

# **TITLE: “Perception of schools’ management towards a new E-Learning platform for hybrid model of education in Ranchi Region.”**

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## **ABSTRACT**

There are many E- learning apps available in the market, but none can solve the problem that is faced by the teacher when she fails to attend to the queries of all the students in her class, in the given time period. This is the reason why the Researcher came up with the idea of carrying out research on a hypothetical situation where an application would act as a supporting tool to the stakeholders of the school administration and would help the students to get their queries cleared from the teacher, even when they are at their homes. This shall encourage the “hybrid” model of education. To carry out this research, Expert Purposive Sampling has been employed by the researcher on 10 CBSE schools out of 17 of them in the Ranchi, Region. A questionnaire of 17 questions has been administered to the Principals/ Vice-Principals (according to their availability) of these schools. The questionnaire aimed to find basic information about the school such as number of students and infrastructure provide to the students along with schools’ perspective towards collaborative learning, continuous learning, continuous evaluation, remedial measures and e- learning. The classes in focus were Std. 9<sup>th</sup>-12<sup>th</sup> which comprises of more than 8000 students studying across these schools. Courses offered by school in higher secondary are Science and Commerce and few offer Arts. Later the Researcher has employed SPSS tests to come to a conclusion.

The outcome of this research came to be a positive one. Schools show keen interest in adopting Hybrid learning and most of the schools have also agreed to take up the new E- learning application. The price and the characteristics of the application play an important role in it’s acceptance by the school’s administration. Hence the null hypotheses in this case have been rejected.

**Keywords:** New E- Learning Model, Hybrid Model, Schools’ administration, perception

## **INTRODUCTION**

The research is based on schools' administration view on E-Learning Software - Testing and Evaluation Platform, to guide students to attain excellence through better practice. Question framing, Testing & Evaluation with proper guidance, resolving student's doubts and providing query - based learning assistance requires involvement of the educator. Current literature suggests that a hybrid model of education supports student learning more effectively than any other format.

### **Why Hybrid Model? -**

Hybrid classes provide a unique avenue or gateway for students to juggle the demands of society on their scarce time and other resources, while still been able to complete their education. The benefits hybrid classes provide for students are many faceted, assisting them to save on costs such as: transportation, text books, commuting time, loss of wages, childcare, and many others. Hybrid classes can be seen as the cost-benefit solution that addresses the needs of community college students.

### **Characteristics of the new E- learning software-**

Software provides for all the stakeholders namely, the institution, teachers, parents and students, a seamless platform for conducting Tests and evaluating the results, without losing the focus on the demands of formal study system. In fact, it actively assists each stakeholder in improving their performance. It makes the task of pedagogy management very easy and thereby freeing quality time for teaching and focusing on improving student's proficiency in the subjects. I have carried out to a market survey to determine the potential demand for this product among schools in Ranchi, Jharkhand. From curriculum to competition and from pedagogy to performance, an education institute needs to stay strong on every front. Ensuring quality education and excellent performance from students, are an institute's responsibilities. The software aims to help the educator to achieve efficiency and measures the performance of the student and provide remedial measures, for further improvement. It is a vital component for building content based smart class solution by the institute, which can help the institute gain edge over the other institutes.

### **Why do we need such a software?**

Simple answer is, with advance in technologies we should upgrade our education system. But, another answer is it's need of the hour for current education crisis of India and the data shown below will justify the claim.

<b>TEACHER STUDENT RATIO</b>			
Countries	Primary	Lower Secondary	Upper Secondary
India	41	34	32
Bangladesh	NA	34	30

Pakistan	41	32	21
China	18	15	15
UK	18	16	16
USA	15	13	13

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The table shows that every teacher in India on an average is responsible for 41 students. At primary level while the same ration in developed countries like USA, UK and China is bellow 20. For once each teach has to work twice compared to their counter in developed countries. Hence reduction in quality of teaching and also a reduction on time that each student should get.

Not just this, there are many week students who require special attention of their teachers, thus increasing the workload of their mentors. Week students are those who find it difficult to attain passing marks/percentage depending upon the school's criteria (mostly 33%). There are various factors resulting in them being week. Some of them can be - Low Self-Confidence or Interest, Poor pedagogy including lack of interaction and creativity in the classroom, inadequate exposure of students to 'real world' situations prior to graduation, such as visits to industry, inadequacy of discussion of performance, counseling and mentoring, to name a few.

