



E-Learning-A Student's Perspective

KEYWORDS

web based learning, e-learning, moodle, infrastructure, interactive learning.

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ABSTRACT

E-learning marks the shift from passive teacher centred learning to active learner centred model.

A MOODLE based interactive website was created. 250, IMBBS students of SRMC & RI, PORUR, were registered as users. E-learning content in Anatomy in the form of powerpoint presentations, interactive lessons with audio narrations, videos, multiple choice questions, histology micrographs etc. were uploaded onto the website. A survey was conducted at the end of one year to know the students' perspective of the infrastructure and content in the e-learning program. 95% of the students found the interactive website extremely useful for learning the subject and for the examination. 94% of the students wanted more free hours of internet services. 70% of the students preferred dissection videos for gross anatomy while 78% of the students preferred histology micrographs for histology. 64% of the students wanted videos with audio narrations for embryology. 84% of the students preferred self explanatory diagrams for surface anatomy. The study concludes that web based learning being a learner centred model provides a stronger learning stimulus to students. Blended learning ie., a combination of e-learning and traditional instructor led learning will definitely help in creating better medical professionals.

INTRODUCTION

E-learning is the current trend in the field of education. It marks the shift from passive teacher centred learning to active learner centred model. Students and teachers find this system more effective and flexible as the content can be accessed at any time. Now with high speed internet connectivity, e-learning is the most sought after method of learning as it enhances the learning experience. The aim of this project is to evaluate the infrastructure and the content of the already existing e-learning program from a student's perspective.

MATERIALS AND METHODS

A Moodle based interactive website was created in Srmc & RI, Porur in 2015. All the 1 Mbbs students of 2015-16 batch were registered as users. E-learning content in Anatomy in the form of powerpoints, interactive lessons with audio narrations, videos, multiple choice questions, histology micrographs etc. were uploaded onto the website. A survey was conducted at the end of one year. A questionnaire was distributed and students feedback was collected to know the student's perspective of the infrastructure and content in the e-learning program in anatomy.

RESULTS-Feedback was obtained from 1 Mbbs students who had been a part of the program at the end of one year. The students responses to various questions have been summarized below.

INFRASTRUCTURE

-Registration /user satisfaction- YES-88% NO-12%

-Device used to access internet-

Android mobile phones-49% Apple mobile phones-26%
Laptop-20% Desktop-5%

-Problems encountered while accessing content- NO-71%
YES-29%

-Frequency of usage

Weekly-52% Before exams-29% Monthly-11% Daily-8%

CONTENT

-Usefulness of Content- YES-95% NO-5%

-Content on Gross anatomy-

Dissection videos-70% Notes-36% Important questions
& diagrams-54% Powerpoints-44% Clinical anatomy-56%

-Content on Histology-

Powerpoints-28% Notes-36% Diagrams-60% Picture of
slides-78%

-Content on Embryology-

Notes-26% Ppts-38% Pbl-46% Diagrams-54% Videos-64%

-Content on Radiological anatomy-

Radiological pictures with explanations-70% Clinical scenarios-66%

-Content on Surface anatomy-

Self explanatory diagrams-84% Notes-38%

-Content on Osteology-

Videos-64% Self explanatory pictures-54%

-Content on Neuroanatomy-

Diagrams-46% Clinical scenarios-60% Notes-44%
Flowcharts-70%

OTHER FACILITIES THAT COULD BE PROVIDED

-Chat forums- YES-68% NO-32%

-Scheduled online tests- YES-66% NO-34%

-Self assessments- YES-78% NO-22%

-Provision of Youtube URLs- YES-90% NO-10%

DISCUSSION-Medical educators are facing challenges today. Apart from teaching the conventional topics in medical school, they have the additional task of teaching new fields like geriatrics and palliative care. So the shift from a passive instructor led training to active learner centred learning is necessary. The e-learning program is one such program where the learner is fully in control of his/her learning.

ADVANTAGES OF E-LEARNING PROGRAM

This is a learner centred model where both the students and educators are equally involved. It enhances both teaching and learning. The major advantage is that the learner has access to the e-

learning materials at any time and place and is therefore flexible. Preparation of content for the program could be a time consuming task. But once this is done, there is standardization of teaching content which can be updated regularly.

INFRASTRUCTURE

An e-learning program requires a learning management system which is an internet based software that facilitates delivery and tracking of e-learning in an institution. It can simplify and automate administrative and supervisory tasks, track students progress and achievement of desired competencies and function as a repository of instructional resources which are available any time.

To access the program 75% of students use android mobile phones. Internet access is equally important. A high speed broad band set up is more appropriate.

CONTENT

The e-learning program in our project was centred around human anatomy. 70% of students preferred dissection videos which will help recreate the structures in the human body. 56% felt content on clinical anatomy would be useful as it helps correlate normal anatomy and clinical scenarios.

78% asked for pictures of slides for histology, which would help them remember the salient features.

64% of students wanted videos with audio narration for embryology which would give a 3Dimensional understanding of the developing embryo. 46% wanted problem based learning, so that they can understand congenital anomalies better as it forms an integrated part of paediatrics.

70% wanted radiological pictures with explanations to help them understand to interpret skiagrams, CTscans, MRIs better as radiological investigations are an integral part of diagnosis and also help monitor prognosis.

84% wanted self explanatory diagrams for surface anatomy as it forms the foundation for surgery. 64% asked for videos for osteology sessions.

70% of students preferred flow charts for neuro anatomy. 68% wanted chat forums for better interaction with all. 66% asked for online tests. 78% wanted self assessments to check their understanding of the subject. 90% wanted well chosen URLs.

CONCLUSION

Students are satisfied with the program as it is easy to use, access and is interactive. E-learning today occupies a highly visible place in the higher learning community. A judicious blend of traditional and e-learning models may possibly get the most successful outcomes. E-learning is not the next big thing, it is the NOW big thing. The tech savvy gen next student community is yet another reason for implementation of e-learning into our curriculum.

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