CHAPTER 7
IMPLICATIONS

7.1 Customizing Learning Programmes

7.2 Technology Enabled Learning

7.3 e-Learning as a Supporting Medium
This chapter focuses on the application and utility of the new knowledge and its impact on various segments of the society. The implications of the current research work are for researchers, academicians and policy makers. Today, due to the tremendous growth in technology, e-Learning has affected curriculum, delivery, careers and above all society at large.

7.1 **Customizing Learning Programmes**

The traditional face-to-face learning environment can be supplemented, or more appropriately complemented by an e-Learning environment. It provides more access to learning and also generates greater diversification to learning. Online learning outcomes are the consequences of dynamic interactions between e-Learners, faculty and e-Learning systems. The Learners should be interested in the technology assisted learning so as to derive benefits from it. The faculty should maintain the high levels of ICT usage among students through continuous education and promotion of the benefits attached to ICT resources. The e-Learning system should be designed in such a way that it makes learning easy, appealing and interactive.

The study may be valuable as a pedagogical tool for all entities involved in the dynamic learning process. For the success of e-Learning the administrators of higher education institutions have a significant role to play. They must constantly invest to upgrade the systems so that e-Learning systems show faster response time, better system accessibility, higher system reliability and flexibility. Administrators should ensure the availability of technical assistance to the students so that they are not demotivated or they do not drop out just because of technological problems. By doing so, e-Learning systems can offer e-Learners with the information that is accurate, current, reliable, dependable, and useful.

Once faculty and students both embrace the use of e-Learning, the teaching and learning activities will be made easier and effective in the higher education setting. ICT usage will also foster growth since there will be free flow of information. Hence, it is recommended that administrators should pay more attention to the use of e-Learning for teaching and learning in the higher education institutions.

The study has identified various factors and dimensions as perceived by the faculty and students of traditional and professional streams of education. The study has
implications for policy makers in the area of online learning in higher education institutions in developing countries. It provides an insight into the country specific factors and dimensions that facilitate in best possible utilization of e-Learning resources by teachers and students. The factors and dimensions identified in the study should be considered essential in the process of design and implementation of e-Learning.

The faculty of traditional stream perceived e-Learning to be interactive while the faculty members of professional stream found e-Learning to be less interactive. Keeping in mind that interaction in e-Learning is of three types: learner-learner, faculty-learner and learner-content, the faculty members of professional stream need to identify the type of interaction in which e-Learning is lacking. Those faculty members who want to have high interaction should take up synchronous e-Learning, while those who prefer low interaction could opt for asynchronous e-Learning. The faculty members of professional stream consider e-Learning to be less capturing. Therefore, course designers should design the course in such a way that it becomes more interactive and capturing for all the faculty members irrespective of their stream.

Faculty members of traditional stream perceived e-Learning to be meticulous and absorbing while faculty members of professional stream perceived it to be less meticulous and absorbing. This indicates that the learning material developed should be sequenced appropriately from simple to complex, known to unknown, and knowledge to application. Therefore, the designers should focus on customizing the learning programs according to the requirements of learners. They should take care of all the technicalities while the faculty should only focus on how to teach and engage students effectively.

The faculty members of the traditional stream who perceived e-Learning to be interactive, capturing, meticulous and absorbing need to convince the management of the institutions about the value that could be derived by incorporating e-Learning in their institutions. For the success of e-Learning, the faculty should take up the role of an expert learner. The process of teaching should be transformed into a process of facilitation and demonstration and the learner should take on the key tasks of reflection and practice.

7.2 Technology Enabled Learning
The attitude of faculty towards e-Learning is important as teachers play an important role in the learning process of students. The faculty members should be having positive attitude towards e-Learning, because then only they can design the course well and will be in a position to guide and motivate the students. A motivated faculty significantly affects the learning and satisfaction of the students. The administrators in the institutions should also free the faculty from barriers they might be facing in integrating technology into teaching as faculty plays a crucial role in creating and enhancing the quality of information for e-Learners. This would involve the use of seminars and training programmes as well as encouraging students to embrace ICT and its resources.

Students of traditional stream perceived e-Learning to be a better learning mode than the students of professional stream on number of factors and dimensions. This result could boost the morale of course designers and motivate them to design courses for the less technology conversant students. The government also has a significant role to play in introducing e-Learning in the institutions offering traditional programmes in India. The institutions offering traditional programs in India are generally lacking in finance. The government should step forward and provide funds to the institutions so that they could incorporate e-Learning in their curricula. They should also push broadband internet penetration across the length and breadth of the country. Thus, students and faculty of traditional streams who have positive attitude towards e-Learning will be benefitted from it and will not feel left behind in the current technological era.

