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Research Article

Analysis of Computer Network Technology on New Media Problem-Based Learning (PBL) Teaching Method

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Today's skill development can support modern technologies to understand in a simple manner. The teaching methods with problem-based learning (PBL) have improved exploration of collaborative inquiry. The deep understanding of concepts is possible with computer network technology through critical analysis. The reasoning, decision, and defending concepts are solving unfamiliar directions of teaching methods. The computer network technologies are making PBL efficient with teaching method. The 3 factors like learning goals, projecting elements, and teaching practices are maintained by computer network technology. This study solely uses students from one major as the experimental subjects, ignoring the fact that students from other majors have diverse logical thinking styles. As a result, the author will raise the sample size and kind of study items in the next research project. Structuralism is a scientifically educational paradigm that, with its particular vision of information, learning, and students, has become the theoretical foundation of teaching and has offered theoretical direction for many instructors' instruction. MBPBL learning paradigm outperforms standard PBL and its N-Gain score is obtained as N-Gain > 70, $30 \leq g \leq 70$, and N-Gain < 30. Training and teaching methods must also be updated on a regular basis. As an emerging technology in the realm of education, virtual reality (VR) technology may assist instructors in implementing immersion instruction. The virtual environment provided by virtual reality technology transcends time and place, allowing students to master new skills in a new "real" setting.

1. Introduction

An educational technique called problem-based learning (PBL) puts students at the centre of the learning process by using a variety of methods, including discussion, self-directed learning, and group work, to help them build their problem-solving and reasoning abilities. Instead than relying on conventional lecture-based methods, PBL encourages students to actively participate in knowledge production and competency development in a variety of settings, including the classroom. PBL contributes much to medical education, yet it has its limits. It is seen as less successful than conventional ways since it takes a long time to complete a task. Concerns about missing out on important details and the high level of self-motivation necessary are some of the other issues that keep PBL from becoming a more popular method of learning. That is why we need more PBL implementations out there.

Medical schools in the West have successfully integrated social media into their curricula, including Facebook and Twitter, as is well known. To keep up with the changing social landscape, Chinese medical educators have recently been experimenting with innovative techniques of instruction. WeChat is a popular new media tool in medical schools that has a good impact on student learning. China's university students use WeChat on a regular basis, making it the most popular social media network. Chinese users of various ages and backgrounds turn to it as their preferred social networking resource. As of this writing, more than half a billion people in China are using WeChat. When it comes to

WeChat's large-scale network platform, there is a plenty of user-generated data that can be accessed for free. Using a group chat is ideal for conducting professional online discussions. In order to provide faster communication for WeChat app users, this communication model has been enhanced and simplified by its convenience, promptness, and strong cross-platform support qualities. As a result of WeChat's real-time communication and source sharing, the conventional classroom teaching model is disrupted and communication becomes easier.

Modern student university education is changing rapidly owing to the integration of digital technology [1], and teachers' learning activities are becoming more important in helping students improve their understanding and stimulate their learning. As a result of constructivist-inspired thinking [2], where knowledge is learned by subject participation rather than imitation or repetition [3], student cooperative classroom activities work as a catalyst for self-knowledge development. Papert believed computational thinking to be a product of their structural education method, in which emotive and social components are as important as the technical substance of the lesson [4]. As a meta-tool for "making the abstract tangible," Paper's CT emphasized the computer's significance and the claim that CT abilities could be applied to other fields. Since CT development is currently possible thanks to the usage of many virtual structures and settings like flipped classrooms, integrated e-learning frameworks like Moodle or Schoology, and the Internet of Things (IoT), a variety of digital form technologies may be used (IoT).

Online learning platforms and 21st-century teaching paradigms like flipped classrooms and hybrid online/classroom learning are making it easier for students to acquire their allocated lectures outside of class.

Educators believe that a mix of outside academic preparations, classroom analytical issues, and computational science-based PBL is important to help students improve their creativity and critical thinking. Additionally, teachers must be ready to support students in problem-based learning (PBL) activities that are guided by the instructor. Higher-order thinking abilities, sophisticated thought processes, and increased learning delight may all result from this (HOTS). HOTS is also described as using analytical reasoning, creative and imaginative problem-solving skills, and mental representations of rules and reasoning and mental capability as well as the development of new ideas. By integrating disparate pieces of knowledge logically, students may get a deeper understanding of complicated issues and develop new approaches to solve them. Therefore, 21st century educators must include ICT abilities, digital literacy skills, knowledge, and attitudes into their IoT classrooms.

