CHAPTER 8

FUTURE SCENES: USE OF PERFORMANCE PREDICTION MODEL IN THE CONTEXT OF E-LEARNING

Relationship between education and e-learning shows big benefits for in higher education. We cannot ignore technology and technical skills in higher education field, even when technical education overtaken. Now a days information and communication technology (ICT) provide great advantages in every sector of education like Teaching and learning process, curriculum development, student progress etc. Using Data mining we can identify problem in growth of e-learning in India.

8.1. Introduction

Higher education is now turning as a big business, with gigantic investments in IT technology supporting online learning [39]. With the support of recent Internet and Web technologies higher educational institutions to design and offer educational opportunities online to meet the student needs, such as time and place flexibility. With the help of these technologies, the number of online degree programs and courses has significantly increased in the new century. Whenever use electronic media in information and communication technology it becomes e-learning.

E-learning has been defined as the use of the new technologies or application in the services of learning or learner support and it has been considered as operational definition of e-learning. Clark and Mayer define E-learning as training provided on a electronic device such as a smart phone, computers, tabs or a laptop that is designed to support individual learning or achieve organizational goals [20]. E-learning is a new context for education where large amounts of information are boundlessly
generated and variety of the teaching-learning interactions universally available. This could be seen as a blessing that sufficiently of information readily available just a click away. Indeed, the Internet and the advance of telecommunication technologies allow us to share and manipulate information in nearly real time. This reality is determining the next generation of distance education tools [38] not only for content delivery but also interaction among participants. Data Mining also called knowledge discovery in Database (KDD). Mined knowledge from educational field is referred as Educational Data Mining (EDM). The mined knowledge can give a better insight, facilitate and enhance the educational process and the learning a whole [10].

The learning provider may be private training companies, private organizations providing training for their employees or universities who wants to runs their courses and make them accessible online via the Internet. As for learners, databases should store all personal details including name, age, gender, address, postcode, and educational-relevant details such as qualifications [9]. Managing and tracking students, courses, degrees, grades, certificates, universities and learning providers requires a massive content management system to manage, track, and control the whole system with all possible implications and complications [39].

8.2. Future opportunity

India facing a lot challenges in higher education. E-learning may become answer of all those challenges. In e-learning there are many open research challenges that exist in this domain. Using ICT specialist, educationists and learner’s joint ventures data mining techniques can deploy in e-learning system [8]. Transformation of teaching and learning through the use of ICT has to be done through many resources: the government, academic organization, each institution, each department, each faculty member, and each student. India has been good at improving qualities of products and services. Now is the time to realize disruptive technologies of teaching and learning and make efforts to transform it to adapt to them.

Education system in Indian is basically constituted of university and colleges. As of now the teaching learning process in India classroom model oriented. To make teaching learning method more interactive and interesting may be replaced with audio-video aid but maximum candidates, learners, trainers and teachers find it less
comfortable with ICT resources because of their perception of atmosphere and the unsatisfied learning experience, although it is not true in all circumferences.

Educators commenced to notice something dissimilar occurrence when they began to use tools for e-learning like wikis and blogs in the classroom. All of a unexpected, students found themselves discussing a wide range of topics with peers worldwide instead of discussing pre-assigned topics with their classmates. Imagine when, after writing a review of a visit had viewed, a student received a response from one of the performers. In very short time, blogs were used for a wide variety of purposes for education. Any educational blogger formed and by these thousands of teachers were encouraging their students to blog.

Performance prediction model have potential to provide a wide place e learning in India. Researchers place a comparison between performance e-learning and traditional learning. Among them predictive modeling has particularly interesting applications on predicting effectiveness of e-learning systems. Apart from them many open research challenges that exist in electronic learning is particularly centered on data privacy and ethics. At the time of deployment of data mining techniques within commercial e-learning systems requires a joint effort of ICT specialists, educationists and the learners.