

Power point as an effective teaching tool education essay



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PowerPoint as an insidious trend - this was the article of a paper I recently read. As an educator I have frequently used PowerPoint in my classroom teaching. I had not previously given thought to how PowerPoint is simply a tool in a teacher's larger toolbox of teaching strategies. Neither had I considered how to use PowerPoint presentations effectively as one teaching and learning tool in my classroom. Likewise, I experienced the use of PowerPoint for giving a lecture and also for having a presentation in my study assignment some which were interesting and some which were sleep inducing. Is there a way to use PowerPoint in the classroom? How students get benefit from having teachers who have an understanding of effective ways to use PowerPoint in their teaching practice?

With the increasing numbers of technology integration in education especially the use of PowerPoint in classroom, it will be very useful for my own professional development and benefit the learning of the learners I am responsible for.

Dennis Austin was the first architect who designed the PowerPoint program, starting in late 1984; Thomas Rudkin joined him in 1986, and they developed all of the PowerPoint 1.0 software (Gaskins, 2012). PowerPoint software were introduced on the Apple Macintosh machine in April, 1987 with the first desktop presentation as shown in figure 1 at the next page.

Figure 1: Copied from (<http://blog.indezine.com/2012/08/powerpoint-at-25-conversation-with.html>)

There is a critique over the use of PowerPoint presentation in classroom teaching and learning. As one scholar stated:

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[PowerPoint] squeezes ideas into a preconceived format, organizing and condensing not only your material but-inevitably, it seems-your way of thinking about and looking at that material. A complicated, nuanced issue invariably is reduced to headings and bullets. And if that doesn't stultify your thinking about a subject, it may have that effect upon on your audience-which is at the mercy of your presentation. (Keller, 2003, p. D01)

However, one study has concluded that students generally trust on the use of PowerPoint as the tool for their learning with ease (Apperson, 2006).

Another study also indicated that although there were no significant differences in student scoring result of PowerPoint introduction to the classroom; yet the interaction and class response between students and teachers talking time has increased dramatically and therefore make the class worth to study (Szabo & Hastings, 2000).

The introduction of technology innovation to education.

There is an effort from the Cambodian Ministry of Education Youth and Sport (MoEYS) to enhance the quality of education through the development of classroom for teachers' capacities in their teaching pedagogy from foundation to higher education system (MoEYS, 2010). In recent years, technology has started to have a presence in classrooms and education technology is becoming a " necessity" (Thomas, 2002, p. 1). McCannon and Morse (1999) pointed out that the program Microsoft PowerPoint controls 97% of the presentation market rating as the most dominant type of technology used in the classroom for learning and teaching. Their data reported that in one day there are 30, 000, 000 presentations made

worldwide and that PowerPoint software was on 250, 000, 000 computers respectively (Amare, 2006).

The revolutions within information technology has provided numerous positive impacts for the education sector and been used to help students with their research studies, self development through internet exploration and use of the modern facilities including the data projector, laser board and so on (Fuyin & Pershing, 2010). Cambodia has implemented workshops on teacher ICT literacy intended to equip lecturers with the knowledge and skills for the effective use of modern technology in their classroom teaching in order to produce student better learning outcomes (MoEYS, 2010).

PowerPoint as a tool in a teacher's toolbox for teaching strategies.

Within the growing integration of technology and education, using power point software as a tool for teaching and learning has dominated classroom teaching practices in developed and, increasing, in developing nations. This tool has great potential to engage students and encourage in their learning since the rise of this software in the late 1990s (Rabinowitz., Kernodle., & McKethan (2010). In addition, Frey and Birnbaum (2002) conducted a survey and found that the use of PowerPoint in the classroom was very useful for students when they were reviewing their studies. Beale (2011) mentioned that powerpoint can be used for many things apart from presentations, for example, many preferred to use PowerPoint to create portfolio documents. Cashman and Shelly (2000) reported that learners learn most effectively when their five senses are involved. The PowerPoint presentations an appeal

to a learner's visual and auditory senses if used effectively and therefore provide an effective learning experience to students.