Learners in constructive environments need more assistance in developing and reflecting on their earlier logical thinking teaching-guided projects, according to research. Partnership and conceptualism have become important tools for creating new knowledge in this new digital age because this modern paradigm of digital based platforms is interlinked to cloud computational teaching forms and sources.

The outcome is that in educational processes, students are self-directed and have their own goals for acquiring knowledge on their own and applying it to society as a whole. In addition, the human brain has a unique ability to envision new possibilities and alternatives because of the process of creativity. The ability to think critically and creatively helps people overcome their worries, sufferings, and difficult issues. A method to address the rapid pace of change that we are seeing is via online education, which is an excellent option. The COVID-19 epidemic has also necessitated that education is conducted online. The most Web age range, according to a 2017 United States Children's Fund study, is still between the ages of 15 and 24, with 71% of this age group connecting online contrast to worldwide average of 48.00%. The usage of mobile digital systems linked to cloud-based structures may thus provide association opportunities and renovate the way we rest, use our leisure hour, and even enjoy ourselves. Creativity is also being used to assist young people compact through problems, risks, and real-time concerns as they prepare for this work.

2. Literature Survey

More and more researchers in the fields of student learning and educational innovation in the health sciences are turning their attention to PBL, a contemporary learning philosophy. In order to fully exploit the promise of educational technology to improve problem-based methods in health sciences education, further study into its different uses is required.

In medical education, the WeChat–PBL platform stresses interactive, personalised, and computer multimedia teaching approaches. This, in turn, promotes education reform. Teachers may use this platform to tailor their lessons to each student's specific strengths and abilities, and students will see remarkable results. WeChat's educational potential has yet to be fully realized.

The employment of new media in clinical learning as a means of communication has become more important as the digital age unfolds. To keep up with the changes and adapt medical education to the advancements in science and technology, it is necessary for both medical educators and students to shift their ingrained ways of thinking [2].

A five-step model was first conceived utilizing a mixed-method approach. As a result of their advice, the model's design was extended to incorporate six linked learning settings by a group of academic specialists consisting of five members. A problem-based evaluation form was employed in the study. For the purpose of gathering and analysing the data, the mean and standard deviation were calculated using group chat [3].

According to a need analysis, the traditional learning paradigm has not been successfully adequate in improving students' learning capacity to its fullest potential. Researchers used a quasiexperiment technique with nonequivalent control groups to conduct this investigation [4].

For this study, researchers will look at previous and present trends in PBL and how online resources have been utilized to promote critical thinking abilities. Previous

research by other scholars served as a foundation for these conclusions. These study's results may lead to an internet-based system to PBL that allows students build intellectual capacity [5].

Designing a PBL paradigm for UG students in the Photographs for Communication Arts course using a virtual classroom was the primary purpose of this research (VLE). For this model, instructional courses and resources were better managed via the use of ISD and a system approach throughout the model's creation and evaluation stages. Experts have determined that the model is appropriate due to its effectiveness and ability to be used in real-life scenarios [6].

Students' thinking capacities were studied using quasiexperiments to investigate the influence of PBL in a flipped classroom (FPBL). When FPBL was put up against other teaching methods, this study found that it had a much stronger influence on student learning results. Teachers, educators, and schools interested in improving their students' academic performance will appreciate this study's creative PBL concept and visualisation [7].

As a result of the data analysis, the study's findings are as follows: Accurate, practicable, and enhanced learning multimedia have been developed using a competency-based approach that includes five phases, computer and network teaching guidelines, and WEB-based educational multimedia. Lecturers and learning designers may use the results from this study to create or develop a learning process that encourages students to be more engaged, innovative, and creative [8].

This chapter examines the pros and downsides of utilizing the Internet for PBL. For online collaborative learning, computer-mediated communication has a variety of challenges. In synchronous and asynchronous distributed problem-based learning environment, how this idea was utilized to help learners' motivation and solution of problems was discussed. Typical problems in computer-mediated communication may be effectively addressed by using our method [9].

