Chapter 5

Conclusion

The study has been carried out to gauge the Usage and Acceptance of Internet Based Platforms in Indian higher Education. The undergraduate engineering and technology students of Communication skills courses and teachers of the same courses were selected as the sample from the universities in New Delhi and the National Capital Region. Objectives and research questions were formulated to conduct the study. Triangulation of quantitative and qualitative methods was used to carry out the study. The first objective of the study was to find out the usage intensity of Internet Based Platforms by the students. In order to fulfill the first objective, questionnaire was distributed to the students and they were asked to mark their preferences. The public group respondents marked YouTube as their choice followed by LMS and emails. The most preferred task which the students do using these IBPs is- reading online study materials. For private group users also, YouTube is the first choice which is used by them to accomplish their educational tasks, followed by the Learning Management System (LMS) and emails. YouTube is the first choice of the student community and it shows that the multisensory properties of this platform motivate the users to adopt it. The second and third preference included LMS and emails indicating use of a collaborative text based platform and a text based communication platform. Both these platforms give numerous opportunities for learning the skills for enhancing speaking skills, writing skills and to develop critical thinking. YouTube, Learning management Systems (LMS) and emails came out as the mostly accessed and used Internet Based Platforms by the students of Communication skills courses.

YouTube is a platform which provides multisensory facility. Students can enhance their listening and speaking skills on this platform. Pronunciation drills and practice can be carried out on this platform. Listening and speaking skills can be enhanced using this platform. Writing skills can also be enhanced, because these days users comment and share their opinions and ideas after watching a video. Not only the writing skills but also the critical thinking skills of the students can be enhanced using YouTube. Students can record their presentations, watch them several times and improve their spoken and presentation skills. While doing the field survey the researcher found that students do mock interviews, record them and upload them on YouTube for evaluation by their teacher and their peer group as well. Students were working in pairs and recording their presentations, debates, group discussions on YouTube which the teacher was evaluating later. So in this manner this multisensory platform is helping the students a lot. It engages them in activities and save time as well. The same thing happens on wikis and emails. Students start discussion threads on emails and perform certain tasks like submitting assignments, complete online quizzes, take feedback from the peers and teachers and several similar tasks on these two platforms. They form groups using emails for collaborative tasks. It enhances their critical and creative thinking skills. It gives chance to the shy students which generally do not speak inside the classroom. In this manner the Internet Based Platforms are helping the students and teachers to utilize their capabilities and hone their skills.

The second questionnaire was prepared in order to get to know about the primary factors which motivate students to use and accept these IBPs. The primary factors which motivate the students to use and adopt the Internet based Platforms are Performance Expectancy, Self-Efficacy, lack of Anxiety and Intention to Use for the public and private university students. Facilitating Conditions proved its contribution for usage in the private group but in the public group the values are insignificant. The results prove that the digital natives today do

not pay much attention to the efforts which are required to accept a new technology. The students are prone to taking risk, so they easily accept even the complex platforms. The primary goal of this population is to take benefit from the technology.

The third objective of the study was to observe whether there is a difference between the acceptance of students of private and public universities, between the gender groups and the users with different years of experience. The demographic variables namely, gender and years of experience were considered to observe the difference. For the public university students there is a difference of opinion for the factors Facilitating Conditions and Anxiety. Males and females think differently for these two variables. Female students tend to show a high intensity towards both the variables. It can be inferred that female users in the public settings tend to show a high intensity of accepting an IBP if the infrastructure and support service of the institute are efficient. For Anxiety variable, the female users tend to be more conscious while taking decisions for accessing and using IBPs, due to cultural and social factors, whereas, in the private group there is no difference of opinion between the male students and female students. The students in the public universities come from a mixed and diverse group of middle class families, whereas students from upper middle class and high class come to the private universities. Availability of infrastructure is present in the private universities, whereas in public universities the technical support structure is not in very good condition.

For the second group '*Years of Experience'*, there is a difference of opinion for three factors namely, PE, EE, and SE in the public settings and for PE and EE in the private settings. It can be inferred that students in the initial years of their IBP usage tend to think about the factors like the level of effort which is required to put while using IBPs. Students of the second setting i.e. students of private universities, there is no difference of opinion noticed in the gender group. It implies that the private university set up is more conducive to both

genders for technology acceptance. PE and EE which are common for difference of opinion in both settings imply that the opinions of students tend to change with the passage of time and the exposure with the IBPs. As the students become more and friendly with the technology, they tend to show high level of confidence in handling the IBPs. By observing and experiencing the benefits they get from these IBPs boosts their confidence and enhance their interest in using and accepting these platforms. As they see the outcomes and enhancement in their communication skills, they tend to espouse the IBPs for their academic tasks.

