

# Smart Learn: A Study on the Transformation from Traditional Learning to Technology-Based Personalized Learning

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## Abstract:

In the last fifteen years, the professional education profession in education has developed. Internet-based "self-learning" has replaced traditional rote learning. A holistic science education program includes many subjects. SmartLearn is a learning application. The learning app provides knowledge, information and technology to keep students motivated and interested in learning. Users are encouraged to learn in their own unique way. Accordingly, the aim of this study is to investigate a small group of high school students and high school students and examine their participation in order to better understand the transition from traditional education to personalized learning. rating points-SmartLearn, M-learning, self-learning, strategic guidance.

**Index Terms** – SmartLearn, M-learning, selflearning, concept orientation.

## I. INTRODUCTION

Education has undergone significant changes over time.

Gone are the days when you had to memorize medical records and remember everything else. In today's teaching and learning, self-learning is paramount. Teachers now act as mentors, facilitators and guides. It does more than just record. Teachers create knowledge through interaction with students.

Students complete all tasks according to the teacher's instructions. Lev Vygotsky (1896-1934), Piaget (1896-1980), Bruner (1915-2016) and John Dewey (1859-1952) are supporters of constructivism.

The constructivist school of thought in philosophy and science claims that knowledge is structured. (2005) Fischer and Mascolo, p. 49. Constructivism opposes behavioral theories led by Pavlov and Thorndike, which are based on the idea that learning occurs through conditioning. Education today is influenced by construction. Counselors create knowledge with the participation of learners. Students have freedom and are students studying. Teachers encourage students to think critically.

The information that users need is provided by multimedia resources, blogs, online forums, online libraries and various websites. Students all over the world are using technology for their education today. The use of multimedia classroom materials encourages greater engagement and emotional learning, which is beneficial for students at all levels of education. Students can use their individual learning interests to meet their needs as they apply what they have learned to current events. It is one of the most important features of multimedia educational software that it supports more imagination and helps knowledge production.

mlearning, commonly known as mobile learning, is one of the latest developments in education. "M-learning combines e-learning with mobile computing, including online resources, rich interactive content, creative thinking and assessment performance" (Quinn, 2001). With students now having smartphones, teachers around the world are starting to collaborate in their classrooms. One aspect of mobile learning is app-based learning. Students have access to a variety of educational programs that support self-learning.

App-based learning is self-paced and tailored to the user's needs.

Learning apps from Meritnation, SoloLearn, Coursera, Unacademy, The Learning App and more are student-centric. For example, it is one of the most used courses in the world. It is an old startup and currently serves around 300 million Indian students.

The software uses 3D animation, motion graphics and visual effects technology to enable effective learning. Raveendran is a Kerala native who founded the most valuable edtech company in the world. This article analyzes the big change that Biju's app has made in Indian education. It focused on a group of high school students and high school students from the Kerala Board and CBSE and analyzed their ideas to see how the app could help improve education.

## **II. HYPOTHESIS**

The hypotheses expressed in this paper are as follows:

- How can M-Learning be used as a training program?
- Indian students rely on traditional teaching methods.
- Indian students do not trust the traditional teaching method.
- Apps are about personal learning of students;
- practices have little effect on students' self-learning.

## **III. LITERATURE REVIEW**

The effectiveness of various teaching and learning methods has been studied in a variety of subjects and studies. Teaching methods have changed over time. One of the methods

used in teaching today is constructivism. According to constructivist theory, learning is a personal effort. According to Singh and Sangeeta (2015), "In the constructivist model, teachers are facilitators of learning, not innocent people on the stage.

Students who participate in the appropriate learning process "acquire knowledge through experience, observation, data, analysis and reflection" (Singh & Sangeeta, 2015, p. 4) instead of assimilating knowledge. Constructivist teachers evaluate their understanding. In constructivist classrooms, students they enhance learning through the analysis process.(2015) Bada and Steve.

In their article titled "Constructivist-Educational Research Research", Shumaila Bhutto and Imran Umer Chhapra (2013) stated that teachers involved in the design process "must be properly studied in all progress with good and lots of support and advice".

The quality and diversity of teachers' training and assessments are effective in the design process. Appropriate teaching methods can be used to teach and learn many things. According to Dr Sunita Singh and Dr Sangeeta Yaduvanshi, "Constructivism helps to know the truth of science.