Teachers may use this material to learn how to recognize good quality online learning materials and utilize them to create successful PBL assignments for their students. For the second demonstration, students had to demonstrate their technical skills before they were introduced to PBL [10].

Live online first aid instruction may have a positive influence on students' academic performance, problem-solving skills, and excellent interpersonal skills, along with their capacity to cooperate. Six weeks of experimentation and data collection were required for this project. In a week, for 40.00 minutes each, courses were conducted throughout the study's length [11].

Researchers observed substantial variation between both the experimental class and control class when it came to relationship quality, knowledge-sharing behavior, academic research, and active engagement in the research project. For group communication and reasoning ability, there was no statistically significant difference between the two groups [also, we found that all of our hypotheses about the connections between structures were correct] [12].

PBL.
Step:1 selected problem motivative the person with deep understadning
Encoder $(h) = g(a(x))$
$= Sigm(Wx)$ or
$= \tanh(Wx)$
Step:2 learner should respond or defind the problem
Decoder $x^{\wedge} = o(\widehat{a}(x))$
$= Sigm(W * h(x))$ or
$= \tanh(W * h(x))$
Step :3 analysis with computer network via courses
$J(W, b; x) = 1/2\|x - \widehat{x}\|^2$
Step:4 grouping and engaging with faster PBL
$z^1 = W^1 x + b^1$
$a = f(z^1)$
Step:5 problem Structuring
$z^2 = W^2 a + b^2$
$\widehat{x} = f(z^2)$
Step:7 stop the process

Algorithm 1.

For the purpose of this research, students' impressions of Edmodo as a collaborative problem-based learning (CPBL) platform will be examined. In light of the recent COVID-19 epidemic, this data implies that Edmodo may be utilized as a CPBL platform in education today, which is a very relevant contemporary distribution strategy internationally .

Distance education and problem-based learning (PBL) settings, two historically distinct and independent fields of teaching research methods, are coming together. There has been a great deal of usage of PBL settings in the classrooms of medical and clinical practice, as well as law and business/management, in order to increase student learning [13].

Learning opportunities are no longer constrained by physical boundaries in the age of digital technology. Using PBL-based online learning, this research hopes to discover more about how fourth-semester education technology students' personalities change after taking the course. In this research a posttest control group model is employed [14].

An examination of student behaviour and attitudes during a pandemic-related online PBL session is presented in the research. The findings were compared to their previous scholastic records. As a consequence of the findings, a thorough discussion of the best ways to aid students in their project work was had .

In the wake of the COVID-19 outbreak, this research tries to examine the efficacy of PBL methods in online arithmetic teaching. The data used in this study was derived from secondary sources, such as research into other studies.

In order to gather the data, scientific publications published in reputable journals and books are used. As shown by data analysis, PBL is a most successful teaching method in the period of the Corona epidemic [15].

As a result of standard tactics used by teachers in the classroom, pupils tend to lose focus on the instructor and get bored with their education. E-learning E-module validity, practicality, and efficacy are all described using descriptive analytic approaches in the data analysis [16].