Problem Statement

As society advances, science and technology develops and the Internet emerges, traditional teaching have been greatly challenged by many new ways of engaging learners with ideas and new material. Today, teachers are confronted with many challenges, such as how to raise students' interest in their learning, and how to increase the efficiency of teaching during class. Use of technology and various software, for example, powerpoint is undoubtedly one answer to the above challenges. Students may be motivated and their learning improve with the effective use of technology including power point slide presentations (Li, 2009).

University budgets have been reported as being used for the implementation of technology so as to enhance the learning environment especially the use of PowerPoint presentation (Atkins-Sayre et al., 1998). Equipping classrooms with the machinery necessary for inclusion of technology in teaching makes it possible for all instructors to make presentations. However, Turfe (2006) has suggested that presentation software, such as PowerPoint, when compared to other common presentation tools (e. g., overhead transparencies), has reduced the analytical quality of serious presentations of evidence. He also suggested that presentation software is presenter-oriented, not content- or audience-oriented, and therefore, is mainly focused on skill, technique and the capacities of the presenter in giving the effective presentation for a better teaching and learning environment. Some agree with Tufte by accusing PowerPoint of negatively editing our ideas (Parker, <https://assignbuster.com/power-point-as-an-effective-teaching-tool-education-essay/>)

2001), and referring to the use of PowerPoint as “ insidious trend” (Bly, 2001, p. 1). Conversely, Carlson (2002) has argued that there is an encouragement for the instructor to spend time preparing slide presentation since it can pack documents and cut the time to make of copies for students in their learning and grasping the information.

I know that in my own preparation for teaching I received no formal training in the effective of PowerPoint in the classroom. Likewise, effective use of technology and software in the classroom is not included in the curriculum of Cambodia’s teacher training institution. Various reports document the fact that teachers in Cambodia are poorly qualified and not well trained. In 2006, the study shown that 34. 5% of teachers in remote areas, 6. 4% in rural areas, and 4. 2% in urban areas had not themselves received formal training from the institution and shockingly studied beyond the primary level (UNESCO, 2006; Benveniste et al, 2008, p. iii). At the same time, the Education Sector Support Program (ESSP) called for the needs of capacity building on teachers to support the strengthening of school directors, and teachers’ performance focusing on teaching and learning methodology and the use of technology in classroom (MoEYS, 2005b, p. 9).

Research Questions:

Two exploratory research questions have been developed in response to the study of this topic:

1. What do lecturers in faculty of X in University X understand as effective use of PowerPoint in the classroom?

2. How do these lecturers use PowerPoint in their teaching tool box of teaching strategies?

Significance of the study

The studies reported above found that PowerPoint decreases the interaction between teacher and student (Pippert and Moore, 1999), gives a student a sleeping pill (Parks, 1999), and makes the class unnatural to some extent (Sammons, 1995). Turfe (2003) mentioned that presenters are more likely to dominate the class and the learners have little chance for learning interaction in class.

This study is an important contribution to the research of and understanding how to use PowerPoint instruction as an effective learning tool. There are a number of technology instruments for teaching and learning. However, schools and universities are depending on the PowerPoint software more and more as a vehicle used by teachers to deliver instruction. Instructors need to have evidence on the effective use of software and how to use them and in this instance due to the widespread of it as a teaching tool; specifically PowerPoint, to improve student learning performance (Schroeder, 2006).

Chapter Two

Literature Review

This chapter is mainly focused on the findings from previous studies on the effective use of PowerPoint in classroom learning and teaching. I reviewed both the national and international sources on the effective use of PowerPoint. However, not many articles, books or journals were found written in the Cambodian context. I used the websites Google Scholar and <https://assignbuster.com/power-point-as-an-effective-teaching-tool-education-essay/>

the ejournal collection accessible from one Australian university to locate the material to use in my review of the literature. The key words used to identify the articles: PowerPoint Presentation, innovative tool, projection devices, Instruction Instrument, and Electronic delivery.