For example, not just as a body of knowledge but as a process of understanding the environment", 2015's "Constructivism in the Science Classroom: Why and How" How". Students according to Nayak (2013, p. 13). ), the ability to understand and apply mathematics and integrate learning content to build knowledge. Using a method allows students to learn complex and effective material.

In the current educational context, mobile learning has had a significant impact on the teaching process. Adnan Majeed (2015) explains in his thesis "A Research Report on Mobile Learning and Education" how mobile learning is changing the way we learn and how it works in business and education. Students use mobile phones, tablets, iPads, PDAs and online courses to improve their academic performance.

According to Ansari (2017) p. 33, "Mobile learning applications are effective in higher education." According to the research, students have sufficient knowledge about mobile phone and internet usage. The importance of mobile learning apps for education and research is widely recognized by students. In the current educational environment, teachers and students have to prepare for the wave of teaching and learning. Teachers should have the necessary skills to teach so that students can easily understand them.

According to Sarrab, Laila and Hamza (2012), p. 13, Mlearning can help teachers and students solve "traditional learning process" problems. 35. The teaching process has been simplified using an effective technique called mobile learning access. Both teachers and students need appropriate and practical methods to communicate with each other and support the teaching process.

Mobile learning technologies can be used in our schools and universities on a case-by-case basis to complete the learning process without replacing traditional classrooms.

(2012), no. 35 (Sarrab, Layla and Hamza). "The acceptance of technology and mobile learning in higher education: A study by the Faculty of Humanities and Social Sciences in addition to mobile devices.

Ann Marie Casanova (2018), " Case Study-Increasing the Love of Learning in K 12: Learning Apps, Deeply Improving Learning Skills How It Facilitates Conceptual Understanding (English) How "promising to change the way millions of students think and learn".

Blended learning, which combines ancient and modern methods, is a popular practice. Modern teachers need the necessary skills to use modern classroom technology.

Classrooms in India are getting smarter over time. Students receive technology education from primary school. With the popularity and popularity of the Internet and other technologies, many students will be able to use mobile learning.

Mobile learning is one of the major trends in Indian education. They offer a wide variety of services, including home study programs, educational materials suitable for school use, help with preparing for competitions, and more. India's education landscape is undergoing a massive transformation thanks to one of the world's most influential edtech businesses. Major investors such as ChanZuckerberg Initiative, Tencent, Lightspeed Venture and Sofina have bought shares in the company.

The company expects faster growth as it already serves customers around the world.

The aim of the current research is to inform educators (including teachers, parents and students) about the many benefits that learning practices bring to teaching. One of the M-Learning apps called App supports the learning of complex topics by making the content easier to understand.

This article will help others learn and explain how mobile apps can enhance personal learning. The findings of this research will help to understand how practices can change the learning environment by being involved in today's self-learning process. It also provides a starting point for further research in this area by other interested researchers.

## **V. RESEARCH DESIGN**

To analyze data from questions distributed by Google Sheets, this article SmartLearn-Learning Applications: A Research Study on the Transition of High School and Home Higher Students from Academic to Vocational Education-Based on Self-Education, using a variety of methods. The aim of this study is as follows:

- To show the role of the implementation program.
- Research on how students transition from traditional learning to contemporary technology learning.
- Determine which part of the application supports education.

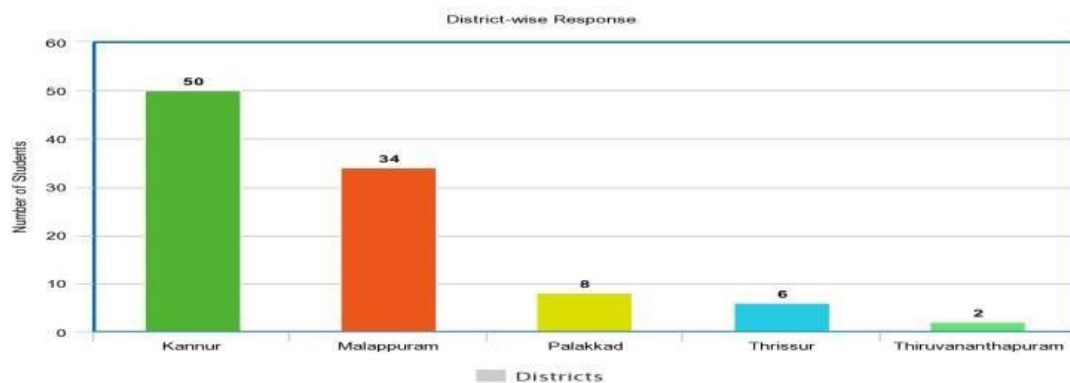
Using a descriptive and inferential analysis method, the study focuses on the effectiveness of instructional design in self-learning technology. This questionnaire consists of ten multiple choice questions and is designed to ask for answers from a group of students who are already enrolled in the app. All aspects of the app's usability-performance, comfort, interactivity and design-were examined. Personal information of the defendant was also obtained. The pie chart is created by arithmetic and analysis. Participants chose answers to multiple-choice questions based on their opinions.