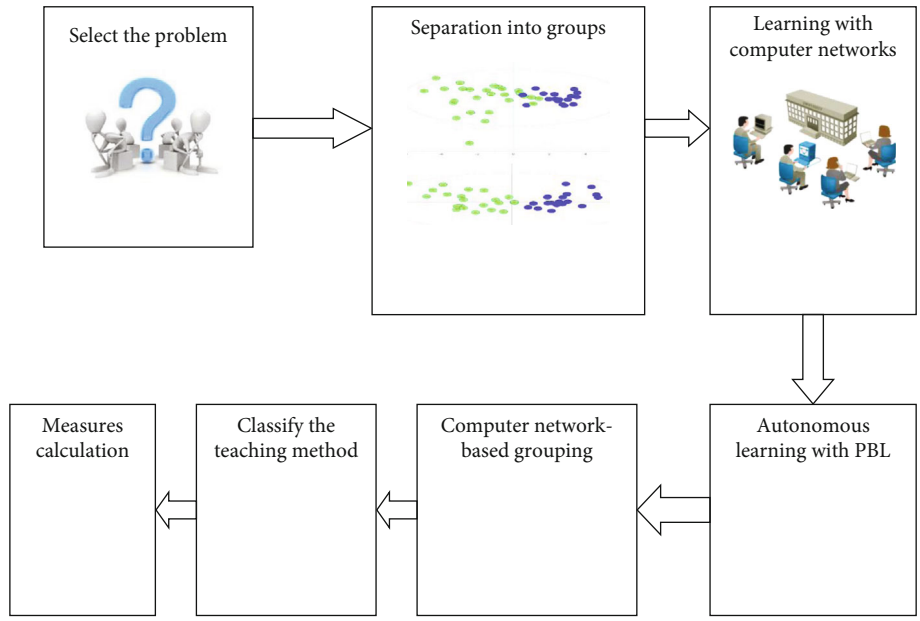

Figure 1: Proposed block diagram.

Problem-solving approach to education according to the article "Teaching & Acquisition," "a teaching style in which challenging real-world issues are employed as the vehicle to increase student learning of ideas and principles rather than direct presentation of facts and concepts" is problem-based learning. When students "are no longer passive learners but active participants in their learning [allowing] for [more] cooperation, since it stimulates inquiry, collaboration, and active engagement," PBL takes on a more constructivism role (Major et al., 2018) [17].

Mobile-based education mediums are explored in this research, which focuses on the usage of computers and basic networking. Additionally, the PBL has a strong pressure on results of student's skills as compared to the PjBL [18].

When students are no longer passive learners but active participants in their learning for cooperation, since it stimulates inquiry, collaboration, and active engagement, PBL takes on a more constructivism role. PBL has a strong pressure on results of student's skills. These are major limitations in the existing system. So this paper presents this method.

3. Methodology

This research project is aimed at putting ideas for effective Personal Computer network plan education to the test. It describes the experience of using the issue-based learning system as a fundamental instructional strategy for supporting practical network planning within the context of a Master's degree module in information communication networks. A two-stranded technique was used, with an area of concern teaching and a conventional discussion string. The module's issue-based learning section included sessions designed to put students in the shoes of system design experts who are familiar with situations with a high level of realism, such as when a customer has specific business requirements that can be met through the selection of a system arrangement. As a result, the issue-based teaching string helps students improve their structure skills, while the talk string uses traditional teaching approaches to help students improve their understanding of essential system segments and models. A standard evaluation of this approach was performed, revealing that it provides an extremely strong and practical learning environment for the understudies. In this way, the designers' master demonstrates that problem-based learning is an excellent academic tool for teaching Personal Computer system design.

For understanding of system administrative developments and communication protocols, in semester 2, the most important goal is to build on the main module's theoretical understanding of how system parts can be coordinated to deliver total frameworks and how the presentation of these frameworks can be broken down to determine how well the system configuration meets client requirements, as Figure 1.

Teachers utilize problem-based learning (PBL) to teach pupils concepts and ideas by presenting them in the context of real-world problems rather of just reporting facts and theories. Along with learning course information, PBL may help students develop their ability to think critically, solve problems, and communicate clearly. It may also make it easier to collaborate, find and evaluate research resources, and continue learning throughout one's life (Duch et al., 2001).

PBL may be applied in any kind of educational setting. All semester long, PBL is the primary modality of teaching in a PBL-based course. As a result, the bigger interpretations and implementations of PBL might range from integrating PBL into lab and design courses to just using it as an opener to a discussion. PBL may also be used to construct assessment items. Common to all of these applications is the real-world difficulty.

