

# ONLINE LEARNING SYSTEM: A SURVEY BASED ANALYSIS

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**Abstract:** With the dynamic growing world, the teaching paradigms have undergone drastic modifications. The ancient teacher-student relation has developed from one-way communication to interactive classroom approach. The repositories of books have been replaced by user-friendly and responsive online data libraries. Learning is now hassle-free and available round the clock, knowledge is easily available. This paper focus on recent online system for education that is analysed for the regular students from the states of northern region of India that covers Haryana, Himachal Pradesh, Jammu and Punjab as well as Union Territories of Chandigarh and Delhi using On-Line Learning Portal (OLLP) system through IIT Spoken Tutorial developed at IIT Bombay for Ministry of Human Resource and Development to promote IT literacy officially launched in January 2010.

**Keywords:** On-Line Learning Portal (OLLP) system, Online Tools, IIT Spoken Tutorial.

## I. INTRODUCTION

Technology has taken a leap for the betterment of learners wherein the traditional classroom teaching has taken a giant movement towards online learning system. The relation between teacher and student has now become more interactive, rigid and dependent one. Students are prone to invoke independent thought process along-with acquiring qualitative knowledge. Students are no more dependent on textbooks and teachers for gaining knowledge. Media has replaced the traditional learning process by providing round the clock assistance and user friendly interface. The core objective of teacher nowadays is to inspire and to motivate the young learners as well as provide assistance to the adult learners in their thirst for knowledge and skills.

There are various types of technologies currently used in classrooms. Among these are [1]:

- Computer in the classroom
- Class blogs and Wikipedia
- Wireless classroom microphones
- Mobile devices
- Interactive Whiteboards
- Digital video-on-demand
- Online media

- Online study tools
- Digital Games

There are multiple tools that are utilized depending on the local school establishments and funds available at their disposal. The online education covers variety of courses. Through this education, the student can choose multiple online degrees or courses from a list of available online universities that have a provision of online education. The flow of this research paper is: Section II provides the research methodology and objectives, Section III analyses the results and discussions, Section IV summarises the conclusion in context to the subject under discussion and Section V throw a light on Future Scope.

## II. RESEARCH METODOLOGY AND OBJECTIVES

This research manuscript is exploratory in nature. In order to meet the objectives secondary data is taken into consideration. The data was collected through books, periodicals, journal and published material related online learning for the study. The collected material was then further surveyed from the students of northern region of India. The research approach lays focus on certain objectives that can prove as an asset for analysis of the scenario.

- To understand On-Line Learning Portal (OLLP) and explore its potential in Indian Higher Education scenario.
- To examine how Online Learning is a boon for higher education in India and the application of new technologies.
- Analyse students' perception towards online learning models and its significance with the skill development, effectiveness and employability.
- To explore the future of Online Learning in India.

The research questions are considered as the first and the most important condition for differentiating it amongst the different research strategies. Since, this research uses a questionnaire to assess the online learning strategy in educational institutions, the survey strategy is chosen. In addition to this research attempts to assess the online learning strategy in higher educational institutions among

the two different disciplines namely Engineering Institutes as well as Arts and Science colleges. The research adopts 'Stratified random sampling' which is a probabilistic sampling option. The first step in stratified random sampling is to split the population into strata, i.e. section or segments. The strata are chosen to divide a population into important categories relevant to the research interest. The second step is to take a simple random sample within each stratum. This way a randomized probabilistic sample is selected within each stratum.

Since there are multiple colleges in India with a variety of domains, so the northern region of India was considered precisely covering four major states of Haryana, Himachal Pradesh, Jammu and Punjab and two Union Territories of Chandigarh and Delhi. The research adopted stratified random sampling in selection of institution from the two disciplines using OLLP system through IIT Spoken Tutorial for Ministry of Human Resource and Development.

### III. RESULTS AND FINDINGS

The respondent students have different perception regarding online courses at institute/university level. Therefore, every student has been included in the survey to collect opinion about comprehensive opinion. The students with different educational qualifications may think differently for attempting online courses. Graduate level students may have better exposure and liking for online courses as compared to Post-Graduate level. Since the online courses are meant for the students of this region, so including all students in the survey will be expectedly give a better insights.

