Are Digital Classrooms (i.e. PowerPoint presentations) the Only Option in Education? A Critical Discourse Analysis.

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Abstract

As educational institutions struggle with the consequences of incorporating digital technology into conventional frameworks, the discourse surrounding the digitalization (i.e. using PowerPoint presentations) of education has grown more critical. This shift's potential benefits and drawbacks must be considered to assess whether PowerPoint presentations have "sold out" in the educational system. This study examines the discourse surrounding digital classrooms, particularly PowerPoint presentations, as a dominant or limited educational tool. The arguments made by institutions in favor of PowerPoint presentations are becoming more and more forceful, thus it's critical to consider the values and ideologies in action. This study examines the institution's process of PowerPoint presentations and its teaching-learning activities through critical discourse analysis. Three public campus institution heads, three students, and a prospectus of these Campuses are chosen using the purposive sampling method to understand views on PowerPoint Presentations in teaching and learning activities within the classroom. The research finding shows that the paradigm shifts from traditional methods to more advanced digital approaches have resulted from the considerable transformation of educational practices brought about by digital technologies. PowerPoint presentations are becoming increasingly popular and compulsion, and they provide accessible and adaptable learning options. Research has shown that incorporating digital technologies improves student learning however it also interconnective the competitive policy of the campuses, and calls for a reassessment of educational approaches to meet the needs of the digital age.

Key Words: *PowerPoint presentation, digital technology, critical discourse, education*

Introduction

Since PowerPoint presentations are frequently used as the standard teaching medium, digital technologies have become essential to contemporary education. The question of whether digital classrooms are improving or decreasing the quality of education has been raised by this change. This change has raised the question of whether digital classrooms are enhancing or decreasing the quality of education. While some believe PowerPoint improves visual learning and keeps students interested,

others warn that excessive dependence on digital tools can supplant more conventional, frequently participatory teaching techniques. To determine whether PowerPoint presentations are offered as the only or best choice and to spot any biases or presumptions that may be present in this discourse, this study will employ critical discourse analysis.

Presentations are an essential component of our academic, professional, and personal lives. We use them in a variety of settings, including lectures, class presentations, webinars, product introductions, speeches, and the military, as well as in universities, the workplace, and the courtroom. (Moulton, Türkay, & Kosslyn, 2017; Kosslyn, Kievit, Russell, & Shephard, 2012). Despite the existence of other solutions for these uses, PowerPoint is known for being the most popular standard presentation application available (Garner, Alley, Gaudelli, & Zappe, 2009; Hopper & Waugh, 2014). It has been reported that there are 30 million PowerPoint presentations made every day, or 1.25 million every hour (Mahin, 2004, as cited in Hill, Arford, Lubitow, & Smollin, 2012). It shows that most of the institutions focuses on the PowerPoint Presentation in their everyday life.

Education is expected to play a significant role in the digitization of society in addition to adopting new technologies and utilizing them to their potential (World Economic Forum, 2015). According to the European Commission's Digital Education Action Plan (2018), the digitization of education will enhance learning, empower students, improve learning outcomes, close the learning gap, increase motivation, and by using big data tailor content to each student's requirements. Education institutions are required to use technology to adapt to and contribute to societal developments, such as the digital economy, increased individualization, opportunities for lifelong learning, and data-driven innovation. The study looks at how PowerPoint presentations are used in Nepal's digital transformation of education. The way that we use media in schools has changed significantly in recent years. Overhead transparencies and PowerPoint presentations have replaced the days of "chalk-and-talk" and sporadic flip charts (Craig & Amernic, 2006, p. 149). Hopper and Waugh (2014) believed that PowerPoint is now one of the most common forms of media that dominate "the world of teaching and training, from elementary school classrooms to graduate programs" (p. 30). However, there has been a lot of skepticism and criticism of PowerPoint use in the literature (Hill et al., 2012; Hopper & Waugh, 2014). Since research has been done on the pedagogical benefits of PowerPoint, academics are quite interested in how effective and successful it can be used in the classroom.