A different technique was adopted, with a talk string used to develop the understudies' overall understanding of

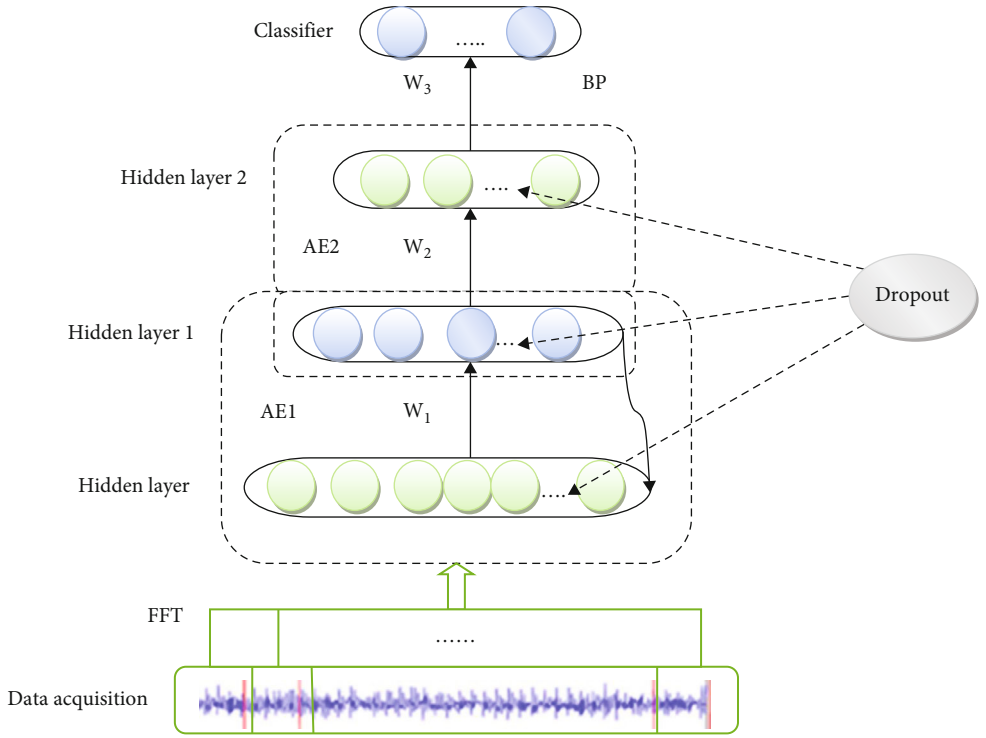

Figure 2: Computer network-based PBL.

system innovations, its activity, and execution, and a PBL string used to develop structure abilities. The PBL string's structure exploited the course moderators' practical knowledge and allowed substitutes to assume the role of systems plan specialists, coping with a total of 3 scenarios with a solid handy measurement and authenticity. The evaluation of this PBL string revealed that the understudy partner provided consistently good assistance, as shown by the powerful set of findings obtained from the system construction job. The intention is to advance to stage 2 of PBL's crucial selection based on the experience of acquainting PBL with this master Sciences module and the criticism received from the understudies. For the academic years 2010–2017, the PBL reduced approach was used as the device for delivering the course and achieving all of its learning objectives, as Figure 2.

The assessment phase is the initial step. At this step, three items are examined: student demographics, cognitive issues, and other factors. Fundamental competence analysis (KD), which includes describing the significance of heat exchange, comprehending the forms of heat exchange, and recognising methods of heat transmission in everyday life, as well as clinic analysis. Observations and interviewing were used to complete this part of the study. The key learning resources in the curriculum are the outcomes of the study of student features and issues in teacher learning, with the lecture style often utilized and audio-visual media used. Students in this situation are often bored and lack enthusiasm to study. The foundational skill assessment (SA) and indicators then illustrate that the instructional analysis is linked to the skills that students must accomplish. The information generated for the interactive learning multimedia is based on key capabilities (KC) and indicators.

Table 1: Practice assessment_001.

Service	Main users in CN	Average	Validation
Media 001	1000	0.923	True
Social network	1000	0.951	True
Messengers	1000	0.981	True

Table 2: Practice assessment_002.

Service	Main users in CN	Average	Validation
Media 001	1000	93,235	True
Social network	1000	85,289	True
Messengers	1000	91,271	True

The findings of the facility/environment study were used to determine the school's infrastructure, such as LCDs and PCs. The researcher created an interactive multisensory system based on problem-based learning (PBL) in scientific topics for fifth-grade primary school students based on the three analyses completed throughout the analysis stage by the following equations:

$$h_n = f(W_1 x_n + b_1), \tag{1}$$

$$\hat{x}_n = g(W_2 h_n + b_2), \tag{2}$$

$$\varnothing(\theta) = \arg\min_{\theta,\theta^1} \frac{1}{n}\sum_{i=1}^{n} L\left(x^i, \hat{x}^i\right), \tag{3}$$

Table 3: Satisfaction of level estimation.