## **VI. DATA COLLECTION PROCESS**

Data collection in research is the process of obtaining and evaluating data in order to address research questions, evaluate hypotheses, and evaluate what has been discovered. To obtain the data for this study, the researchers selected students in grades VIII to XII

from CBSE and the state board. A questionnaire was distributed to students in more than 25 schools in Kannur, Malappuram, Palakkad, Thrissur and Thiruvananthapuram, Kerala to understand how the app is affecting and changing students' learning. They had approximately two weeks to complete the questionnaire and send it back to the researcher.

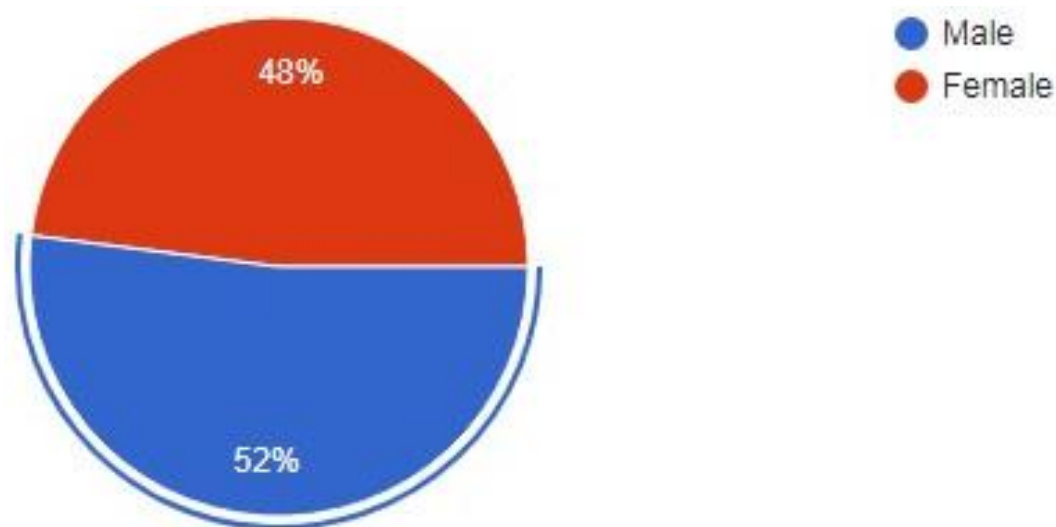
Users of the app are involved in writing questions. Of the 115 respondents, 100 were selected to participate in this study. Others were excluded due to missing data.



**Figure 1:** number of students participated in different districts.

The number of students from Kannur, Malappuram, Palakkad, Thrissur and Thiruvananthapuram districts in Kerala is shown in figure 1.

Fifty students from Kannur responded, followed by 34 students from Malappuram, 8 students from Palakkad, 6 students from Thrissur and 2 students from Thiruvananthapuram.



**Figure 2:** percentage of male and female student respondents.

Figure 2 shows the percentage of men and women who responded. 52% of the students are male and 48% are female. Figure 2 shows the student's learning process. 58% of respondents are from the State Board (Kerala syllabus), 42% are from CBSE. Eight men and 34 women from the CBSE board and 40 men and 18 women from the state board responded.

## **VII. FINDINGS AND DISCUSSIONS**

For statistical model-based analysis, we collected and compiled data from respondents. Statistical models help draw conclusions or make decisions when the population is limited. Charts, graphs, charts, and graphs are used to represent data. After completing the data presentation, researchers can analyze the data using descriptive and statistical analysis. Inferential data analysis is an analysis that helps evaluate ideas based on patterns taken from various topics. The main features of the collected data are explained through data analysis.

