CHAPTER 6

SUMMARY, CONCLUSIONS AND SUGGESTIONS

6.1 The Summary

6.2 The Conclusions

6.3 The Suggestions
6.1 THE SUMMARY

The Internet and the World Wide Web have significantly changed the teaching and learning practices globally. Indian Institutions of higher learning have started seeking the benefits of Information Communication and Technology in teaching-learning process with a vision to improve the quality, availability and cost effectiveness of education. To meet the transnational standards, the courses, subjects and finally delivery of content need to be properly scheduled. To satisfy these requirements e-Learning needs to be promoted and infrastructure also has to be standardized so that it fulfils the elementary needs of every learner. On the delivery side, the prerequisite is having faculty who are tech savvy, effective communicators and experts in their fields.

e-Learning is perceived by the institutions as a better teaching-learning medium owing to its being innovative, effective and customized. The tech savvy learners in India, who are ever increasing, look at e-Learning as the medium that empowers them because of its being more learner centered. Whereas, less tech savvy learners are also trying to accept and use this innovative medium of education. The acceptability and non-acceptability of a particular technology to a large extent depends upon the perception of its users. The present study was undertaken to identify the perceptual gaps between the faculty of traditional and professional streams of education and the students of traditional and professional streams of education on the factors and dimensions of e-Learning.

The report of the study runs into seven chapters besides references and appendix. The chapter 1 on Introduction has three parts-Conceptual framework, Rationale of the Study and Objectives. The first part i.e., conceptual framework of the study is further divided into several sub-sections to frame and understand the concept of e-Learning. The first sub-section begins by laying down the background of e-Learning. It is followed by the second sub-section which reveals about the history and growth of e-Learning. Further, the main types and technologies used in e-Learning have been presented. Thereafter, the benefits and limitations of e-Learning have been explained. This sub-section ends with the elucidation of strategies for e-Learning success.
The third sub-section throws light on the traditional and professional streams of education; the difference between the two. It also justifies the popularity of professional stream of education. The fourth sub-section provides insights into higher education in India and its market size. The fifth sub-section explains the need and usage of e-Learning in higher education. It also enumerates the e-Learning initiatives and projects undertaken in India. The second part of the chapter contains the rationale of the study, which entails the purpose and reasons why this study was undertaken. Finally, objectives of the study have been listed in the third section of this chapter.

The chapter 2 on Review of Literature contains the extensive review of the earlier researches carried out by various scholars leading to the recognition of e-Learning as a domain of study. In this chapter the available literature on e-Learning and higher education has been carefully reviewed. Efforts have been made to briefly describe the available studies with respect to their importance to the present study. An attempt has been made to draw attention to the prevalent gaps in knowledge to complement the objectives of the study. The chapter has been organized into various sub-headings based on different streams of research. The first section of the chapter begins with the prior researchers’ identification of dimensions of e-Learning.

The second section presents the characteristics of two main stakeholders of e-Learning i.e., learners and teachers. The third section begins with the importance of e-Learning over traditional learning method. Further, the available work on measuring effectiveness of e-Learning, problems regarding effectiveness have been presented. Thereafter, the section presents the critical success factors of e-Learning. Finally, the section ends with enumerating the challenges of e-Learning as found by various researchers.

The chapter 3 on Research Methodology describes the research method. The chapter is divided into four parts. The first part explains the type and purpose of the study undertaken. The second part describes the multi-stage design. The third part describes the attributes of the sample consisting of traditional teachers and students as well as professional teachers and students. This part further contains details about the sampling technique and sample size adopted in the study. The last part gives detailed description about the tools used for data collection and data analysis.
The chapter 4 on Results focuses on the results obtained in the course of the study. The results have been presented in two stages, namely Layout of the Experiments and Grand Summary of the Results. The Layout of the Experiments contains 2 sub sections- Experiment 01 and Experiment 02. Experiment 01 contains 33 null hypotheses covering 23 factors and 10 dimensions. The second experiment contains 208 null hypotheses covering 18 factors and 8 dimensions. The Summary of the Results is given at the end of each section followed by a grand summary at the end of the chapter.

In the chapter 5 on Discussion, an attempt is made to establish linkages between the findings of the present study with reported findings of earlier studies in the relevant area. The factors and dimensions of e-Learning evolved through the present study have been presented to facilitate the assimilation of new knowledge into the existing mass of literature.

The chapter 6 on the Summary, the Conclusions and the Suggestions presents a chapter wise outline to provide a glimpse of the contents of the thesis. The conclusions are drawn in the light of the objectives of the study. The study has brought important insights and suggestions. The suggestions based on the results are also enumerated.