S No.	Questions satisfactory level	Questions satisfactory level
1	Improving understanding of lecture provided	Improving understanding of lecture provided
2	Within module	Within module
3	70%	70%
4	Aiding understanding of theoretical concept 85%	Aiding understanding of theoretical concept 85%
5	Improving practical understanding 68%	Improving practical understanding 68%
6	Real network designing 75%	Real network designing 75%
7	Real practical solution implementation 79%	Real practical solution implementation 79%

Table 4: The students' mathematical problem-solving skill normality test results.

Types of data	Groups	Kolmogorov-Smirnov[a]		
		Statistic	df	Sig.
Pretest	Experimental	0.84	92	0.083
	Control	0.83	92	0.088
Posttest	Experimental	0.87	92	0.060
	Control	0.85	92	0.073

Table 5: Descriptive statistics (N-Gain score).

	Experimental		Control	
	Statistics	Std. error	Statistics	Std. error
Mean	42.06	2.20	31.94	1.40
95% confidence interval for mean				
Lower bound	37.62	1.21	27.12	1.20
Upper bound	46.50	2.10	32.76	1.10
Std. deviation	2.15	1.15	1.34	1.20
Minimum score	21.56	1.05	13.20	1.22
Maximum score	100	1.12	77.15	1.31

$$\{X_n\}_n^N = 1'. \tag{4}$$

The online educational multimedia is of exceptional quality and has been deemed practical based on the findings of an expert validity test. It is more fun, resulting in considerable improvements in student academic achievement.

Table 6: Results of mathematical problem-solving skill homogeneity test.

Types of data	Levene statistic	Sig.
Pretest	0.001	0.992
Posttest	0.989	0.752

4. Results and Discussion

In this section, a brief discussion of PBL for media is explained with theoretical as well as practical analysis shown in Table 1.

Table 2 is clearly explaining about practical assessment of proposed model; as a result, it may be used in the classroom as part of learning. The usage of interactive learning multimedia in the learning process is very successful in piquing learners' motivation in studying and make learning.

The findings are presented in both group observations between both observers in monitoring the activities of lecturers on problem-based education employing the blended learning technique in cycle I and cycle II. The professor has used learning stages in cycles I and II in line with the intended syntax and technique. Table 3 shows the results of the first cycle's inspections of professor activities. Because it includes the students' interest and business owners who involved in the proposition, as well as the educational institution, which not only helps make future results within its curriculums but also believes the project's results to endorse its regulation obligations in comparison to the statutory requirements in order to give the provided services, the institution of this PBL prototype necessitates careful planning, communication, and training. This research will assist participants in improving their professionalism, will provide the opportunity to improve relationship ties between the University and the productive sector of its influence area, and will open a door to the creation of communities of

Table 7: The results of the students' mathematical problem-solving abilities on the pre- and posttests.

Description	Pretest scores		Posttest scores	
	Experimental class (MBPBL)	Control class (PBL)	Experimental class (MBPBL)	Control class (PBL)
Number of students	92	92	92	92
Maximum score	88	89	100	93
Minimum score	36	34	50	45
Standard deviation	12.85	13.13	12.64	12.66
Mean score	60.41	58.22	73.43	69.43

Table 8: Mathematical problem-solving skills of posttest mean score analysis.

Type of data	Sig. value	α	Conclusion
Posttest	0.013	0.03	H_0 is rejected, indicating that the experimental and control groups vary significantly