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amount of the literature is based on empirical and theoretical research (Hopper & Waugh, 2014; Kosslyn et al., 2012; Moulton et al., 2017; Savoy, Proctor, & Salvendy, 2009). Furthermore, in spite of this interest, comparatively little research has looked at the attitudes and ideas of institution heads and students about the use of presenting tools (Abdelrahman, Attaran, & Hai-Leng, 2013; Savasci Acikalin, 2011; Yilmazel-Sahin, 2009). So, this study tries to examines the institution's process of PowerPoint presentations and its teaching-learning activities through critical discourse analysis.

By examining the phenomenon from the viewpoint of institution heads and students, the current study seeks to increase our understanding of the efficacy of PowerPoint slide technology. So, this study used semi-structured interviews to gather data from three academic institution heads, a prospectus of these institutions, and three students. Since most of the institutions are likely to use similar technologies, it is thought to be crucial to comprehend how educators take them. Similarly, this study examines the use of PowerPoint presentations in connection with Nepal's educational digital transformation employing Critical Discourse Analysis (CDA) (Fairclough, 2023) to detect and investigate embedded ideologies by critically analyzing the discourse around the digitalization of education in educational institutions.

Problem Statement
Educational institutions all across the world are gradually incorporating digital classrooms, particularly those that make use of PowerPoint presentations. Even though digital technologies have many advantages, like improved accessibility and visual engagement, there are also limitations and disadvantages of depending only on technology-based training According to certain academics and educators, conventional teaching methods including face-to-face interactions, hands-on activities, and experiential learning are crucial for students' overall development. The purpose of this study is to examine the extent to which digital classrooms are regarded as necessary for contemporary education and to evaluate critically whether or not they can fully replace traditional teaching methods. This research examines the current discourse around traditional teaching and digital classrooms to ascertain the perceived advantages, disadvantages, and pedagogical consequences of each.

Research Objectives
To examine the use and significance of digital classrooms in contemporary education.
To assess how educators, students, and legislators perceive the advantages of digital classrooms.

Significant of the study
Since PowerPoint-based instruction and

other digital classrooms are becoming more and more popular, it is crucial to evaluate how they affect student's learning outcomes and experiences. To provide education professionals and policymakers with useful information, this study attempts how digital technologies affect students' engagement, comprehension, and retention of material. This study is important because it could add to the current discourse about how technology affects learning and how it functions in the classroom. To fulfill the growing need for varied pedagogical approaches, this study investigates whether digital classrooms are adequate or if traditional teaching methods are still valuable. Results could help us understand how different teaching strategies accommodate diverse learning styles and cognitive needs more deeply, emphasizing the value of flexibility in education.

Literature Review

The research claims that PowerPoint is one of the most popular educational technologies used by both teachers and students. The implicit assumption that using PowerPoint is equivalent to using ICTs for teaching and learning appears to exist. The majority of teachers who are asked to report on how they use ICT in the classroom discuss their use of PowerPoint (Abdelrahman et al., 2013; Hopper & Waugh, 2014; Reedy, 2008; Savasci Acikalin, 2011). The literature has, however, discussed both the benefits of utilizing this technology and some of the

criticisms directed at its application.

Benefits of PowerPoint Presentation

The role that PowerPoint can play in teaching and learning is explained by learning theories. The dual channel assumption, for instance, holds that humans process visual and aural information through two different channels (Paivio, 1986). Furthermore, learning is improved when various information sources both visual and auditory are provided, according to the Cognitive Theory of Multimedia Learning (CTML) (Mayer, 2009). PowerPoint slides may give teachers the chance to combine spoken and visual information, which could improve student learning, according to Levasseur and Sawyer (2006). Additionally, as slides allow teachers to offer a variety of sources, they may be well adapted to the needs of various students with varying learning styles (such as visualizers and verbalizers). The use of slides to facilitate learning can also be explained by arousal theory (Levasseur & Sawyer, 2006). Weiner (1990) asserts that visually appealing course materials increase student engagement, enhance learning, and make learning more pleasurable. PowerPoint has the ability to engage both the visual and auditory senses, which may raise arousal levels.

