headway in taking on digital media, government schools face critical difficulties because of asset limitations. To overcome this issue and advance fair digital media joining across all schools, it is fundamental for policymakers to put resources into infrastructure upgrades, proficient improvement for teachers, and drives pointed toward working on digital education. Just through facilitated endeavors could digital media at any point be completely used to improve collaborative learning and plan students for the requests of the 21st hundred years.

6.1 RECOMMENDATIONS FOR FUTURE INTEGRATION

- **Teacher Training:** Schools should invest in professional development for teachers.
- **Infrastructure Improvement:** Upgrading internet infrastructure in schools is essential.
- **Policy Support:** Government policies should promote equitable access to digital tools.
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6.2 LIMITATIONS OF THE STUDY

The research is limited by its focus on a specific geographic area and may not be generalizable to rural settings or other urban areas in India.

CONFLICT OF INTERESTS

None

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None

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