

## Web Based Knowledge in Medical Education

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### Abstract

*Learning depends on several factors, but a crucial step is the engagement of a learner. This is affected by their motivation and perception of relevance. These, in turn can be affected by learners' previous experiences and preferred learning styles and by the context and environment in which the learning is taking place. In adult learning theories, teaching is as much about setting the context or climate for learning as it is about imparting knowledge or sharing expertise. Even though their concepts regarding the lecture topic are not clearly understood after the lecture, students routinely do not question after the lecture. The inhibitions will be eliminated if they are instructed to search for themselves in a conducive atmosphere i. e. computer laboratory. Moreover, learning and working with computer will make them realize the relevance of topic learning. This study was undertaken to find out whether there is an effect of web in medical education. A group of 25 students from first MBBS 2014-15 selected randomly as a study group. The students were allotted one hour time every day to sit in the library having broad band internet facility. Study group was observed for a period of one year. Their performance in terminal examination and preliminary examination was assessed. The data shows that there is an improvement in the performance of the students after using web for the study.*

**Key Words:** Web based education, Medical students, Computer laboratory

### Background

Students might find a particular question threatening and intimidating in one context yet stimulating and challenging in different context. What makes one learning context unpleasant and another pleasant? Learning depends on several factors, but a crucial step is the engagement of a learner. This is affected by their motivation and perception of relevance. These, in turn can be affected by learners' previous experiences and preferred learning styles and by the context and environment in which the learning is taking place. In adult learning theories, teaching is as much about setting the context or climate for learning as it is about imparting knowledge or sharing expertise.

Even though their concepts regarding the lecture topic are not clearly understood after the lecture, students routinely do not question after the lecture. The inhibitions will be eliminated if they are instructed to search for themselves in a conducive atmosphere i. e. computer laboratory. Moreover, learning and working with computer will make them realize the relevance of topic learning.

It is vital that teachers take an expert help with technical issues in the planning, design, and delivery of web based learning programmes. Through programming and the use of "plug-ins" (programs that can be downloaded from the internet), designers can produce interactive course materials containing online activities (such as self-assessments), animations, and simulations. These can improve learning and are often more enjoyable and meaningful for learners. This study was undertaken to find out whether there is an effect of web in medical education.

### Methodology

The study was conducted at SBH Government Medical College, Dhule. SBH Government Medical College, Dhule has an intake capacity of 100 students per year. A group of 25 students from first MBBS 2014-15 selected randomly as a study group. The students were allotted one hour time every day to sit in the library having broad band internet facility. All these students were instructed to follow the time table of one topic every day. So every day a topic is allotted to the students in study group and instructed to freely access the web and search for specified topic. For the students in study group, all the digital media in medical sciences in the form of videos, CD ROMs and digital formats of books made available. A list of online journals and their accessible URL were provided booklet for ready reference.

Study group was observed for a period of one year. Their performance in terminal examination and preliminary examination was assessed.

### Results and Discussion

The performance of the students in study group in the form of marks scored at the terminal examination and preliminary examination were assessed. The mean marks scored at terminal examination held in the month of January, were  $28.45 \pm 2.6$  out of 60 in theory and  $21.68 \pm 3.4$  out of 40 in practical. The percentage of the marks in theory and practical was 47.42 and 54.2 respectively. These students were instructed to use internet and digital media for one hour on working days, between the period of terminal examination and preliminary examination, which was held in the month of April. Marks scored at the preliminary examination were

assessed. The mean marks scored were  $52.36 \pm 3.8$  out of 100 in theory and  $25.27 \pm 2.9$  out of 40 in practical.

The data shows that there is an improvement in the performance of the students after using web for the study.

| S. No | Parameters                                       | Mean            | Percentage |
|-------|--|-----------------|------------|
| 1     | Marks at the terminal examination (Theory)       | $28.45 \pm 2.6$ | 47.42      |
| 2     | Marks at the terminal examination (Practical)    | $21.68 \pm 3.4$ | 54.2       |
| 3     | Marks at the preliminary examination (Theory)    | $52.36 \pm 3.8$ | 52.36      |
| 4     | Marks at the preliminary examination (Practical) | $25.27 \pm 2.9$ | 63.18      |

Newer technologies such as computers and video conferencing are not necessarily better (or worse) for teaching or learning than older technologies . . . they are just different . . . The choice of technology should be driven by the needs of the learners and the context in which we are working, not by its novelty.” Web based learning offers huge opportunities for learning and access to a vast amount of knowledge and information. The role of teachers is to ensure that the learning environment provided takes account of learners' needs and ensures that they are effectively prepared and supported. Online learning has advantages, but web based learning should not always be viewed as the method of choice because barriers (such as inadequate equipment) can easily detract from student learning.