Features of Classrooms Designed for Effective Learning.

There are various factors required for promoting effectiveness of student learning performance. McDonald and Gibson (1998) stated that social interaction and interpersonal relationships are a necessary part of learning and learning environments. Studies indicated that not only social interaction and interpersonal relationships are a necessary part of learning but also the assessment of learning, the emotional climate in the classroom, supportive learning environments, and the selection of the methods and activities of teaching and,; the inclusion of technology in the classroom, are also counted as features needed for an effective learning environment (Rudland et al., 2010). Many colleges and universities are equipped with technology necessary for any instructor to display information using the PowerPoint software program. Furthermore, instructors are often encouraged by the administrators to use this technology (Carlson, 2002). It is also wise to consider advantages and disadvantages to the teacher when investigating the effectiveness of a new teaching method.

Assessment of Learning.

Effective assessment is a very important tool to enhancing student learning and improve their learning performance (Brown and Knight, 1994). Trotter (2006) claims that continuous assessment practices encourage learners to continuously keeping on track of their academic life. Carless (2007) argues <https://assignbuster.com/power-point-as-an-effective-teaching-tool-education-essay/>

that appropriate tasks must be set to support and assess students' learning, by focusing on the process of learning and on providing feedback that is effective, and by developing students' autonomy and responsibility for monitoring and managing their own learning. Furthermore, Black and William (1998) ranked assessment of learning as the most critical element to consolidate students' performance in their learning.

Emotional climate.

The effect of the classroom climate is an undeniably important influence in the effectiveness of students learning outcome including intellectual space, but also as a social, emotional, and physical environment (Huston and DiPietro, 2007). Zins (2004) noted that the effective learning included a teacher being able to create safe, caring, well-managed and cooperative classroom environments, as well as broader controlling that provide equal learning process for students in participating their classroom effectively. Burdett (2003) mentioned that students learn best when they work in groups and share a common sense in their discussion over the area being studied.

Supportive learning environment.

To some extent, learning needs supportive environment for the effective learning outcome. Kimbell and Stables (2008) highlighted the importance of the teachers' role to support students in their thinking so as to let them take greater responsibility for the study, through their own target setting to enable them manage and successfully keep on track with their learning. The learning environment was a very strong predictor for the academic success student studying at university (Lizzio, Wilson, & Simons, 2002).

Pedagogy.

Leach & Moon (2000) believed that there is a strong connection between pedagogy and the effective learning within the classroom environment.

Likewise, the study conducted by Norvig (2003) indicated that the methods and activities of teaching can most effectively support and provide various benefits ranging from learning inquiry, reflective thought & learning, and the use of technology into the classroom.

Teaching as inquiry

The pedagogical approach known as the inquiry teaching is viewed as an essential component of all western countries current K-12 science curricula.

From the perspective of the United States National Science Education Standards (NRC, 1996), students are expected to be able to develop scientific questions and then design and conduct investigations that will yield the data necessary for arriving at conclusions for the stated questions.

Lederman (2009) mentioned that students are often asked to make predictions about what they believe will be the outcome of the investigation.

Using this type of activity, students investigate a problem presented by the teacher using a prescribed procedure that is provided by the teacher. In that sense, students have the opportunity to develop their own conclusions by analyzing the data and coming up with their own evidence-based conclusions and at the same time enhance the efficiency of their learning.

Encouraging reflective thought & action for experiential learning

John Dewey, Kurt Lewin and Jean Piaget are the acknowledged founders of the Experiential Learning approach (Miettinen, 2000). This concept is being
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used routinely in the teaching of adult education in Europe, North America and Australia. It has been an important starting point for several attempts to develop adult education theory (Jarvis, 1987). Similarly, Weil and McGill (1989) indicated that giving students opportunities for reflecting and acting in the course of experiential learning could produce fruitful results for their academic performance. The Australian philosopher of science Allan Chalmers states that the concept is a very practical accomplishment by doing action with the reflective statement in order to make students experience academic rewards (Chalmers, 1990).