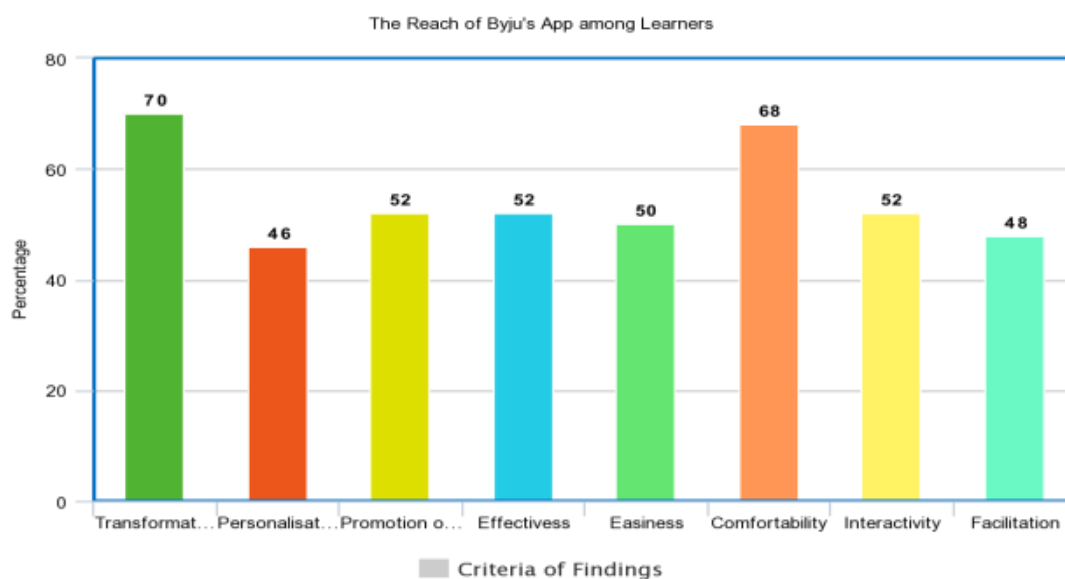
The theme of the app is "Fall in love with learning". According to its announcement, the app uses technology to make learning better by simplifying the content. Researchers examine how the use of modern education in apps can change the way users learn. The answers given by the students to the questionnaires were carefully analyzed using descriptive and quantitative research methods. The app uses a research analysis to help it draw some conclusions.

Among the variables taken into account are the degree of students' use of the application, the scope of the application, their preferences, ease of use, focus, efficiency, study, etc. All the information selected here is based on the questionnaire given to the students. The application can reach a wider audience thanks to advertisements in visual media such as TV and printed media such as the internet. 74% of students started offering the program through work. Only 1% of students use it to review the app, 4% to complete assignments, 24% to prepare for exams, and 70% to understand content. 72% of students say software helps them prepare for exams. 46% of the participants requested to use other training methods. The table below summarizes the results of the study.

**Table 1:** Transformation, Personalisation, Promotion of Learning, Effectiveness, Easiness.

| FINDINGS OF THE STUDY |                            |                         |                      |              |                    |
|-----------------------|----------------------------|-------------------------|----------------------|--------------|--------------------|
| Sl. NO                | PARTICULARS                |                         |                      |              |                    |
| 1.                    | Penetration of the App     | Advertisement-74%       | School-12%           | Family-10%   | Printed Media-4%   |
| 2.                    | Scope                      | Understand Concepts-70% | Exam Preparation-24% | Homework-4%  | Revision-1%        |
| 3.                    | Attractiveness             | Good-68%                | Average-22%          | Very Good-8% | Not at All-2%      |
| 4.                    | Easiness                   | Quite-50%               | Very-44%             | Not Very-4%  | Not at All-2%      |
| 5.                    | Subject Focus              | Maths-42%               | Science-42%          | Language-8%  | Any Other-8%       |
| 6.                    | App Usage                  | 30 min to 1 hr-60%      | Less than 30min-26%  | 1-2 hrs-10%  | More than 2 hrs-4% |
| 7.                    | Orientation for Exams      | Very-36%                | Quite-36%            | Not Very-20% | Not at All-8%      |
| 8.                    | Effectiveness              | Very-50%                | Quite-34%            | Not Very-12% | Not at All-4%      |
| 9.                    | Self-Learning              | Very-52%                | Quite-32%            | Not Very-14% | Not at All-2%      |
| 10.                   | Use of Other Learning Apps | Yes-46%                 | No-38%               | Some-16%     | Many-NIL           |

Undoubtedly, this represents a change in the way we learn from the past. regular process work. "Personalize" and "Encourage Learning" look at how much the app encourages students to learn independently. Fifty-two percent of respondents said the app facilitates self-learning and provides a hands-on experience.:



