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FLIPPED CLASSROOM METHODOLOGY: TRANSFORMING THE TEACHING-LEARNING PROCESS THROUGH TECHNOLOGY-ENHANCED INSTRUCTION

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ABSTRACT

The essential objective of the examination was to feature the way that, like different areas, instruction is vigorously influenced by the computerized upheaval. Tremendous changes in the space of schooling's acknowledged strategies for guidance and understudy gaining have come about because of the previously mentioned powers. Our age's students are notably not quite the same as their ancestors, and their assumptions have been formed fittingly. Hence, regular techniques for guidance struggle with piqueing the interest and interest of current understudies in instructive pursuits. Additionally, utilizing obsolete techniques to fix a few issues with training isn't direct. Teachers these days are exceptionally keen on new strategies for guidance that take special care of understudies' necessities in this advanced period. Among these strategies is the flipped homeroom approach. This examination caused to notice the hypothetical underpinnings, authentic setting, and applied underpinnings of the flipped study hall model, which has acquired prevalence as an instructive system lately. It likewise underscored the worldview's advantages and downsides. Likewise remembered were feelings for how the flipped study hall approach might assist with settling specific issues tormenting the training area.

Keywords: *flipped classroom, digital era, Technology-Enhanced Learning, Active Learning, Student-Centered Instruction, Blended Learning*

I. INTRODUCTION

Numerous grown-ups these days find it confusing that the present youth are so engrossed with innovation — with cell phones, tablets, and workstations specifically — and that their imaginative thoughts and techniques for critical thinking are established in these stages. Furthermore, they balance the current practices with the past.

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Here, Prensky (2001) noticed that "computerized outsiders" who can't think imaginatively waste their time by whining about how things were better in the past [1]. According to conversely, he, those with versatile and wise personalities attempt to find a place with the computerized world by enrolling the guide of the more youthful age, regardless of whether they concede they don't know sufficiently about this age's exceptional culture. Another sort of flipped learning, understudy made video material assists understudies with learning all the more profoundly while additionally developing significant 21st-century abilities like imagination, decisive reasoning, and correspondence. Current Capabilities in a Flipped Study Hall. The act of turning a homeroom on its head isn't new. Educational plan flipping is truly something that a great deal of instructors is doing at present. An illustration of mixed picking up, "flipping the homeroom" turns the normal homeroom model on its head by getting class exercises — including those that could have been doled out as schoolwork previously — rather than having understudies access educational materials on the web. Educators could set assumptions for their understudies to meet beyond class, for example, perusing a book with the goal that they can partake nicely in class conversations or doing numerical statements before class to assist them with planning for additional difficult issues in class.

As well as being a more viable technique for understudies to gain the critical abilities to think they'll require for the gig upon graduation, flipped homerooms give a new viewpoint on educating programming. Rather than addressing understudies straightforwardly in a homeroom setting, flipped homerooms urge understudies to work freely on course material, with the educator directing them as they apply what they've realized and think fundamentally about the material within reach [2].

The impacts of "flipping homerooms" on understudy accomplishment have been the subject of much review. "From Sage on the Stage to Guide as an afterthought" is an article that originates before the current pattern of educational program flipping in schools. In the constructivist learning worldview, the creator contends, the job of the educator shifts from that of a speaker to that of a facilitator for the students. The educator's job continues as before, however presently they might offer the data such that understudies can comprehend and draw in with it all the more successfully. Understudies are bound to have a careful handle of the material when they effectively take part in their own schooling (Lord, 1993).

A. Purpose

Figuring out how a FLIPPED homeroom might help understudies learn and succeed was the main impetus behind our exploration. Many expectations and desires have been acknowledged thanks to new innovation that

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have arisen over the most recent 20 years. Wishes to help understudies in diving further into, applying, and expanding upon the information and capacities being granted. Desires to dedicate additional opportunity to chip away at projects and less to going to classes. Expects future prospects to perceive the truth about the globe, without burning through every last cent on airfare. Some of extra obligations held by instructors have additionally been rearranged. On account of innovative headways, numerous once monotonous errands, for example, physically computing grades, looking through up telephone numbers, and arranging piles of understudy papers, are presently generally outdated. Despite the fact that I have figured out my own opportunity twist to be both captivating and frightening on occasion, I'm delighted to find the newly discovered opportunity that accompanies utilizing innovation [3].