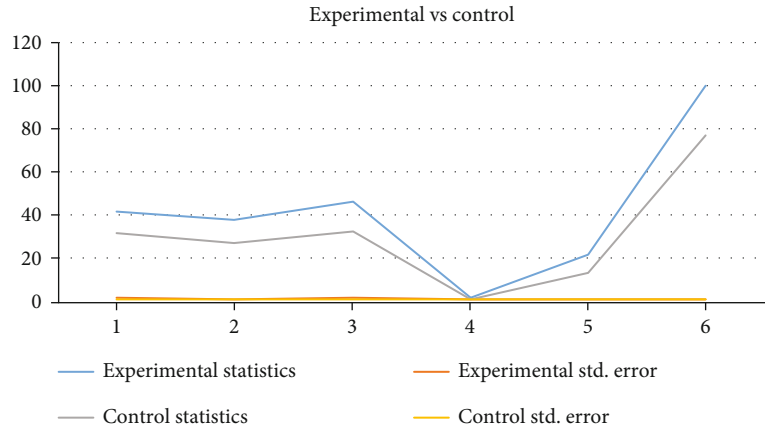

Figure 3: Experimental controls.

practice on a larger scale due to its online nature shown in Table 3.

This research investigates how m-learning, or the use of smart phones as a teaching-learning aid, is a kind of innovation that indicates the impact of Information and Communication Technologies (ICT) on the educational orientation aimed towards university students shown in Table 3. The paper demonstrates how problem-based learning (PBL) facilitates the implementation of action data and decision creating, as well as how the creation of a computer simulation for the realization of business practices via a mobile application will benefit the symbiotic relationship University-Company by allowing students to interact with the promotion of economic growth, bringing them closer to the business environment and challenging them to generate alternative solutions. The objective is to inspire collaborative learning and knowledge development by adding mobile digital components that are readily available to students (smart phones, digital tablets, and Internet-related technology) into teaching methodologies. The programmer is designed for candidates at the Class Learning Faculty of Business and Administrative Sciences who are in their eighth and ninth semesters and are preparing to apply to the business practice phase as a condition for graduation. A descriptive methodology research is presented for this goal, in which diverse instruments of data collecting are connected utilizing data and statistical methodologies in a unique case preexperimental structure. After the research is completed, its features, responsibilities, and practices will allow for the creation of a model that will allow it to be used in a variety of educational settings and taken initiatives.

Table 9: N-Gain score categorization.

Percentage (%) N-Gain score	Category
N-Gain > 70	High
$30 \leq g \leq 70$	Moderate
N-Gain < 30	Low

Computer Science professionals with expertise in cloud architecture, cyber security, and Industrial IoT, which are all merging fields, have a lot of prospects in the technology space. Computer System is a key subject in the Computer Science stream that presents a difficulty in teaching and mastering networking principles, which are thought to be a black box. The goal is to use Project-Based Learning (PBL) to break open this black box information and improve the

Table 10: The results of the questionnaire distribution process.

No.	Statements	Agree	Disagree
1	Instead of just attending classes in person, I prefer to study mathematics via a hybrid of in-person and online methods.	81%	22%
2	Schoology is an intriguing new medium that may be utilized in classrooms to help students learn.	76%	26%
3	In the MBPBL learning paradigm, I am held to a higher standard of accountability and discipline.	81%	22%
4	The MBPBL educational paradigm has provided me with a fresh perspective on mathematics education.	64%	34%
5	Schoology learning applications allow me to complete activities more quickly, allowing me to spend less time on them.	64%	34%
6	Because of the MBPBL educational paradigm, I have easier access to educational resources.	86%	16%
7	I can learn more about arithmetic by using e-books and YouTube videos that have been submitted to Schoology's learning applications.	86%	16%
8	Instead of interacting with my classmates in person, I prefer to do assignments and turn them in through Schoology learning tools.	81%	22%
9	The MBPBL teaching approach has the potential to boost my self-esteem.	86%	16%
10	The MBPBL learning approach can help me overcome my anxiety of maths.	88%	16%
Mean		80.7%	25.3%

conceptual knowledge and 21st century abilities necessary to construct network applications and services. The PBL exercise has aided the students in contributing to the collaborative development of real-time network-based alternatives. The comparison of pre- and posttest data reveals a 20% increase in network ideas learnt. The findings of peer and self-assessment show a 10% increase in 21st century abilities including collaboration, critical analysis, and originality.

The independent t-test was utilized in this research for quantitative data. It then moves on to the N-Gain score exam. The independent samples t-test was used to examine whether there were any differences seen between MBPBL and PBL classes, while the N-Gain score test was performed to assess how successful the adaptive learning was. The data was processed using SPSS version 20 software to check for variations in the student learning and efficacy of the MBPBL and PBL. To assess the model's effectiveness, use the standard test explanatory formulas for the t-test and the N-Gain test.

