

## **DEVELOPMENT OF A PLUGIN FOR MOODLE: A VIRTUAL CLASSROOM**

**J. Pratheepan**

Postgraduate Institution of Science, University of Peradeniya, Peradeniya, Sri Lanka

Nowadays conducting traditional classes is quite expensive and has some limitation due to the number of students in a class and geographical distribution of students etc. Further there are a lot of disabled students in our country who are unable to present traditional classes physically. Therefore, instead of restricting to the traditional classroom teaching moving towards some other alternative teaching methods such as Web Based Teaching (WBT) is compulsory today. A Virtual Classroom is an online classroom that allows participants to communicate, view presentations, interact with learning resources and work in groups.

Students, teachers and parents are feeling that there are some gaps between real classroom teaching and the current Web Based Teaching. The objective of this research project is to identify the drawbacks in Web Based Teaching comparing with traditional classroom teaching, and then suggest some solutions for each and every problem identified. According to the solutions, a Virtual Classroom System is developed. Although some virtual classroom systems have already been developed we have concentrated mainly on our local needs and mentality.

Moodle, a well-known Learning Management System (LMS), is playing a vital role in many of the academic institutions nowadays. However, it has some weaknesses particularly in interactive teaching facilities. The virtual classroom is developed as a plugin for the existing LMS Moodle because Moodle already has a lot of teaching and learning facilities. Our virtual classroom is intended to add some more values to the Moodle.

The developed plugin was tested for its functionality and reliability. Test results indicated that it successfully works with Moodle without affecting the functionality of Moodle. Additionally it functions efficiently and reliably. However there are some areas to be improved. Particularly the communication speed has to be improved for better and smooth functionality of our plugin. This is actually out of our control.