PowerPoint is a user-friendly, reliable technology that is included free of charge in the Microsoft Office suite. With little effort or technical or instructional expertise, novice teachers and students can use this technology. They can instead concentrate

on honing their design and content abilities rather than mastering the technology, which would need for advanced technical knowledge or higher-level expertise (Hertz, van Woerkum, & Kerkhof, 2015; Hopper & Waugh, 2014). PowerPoint also has the benefit of making knowledge distribution easier and more effective with slides in larger class sizes than in smaller ones (Hill et al., 2012; Yilmazel-Sahin, 2009).

Teachers might use PowerPoint to arrange their thoughts when preparing their presentations. Teachers can use well-prepared presentations to further reinforce and strengthen the message they convey. Additionally, they can add sound, animations, graphics, and other hypermedia elements to their PowerPoint presentations. Studies have demonstrated that using several information sources visual and auditory improves learning (Mayer, 2009). Both lectures and lecture notes can be better organized with PowerPoint (Levasseur & Sawyer, 2006; Nouri & Shahid, 2005). Because major components of the topics to be addressed can be stressed and highlighted using slides (Susskind, 2008), students perceive lessons accompanied by slides as being more organized and appear more "clear and interesting" (Apperson, Laws, & Scepansky, 2008).

Slides can also be seen of as a time-saver for teachers and students. During lectures, slides make it easier for students to take notes (Fritschi, 2008; Susskind, 2005, 2008). As it reduces the pressure of taking notes in class, which could cause students to miss out on crucial material, giving students access to slides to watch before class may help them learn (Wecker, 2012).

Criticism on PowerPoint Presentation

In addition to its advantages, learning theories indicate that PowerPoint may sometimes be harmful to learning. For instance, successful learning happens when limited cognitive resources are employed as efficiently as possible, according to cognitive theories of learning (Paas & Sweller, 2014). Nevertheless, "PowerPoint overload" can happen when PowerPoint slides include too much information for the user to process. Atkinson and Mayer (2004, p. 1) assert when the PowerPoint slides contain "busy backgrounds, endless bullet points, and a tangle of diagrams clearly shutdown understanding, instead of opening it up." More precisely, when there is an excessive amount of on-screen text used as the presentation rather than depending solely on the presenter's or narrator's spoken words, the modality principle of the CTML (Mayer, 2009) may be broken. A common technique in PowerPoint presentations is for the lecturer to read out the screen content entirely, which can also result in redundancy (Hill et al., 2012; Yilmazel-Sahin, 2009). Additionally, if slides with an excessive amount of information are not divided into smaller sections, the segmenting concept may be broken.

PowerPoint promotes a classroom environment where the instructor is viewed

as the main source of knowledge, according to the majority of research. In other words, PowerPoint promotes a teacher-centered approach more than a student-centered one (Hopper & Waugh, 2014). For some disciplines where critical pedagogy, active participation,andengagementarenecessary, this circumstance can be particularly harmful and critical (Hill et al., 2012). PowerPoint is said to encourage presenters to repeat the slide information aloud to the class verbatim, stifling impromptu discussion and discovery. However, some contend that while this is generally true, it is more a fault of the instructor than a problem with PowerPoint (Hopper & Waugh, 2014). Even though the majority of students preferred PowerPoint presentations, it was discovered that students who got conventional lectures performed better academically.