### **LITERATURE REVIEW**

The arrival of technology has taken the path of increasing the use of the Web, making it possible to access various kinds of information and materials. This advent of technology has introduced a significant number of distinct technologies to assist in human communication and interaction. Since the genesis of Web 2.0 technologies, people all over the world now have the Internet at their fingertips, and with little or no difficulty can execute communicative acts. Since Web 2.0 has a profound impact in educational institutions and yields promising results, there is a very strong potential for it to have a significant impact on the language learning and teaching process.[1](*The impact of Web 2.0 in Education and its potential for language learning and teaching*, 2015/27/03).

Modern education system is a hybrid of both traditional form of teaching using black boards and books as well as using modern technology coherently, like using e-books or smart classes. Both methods have their own importance. Traditional method of teaching is widely practiced. It's also easily affordable and practicable. Teachers as well as students are well acquainted with it. It becomes easy for the teacher to deliver the topic as well as solve the queries of the students. For students it becomes easier to understand. Modern method on the other hand makes it easy for the student to recap whatever has been as and when he/she requires. E-learning platforms or smart classes make use of visual effects such as videos and images and 3D diagrams. These visuals makes it easier for the child to retain whatever is taught. On the part of teachers it's like a one time investment. Once they are ready with presentations or images or videos they can repeatedly make use of it till the curriculum remains the same. Research also shows that if a proper balance is stroked between both these methods, it can do wonders for all the stakeholders of the education system, that is, the students, the teachers, the management and the parents[2](*A Comparative Evaluation of E-learning and Traditional Pedagogical Process Elements*, 2013).

A review of a decade of online learning work indicates that mixed or hybrid learning, that is, mixing face-to-face and online learning, is the most suitable method of imparting, something known as “holistic education”. Technologies are making modern hybrid education models possible. [3] (*Hybrid Education: The potential of teaching and learning with robot-mediated communication*)

Traditional face-to-face courses are the mainstay of universities and schools. Hybrid courses could be an solution for those teachers who feel that online learning does not offer an educational experience equal to that in the classroom. Hybrid classes, also known as blended classes, provide a mix of conventional and online teaching methods, with the goal of offering the advantages of carefully arranged class meetings combined with the ease of online learning. Hybrid courses can "promise the best of both worlds and deliver some of the ease of all-online courses without the full loss of traditional method. Given the scope of potential combinations of conventional and online teaching methods, a hybrid model seems likely to be accomplished for most courses; however, it might be presumptuous to conclude that hybrid courses will produce the highest learning results for students. A study of course learning objectives, pedagogical techniques, and student audience — as well as a measure of trial-and-error — would probably show a model that fits most students best. [4] JALN- “*Questioning the Hybrid Model: Student Outcomes in different course formats*” (March 2005)

Hybrid courses brought new impetus and choices to the colleges, their students and instructors. These programs give the students the chance to excel. These types of courses foster a special combination of guidance from the teachers and the students accept accountability. In addition, students in pursuing these types of courses also react positively. Hybrid courses give an alternative to spending time on campus; raising transportation costs and travel time. For certain cases, this type of education system has progressed from being an option to a requirement. Hybrid courses have been the stimulus many students have longed for a few short decades now. Hybrid courses give individuals the ability to graduate in their chosen field whilst holding several other duties. Thomas Gould from the Durham Technical Community College claims that the advantages of hybrid courses include the improvement of time management skills, crucial thinking capabilities and comprehension.[5] Joel Barker, *Contemporary Issues In Education Research – “Benefits Of Hybrid Classes In Community Colleges” – (Third Quarter 2012015) Volume 8, Number 3.*

## **OBJECTIVE**

### **Primary Objectives :**

1. To study if price has a significant impact on the acceptance the new E-learning model by the schools’ administration in Ranchi region.
2. To study if the characteristics of the new E-learning model have a significant impact on it’s acceptance by the schools’ administration in Ranchi region.

### **Secondary objective :**

3. To study if the schools’ management are in support of a hybrid model of study.

## **RESEARCH METHODOLOGY**

**Data Interpretation Methods:** Data is collected by administering a questionnaire of 17 questions to the schools' administration through a personal interview. My questionnaire aimed to find basic information about the school such as number of students and infrastructure provided to the students. Another area of focus was to find school perspective collaborative learning, continuous learning, continuous evaluation, remedial measures and e-learning. I interviewed principals of 10 CBSE schools from Ranchi region, in the state of Jharkhand. More than 8000 students are studying in this school in between 9<sup>th</sup>-12<sup>th</sup> standard. Courses offered by school in higher secondary are Science and Commerce and few offer Arts.