Technology

Atkinson (1968) and Suppes (1968) are among the pioneers who conducted research on the integration of computer technologies as tools for enhancement tool of learning and understanding. There is a confirmed conclusion about the growth of academic achievement within the use of technology in education (U. S. Department of Education, 1994). In Christmann and Badgett's study (1999) indicated that the introduction of technology in classroom course instruction is very useful. The findings consistently suggest that this introduction increases student performance above the levels afforded by traditional instruction.

Research on the Effectiveness of PowerPoint in the Classroom

In a study by Szabo and Hastings (2000), 155 students were administered a 10-item questionnaire to measure how they felt about the use of powerpoint presentation in the classroom. Ninety percent of the respondents believed that presentation graphics were more attention capturing than traditional

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lectures and 85% said that it was more interesting. Mantei (2000) also reported similar results with students reporting they found the presentation was more interesting and enjoyable and at the same time enhanced their knowledge dramatically. Moreover, Atkins-Sayre, Hopkins, Mohundro, and Sayre (1998) reported that 73% of the 485 students they surveyed found that presentation graphics helped them maintain an interest in the lecture. Cashman and Shelly (2000) concluded that PowerPoint presentations appeal to learners' diverse learning styles, such as visual, auditory, kinesthetic, and creative by employing multimedia methods, such as sounds, images, color, action, design, and so on. Scholnik and Kol (1999) at the same time confirmed that PowerPoint is a tool that allows learners to get a big picture with real understanding. The use of this presentation software within a supportive classroom atmosphere encourages the integration of academic skills. PowerPoint not only offers simple inclusion of an extensive assortment of clip art, but more experienced teachers will also learn to include audio/visual clips as a further refinement in animation. The software includes animation features such as zoom, fly, crawl, and swivel; which can, in turn, make a lecture more interesting. Likewise, Norvig (2003) indicated that PowerPoint can most effectively support a presentation by providing visual information such as photographs, charts, or diagrams in addition to a brief outline of main topics and first level subtopics. Thus, the visual image tool in PowerPoint slide presentation may be used to enhance the text and create an interested classroom environment (Goldstein, 2003).

Why Use PowerPoint in the Classroom for Lectures?

Whilst used extensively in classrooms around the world, the use of PowerPoint as a tool for enhancing learning is well understood. In a study by Rankin and Hoas (2001), one professor taught 4 sections of Economics classes over the course of two semesters. Each semester the professor taught one class using a traditional lecture method and another class using lecture aided by the use of PowerPoint software presentation. Consistent with other studies, Rankin and Hoas found no significant effect of the method of instruction on student performance. However, consistent with research mentioned earlier regarding student perceptions, Brewster (1996) did show a difference in attitudes towards the multimedia presentations; students were more positive in their evaluations of the class when PowerPoint slide presentation took place in their learning.

The research conducted by Smith and Woody (2000) found that students gained higher examination scores from multimedia courses only if those students scored high on measures of visual orientation, indicating that the benefits of PowerPoint presentation in classroom for making lecture is strongly associated with learning styles especially the visual style. This is consistent with the findings of Beets & Lobingier (2001).

From the studies above it is clear that PowerPoint can enhance learning for some learners especially those who learn strongly from visual material. Also obvious is that if used well by a teacher it can be a motivational tool for engaging students with the material being presented.

Characteristics of PowerPoint

Figure 2. Copied from Microsoft PowerPoint 2007 In the typical 'blank' default slide (see figure 2), PowerPoint presents with a relatively straightforward invitation. There are two text boxes generally take place. The top one is 'Click to add title', and the below one is 'Click to add subtitle'. Moreover, Beale (2011) mentioned that animation can be made in PowerPoint program in order to catch students' attention from their learning.