The chapter 7 on Implications of the study focuses on the utility of the generated knowledge and its implications for various segments of the society. The implications of the current research work are both for academicians and policy makers. The present study was an effort to understand the perceptions of faculty and students about e-Learning in two streams and two levels of education. Measures for improving or enhancing the effectiveness of e-Learning have also been suggested. The study can provide the basis for researchers and practitioners to further investigate into the factors and dimensions derived from the data. The references have been included at the end, which relate to the relevant studies cited at various places in the report. They have been presented in standard format. The tools used for data collection, tables of factor analysis and dimensions have been appended for ready reference and perusal of the users of the thesis.

6.2 THE CONCLUSIONS
The conclusions have been drawn in the light of the objectives which were framed for carrying out the present study. The study has successfully achieved its objectives as concluded below.

**Objective 1. To identify the factors and dimensions which affect the e-Learning implementation.**

The study has resulted into the identification of 23 factors and 10 dimensions of e-Learning as perceived by the faculty members of traditional and professional streams of education. The 23 factors are e-Learning efficacy, Flexibility, Valuable tool, Empowering, Culturally fair, Easy to learn, Enabling, Contemporary, Outlook dependence, Interactive, Autonomous, Exciting, Participative, Appealing, Proficient, Effective, Stimulating, Insightful, Efficient, Reliable, Lucid, Simple and Capturing. Second order factor analysis revealed that 23 factors can be classified into 10 dimensions i.e., Reflective, Exquisite, Meticulous, Facilitating, Responsive, Perceptive, Equitable, Absorbing, Simple and Reliable.

Also, the study has resulted into the identification of 18 factors and 8 dimensions of e-Learning as perceived by the students of traditional and professional streams of education. The 18 factors are Comprehensive, Flexibility, Engaging, Empowering, User friendly, Suitable, Culturally fair, Feasible, Worthwhile, e-Learning efficacy, Interactive, Effective, Accessible, Challenging, Easy to learn, Technical competence, Workable and Convenient. Second order factor analysis revealed that 18 factors can be classified into 8 dimensions i.e., Viable, Dependable, Adaptable, Inclusive, Power, Pertinent, Challenging and Equitable.

**Objective 2. To identify the perceptual gap between the faculty of traditional stream and faculty of professional stream.**

The faculty members of traditional and professional streams of education were compared on 33 null hypotheses. Out of which 4 were rejected and 29 were accepted. Faculty members of traditional stream perceive e-Learning to be higher in terms of Interactive and Capturing factors than the faculty members of professional stream. Also, faculty members of traditional stream perceive e-Learning to be higher in terms of Meticulous and Absorbing dimensions than the faculty members of professional stream.

**Objective 3. To identify the perceptual gap between the students of traditional and professional streams of education.**
The students of traditional and professional streams of education were compared on 26 null hypotheses. Out of which 23 were rejected and 3 were accepted. Students of traditional stream perceive e-Learning to be higher in terms of Comprehensive, Flexibility, Engaging, Empowering, User friendly, Suitable, Culturally fair, Feasible, Worthwhile, e-Learning efficacy, Interactive, Accessible, Challenging, Easy to learn, Workable and Convenient factors than the students of professional stream. Also, students of traditional stream perceive e-Learning to be higher in terms of Viable, Dependable, Adaptable, Inclusive, Power, Challenging and Equitable dimensions than the students of professional stream.

Objective 4. To identify the perceptual gap between the students of undergraduate and postgraduate programmes.

The students of undergraduate and postgraduate programmes were compared on 26 null hypotheses. Out of which 25 were rejected and 1 was accepted. Students of postgraduate programmes perceive e-Learning to be higher in terms of Comprehensive, Flexibility, Engaging, Empowering, User friendly, Suitable, Culturally fair, Feasible, Worthwhile, e-Learning efficacy, Interactive, Effective, Accessible, Challenging, Easy to learn, Technical competence, Workable and Convenient factors than the students of undergraduate programmes. Also, students of postgraduate programmes perceive e-Learning to be higher in terms of Viable, Adaptable, Inclusive, Power, Pertinent, Challenging and Equitable dimensions than the students of undergraduate programmes.

Objective 5. To identify the perceptual gap between the students of traditional undergraduate and traditional postgraduate programmes.

The students of traditional undergraduate and traditional postgraduate programmes were compared on 26 null hypotheses. Out of which 16 were rejected and 10 were accepted. Students of traditional postgraduate programmes perceive e-Learning to be higher in terms of Engaging, Empowering, User friendly, Suitable, Worthwhile, Interactive, Effective, Challenging, Technical competence, Workable and Convenient factors than the students of traditional undergraduate programmes. Also, students of traditional postgraduate programmes perceive e-Learning to be higher in terms of Viable, Inclusive, Pertinent, Challenging and Equitable dimensions than the students of traditional undergraduate programmes.
Objective 6. To identify the perceptual gap between the students of traditional undergraduate and professional undergraduate programmes.