Students of post graduate programmes perceived e-Learning to be higher on number of factors and dimensions irrespective of their stream (traditional or professional) than the students of undergraduate programmes. This calls for attention from the course designers and policy makers to make some radical changes in e-Learning courses so that the attitude of the undergraduate students becomes more positive towards the adoption of e-Learning. The courses for them should be designed in such a way that their components (structure, dialogue and learner autonomy) work in tandem. The course curriculum should be structured in a way that it matches the level of the target audience. Dialogue ensures that there is two-way interaction between a learner and the instructor and more importantly among all the learners. The learner autonomy
should ensure that learner has the freedom to access the content (practice weak areas), instructors, and peers from anywhere (Upadhyay and Maitra, 2015).

Engaging, Empowering and User friendly are some of the factors perceived important by the students of traditional post graduate programmes as compared to the students of traditional under graduate programmes. Thus, the content in the e-Learning programmes undertaken by the students of traditional post graduate programmes should be effectively increased so that they gain more in less time. Comprehensive and Interactive have emerged as significant factors in the study. The students of traditional under graduate and traditional post graduate programmes perceived e-Learning to be more comprehensive. This implies that the traditional under graduate and traditional post graduate students consider e-Learning as a complete learning solution which could be used to educate the students on any subject.

Easy to Learn has emerged as a significant factor in the study. The students generally consider e-Learning easy to learn. This means that all the students irrespective of the course they are pursuing can take advantage of learning through e-Learning. Students who are exposed to the usage of computers and internet can easily learn through it. Moreover, the students who are not computer savvy could also include it into their learning process with proper training. Also, the slow learners could be benefitted through this technology enabled learning since it is easy to learn and provides varied options for the learners to learn.

7.3 e-Learning as a Supporting Medium

The findings suggest that a more sophisticated understanding of perceptual difference between the faculty and students using the technology needs to be looked into. Use of technology for different purposes, and the implications of those uses for higher education are required to be inquired in further detail. This will enable the policy makers to ensure that the critical factors for effectiveness of e-Learning are addressed in the implementation process. Thus, the study contributes to the development of appropriate pedagogical methods for e-Learning content addressed to developing countries.
Viable, inclusive and challenging are the three dimensions which have emerged to be significant. Students of traditional under graduate and traditional post graduate streams perceived e-Learning as viable, inclusive and challenging. It means that students of traditional streams have accepted e-Learning as a complete learning solution which could help them learn at their own convenience. They find it challenging since they are not exposed to the usage of computers in education. This implies that the students pursuing education in traditional streams should be trained in the technology usage and then technology should be integrated into their learning environment so that they could also access the vast resources of available knowledge.

It can be concluded from the results of the study that both the faculty and the students find e-Learning very useful and accessible even though their perceptions might be differing on certain factors and dimensions. The implication is that online learning culture has come to stay in India particularly in higher education domain. Although India has shown improvement in the past decade with the number of enrolled students having gone higher but it is still behind the worldwide average Gross Enrollment Ratio (GER) of 30 percent. India is striving to reach the 30 percent GER mark which can be accomplished only by mainstreaming the use of technology (Upadhyay and Maitra, 2015).

The Indian government should be spending more on technology rather than just opening new institutions. Government should improve infrastructural amenities like electricity, computers with internet connection to enable ICT in the institutions in order to improve teaching and learning. Stakeholders must place ICT in a centre place of activities in all the institutions. Internet access for students should be encouraged and made more accessible at affordable prices. This should be done by providing students with computers at affordable cost and having a high speed internet connection.

The researchers can replicate the study to review and validate the findings of the present study. The study can also be conducted in different streams to find out whether these dimensions and factors are stream specific. The dimensions which have not emerged to be significant in the present study need to be looked into again by the researchers amongst various study groups. Longitudinal study can be conducted to
explore whether these dimensions and factors are age specific, discipline specific, or universal.

The major challenge faced by e-Learning is that it cannot replace human being. Hence, it is necessary for the online learning designers to realize that the learners are not isolated. The policy makers of higher education like AICTE and UGC can promote e-Learning as a supporting medium to the main stream education and also to the present methodologies of teaching and learning. They can take initiatives to support this medium for blended learning. Blended learning often referred to as “hybrid” learning is a combination of traditional face-to-face learning and online learning in such a way that the one compliments the other. It provides learner with the opportunity to enjoy the best of both the methodologies.