The following is the formula of the independent$t$-test:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left(\left((n_1 - 1)S_1^2 + (n_2 - 1)S_2^2\right)/(n_1 + n_2 - 2)\right)\left((1/n_1) + (1/n_2)\right)}}. \tag{5}$$

$\bar{X}_1$ is the mean score of sample 1, $\bar{X}_2$ is the mean score of sample 2, n_1 is the number of sample 1, n_2 is the number of sample 2, S_1^2 is the variance of sample 1, and S_2^2 is the variance of sample 2.

The following is the formula of the N-Gain test:

$$\langle g \rangle = \frac{\langle S_{\text{Post}} \rangle - \langle S_{\text{Pre}} \rangle}{100\% - \langle S_{\text{Pre}} \rangle}. \tag{6}$$

$\langle g \rangle$ is the gain score, S_{Post} is the score of posttest, and S_{Pre} is the score of pretest.

The triangulation of sources based on interviews and observations was the analytical approach utilized for qualitative data.

Both the experimental and control classes were tested for normalcy using the pretest and posttest analyses in Table 4. No statistically significant differences were found; hence, this study's results may be regarded as normal. Table 5 shows the homogeneity test results for both the pretest and posttest shown in Table 4.

Table 6 shows that all of the pre- and posttest sig values are more than 0.05, indicating that each group has a homogenous variation, as shown by the test results. The conditions for the next analysis have been met. Here are the findings of the pre- and posttest scores.

Tables 7 and 8 explain that an independent sample t-test and an N-Gain score were used to compare the experimental and control classes' improvements in mathematical problem-solving abilities. The SPSS application was used to do the N-Gain score analysis. In Table 8, the N-Gain score analysis has been summarized, as Figure 3.

MBPBL may be adopted and accepted as a learning model, boosting students' mathematics abilities and lowering anxiety, according to the findings of this research. Furthermore, the MBPBL learning paradigm outperforms standard PBL. Furthermore, pupils have responded well to the use of the MBPBL learning paradigm in mathematics learning Table 5.

The findings of this research encourage the use of mobile device-assisted learning, which includes the usage of mobile learning devices. On their mobile device, teachers and students may learn whenever and wherever they choose. This research also demonstrated some notable outcomes for incorporating mobile devices into blended learning with PBL syntax due to the flexibility of accessing mobile devices and enhanced student skills in using mobile devices in learning shown in Table 9.

However, the scope of this study is confined to mathematics learning in a mixed learning environment. As a result, it is advised that additional academics do further

study in the setting of entirely online learning. The findings of this research will be used to help educators and decision-makers in their job. Realize how difficult it is for teachers and students alike to successfully use mobile technology into their daily lives as well as their classrooms, and devise strategies to overcome those obstacles. Teachers and researchers should take into account aspects such school curriculum, school restrictions governing student usage of mobile phones, excellent Internet access, and family in order to achieve desired course learning results, according to this study shown in Table 10.

5. Conclusion

Today's skill development may help people comprehend current technology in a straightforward way. The use of problem-based learning (PBL) in the classroom has improved collaborative inquiry investigation. Through a critical study, computer network technology allows for a deeper grasp of topics. The principles of thinking, decision-making, and defending are solving new avenues in instructional approaches. PBL is becoming more efficient as a teaching approach because to computer network technology. Computer network technology keeps track of the three factors: learning objectives, projecting components, and teaching methods. Constructivist approach offers the theoretical foundation for English immersion training, while VR technology provides the technological assistance. The acceptance challenge of English instruction is quite low for college students with high understanding capacity. Students must tell and express their information and thoughts in English using video, audio, text, emoticons, and other carriers in electronic narration and expression, while others may contribute in augmenting, enhancing, and assessing individuals' narrating. Both the narrator and the audience may employ the taught English information in this procedure, and other learners' involvement and collaboration can also serve as criticism and corrective, enhancing the learning impact.

Data Availability

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

Conflicts of Interest

The author states that this article has no conflict of interest.

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