Tab 2: The Schools involved in interview are:

1	DAV Public School, Bariatu
2	DAV Public School, Hehal
3	Army Public School, Ranchi
4	DAV Public School, Gandhinagar
5	Karali School
6	Bridgeford School
7	Jawahar Vidya Mandir, Shayamali
8	DPS Ranchi
9	Surendranath Centenary School
10	Sarla Birla Public School

**1. Sampling Design :**

- **Target Population:** The respondents are Principals or Vice-Principals of 10 CBSE Schools in Ranchi, Jharkhand region.
- **Sampling Method:** Expert Purposive Sampling method was used.
- **Sample Size:** Response was collected from a total of 10 schools out of 17 CBSE schools in the region.

**2. Method of collecting primary and secondary data:**

- The primary data was collected using questionnaire administered to the school's administration in a personal interview.
- The secondary data was provided by the school's management through their official records.

### **DATA ANALYSIS AND INTERPRETATION**

To test the first hypothesis that :

**H0:** Price does not have a significant relationship with the acceptance of the new hybrid learning system by the schools' in the Ranchi region.

**H1:** Price has a significant relationship with the acceptance of the new hybrid learning system by the schools' in the Ranchi region.

The researcher has used Cross tabulation with Chi-Square technique of SPSS. Below is the analysis that I have made using the software.

### **CROSSTABS**

Tab3.1: Case Processing Summary

Tab3.2: Cross-Tabulation-E-learning\* price of E-Learning platform

Tab3.3: Chi-Square Tests

## CROSSTABS

```
/TABLES=Product BY Price  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ  
/CELLS=COUNT  
/COUNT ROUND CELL.
```

**INTERPRETATION:** The above Chi-Square table shows that there were 10 samples (schools) into consideration. The chi square statistic appears in the Value column of the Chi-Square Tests table immediately to the right of “Pearson Chi-Square”. In this case, the value of the chi square statistic is 10.000. The p-value appears in the same row in the “Asymptotic Significance (2-sided)” column (.019). The result is significant if this value is equal to or less than the designated alpha level (normally .05).

In this case, the p-value is smaller than the standard alpha value, **so we’d reject the null hypothesis that asserts that price has a significant impact on the acceptance of the new E-learning system by the schools’ in the Ranchi region.**

**To prove the second hypothesis that:**

**H0: The characteristic of the new E- learning platform does not have a significant relationship with the acceptance of the new E-learning platform by the schools’ in the Ranchi region.**

**H1: The characteristic of the new E- learning platform has a significant relationship with the acceptance of the new E-learning platform by the schools’ in the Ranchi region.**

**The Researcher has taken the help of Cross tabulation technique of SPSS. Below is the analysis that I have made using SPSS.**



Tab 4: Case Processing Summary





Tab5.1: Cross-Tabulation-E-learning\* If a system, which can Auto-Generate Subject/Chapter-Wise Tests and Problem-Solving Exercises easily, would you be interested in it?

**INTERPRETATION:** The data above shows that out of 10 schools 4 are interested in the E-learning platform which can Auto-Generate Subject/Chapter-Wise Tests and Problem-Solving Exercises easily. Moreover 5 of them show interest in the application but are dicey about this feature. The remaining one says it is probably interested in this feature but not in accepting the new E-learning platform, the reason for which is that they already are making use of some software.



Tab5.2: Cross-Tabulation-E-learning\* What do you think about a system, which provides 10,000+ Questions and Answers with solved examples, explanations and hint/reference link for further study?

**INTERPRETATION:** The data above shows that out of 10 schools 1 would certainly buy the E-learning platform which provides 10,000+ Questions and Answers with solved examples, explanations and hint/reference link for further study. Moreover 8 of them are sure about purchasing the application but

dicey about this feature. The remaining one says it is probably interested in this feature but not in accepting the new E-learning platform, the reason for which is that they already are making use of some software.



Tab5.3: Cross-Tabulation-E-learning\* What do you think about a forum in which a student can lear his doubt regarding a subject, by posting it online and starting a discussion In which teacher can participate?

**INTERPRETATION:** The data above shows that out of 10 schools 7 show interest in the E-learning platform which a student can use to clear his doubt regarding a subject, by posting it online and starting a discussion, in which teacher can also participate. Moreover 2 of them are satisfied to some extent with the feature and also show interest in the application. The remaining one says it is probably interested in this feature but not in accepting the new E-learning platform, the reason for which is that they already are making use of some software.



Tab5.4: Cross-Tabulation-E-learning\* Would a system, which provides multi-dimensional deep performance analysis of a Test result, be helpful?

**INTERPRETATION:** The data above shows that out of 10 schools 8 think that the E-learning platform which provides multi-dimensional deep performance analysis of a Test result, be greatly helpful. 1 of them thinks it can be of help and is hence dicey about the feature but in support of the new E-learning platform. The remaining one says it is probably interested in this feature but not in accepting the new E-learning platform, the reason for which is that they already are making use of some software.