**TABLE 1: Overall State-wise Ranking Analysis in Year 2018**

RANK	STATE	TOTAL STUDENTS
1	Haryana	6880
2	Punjab (excluding Chandigarh)	5802
3	Jammu	3163
4	Himachal Pradesh	2852
6	Delhi	2172
7	Chandigarh	1966

In Table 1, data from four different states, Haryana, Himachal Pradesh, Jammu and Punjab as well as union territories of Chandigarh and Delhi. These are ranked as per the overall students enrolment observed in the year 2018. As per this record, maximum number of students were enrolled from state Haryana with 6880 students where as minimum number of students were registered from union territory Chandigarh with 1966 students. It is noticed that the number of students that are enrolled from Haryana are more aware than any other state or union territory. It is seen that Chandigarh being most accessed city for education also lacked enrolment of OLLP system.

**TABLE 2: Overall State-wise Ranking Analysis in Year 2017**

RANK	STATE	TOTAL STUDENTS
1	Chandigarh	61941
2	Haryana	38964
3	Himachal Pradesh	23778
4	Jammu	17867
5	Punjab (excluding Chandigarh)	16741
6	Delhi	10963

In Table 2, four different states namely, Haryana, Himachal Pradesh, Jammu and Punjab as well as two union territories namely, Chandigarh and Delhi, are ranked as per the overall students enrolment observed in the year 2017. According to analysis, maximum number of students were enrolled from union territory Chandigarh with 61941 students where as minimum number of students were registered from union territory Delhi with 10963 total students.

It is noticed that the number of students that are enrolled from Chandigarh are more aware than any other state or union territory in year 2017. It is seen that Haryana also had lesser enrolment of OLLP system.

**TABLE 3: Overall State-wise Ranking Analysis in Year 2016**

RANK	STATE	TOTAL STUDENTS
1	Haryana	40450
2	Delhi	31211
3	Chandigarh	30590
4	Punjab (excluding Chandigarh)	15099
5	Himachal Pradesh	7568
6	Jammu	4187

In Table 3, four different states namely, Haryana, Himachal Pradesh, Jammu and Punjab as well as two union territories namely, Chandigarh and Delhi, are ranked as per the overall students enrolment observed in the year 2016. According to analysis, maximum number of students were enrolled from state Haryana with 40450 students where as minimum number of students were registered from state Jammu with 4187 total students.

It is noticed that the number of students that are enrolled from Haryana are more aware than any other state or union territory. It is seen that Jammu lacked enrolment of OLLP system due to issues of the state.

**TABLE 4: Overall State-wise Ranking Analysis in Year 2015**

RANK	STATE	TOTAL STUDENTS
1	Haryana	9169
2	Punjab (excluding Chandigarh)	6964
3	Delhi	5345
4	Himachal Pradesh	3092
5	Jammu	669
6	Chandigarh	147

In Table 4, four different states namely, Haryana, Himachal Pradesh, Jammu and Punjab as well as two union territories namely, Chandigarh and Delhi, are ranked as per the overall students enrolment observed in the year 2015. According to analysis, maximum number of students were enrolled from state Haryana with 9169 students where as minimum number of students were registered from union territory Chandigarh with 147 total students.

It is analysed that the number of students that are enrolled from Haryana are more aware than any other state or union territory. It is seen that Chandigarh being most accessed city for education also lacked enrolment of OLLP system.

**TABLE 5: Overall State-wise Ranking Analysis in Year 2014**

RANK	STATE	TOTAL STUDENTS
1	Haryana	15672
2	Punjab (excluding Chandigarh)	9322
3	Delhi	2900
4	Himachal Pradesh	2866
5	Jammu	760
6	Chandigarh	604

In Table 5, four different states namely, Haryana, Himachal Pradesh, Jammu and Punjab as well as two union territories namely, Chandigarh and Delhi, are ranked as per the overall students enrolment observed in the year 2014. According to analysis, maximum number of students were enrolled from state Haryana with 15672 students where as minimum number of students were registered from union territory Chandigarh with 604 total students.