Farkas (2005) developed the characteristic of slide presentation so as to provide criteria for writing bullet points and suggests reasons why presenters include excess text on their slides so on and so forth. The characteristic of PowerPoint program as described below:

Section Slides (Section Titles).

Section slides usually correspond to the elements of the preview slide- though each kind of slide may be used without the other. Like the preview slide, section slides reveal structure, and together the preview slide and section slides comprise the top level of the deck's logical hierarchy (Farkas, 2009). The text must be properly sized (Rickman and Grudzinzi, 2000).

Holzl (1997) recommends the use of a 32 point font for headings and a 24 point font for the text in classrooms with fewer than 50 seats; and a 36 point font for headings and a 28 point font for text in classrooms between 50 and 200 seats. For maximum legibility, Holzl (1997) recommends the use of the sans serif fonts (such as Arial) because their uniform line thickness makes them easier to read. He also suggests the use of no more than two different fonts per presentation (one for headings and one for text). Besides these

basic concepts of PowerPoint characteristic, there are a number of have-to-know elements as stated in the next paragraph.

Slide Title.

Almost all slide layouts employ a few lines slide title, which is most often followed by a list of bullet points. This in turn gives the title of the slide.

Slide Headings.

Typically, the slide title is followed by a slide heading, several bullet points, another slide heading, and several more bullet points as it is called sub heading (Doumont, 2005).

Bullet Points.

Bullet points represent the lowest structural level of the hierarchy. The role of a bullet point is to briefly state an idea that the presenter will gloss over. Bullet points consist of structural, meaning and it must be brief with the keyword presenting on PowerPoint slide presentation (Parker, 2001).

Exhibits.

Again, Parker (2001) indicated that the exhibits can include graphics (diagrams, graphs, tables, and photographs) as well as motion graphics (video and animation sequences). Exhibits may also include equations, quotations, and other key text elements.

Decorative Graphics.

Decorative graphics normally appear throughout the deck as a visual transparency on the slide background. For example, a slide background might include a subtle computer-chip

image to help express a high-tech theme or a fresh green leaf to suggest nature image (Farkas, 2009).

Body Text.

Body text consists of the detail. It can appear anywhere below the slide title.

There are appropriate uses for body text (Bellamy & McLean, 2002).

Lecturer Attitudes on how to use PowerPoint effectively

Too often lecturers fail to recognize that each student has a unique style of learning (Dunn and Dunn, 1978) and different strengths according to one or more of Gardner's theory on "multiple intelligences" (Armstrong, 1994; Gardner, 1983). For many lecturers, PowerPoint slide sets have become the most useful way in providing students with examination preparation (Frey and Birnbuam, 2002). Dewhurst and Williams (1998) suggest that the PowerPoint learning environment used in their study was as effective as traditional lectures in disseminating factual information. Holt et al., (1993) concluded that students and teachers found the computer-based delivery (the use of PowerPoint) easy and effective to use and valued the course more highly than traditional lectures. However, Susskind (2005) performed a study that indicated no significant difference among delivery styles of PowerPoint within the use of this program.

Summary

To my observation of classes from my university, formal, and informal institutions, I found that PowerPoint is the most popular software in giving the projection for classroom teaching and learning. In this study, I believe that PowerPoint is so powerful in transferring the knowledge and key

concepts for learning when effectively used. This is supported by Harknett and Cobane (1997) who found out that visual emphasis in PowerPoint helps students recall the materials.

Chapter Three

Methods

In this chapter, methodological information for the study will be introduced. The first part of this chapter focused on the research design so as to construct a well developed informed method for responded this study. The size and technique for identifying participants in this study are described in the second section. Third, the researcher will describe the tool to be used for data collection and the fourth is the process of data collection. In the last section, I discuss some of the ethical considerations.

Research Design

To conduct this study, I plan to pilot my questionnaire designed to describe the current practice of lecturers' PowerPoint usage in their real classroom teaching and learning within two faculties at University X. By using this method, it will also reveal a bigger picture in respond to the problems that challenge the practice.