The students of traditional undergraduate and professional undergraduate programmes were compared on 26 null hypotheses. Out of which 21 were rejected and 5 were accepted. Students of traditional undergraduate programmes perceive e-Learning to be higher in terms of Comprehensive, Flexibility, Engaging, Empowering, User friendly, Culturally fair, Feasible, Worthwhile, e-Learning efficacy, Interactive, Accessible, Challenging, Workable and Convenient factors than the students of professional undergraduate programmes. Also, students of traditional undergraduate programmes perceive e-Learning to be higher in terms of Viable, Dependable, Adaptable, Inclusive, Power, Challenging and Equitable dimensions than the students of professional undergraduate programmes.

Objective 7. To identify the perceptual gap between the students of traditional undergraduate and professional postgraduate programmes.

The students of traditional undergraduate and professional postgraduate programmes were compared on 26 null hypotheses. Out of which 7 were rejected and 19 were accepted. Students of traditional undergraduate programmes perceive e-Learning to be higher in terms of Comprehensive, Interactive, Effective, Easy to learn and Technical competence factors than the students of professional postgraduate programmes. Also, students of traditional undergraduate programmes perceive e-Learning to be higher in terms of Inclusive and Pertinent dimensions than the students of professional postgraduate programmes.

Objective 8. To identify the perceptual gap between the students of traditional postgraduate and professional postgraduate programmes.

The students of traditional postgraduate and professional postgraduate programmes were compared on 26 null hypotheses. Out of which 13 were rejected and 13 were accepted. Students of traditional postgraduate programmes perceive e-Learning to be higher in terms of Comprehensive, Engaging, User friendly, Culturally fair, Feasible, Interactive, Challenging, Easy to Learn and Workable factors than the students of professional postgraduate programmes. Also, students of traditional postgraduate programmes perceive e-Learning to be higher in terms of Viable, Dependable, Inclusive and Challenging dimensions than the students of professional postgraduate programmes.
Objective 9. To identify the perceptual gap between the students of traditional postgraduate and professional undergraduate programmes.

The students of traditional postgraduate and professional undergraduate programmes were compared on 26 null hypotheses. Out of which 25 were rejected and 1 was accepted. Students of traditional postgraduate programmes perceive e-Learning to be higher in terms of Comprehensive, Flexibility, Engaging, Empowering, User friendly, Suitable, Culturally fair, Feasible, Worthwhile, e-Learning efficacy, Interactive, Effective, Accessible, Challenging, Technical competence, Workable and Convenient factors than the students of professional undergraduate programmes. Also, students of traditional postgraduate programmes perceive e-Learning to be higher in terms of Viable, Dependable, Adaptable, Inclusive, Power, Pertinent, Challenging and Equitable dimensions than the students of professional undergraduate programmes.

Objective 10. To identify the perceptual gap between the students of professional undergraduate and professional postgraduate programmes.

The students of professional undergraduate and professional postgraduate programmes were compared on 26 null hypotheses. Out of which all 26 were rejected. Students of professional postgraduate programmes perceive e-Learning to be higher in terms of Comprehensive, Flexibility, Engaging, Empowering, User friendly, Suitable, Culturally fair, Feasible, Worthwhile, e-Learning efficacy, Interactive, Effective, Accessible, Challenging, Easy to learn, Technical competence, Workable and Convenient factors than the students of professional undergraduate programmes. Also, students of professional postgraduate programmes perceive e-Learning to be higher in terms of Viable, Dependable, Adaptable, Inclusive, Power, Pertinent, Challenging and Equitable dimensions than the students of professional undergraduate programmes.

6.3 THE SUGGESTIONS

To further enhance the knowledge in the discipline under focus, some suggestions are put forward for future research.

1. The present study has chosen two demographic variables only. Further work can be envisaged to incorporate various other socio-demographic variables
like age, gender, rural-urban background of the learner, family income, educational level of parents, and socio-economic background to name a few.

2. The study can also be expanded to cross cultural domains to explore the influence of cultural dissimilarities on the perception of e-Learning and explore whether the e-Learning dimensions emerged in Indian context are consistent across cultures.

3. The other possible context of the research can be comparing the perceptual difference on e-Learning in the developing-developed countries.

4. The perception of promoters should be studied while comparing private and government institutions of higher learning.

5. The perception of the faculty and students of various professional programmes in medicine, management and pharmacy should be studied to explore the significant differences for undertaking the measures to enhance effectiveness of e-Learning.

6. The perception of the faculty and students of various traditional programmes in arts stream should be studied to understand the distinctions for improving effectiveness of e-Learning.