PowerPoint Use in Teaching

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Abstract - Technology is foraying into the field of education. More teachers are breaking out of their shell of old school teaching methods and experimenting with the latest applications in the technology market to enhance the classroom experience for the students. One such popular application is PowerPoint. While PowerPoint is a boon to several teachers, it can also be a bane in terms of its over and wrong usage. This paper discusses the advantages of using PowerPoint, its drawbacks and 'how tos' of creating good presentations.

Index Terms - PowerPoint, education, presentation, outline, visual aid, reachability, effective slides.

INTRODUCTION

PowerPoint is a part of the MS Office Suite released by Microsoft for the purpose of creating presentations. It is an easy-to-learn application which provides tools for managing and editing text and graphics to build better and more effective presentations. PowerPoint has been used in many fields, especially in business and education where presentations provide an effective way of putting forth a concept or idea to an audience.

I. Popularity of PowerPoint

There are various presentation creating tools available. PowerPoint is one of the most widely used as it is a very cost effective tool. It is very easy to learn and use. The presentations need not be limited to text alone as pictures, animations and other forms of multimedia can be easily added to the slides. PowerPoint provides standard tools for editing text and graphical content [9]. PowerPoint also provides for modularity of the content, where the slides can be arranged in any order and can be redone whenever necessary [8]. Ease of distribution of is also an important factor in the popularity of PowerPoint. The presentations can be converted to any standard format that can be easily shared online. PowerPoint

presentations can also be viewed on a variety of platforms using converting and viewing tools.

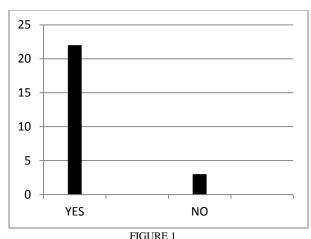
I. PowerPoint in Teaching

Technology has radically changed the course of lectures in classrooms by replacing old school chalk and board by the use of projectors to engage the students in the class. PowerPoint has proved to be a very powerful tool to the teachers by giving them a way to convey text book concepts in a more visually pleasing way. By using various forms of media such as pictures, animations and graphics, PowerPoint has made it easier for the teachers to keep the students interested in class. A presentation is considered to be good as long as it is relevant to the subject, is of good quality and the data in it is of high integrity. Presentations which do not comply with these rules are ineffective and almost useless to students. The gains of using PowerPoint presentations and its drawbacks are discussed in this paper. Some guidelines to create good presentations are also mentioned.

ADVANTAGES AND DISADVANTAGES

II. Gains Of Using PowerPoint

PowerPoint acts as a supplement to the regular oral lectures by outlining the class schedule. Presentations break down lectures into layers and thereby giving it a structure. By displaying all the key points in the concept, note-taking becomes easy for the students. The information being covered can be distributed easily via various storage media and the internet [1]. The use of visual aids such as pictures, graphs and multimedia keeps the class interesting and the students attentive [1]. Since presentations have a focal point, they command the students' attention. An informal opinion poll conducted on a social networking forum on the usefulness of presentations in class, yielded the following results.



DO PRESENTATIONS MAKE THE TOPIC EASIER TO UNDERSTAND? (INFORMAL POLL).

The poll results clearly indicate that presentations indeed increase the ease of understanding of the topic presented.

The amount of errors are also considerably reduced owing to the spell-check and graphics editing tools. Better quality notes in turn lead to better understanding of the concept. All the above advantages enrich the classroom experience for both the students and the teachers [10].

I. Limitations And Constraints

Presentations are one of the most easily misused teaching aids. Because the topics are broken down, even very complicated topics are over simplified which may not be a real-time view. When the presentation itself occupies the major part of the classroom time, lectures become impersonal [7][9]. Some educational testing methods require very deep understanding of the topic which presentations fail to provide.

Other limitations of PowerPoint can be discussed threefold; Technological constraints, presentation constraints and limitations of people involved.

- Technological Constraints: Computer systems are prone to unexpected crashes and virus attacks which can occur at any time. The technology infrastructure of the school may also be an obstacle if the resources needed to present are not available.
- Presentation Constraints: A presentation is deemed ineffective if it contains too much text crammed into it. The usage of more than two colors may also be a drawback as it is not easy to read. If the presentation has too many illegible fonts, pictures and moving animations the focus shifts from the actual content to how fancy the

slides are. Too many slides make the class too long and the attention of the class might drift.

• Limitations Of The People Involved:

- a. *Teachers*: Teachers can get away with not having an understanding of the subject by presenting pre-prepared presentations on topics, thereby avoiding an oral lecture completely. The term 'Slide Slave' [4] has been coined to refer to a presenter who merely reads the slides out, without elaborating on any point. Some teachers eliminate every other mode of teaching aid, which can lead to monotonous lectures. Older teachers are reluctant to switch to newer technology and prefer to be old-school. Some teachers deliver the lectures either too fast or too slow which can also affect the students.
- b. Students: When the presentations convey more than the lecturers themselves some students believe that the teacher is not needed. When the slides are available before hand to the students, it reduces attendance to classes [2]. When it is the students who are making presentations, they waste time by engaging in 'PowerPoint duels' [3] to see who creates a better looking presentation. The grasping capability of each student may be on different levels. The presentation may not cater to the needs of all the students if the class has a large population

CREATING EFFECTIVE PRESENTATIONS

Presentations can easily become unproductive as there are no definite set of rules for creating them. However, there are certain guidelines that are generally agreed upon to enhance the readability and usefulness of the content. They are discussed in this section.

- **Objective**: The presentation in a classroom is aimed at a large set of students. As mentioned before, each student may have a different learning curve. The presentation prepared must be reachable to all students regardless of their abilities.
- Content: PowerPoint presentations must be used as an aid to highlight important points but not as an entire lecture. The slides must serve as an outline to the presenter and need not contain long sentences. The presentation must be short and precise, the standard procedure being 6 lines per slide and 6 words per line [3]. Cramming too

much text into the slides must be avoided. The use of unnecessary transition and sound effects must be minimized whenever possible and readable standard fonts must be used. The presentation must invoke audience response and pose questions. The topic on which the presentation is being prepared plays an important part. If necessary, additional methods can be used along with the presentation to explain the course material.

- **Before Presenting**: Proper conversion of the presentation format must be done before presenting, to make sure that the presentation can be displayed on the resources that have been provided. The presenter must also familiarize himself/herself, with the hardware equipment used for projecting. This avoids problems during the presentation and increases class time.
- Handouts: Handouts of the slides may be given
 just before presenting so that the students follow
 the class [4]. The recommended format for the
 handout is all slides on the left column of the
 paper and right column is left blank for notetaking.
- **During the Presentation**: Care should be taken to ensure that there is synchronization between what is being explained by the teacher and what is on the slide. The presentation must be delivered in a moderate pace. Any amount of tweaking done to the presentation does not guarantee that the class will be an effective one, without the ability of the teacher to keep the class attentive.

CONCLUSION

PowerPoint is a very useful aid for teachers when used moderately and prepared correctly. The objective of the presentation must be to engage the audience, help them understand and provoke thoughts. Reachability of the presentation can be ensured only when the presentation respects the audience it aims at. In spite of the drawbacks, as explained earlier in the paper, PowerPoint continues to be the most popular, easy-to-use and effective tool in the field of teaching.

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