In this research study, the following use of sampling, data collection methods, strength and limitation of each method and the ethical consideration of the data collection process will be going to discussed in greater detail so as to get a big picture.

Sample size and Sampling technique

This research study will be conducted using form of convenience and purposive sampling techniques in which the location of study will take place within University X where I have worked. I propose lecturers from two different faculties; the Information Communication Technology (ICT) faculty and the English Language faculty.

Convenience sample.

The required sample size has been obtained and those who happen to be available and accessible at the time is well informed in advance for either participants and researcher's convenience and availability of time. It will also be easy to conduct this study since the participants are available and voluntary to participate due to the same place are taken for this study. Thus, the participation both from lecturers and students are at ease in reaching.

Purposive sampling.

The sample has been chosen for a specific purpose: in this study, a group of lecturers and students from both faculties (ICT & English) at year 2 of the University X will be chosen as the research is studying the effective use of PowerPoint presentation between staff of these two faculties. A few lecturers of each faculty will be selected purposefully in regard with the teaching experience and gender range.

Data collection tools

The tools I plan to use for data collection are researcher-designed questionnaires, focus groups, and observation. With these tools for data collection, there will be a range of data that will be useful for answering the

questions of this research project. In addition, the tools being use in this study are categorized in two ways of conducting. First, lecturers will be the focus point for the study. Second, students also will be involved so as to uncover more responsive and reliable data.

Questionnaires.

I plan to use closed-ended questions in the questionnaire for these study which are probably the type with which most participants are familiar. This type of questionnaire is used to generate statistics in quantitative research. As mentioned by Smith (2007) questionnaires follow a set format, and some can be scanned straight into a computer for ease of analysis and greater numbers can be produced. There is no influence from the researcher towards their participants through this process. There is, however, a concern over the rate of data collecting return as a result of the participants' laziness in checking the questionnaire (Anderson & Arsenault, 1998).

Focus group discussion.

Arksey and Knight (1999) suggested that having more than one participants present can provide two versions of events - a crosscheck - and one can complement the other with additional points, leading to a more complete and reliable record. This tool is very useful as far as safety and secure is concerned. This is a safe tool for the participants to involve in the discussion as a group of small number of people. Moreover, the idea from the participants will pop up within the discussion and participant will also be able to think out of the box with less time consuming comparing to other data collection tools. However, participants may not get involved altogether since there is limited of time available for them.

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Observation.

Robson (2002) stated that what people do may differ from what they say they do, and observation provides a reality check; observation also enables a researcher to look afresh at everyday participants' action. Moreover, observational data are sensitive to contexts and demonstrate a very strong validity (Moyle, 2002). Conversely, there is a limitation on the privacy of the classroom observation since students and lecture may feel uncomfortable in the class being observed. This is consistent with the study of Silverman (1993).

Data collection process

This stage involves with the process of collecting data for supporting evidence. I will use the above-mentioned methods including questionnaire, focus group discussion and observation in order to collect the important data from the field of study. Moreover, I will break the participants into two categories. The first category will be used to mainly focus on lecturers. Whereas, the second category will be student oriented. In that sense, there will be a valid for the study (Gronlund, 1981).

Ethical Considerations

Although, I work as a full time staff at the University X, as far as ethical consideration is concerned, I will ask for the letter of recommendation from the Royal University of Phnom Penh (RUPP) in order to get the access for the permission to conduct the study at University X. As a general rule, however, informed consent is an important principle. It is this principle that will form the basis of relationship between the researcher and the researched and will

serve as a basic start on which subsequent ethical considerations can be structured. All the participants will be asked to voluntarily and willingly be involved in this study. I will, moreover, use two ways to get the information from the participants. First of all, I plan to use a drop box method which there will be an A4 sized box so that participants can drop their completed questionnaire papers in and I will keep my eyes away from it so as to avoid participant identification. Second, I will ask students in the classroom to directly give me the name and contact for the permission of participation involving in group discussion.