B. Significance

Tracking down the best FLIPPED homeroom conveyance systems to further develop understudies' scholarly presentation is the essential inspiration for this exploration. Distributed computing has progressed to the point that it gives many advantages to sharing information and programming, say Jou and Wang (2013). "Schooling quality and understudy intensity have been getting more consideration around the world," they noted too on their past perception. There is mounting proof from an assortment of examination that recommends involving iPads and other cell phones in the homeroom might further develop understudies' learning results and encounters.

Trouble, Hopkins, Male, Martin, and Trala (2012) express that understudies can encounter positive changes in regions, for example, "cooperative learning," "customized and consistent learning," inspiration, commitment, and the capacity to learn in manners that were beforehand unthinkable. They additionally notice that there might be upgrades in correspondence among educators and understudies, as well as an improvement in the daily schedule and simplicity of advances among school and home. Such contraptions could possibly acquire a benefit when incorporated with other innovative frameworks [4].

As per research (Hegedus, Dalton and Tapper, 2015; Zhai, Zhang, and Li, 2016), understudies who use cell phones both all through the homeroom will quite often improve scholastically and show more interest in testing subjects. Extra exploration affirmed that teachers face a consistent daunting task in staying aware of the steadily advancing instructive targets forced on them by a blend of variables, including however not restricted to, curricular turns of events and innovation propels. "Teachers changing in accordance with this better approach for life need to sort out some way to consolidate and involve these new sorts of innovation in the homeroom, to

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rouse understudies, yet in addition to teach them," Francis(2017) said. A few instructors are utilizing a FLIPPED study hall construction to help their students find out more and capitalize on their homeroom prospects, as per Francis (2017) and Cukurbasi, and Kiyici (2018).

C. Research Question

I considered, "The amount of an effect does the FLIPPED homeroom conveyance technique have on secondary school understudy accomplishment?" considering the squeezing need for teachers to find novel ways to deal with working on their understudies' instructive encounters.

I set off on a mission to find the response to this issue by leading a writing concentrate on in which I meant to research:

- Methodologies for instruction that utilize versatile advances
- Understudy, educator, and managerial perspectives on FLIPPED homerooms.
- How well understudies are ready for in-class exercises utilizing the FLIPPED system.

II. CONCEPT OF THE FLIPPED CLASSROOM

The flipped study hall model has likely arisen during natural discourse as one of the most sultry instructive ideas of late. Nonetheless, what precisely is it that separates a flipped homeroom from the rest? In a flipped homeroom model, understudies watch recordings or read articles on the material at home prior to finishing tasks in class. This mixed learning strategy joins conventional study hall guidance with additional cutting edge types of independent learning, like web-based assets. Subsequent to seeing the recordings at home, understudies might move toward their task with questions and some earlier information. The possibility of the flipped homeroom is to reconsider the ideal times for understudies to get to the materials they will require. The flipped study hall model flips the customary request of things on its head[6]. This approach is helpful when understudies need more direction with the real main jobs than with figuring out the hypothetical underpinnings of those undertakings.

With the recordings at home and the teachers in the study hall, understudies have twofold the opportunity for customized learning and more accurate coordinating. In a flipped homeroom, understudies work with the educator one-on-one while likewise utilizing their own gadgets to get to course materials.

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Own. The capacity to record addresses that feature key guidelines, significant ideas, or even the speed of a specific educational program map is an extra advantage for teachers. To really sweeten the deal, it makes a library that understudies can access for survey, make-up work, and so on, and allows them to stop, rewind, Google words, replay, and so on.

III. REVIEW OF THE LITERATURE

In my presentation, I said that the reason for this exploration was to recognize innovation modes and methodology that might end up being useful to raise understudies' scholarly exhibition. The advantages and disadvantages of distributed computing for sharing information and applications have been proven and factual by Jou and Wang (2013). "Schooling quality and understudy seriousness have been getting more consideration around the world," they said also.