The fourth and last objective of the study was to gain an insight about the opinions of the Communication skills courses teachers towards IBPs and allied technologies. In order to get their perception towards the new technological changes, their inclusion in the teaching learning process and their recommendations for better implementation, interview method was used. While answering the questions, the respondent teachers reported that IBPs are very helpful in saving their time, enhancing their performance. It helps to enhance the active engagement of the students, and gives a multisensory perception. It breaks the barrier of space and time. Storage problem which was a big issue has been solved to some extent because of IBPs. It not only enhances their academic skills but also hone their communicative competence. IBPs work as effective platforms and provide a complete package of skills which is required today. One recommendation which was suggested by almost all the respondent teachers was- the provision of teachers training so that they can prepare themselves completely and maximum utilization of the technology can be done.

The factors which emerged in the study as important factors can be taken into consideration by the industry people and the technology manufacturers. Taking these factors into consideration new technology can be developed. Anxiety came out as a very prominent factor. The respondents reported that initially they become nervous to start operating a

technology. Possible solutions should be tried to find out by the industry so that the anxiety level of the users can be reduced to the minimum extent.

The recommendations and suggestions of the teachers can be taken into consideration by the curriculum designers and the policy makers. It was observed during the field study that there is an immediate need of training and workshops for the teachers to make them skilled for using technology. There is a need for infrastructure support from the government in order to strengthen the technology acceptance among the digital immigrants and digital natives.

Concrete strategies for enhancing IBP acceptance among teachers, such as blended classrooms, flipped classrooms, designing materials, task integrating classroom activities with life skills, project work. ICT gives the freedom to bring the knowledge seeker at the front. The concept of flipped classroom would only work when more freedom would be given to the teacher and the student for making errors and committing mistakes. The normal set-up of a classroom since ages is a teacher in the control of fulfilling the demands of the administrators and policy makers. The teacher should be given the autonomy to bring the learners at the centre. Teaching should be more learner centered. There should be more focus on learning by doing, and technology would act as a catalyst in this situation. The IBPs provide ample opportunities to collaborate and connect. The students and teachers can stay connected all the time through these platforms. The teacher should motivate and inspire the students to take initiatives and come in the front. The students should be seen in the center of the classroom instead of the teacher. Orientation should include use of technology in preparing materials and using them effectively and innovatively by the teacher. The more the teacher will experiment with the designs and innovations, the more he/she reduces the level of anxiety ultimately.

There is a strong recommendation for the use of IBP more constructively both by teachers and students. There is the temptation for teachers and students for copy and pasting.

Measures should be taken by the teachers to control this copy pasting behavior by using the software available in the market for checking plagiarism. Students should be motivated to use technology and ample opportunities should be provided to them, but in a constructive manner. Assignments should be designed and prepared in such a way that students cannot do copy and pasting even if they desire. The design and content of the tasks should be prepared with much attention and using creativity. The teacher should think of more critical and reflexive techniques to include the learners' participation at any cost.

There are few measures which can be used for elevating Anxiety, which came as an important factor playing role in the adoption process. While interviewing the teachers, it came out that the most effective way to reduce the anxiety level of the users, (teachers in this case) is practice. The key determiner to reduce anxiety associated with the technology usage is exposure, training and practice. External motivation is required from the higher authorities. The training which is given to the teachers during their teachers' training is needed to be updated. The group of people says that newer and advanced versions of technology are coming into the market, so there is no chance of making a teacher perfect in using one technology guarantees her/his techno-savvy attitude. But making the teacher more and more familiar with the technologies available in the classroom would be an effective step to reduce the anxiety level of the teachers.

5.1) Limitations of the Study

Limitations of a research have been defined as, "matters and occurrences that arise in a study which are out of the researcher's control and limit the extensity to which a study can go, and sometimes affect the end result and conclusions that can be drawn" (Simon and Goes, 2013, p.1). The present work of research also has certain limitations.

- Firstly, additional work is needed to confirm the results obtained from the current research.
- One of the limitations of the present research is the restricted geographical location. Due to financial and time constraints the sample has been chosen from Delhi and the National Capital Region only.
- The study has been conducted using cross-sectional design. Due to time and operational constraints, it was not possible to collect data for a longitudinal study.

5.2) Future Scope for further Research

Some suggestions for future study arise from the limitations observed from the present study.

- This study has focused on the established framework of acceptance which includes PE, EE, ANX, FC, SE, IOU, and U as determiners. The study can be extended to include other factors such as socio-economic factors of the learners, the academic background of the family, medium of infrastructure in schools etc.
- In addition to this, the study can be extended to more disciplines of higher education including sciences and humanities. Also other stakeholders such as educational administration content developers and technology innovation can be included in future studies.
- For both longitudinal and larger sample reasons, replication of this study at other universities is also suggested. This will give a broader picture (over time) of students' experiences with IBPs.
- Further studies can be carried out longitudinal research design, and data can be collected at multiple times to get a broad spectrum of the user acceptance.