PowerPoint is often criticized for encouraging the simplifying of some topics. Even though simplification and shortening can be useful tools for presenting information, critical thinking is impeded when they are used excessively or through bullet-pointing. Extreme brevity can cause learners to lose sight of crucial information and its linkages, complexity, or breadth (Hill et al., 2012; Hopper & Waugh, 2014). Tufte (2003) mentioned, "the PowerPoint style frequently interrupts, dominates, and trivializes content" (p. 2). Even instructors lament that they occasionally feel they must remove some of the course materials because sometimes the material, which is meant to be covered in detail and critically, cannot be properly transferred into the "bullet points" format so frequently associated with PowerPoint (Craig & Amernic, 2006).

Nevertheless, a lot of the claims made regarding PowerPoint are based on speculative and anecdotal research (Moulton et al., 2017). It is evident from a review of the literature that most studies on the efficacy of PowerPoint used media comparison study; contrasting PowerPoint-enhanced lessons with those that used the conventional whiteboard teaching method. Nevertheless, there are several methodological issues with this research (Moulton et al., 2017). The question may have more to do with how to utilize PowerPoint efficiently than with whether PowerPoint should be used in the classroom (Jordan & Papp, 2014). Students' and academic heads opinions may be thoroughly examined to obtain understanding of how institutions use PowerPoint in the classroom. Only a small number of studies, though, have been done on this subject (Abdelrahman et al., 2013). Given that teacher educators are seen as role models, it may be crucial to examine this topic in the context of using the PowerPoint in the classroom. Given these concerns, the current study aims to investigate institutions perceptions of the impact of PowerPoint techniques on learning.

Research Method

The principles of qualitative research are applied to this study. The three-dimensional model developed by Norman Fairclough (2023), which looks at the discourse of digital classrooms through three lenses; text, discursive practice, and social practice, is used in a critical discourse analysis (CDA) approach. This paradigm makes it possible to extensively study digital strategies' representation, reception, and integration in educational settings (Fairclough, 2023). Three public campus institution heads, three students, and a prospectus of these Campuses are chosen using the purposive sampling method to understand views on PowerPoint Presentations in teaching and learning activities within the classroom. Observation, textual sources, and interview transcripts were used to gather and analyze the data.

Findings and Discussions

Like PowerPoint, digital classrooms are helpful, but they are not the only option. Incorporating a variety of approaches to engagement, inclusion, and skill development is necessary for a comprehensive education. This section presents the use and significance of digital classrooms, discursive practice, and social practice of PowerPoint presentation discourse.

The Use and Significance of Digital Classrooms

The design and format of PowerPoint presentations demonstrate how the language and organization of instructional materials frequently become increasingly uniform in digital classrooms. Key points are often the focus of texts, which can cause complicated subjects to be oversimplified. As demonstrated by the layout and style of PowerPoint presentations, the vocabulary and organization of instructional materials frequently become more standardized in online learning environments. Texts frequently concentrate on the most important details, which might cause complicated subjects to be oversimplified. Here is an example of a response of a respondent:

> *Rajaram Pandit: Since we installed the digital classroom, it has become easy to simplify the subject matter for our students, and the students are also happy with the new technology. It not only made the classroom effective but also attracted the students.*

The teaching and learning process has been completely transformed by the introduction of digital classrooms. Modern technology has made it possible to simplify and convey information in an interesting way that improves comprehension. Teachers can design dynamic and visually appealing classes because to the efficiency and adaptability that digital tools offer. The digital classroom offers learners a dynamic and engaging learning environment. They are drawn in by the cutting-edge technology, which enhances learning and cultivates

a love of learning. This change not only increases the classroom's efficacy but also fosters an atmosphere where students are motivated to engage and investigate novel ideas. Thus, digital classrooms represent a cutting-edge method of instruction that meets the demands of today's students and guarantees a more memorable and stimulating educational experience.

> *Harisharan   Upadhaya: Digitalization means change and students also demand such change. Moreover, to understand simply in any subject matter, PowerPoint is essential*

Students' changing needs, who thrive on creative learning experiences, are met by the revolutionary changes that digitalization brings about in education. Incorporating technology into the classroom not only improves instruction but also satisfies students' need for contemporary, participatory teaching methods.