It is noticed that the number of students that are enrolled from Haryana are more aware than any other state or union territory. It is seen that Chandigarh being most accessed city for education also lacked enrolment of OLLP system.

**TABLE 6: Overall State-wise Ranking Analysis in Year 2013**

RANK	STATE	TOTAL STUDENTS
1	Haryana	3828
2	Jammu	1918
3	Himachal Pradesh	1420
4	Delhi	1122
5	Punjab (excluding Chandigarh)	1040
6	Chandigarh	35

In Table 6, four different states namely, Haryana, Himachal Pradesh, Jammu and Punjab as well as two union territories namely, Chandigarh and Delhi, are ranked as per the overall students enrolment observed in the year 2013. According to analysis, maximum number of students were enrolled from state Haryana with 3828 students where as minimum

number of students were registered from union territory Chandigarh with only 35 total students.

It is noticed that the number of students that are enrolled from Haryana are more aware than any other state or union territory. It is seen that Chandigarh being most accessed city for education also lacked enrolment of OLLP system.

**TABLE 7 : Overall State-wise Ranking Analysis**

RANK	YEAR	STATE	TOTAL STUDENTS
1	2017	Chandigarh	61941
2	2016	Haryana	40450
3	2016	Delhi	31211
4	2017	Himachal Pradesh	23778
5	2017	Jammu	17867
6	2017	Punjab (excluding Chandigarh)	16741

In Table 7, four different states namely, Haryana, Himachal Pradesh, Jammu and Punjab as well as two union territories namely, Chandigarh and Delhi, are ranked as per the overall students enrolment observed in the years 2018, 2017, 2016, 2015, 2014 and 2013. According to analysis, maximum number of students were enrolled from union territory Chandigarh with highest number of students which are 61941 in the year 2017 where as minimum number of students were registered from state Punjab (except Chandigarh) with lowest number of students which are 16741 in the year 2017.

It is analysed that in year 2017 maximum number of enrolment of OLLP system were from Chandigarh which outraged the intake of students from Haryana even because of establishment of State level Private university in Chandigarh. It can be also inferred that even though state level issues prevail in Jammu, still students are aware of OLLP system but Punjab lacks the enrolment as Chandigarh city is excluded from the region and alone state does not support OLLP system as compared to others.

#### IV. CONCLUSION

As per our research findings, conclusion can be drawn that with the rapid growth in internet connectivity, Online learning system has gain a boom. Online learning plays a vital role in educational development as a wheel of growth in education sector. In the present manuscript, limelight has been drawn on Online learning system which act as foundation to interactive learning system. It is analysed that the developing wave of adaptive learning will help higher education, women as well as government. According to analysis in the paper, maximum number of students were enrolled from union territory Chandigarh in the year 2017 where as minimum number of students were registered from state Punjab (except Chandigarh) in the year 2017. Similarly, analysis is done year-wise of the contribution of regular students of various states and union territories as

shown in the tables illustrated in the paper. This contribution depicts the number of students that have enrolled to online learning courses and have successfully completed the course through IIT Spoken Tutorial developed at IIT Bombay for Ministry of Human Resource and Development to promote IT literacy.

#### V. FUTURE SCOPE

This paper focus on challenge that was stated was the disparity in the technological advances with the students being unable to meet the growing changes and up-gradations required. These vital issues must be addressed in other to increase the ease of undertaking the On-Line Learning Portal (OLLP) system courses and thus encouraging higher pursuance.

In Future, Analogous researches could be easily conducted to focus on every state of the country and reorganize the most preferred courses. The research findings could also be compared with other countries to determine the value of On-Line Learning Portal (OLLP) system and the growing market shares in India. This would provide assistance in obtaining the emphasis on various factors such as Technology, the Course Module Structures, Resource availabilities and so on.

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