## STUDENTS' PERCEPTIONS ABOUT USE OF MULTIMEDIA PROJECTORS FOR INFORMATION TRANSFER IN CLASS ROOM

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#### ABSTRACT

BACKGROUND: Use of modern tools like multimedia has revolutionised the mode of information transfer.

AIM: This study aim to know about the use of multimedia as tool for content to be taught.

METHODS: Students' perceptions were noted about three possible situations (lecturing without multimedia, lecturing with multimedia and use of multimedia only for lecturing) for information transfer with support of multimedia tools.

RESULTS: Of the total 12 teachers, 17% were using lecturing without multimedia, 33% were using lecturing with multimedia and 50% used only multimedia to transfer information. Interestingly, of the total 56 respondents, only 20% preferred lecturing without use of multimedia with claims that it gives students time to digest the information. More participants (80%) preferred the use of multimedia during lecturing as it helped them to get a clear picture and concept mapping of contents being taught in this modality.

CONCLUSION: Learners' key reasons for liking of lecturing with multimedia were gaining full attention, concept mapping, correlating the use of white board with multimedia slides (more clearly explaining) that ultimately motivates learners perhaps for self-directed learning. However, use of pure multimedia without use of white board is not liked by learners.

KEY WORDS: multimedia; lecturing; mode of information transfer; concept mapping; motivation

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#### INTRODUCTION

Nowadays use of modern tools has revolutionized the mode of information transfer (MIT) in class rooms<sup>1-2</sup>, and in different clinical conditions as well.3 Students also prefer to receive information in a mode they can digest very easily.4 It is an admitted fact that MIT plays an important role in learning process.<sup>5</sup>

Lecturing is an old way of information transfer. A tutor goes to a class room and share the information. Giving lecture is a simple,

fast and cheapest way of information transfer. There is no denying the fact the lecturing has been the most prevalent form of instructional strategies. If we start is benefits, it will be out of the scope of the paper. However, one can say, that we are the products of the old way of this instructional strategies and our performance is evident since very long. Nevertheless, contrary to its benefits, there are some disadvantages like inactiveness of students, long tiring lectures and easy forgot of the contents taught are the main disadvantages of the didactic lecturing.6 According to a study, 80% of the contents delivered through lecturing are forgotten within 8 weeks.7 Thus, it is evident from literature that lecturing being a one way of communication is not promoting deep learning. The use of modern multimedia

has revolutionized the mode of information transfer.8,9 Certain contents are best presented by drawing computer graphics which are presented through modern tools like projectors. Support of either audios or videos has revolutionized the sharing of information that have long lasting for promotion of deep learning<sup>7</sup> provided the tutor discuss and remove the misconceptions with in the same session of class. 10,11

Often, whence I have asked students in classrooms, their answers focused me on many points of concern. For example, most of my students

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proclaim that teachers always downloads the power point lectures of others and present it in class rooms. Others say that teachers come and present on power point and skip many key points that don't makes our concepts very clear. Whereas our vice-chancellor always ask for use of multimedia projector and PowerPoint presentations. Whereas the world is turning to a blended mode of instructional strategies, hence, on the analogy of above rationale, and literature review current study is designed to know about the students perceptions about the use of multimedia projectors for lecturing in the class rooms. More, the current study will tell us that what are the preferences of students for better understanding about a topic whence we use purely didactic lecturing, lecturing with multimedia projectors and lecturing purely through multimedia projectors.

#### **METHODS**

The study was carried out Institute of Nursing Sciences, Khyber medical University, Peshawar, Khyber Pakhtunkhwa, Pakistan. Institute of Nursing Sciences offers BSc Honor nursing, MS Nursing and Post resident Nursing programs.

Inclusion criterion, ethical consideration and getting the verbal feed back

All students of third batch of year II semester III of nursing program (BS honor), whom were present on the day of survey, were enrolled in the study. Such a class was selected where the students had already experience of receiving lectures on three different modes of information transfer i.e. received purely lecturing without multimedia projectors for graphic whence required, received lecturing with use of multimedia projectors and purely received contents via power point presentation. Verbal consent was taken from students with assurance that neither students' identity nor identity of teachers will be disclosed. All of them agreed and proceeded with

the survey. Students were asked to share their point of view about the said three mode of information transfer. They were asked to vote in favor of the mode through show of hand. A class representative along with a coopted student was asked to record the number of frequencies and scribe the students' preferences. Only those reasons were scribed where 2/3rd majority of students were in favor. Data was tabulated in Microsoft XL sheet where frequencies, distribution and figures were plotted.