Understudies' positive development in "cooperative learning," "customized and consistent learning," inspiration and commitment, animating "synchronous open doors for up close and personal social association," getting to the next level "learning in simple that were already impractical," and perhaps "making correspondence among educators and understudies, and school and home simpler and more daily practice" have all been connected to the utilization of cell phones like iPads, as per various examinations. contraptions and frameworks could possibly acquire a benefit when incorporated "with different advancements." As per Weight et al. (2012) [7]

Scientists have shown that understudies who utilize their cell phones both all through the homeroom improve scholastically and show more interest in testing subjects like math and physical science (Hegedus et al., 2015; Zhai et al., 2016). Instructors are confronted with the steady undertaking of staying aware of the consistently advancing curricular goals and innovation advancements. "Educators adjusting to this new way of life should track down techniques for consolidating and using these new types of innovation in class, on a persuasive level, yet in addition on an educational level as well," Francis (2017) said.

Various instructors are utilizing the FLIPPED model of guidance, as indicated by research by Cukurbasi and Kiyici (2018). As indicated by their discoveries, executing a FLIPPED homeroom model increments both understudy inspiration and achievement. "They coordinated, traded thoughts, shared undertakings, assumed liability, and associated with their companions" whenever allowed the opportunity to utilize new mechanical programming and gear, as per one understudy concentrating on this. In similar exploration, the two understudies and teachers noticed that the climate encouraged better opportunities for getting done with troublesome

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responsibilities, tasks, and discussions among educators and their understudies. In a FLIPPED study hall, what sorts of educational strategies are important for progress?

The primary way to deal with schooling utilizes convenient electronic gadgets that can be utilized both all through the homeroom. How might I characterize a cell phone? As per Traxler (2010), a cell phone might be depicted as "PDAs, game control center, computerized cameras, media players, netbooks (electronic scratch pad), in-vehicle SATNAV (satellite route framework), and handheld PCs." With the coming of cell phones, the two understudies and educators have more breathing space to investigate thoughts and data beyond the imperatives of a regular homeroom setting and an unbending schedule. These new advances have considered critical headways in the spaces of appropriate setting for the two teachers and students (Traxler, 2010) [8].

Educators may likewise adjust their helping methodologies to more readily suit the prerequisites of their understudies through the use of cell phones in the study hall. Educators "not just lived up to the assumption to make suitable facilities, yet arranged illustrations from the beginning through separation," as Floyd and Judge (2012) put it. By utilizing innovation and taking on various showing strategies, teachers ensured that each understudy couldn't see yet additionally partake in the meeting.

As per Zhao et al. (2016), customary homeroom procedures of training have been stirred up by the presentation of these cell phones utilized by the two understudies and educators. Interruptions might have positive angles too. The expansion of cell phones has furnished instructors with a brilliant opportunity to explore different avenues regarding new ways to deal with illustration arranging and conveyance. Seeing one model named SAMR (Puentendura, 2006) permits one to concentrate on educational procedures that utilize various transformations to innovation. In training, the abbreviation SAMR alludes to the four phases of educating: "replacement, expansion, adjustment and redefinition" [9].

Various methodologies for integrating innovation into the homeroom are spread out in the SAMR model, which gives a movement of learning levels. Two of SAMR's stages are committed to further developing homeroom training, while the other two spotlight on totally redoing the model (Puentendura, 2006). The model gives a rundown of the various levels of innovation use for every one of those levels. There are two degrees of mechanical turn of events: the improvement level includes involving innovation as an instrument, and the groundbreaking level includes upgrading innovation to make new exercises that were beforehand unimaginable (Puentendura, 2006). Lai, Hwang, Liang, and Tsai (2016) expressed that "both the understudies and educators

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thought about that the "whenever' and 'anyplace' support gave, by means of the portable innovation, assumed a significant part during the learning exercises, drawing in them in looking for data, gathering information, deciphering information, and summing up discoveries" [10].