PowerPoint and other similar tools are essential for making complicated subjects easier to understand. Multimedia components, organized presentations, and visual aids make subjects simpler to comprehend, which increases student engagement and retention. The need to change with the times and create a learning environment is reflected in this move from conventional approaches to digital media. In summary, by improving education's efficacy, engagement, and accessibility in the fast-paced world of today, digital classrooms empower both teachers and students.

> *Rajaram Pandit: What to do? To show the students, we also install PowerPoint in the classroom. Otherwise, we cannot stop the students here. They started to compare the campus in the matter of digitalization.*

However, bullet-pointed information may prevent critical thinking and in-depth comprehension. Digital writings (like slides) place more emphasis on concise, aesthetically pleasing information than traditional approaches, which frequently promote discussion and elaboration. Students' processing and interpretation of educational content are impacted by this, which may result in superficial learning as opposed to a deeper engagement with the subject matter. Adams (2007) believed that teachers are enticed by PowerPoint to rearrange information in specific ways, which are then taught to students in the classroom.

> *Dayavir Khatri: In fact, PowerPoint presentations made teachers lazy, but what to do? All are doing the same. We are compelled to do so. This is the age of telling lies and being showy.*

Teachers continue to argue over the possibility that PowerPoint presentations could lead to a reduction in the efficacy of instruction. There are legitimate concerns about PowerPoint's effects on student engagement and teaching quality, even though many educators use it for its ease of

use and aesthetic appeal. Some claim that because PowerPoint is so simple to use, less work may be put into lesson planning. Instead of interacting with students directly, teachers may grow excessively dependent on their slides (Mansour, F. S. O. A. et al. 2019). Baker et al. (2018) noted that teachers considering whether or not to use PowerPoint in the classroom are making a pedagogical choice that might not be very beneficial to their students.

Students may be discouraged from thinking critically or actively participating in class discussions as a result, creating a passive learning atmosphere. Moreover, Bouchrika (2024) mentioned that PowerPoint presentations frequently reduce complex information to simple images or bullet points, which might prevent deeper understanding. This reductionist method can cause learners to lose out on complex conversations that are essential for all-encompassing education

Discursive Practice (Production, Distribution, and Consumption of Digital Content)

Teachers can utilize the same resources in different courses and PowerPoint slides, can be produced quickly and easily. This could, however, result in students consuming knowledge more passively and acting more as "receivers" than as active participants. Teaching methods are now less participatory and more lecture-focused due to the uniform structure and ease of digital content distribution. Repetitiveuse of digital resources may also limit opportunities for

critical engagement, which depends on student-teacher discourse. The use of this discursive technique is indicative of a larger movement in education toward efficiency, frequently at the expense of individualized and flexible instruction.

> *Raj Thapa: Since I was a student of the school, I was not habituated to such a matter. I think PowerPoint presentations made it easier for teachers. The same subject matter each year is not a new thing.*

It seems reasonable to believe that traditional teaching techniques, including lectures augmented by PowerPoint presentations, might occasionally result in a feeling of familiarity and repetition. Although these resources can improve instruction, they also pose problems for student participation and creativity.

Even though PowerPoint presentations have greatly improved teaching efficiency, teachers must be aware of their limitations and look for creative ways to effectively engage students. Teachers may create a more dynamic learning environment that appeals to today's students by introducing interactive components, making innovative use of technology, and updating content frequently

Social Practice (Societal Influence and Power Relations)

Social expectations for technology integration and modernized education frequently stimulate the move toward digital classrooms. Schools and other institutions would experience pressure

to implement digital tools to satisfy these demands, which would support the idea that digital classrooms are a sign of "progress." Though it is not enough on its own, computer technology can improve the quality of education (Singh, 2021). The fundamental obstacles are firmly establishing the appropriate utilization of the advantages offered by digital technology.

