Chapter: V

Conclusions and Suggestions

5.1 Conclusions:

The conclusions of the research study are in the format of paragraphs as follows.

In the present research study entitled “Design and Evaluation of E-learning System: A Case Study of MCA Institutes in Maharashtra” the respondents from MCA institutes of Maharashtra state has been taken for the study. These institutes are affiliated to respective universities. In this study 540 respondents have contributed their opinion through questionnaires. Two types of questionnaire sets were used i.e. 1) Questionnaire 2) Feedback. The first questionnaire set was introduced for collecting personal details and opinion about the E-learning concepts. It is duly filled by 300 respondents from Maharashtra state. The responses were analyzed and interpreted by using quantitative analysis technique. It includes the analysis and interpretations of the respondents’ views, skills, knowledge, interest, etc. These responses have been considered in the development of E-learning Model. The developed E-learning model was presented before the respondents for getting their responses. The second type of questionnaire set i.e. feedback has been used to receive their responses and it is responded by 240 respondents.

The research study indicates that out of 300 respondent 187 are male and 113 are female who responded for first questionnaire. Out of this 240 respondents have given their feedback about the developed E-learning model where 147 are male and 113 are female. This statistics shows that the majority of the respondents are male.

Since all the respondents are in the age group of 20 – 25 years and only 3% are above 25 years of age.

In this research study the respondents are MCA students who are pursuing the degree in the respective institutes and they are qualified in different discipline like BSC, BCS, BCA and other faculty. So, the majority of respondents are BCA followed by BCS and BSC degree qualified. Only 5 respondents have completed basic degree from other faculties.
All the respondents are pursing MCA professional degree course in respective institutes which is affiliated to the state University. The majority of the respondents 70 are from Savitribai Phule Pune University followed by 50 respondents from Dr. Babasaheb Ambedkar Marathwada University and SDNT University is at lowest number.

In the research study it is found that the majority of the respondents 162 have shown their interest in the subject Programming Language for their subject specialization.

The present study discovered that majority of the respondents use IT Tools for additional study or as a support core study.

The research study revealed that the majority of the respondents are frequent users of E-learning tools for learning MCA course. Other users used E-learning tools at occasional basis.

It is founded that, respondents are using various types of devices like desktop, smartphone, laptop, tabs, etc for accessing the E-learning facilities. The study found that majority of the respondent preferred to use desktop device for their academic as well as accessing E-learning material.

In the research study it is found that the largest number of users are using E-learning phenomenon in between 3 to 5 hours on daily this endorses the growing opinion that, Elearning is becoming popular and substantive time is spent on the learning.

It is noticed that various IT tools are used by the respondents like internet, chatting, online conference, etc. The study found that social networking web sites are popular term amongst the students of MCA and they are using these techniques in their academics.

Research revealed that almost all the respondent have admitted the importance of E-learning in MCA course and it is founded that Programming in C & C++, Networking and Java programming are most preferred computer subjects suggested by the respondents in E-learning model.
The present research study explored the opinion of the respondents about the E-learning tools plays an effective role in learning process. So, almost all respondents have shown their acceptance in this regard. This suggests that, E-learning tool has become effective learning process.

The current study discovered that all the respondents admitted that E-learning facilities help in understanding complex phenomenon in simple way.

Cost is one of the important factors which play an important role to get any tools or services. In the study the majority of the respondents believed that E-learning is a costly phenomenon, despite the fact that, it is effective learning process.

It is observed that respondents are getting various facilities at institute level. Out of them email is the most popular facility opined by the respondent. There are some other facilities like online examination, social networking web sites, video conferencing, chat room, web portals, etc. that are provided by the institutes.

The present research study uncovers the platform preferred by the respondents. Majority of the respondents agreed to use Windows System followed by Android and Linux.

The respondents have expressed their opinion about including various features in E-learning model. The most rated feature is E-book which is followed by online examination. There are other features like notes, online syllabus, audio-video support, graphics, algorithm, programs and feedback forms. In addition to this, there are identification of other elements to be used in E-learning model. The most preferred element is synchronous method followed by web based tools, seminar and workshop.

It is found that the majority of respondents agreed to get encouragement on E-learning issue by the institute. Only 8% respondents are not fully agreed with this. A message is revealed that majority of respondents admitted that there is good support by the institute for E-learning facilities. It is found that only 2% respondents pointed as poor support.
In the study various key challenges were explored by the respondents. Out of that increasing technical support and maintaining current technical infrastructure are major problems for implementing E-learning system in MCA institutes of Maharashtra state.

In the present study it is found that the majority of the respondents believed that E-learning improves retention ability. The study also found that half of the respondents wished to learn by traditional as well as E-learning tools both.

In the research study it is explored that the majority of the respondents admitted that E-learning tools plays an important role & supports for quality education and believed E-learning is an enabler of higher performance. Majority of respondents are satisfied with the overall quality of present developed E-learning model.

The research reveals the responses about the various features included in the present developed E-learning model. The majority of the respondents liked the online examination feature which is followed by downloading facility, ease of learning, quick access, evaluation report facility, etc.

The study explored the ratings of tested subjects in the present developed E-leaning model. C, C++ subject is given the highest priority followed by Software Engineering and Dot Net subjects. The study also found that majority of respondents feels the E-learning model provides all formal support.

In the research it is found that the online examination facility in the present developed E-learning model has been appreciated by all the respondents. It is noticed that all the respondents admitted that the questions included for online examination in the present developed E-learning model were relevant and appropriate with concerned subject.

It is observed that the online examination evaluation report feature has been acknowledged by all the respondents where they get the score card on their email id immediately after completion of the examination. It provides the complete analysis of the questions.
The present research study proved that E-learning systems are more effective than traditional learning systems. The given statement has been accepted by all the respondents and also found that present developed E-learning model helps learners to increase their knowledge.

After successfully execution of the present developed E-learning model all the respondents have agreed for recommending the model to other users and they feel the privacy and security issues is good in the present developed E-learning model. Only 10% respondents have shown seldom acceptance in this regard.

The study found that the respondents endorsed the view that the present developed E-learning Model has been accepted by entire student community and they are fully satisfied with the same.
5.2 Suggestions:

The suggestions are based on the study presented below:

1) E-learning tools and technique may provide various facilities to the students from learning point of view. These techniques provide mobility to the users to access the course related material from distant place. The MCA course curriculum may include this type of E-learning model.

2) The online examination facility is available to the respondents where they can select their preferred subject and go for online examination. The objective type exam is available to the respondents. Questions are presented before the respondents randomly from the question bank of E-learning. The result of the exam is provided immediately after the submission of exam on respective email id with details. So, this may help the candidate for self evaluation. This type of comprehensive evaluation tool can be developed by university and the online examination for MCA course may be conducted.

3) The candidates may contribute their opinion, views and course materials in the developed E-learning model. So this may help the students for being more active and get updated on regularly basis.