#### **RESULTS**

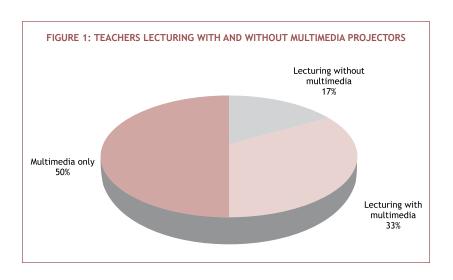
Half of the teachers used "multimedia only" in their lectures. One third of the teachers used "multimedia along with white board", wheras few of them used no "multimedia". Percent of teachers who are using multimedia projectors in different modalities are shown in Figure 1. Figure 2 shows that pure lecturing without the use of multimedia, though promotes self-directed learning, had some limitations such as loss of concentration.

## DISCUSSION

Though there are studies that the conventional lecturing system has a great opportunity for recall of students as compared to power point presentation.<sup>12</sup> Moreover, there is no denying the fact that

the use of multimedia has revolutionized the distance learning programs as well.<sup>13</sup>

Nowadays the world is turning to most recent and advanced types of learning strategies like case based learning where the students are more focused and make their concept mapping along with more elaboration, which makes both tutor and students interactive.14 However, we have to follow lecturing as it is the most cheapest and practical one particularly in developing countries. It is evident in Figure 2 that pure lecturing without use of multimedia, though promotes self-directed learning, is having some drawbacks like students cannot concentrate sometimes. Moreover, students reported that concomitant use of multimedia can be hurdle in correlation. However, for modality like lecturing with multimedia has some key reasons like gaining attention and receptivity, more explanation of the key concepts with concept mapping, which promotes deep learning. This may be attributed to the expertise of the teachers as well as teaching is an art. Nevertheless, it is evident that use of white board and multimedia during lecturing is mostly liked by students perhaps for their better understanding. Contrary to this, Use of multimedia only has a



#### FIGURE 2: KEY RESONS FOR LIKING AND DISLIKING THE MULTIMEDIA PROJECTORS

# Lecturing without multimedia

Motivates students for self-learning

Focussed on a topic as difficult to concentrate on media

Students can not concentrate

Self study is required

#### Lecturing with multimedia

Full attention

Key concepts are explained

Correlation of using white board make the concept more easier

Deep learning happens

No point is missed

Motivates students to learn

# Lecturing through multimedia only

Difficult to understand

No satisfaction for questioning and answering

Only reading

Boring

No opportunity for questioning

Superficial knowledge

Pushy habit of teachers

different perspective. Key reasons for disliking were only reading (from power point presentation), boring (non interactive), no opportunity for asking questions, and above all the pushy habit of teacher to finish the course as early as possible. Interestingly, the students referred to poor satisfaction during question answer if any. This reflects that mostly teachers had poor control on use of multimedia. This situation arise when a teacher use power point presentations of others available on the net or they use multimedia for lecturing only (Figure 1). Thus if we want to make our students more strategic and deep learners, we should train our teachers for use of technology which is owned by students that ultimately makes them engaged and interactive learners. 15

#### CONCLUSION

The use of modern technology can be sometimes counterproductive if not properly used. Like

somebody said, though computer is a marvelous miracle, yet it requires the skills of an expert. Hence, likely in the manner, modern technologies are no doubt making the difference, yet it requires the skills of an expert to use them efficiently so that it should be productive.

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### **NOTES ON CONTRIBUTOR**

NA is Professor of Pharmacology with additional qualification in HPE, and was involved in every part of the analysis, idea's development and write-up.

#### **CONFLICT OF INTEREST**

Author declares no conflict of interest.

### **ETHICS APPROVAL**

The approval/permission was obtained from Khyber Medical University Research and Ethics Board.

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