IV. FLIPPED LEARNING'S 21ST CENTURY SKILLS

A. Independent Learning

Understudies are persuaded to take part in metacognitive realizing while direct educating is migrated beyond the study hall. Here, understudies might learn at their own speed in a climate intended to meet their singular prerequisites, which cultivates independence and individualization in the study hall.

B. Critical Thinking

Decisive reasoning is a higher priority than at any other time for understudies in the present day. Understudies' decisive reasoning abilities, regular interest, and limit with regards to information extension are undeniably improved by the act of autonomous review. To set themselves up for an undeniably questionable future, children might benefit incredibly from acquiring decisive reasoning abilities, which incorporate the risks of reliance and the compensations of self-assurance.

C. Collaboration

Everybody realizes that cooperating beneficially pays off, and fortunately it has never been simpler to get that going. Understudies are urged to cooperate gainfully beyond school hours utilizing web-based entertainment under the flipped homeroom approach, with the study hall filling in as a proactive place for helpful and productive shared learning.

D. Digital Literacy

Each understudy in the present day needs to know how to utilize PCs and other computerized gadgets. Understudies tap into an abundance of chances when they routinely use innovation to get to classes, participate in cooperations, and contribute. The significance of advanced proficiency and computerized citizenship is imbued in their innovation use, as understudies are educated to see their contraptions not as friendly adornments but rather as apparatuses for study and development.

E. Social Skills

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An individual's social improvement might be additionally hindered assuming that they are naturally introduced to a general public that values virtual entertainment. You might put more spotlight on creating positive associations and viable groups by making the homeroom into a more powerful and cooperative climate.

V. TEACHER EFFECTIVE TEACHING ENVIRONMENT OF A FLIPPED CLASSROOM

To objective set it forth plainly, "flipping the study hall" achieves its planned. It absolutely turns the tables on the dated elements of learning. Utilizing this methodology, homeroom guidance is pointless for understudies to secure new information. Rather, understudies learn at their own speed and in their own surroundings by watching recordings and perusing articles on the web. Simultaneously, rather than doing schoolwork, understudies take care of on problems and assignments in class with teachers giving individualized criticism. A great deal of advantages might be acquired from this methodology. The current week's blog entry sums up seven significant ones [11].

A. More one-to-one time between teacher and student

Having more one-on-one time with every understudy is a significant advantage of a flipped homeroom model. It likewise gives understudies a spot to go in the event that they need explanation or more help with anything they're battling with [12].

B. More collaboration time for students

Nowadays, understudies don't be guaranteed to need to deal with their own activities in class. The flipped homeroom model urges understudies to cooperate on a more regular basis, which is useful for their learning and their improvement as cooperative individuals.

C. Students learn at their own pace

Now that "information securing" occurs beyond class, understudies might fit it to their own advantages, assets, and shortcomings. In a traditional homeroom setting, the progress of the showing methodology relies upon every understudy getting a handle on the material at their own speed. No, flipped homerooms don't work. This might be particularly liberating for understudies who learn at a more slow speed [13]. The strain to 'keep up' is off their shoulders, and they might learn at their own speed. Moreover, understudies are allowed to return to recently covered material at their recreation.

D. It encourages students to come to class prepared

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Understudies might be prepared for class with questions and considerations subsequent to connecting with computerized material at home. Accordingly, understudies' sense of obligation might be encouraged as they are effectively engaged with making homeroom meetings.

E. Subject matter content becomes infinitely richer

Individuals used to depend just on everything that their educators said to them in class while exploring a subject. They have significantly more opportunity to examine with flipped learning. They approach an abundance of assets, and you have the ability to point them toward assets made by different instructors, among others. They will have a more profound comprehension of the topic because of this assortment [14].

VI. CRITICISMS OF THE FLIPPED CLASSROOM

Normally, there are advantages and drawbacks to a flipped homeroom, and it is quite difficult.