Tab5.5: Cross-Tabulation-E-learning\* Do you think the system, which keeps school, student and Parents, informed regarding school matters and events, would be important?

**INTERPRETATION:** The data above shows that out of 10 schools 8 say it is extremely important to have an application which keeps school, student and Parents, informed regarding school matters and events. 1 of them says it's very important and hence all these 9 schools are interested in the feature as well the new E-learning model. The remaining one says it is probably interested in this feature but not in accepting the new E-learning platform, the reason for which is that they already are making use of some software.

**E learning platform \* Do you believe a centralized Online Portal, which provides Access to all School Activities, would be helpful to School? Crosstabulation**

Count

		Do you believe a centralized Online Portal, which provides Access to all School Activities, would be helpful to School? extremely helpful	Total
E learning platform	yes	9	9
	no	1	1
Total		10	10

Tab5.6: Cross-Tabulation-E-learning\* Do you believe a centralized Online Portal, which provides Access to all School Activities, would be helpful to School?

**INTERPRETATION:** The data above shows that all the 10 schools think it is extremely helpful to have an online Portal, which provides access to all school activities. Although 1 of the school is interested in this feature but not in accepting the new E-learning platform, the reason for which is that they already are making use of some software.

### FINDINGS

1. The research topic deals with understanding the perception of the schools' management towards the new E- learning platform for hybrid model of education, in respect to the price and the characteristics of the E- learning platform.
2. The data from the Principals/Vice- Principals 10 CBSE schools has been collected by the researcher.
3. Figure1 based on the data collected by the researcher shows that out of 10 schools 4 schools have all the three streams, namely Arts, Commerce and Science and rest 6 have only Commerce and Science.
4. Figure 2, based on the data shows that among all the 10 schools 66% students are from Science stream, 6% from Arts Stream and remaining 28% from Commerce stream.
5. Figure 3 and Figure 4, based on the data collected, respectively shows that all the 10 schools are interested in hybrid model of education and all find it more effective and efficient than traditional form of teaching.
6. (Table 3.1-3.3) Taking Chi Square test with Cross Tabulation on the data related to the price and whether or not the new E-learning model will be acceptable by the school's management, the researcher found a positive relationship between both the variables, proving that price has a significant impact on the acceptance of the new E- learning mode for hybrid education by the school's management in Ranchi region.

7. (Table 5.1-5.6) Taking Cross Tabulation on the data related to various characteristics of the new E-learning mode for hybrid education and whether or not the new E-learning model will be acceptable by the school's management, the researcher found a positive relationship between both the variables, proving that the characteristics of the new E-learning model has a significant impact on its acceptance by the schools' management in Ranchi region.

### **RECOMMENDATIONS AND SUGGESTIONS**

- The application only focuses on students studying between Std.9 to Std.12. It can be gradually expanded to include facilities for other classes too.
- The application can also teach regional language, like Nagpuri, Maghi, Mathili etc. to students.
- Beyond schools, the application can also be sold to coaching classes and individual students.
- It can also be expanded towards providing assistance to students preparing for competitive exams like NEET, AIEEE etc.
- It should develop a proper hold in the city and should then think to expand.
- The application can also be developed to include virtual laboratories and technical courses such as training in computer languages such as JAVA/ Python/C++.

### **FUTURE SCOPE**

A research topic as such- "Perception of schools' management towards a new E-learning hybrid model of education in Ranchi Region." has a very vast scope of further studies that can be conducted. The researchers can further analyse following extensions to the study in future :

- They can take up a research to understand the perception of parent's towards a new E-learning hybrid model of education.
- They can also take up a research to understand the perception of parent's towards a new E-learning hybrid model of education.
- They can also take up a study to compare this application with the other similar applications available in the market like BYJU, Extramarks, Toppr etc.
- A similar kind of study for this application can be performed in some other region of the country also.

### **CONCLUSION**

The survey indicated that almost all the principal of the surveyed schools, agree that the use of educational technologies -

1. Helps students collaborate.
2. Enables personalized learning
3. Improves students performance
4. Increases students engagement in learning

It also proves that both primary and secondary objectives have been proven.

Such a solution/portal helps teachers, to implement different types of learning strategies, as per the need of their students such as corresponding developmental courses, tutorials, instructional videos and a variety of other features. Personalized and engaging contents will greatly help students learn, even the most complex topics. In this manner, every students gets equal opportunity to improve upon his/her skills and knowledge base. Principals also agree that the biggest challenges to digitization in schools include funding, insufficient technical infrastructure, lack of time to implement and training.

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