



## **Abstract**

**Background:** It has been repeatedly shown and 'universally' accepted that undergraduate medical education can be enhanced significantly through the use of computer assisted learning. As the field of clinical embryology imposes significant educational challenges to students, mainly due to the dynamic nature of the embryonic development, e-learning could be considered as an effective alternative strategy. A plethora of multimedia enhanced embryology resources in the web further justifies this.

**Method:** A needs analysis study was conducted on medical students to understand their requirements for supplementary learning materials in embryology. A general feasibility study was also conducted on medical students and medical educators to understand their level of computer literacy and attitudes towards e-learning as it has a significant impact on the sustainability of the e-learning project. A self administered anonymous questionnaire was used on all these situations.

**Designing, Development and Evaluation of the project:** Lessons to be developed was decided and content materials and student objectives were identified. This was followed by designing of interactive eLearning materials according to instructional designing principles and learning theories. The lessons and activities were developed and the Faculty Moodle Platform customized. Learning materials were evaluated by Rapid Prototype Evaluation following which they were updated according to the feedback. The module was piloted on 15 representative learners and was fully implemented in the faculty.

**Results:** It was seen that majority of medical students consider clinical embryology as a difficult to very difficult subject and majority preferred to have e-Learning materials developed on the subject. A considerable number of students are already using e-Learning materials to facilitate learning in embryology. The results of the feasibility study were favourable towards e-Learning although training needs were identified on using the Learning Management System. Feedback from the pilot study further demonstrated the students' positive attitude towards e-Learning for Clinical Embryology.