This pattern demonstrates how institutional forces and social norms can diminish conventional teaching approaches. A "one-size-fits-all" educational setting could be created as a result, which could not benefit all students equally, particularly those who learn best in interactive or hands-on settings. As technology corporations and educational institutions create educational standards, they may prioritize digital literacy above other crucial abilities, which is another way that the social push for digital classrooms reflects underlying power dynamics. Because of the problems posed by digitalization, schools and universities will need to adapt how they are organized and how they offer higher education.

> *Dayavir Khatri: Because of the problems posed by digitalization, schools, and universities will need to adapt how they are organized and how they offer higher education.*

Schools and universities will need to change how they are set up and how they provide higher education due to the issues brought about by digitalization. Higher education institutions must now embrace digitalization to remain competitive and

survive. To increase productivity and effectiveness, technology must be included in teaching, learning, administration, and support procedures (Barrett et al. 2024) This change makes it possible for educational institutions to provide more individualized and adaptable instruction, meeting the needs of students in a world that is changing quickly. The institutions mainly focus on:

Provision of Audio-lingual classroom
PowerPoint is increasingly being used in classrooms as a preferred tool for sharing knowledge, presenting information, and communicating (Adams, 2007). The consequences of using this new media for the dissemination of knowledge have been questioned. To meet the demands of a digital world, higher education institutions must proactively modify their structures and tactics as digitalization continues to progress. By adopting new technology and encouraging an innovative culture, these institutions may improve student learning results, increase operational effectiveness, and better equip students for challenges in a highly competitive future.

Discussions
PowerPoint presentations are a popular tool in digital classrooms, but alternative methods like hands-on activities, group discussions, role-playing, and experiential learning are essential for holistic education. A mix of teaching tools yields better outcomes, catering to students with diverse learning styles. Digital classrooms enhance access to education but may exclude students without reliable internet

or devices, perpetuating inequalities. PowerPoint presentations are suitable for conveying theoretical knowledge but less effective in promoting practical skills, critical thinking, or interpersonal communication. Over-reliance on PowerPoint can reduce teacher creativity and student engagement. Teachers must balance technology with traditional methods to ensure comprehensive learning. The digital divide highlights the need for policies to address these gaps. A blended approach incorporating digital tools, hands-on learning, and experiential methods is promising.

Synthesis and Implications

This analysis across the three dimensions reveals that while digital classrooms have distinctadvantages, they are not sufficient on their own for a comprehensive educational experience. PowerPoint presentations and similar tools can support certain types of learning but may hinder critical thinking, engagement, and adaptability. The findings emphasize the need for a balanced approach that integrates both digital and traditional methods to address diverse learning needs and prepare students for varied real-world challenges.

Conclusion

There are many facets and complexities to the topic of whether digital classrooms especially those that use PowerPoint presentations are the sole alternative available in education. Diverse viewpoints regarding the advantages and disadvantages of digital tools in educational settings are revealed by critical discourse analysis. From elementary schools to universities, PowerPoint has become a common tool in educational settings. Its application is not without detractors, though. According to research, PowerPoint can help students learn by making note-taking less stressful, but it can also result in "PowerPoint overload," a condition where students' cognitive abilities are overloaded with too much information. Critics contend that by favoring a teacher-centered approach, this style frequently reduces student participation and engagement. The study makes suggestions based on the discourse analysis, including employing a range of instructional techniques, utilizing digital tools as complements rather than substitutes, and adding interactive features to digital presentations. Teachers are encouraged by these suggestions to take a more well-rounded approach, which may involve combining digital content with inquiry-based, experiential, and group projects.

Classrooms that encourage critical thinking, active engagement, and student-centered learning may become more dynamic as a result of this strategy. The analysis concludes that while digital classrooms, especially PowerPoint presentations, offer valuable educational tools, they are not sufficient as a standalone approach. A combination of digital and traditional methods can create a more balanced, inclusive, and effective learning environment, highlighting the importance of a flexible pedagogical approach that prioritizes diverse student needs and learning outcomes.

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