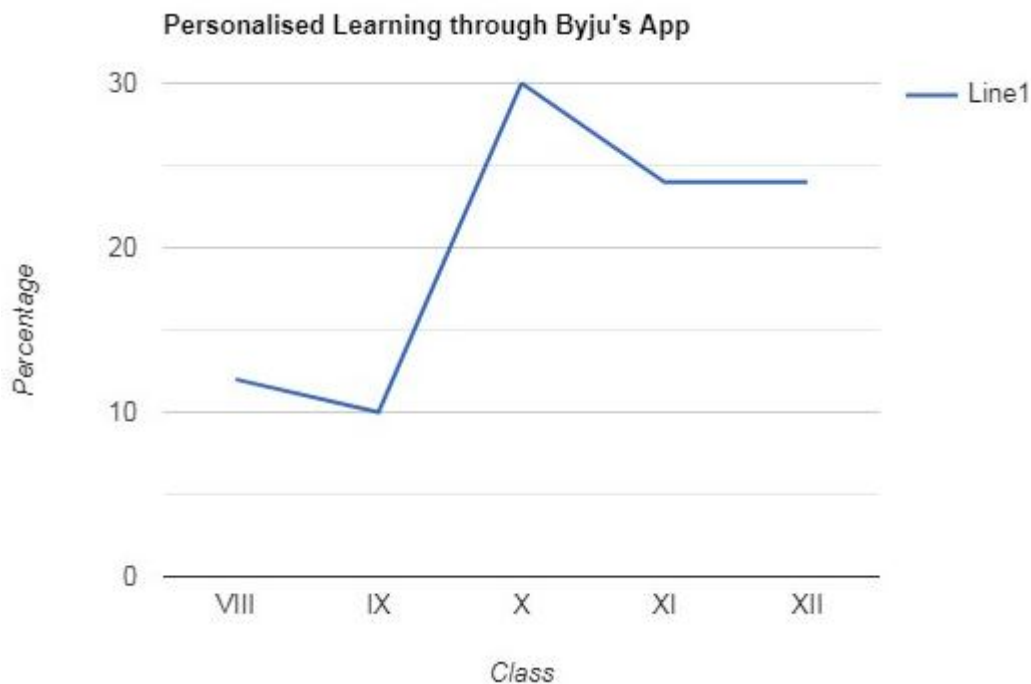
**Figure 3:** Graph for criteria included Transformation, Personalisation, Promotion of Learning, Effectiveness, Easiness

The competency section covers how the app can help users prepare for and reduce exam stress. 36% of the participants said that using the app reduced their test anxiety and 50% said that using the app helped them to be successful in the exam. The Ease of Use study shows how easy the program is to use. 50% of students found the app very easy to use. The "Comfort" app has been tested and seen how easy it is to use.

68% think the app is good. The term "interactive" was chosen because practice testing is attractive and functional.

Help discover how software helps students understand complex concepts and makes difficult topics easier to learn. 42% of respondents use the app to learn math, and 42% use it to learn science. Understanding how practices can help eighth to twelfth graders achieve academic success is the ultimate goal of research. Not surprisingly, the chart below shows students in Class X using the app the most, followed by XI and XII. It shows the classes are coming. Students in middle and high school take education seriously. Repetitive learning is not good for them because most of the test questions are practice.





**Figure 4:** Graph for Personalized Learning through Byju's App

Students need to understand the specific topic in order to answer these questions. Memorization doesn't work in the long run.

Today's teachers believe in self-directed learning. Constructive teaching methods are frequently used in education because they are practical and student-centered. In this case, the Application is correct and its success speaks for itself. From the chart below, it is seen that students in X, XI and XII classes use the application more frequently.

## VIII. CONCLUSION

By assisting users in comprehending complex concepts, the SmartLearn App is recognised for enabling students to learn at their own pace. The software uses a number of modern instructional techniques, such as web-based learning, visual graphics, video-based education, etc. to provide a fully immersive learning experience. These developments allow students to better study foundational concepts and prepare for exams. This study shows how an app successfully used helpful teaching and learning methods to transform Indian education.

The majority of respondents agree that the app is engaging, comfortable, and practical. The study does, however, also show that some users, who are not regular app subscribers, are unable to utilise this programme for individualised learning. A standard subscription is expensive for Indian students. The software will surely reach a big audience and alter the way that education is delivered if it can be made more affordable.

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