A portion of the protests evened out against this type of schooling incorporate the accompanying: that it works on a generally industrialized strategy for educating and realizing, that it supports a talk driven walk through the educational plan, that it decenters the understudy's job, and that it decreases potential open doors for independent decisive reasoning [15].

Achievement, as in any study hall, is vigorously reliant upon the type of the teacher, the adequacy of class conversations, and the gave materials, tests, and tasks [16]. Likewise, it fails to address the obsolete way that most educational systems handle educational plans, and equity is as yet a major concern. That is its finish. The Picture That Explains, An outline by Suanne Bloemarts, obtained from coetail.com, gives a decent synopsis of the flipped homeroom model, which is as yet a generally better approach for contemplating understudy learning. With one significant point. At school, the children finish their tasks. Play out a run through at home and a wet run at school[17].

- A flipped homeroom model that focuses on understudy office was proposed.
- Understudies had the option to all the more likely arrangement their time beyond class with the guide of this technique.
- A numerical trial was done in an elementary school math class.
- Understudies' learning achievement, self-adequacy, and self-guideline were all decidedly affected by the technique.

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- The strategy supported the understudies in laying out goals for learning and keeping tabs on their development.

VII. EDUCATION IMPLICATION

By offering educational data, frequently on the web, beyond the customary study hall setting, a flipped homeroom turns the conventional learning climate on its head. This approach is a sort of mixed learning. This brings recently allocated undertakings, like schoolwork, into the study hall setting. Under the initiative of an educator, understudies in a flipped study hall learn thoughts in class subsequent to having watched addresses on the web, partook in internet based conversations, or done free learn at home [18].

The teacher, in the customary perspective on the study hall, assumes a crucial part in many illustrations and is the chief communicator of class material [19]. Understudies seek the educator for heading and remarks as she responds to their requests. Illustrations in a homeroom that follows the regular model of training frequently focus on an educator addressing understudies through the material. Inside the traditional worldview, understudy cooperation is frequently confined to educator planned application assignments that understudies do either alone or in little gatherings [20-23]. In many homerooms, the teacher starts to lead the pack in directing understudies through class conversations. As a component of this sort of guidance, understudies are much of the time relegated course book perusing or issue sets to do beyond class to assist them with incorporating the material [24].

By utilizing informative innovation like web recordings to "convey content" beyond class, the flipped study hall model intends to move educating to a student focused approach, by which class time is utilized to go further into subjects and give significant learning open doors. 'Content conveyance' in a flipped study hall could mean various things to various individuals. Albeit online cooperative discussions, computerized examination, and text readings are conceivable, video addresses made by the educator or outside parties are the most widely recognized strategy for data conveyance. Research shows that eight to twelve minutes is the perfect balance for video illustration span [25].

VIII. CONCLUSION

Despite the fact that it calls for devoted investment, the flipped homeroom model yields huge prizes. There is an expansion in understudy office over their own schooling. Their decisive reasoning abilities, correspondence capacities, and comprehension of the subject's importance and rationale are totally upgraded. At the point when

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understudies find new and, in certain examples, progressive perspectives, they feel a specific degree of satisfaction. They further develop their critical thinking abilities — a quality pursued by businesses in the cutting edge period — and become more put resources into their own improvement subsequently. One normal system to make illustrations more captivating for understudies is the "flipped study hall" approach. The two understudies and educators need to invest additional effort while utilizing the flipped homeroom worldview. Furthermore, flipped homerooms reexamine what understudies do while in class. To keep understudies intrigued by the material, educators utilizing the flipped homeroom model might utilize activity learning or considerably more customary schoolwork errands in class. Contingent upon the class, we might work with math manipulatives and new numerical advancements, direct top to bottom research center tests, examine unique records, present our discoveries in a discussion or discourse, talk about recent developments, survey each other's work, work on undertakings, and practice or work on our abilities. Understudies work in gatherings to tackle complex issues, lead exploration, and fabricate information with the backing of their teacher and colleagues through these types of dynamic realizing, which allows profoundly customized guidance and saves class time for understudies to zero in on higher-request thinking abilities like issue finding, joint effort, plan, and critical thinking.

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