# Consequential Challenges in Designing PowerPoint Presentations as Teaching Strategies: Analyses of cases in Addis Ababa University

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## Abstract

This study examined the challenges academic staff and students face while designing PowerPoint presentations. The study was qualitative in its design. Six case slides from five senior academic staff in Addis Ababa University (Assistant Professor and above) and one fifth year PhD candidate were used as data sources. As forwarded by scholars, analysis was made using slide designing criteria and associated consequences. The findings revealed that except for the font size and limited bullet usage in some cases, the slide-designing criteria, including the principles of segmenting and coherence, were all violated. Professionals should continue using the tool but must reassess and change how they use it. Higher education institutions, and other organizations for that matter, need to train their professionals on how presentation slides should be designed and presented. Similar training needs to be arranged for students as they are exposed to model how their teachers are doing things.

Keywords: Designing-strategies; PowerPoint; Presentation; Slide

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#### Introduction

Advances in the Fourth Industrial Revolution (4IR) are pushing global researchers, educators, and policymakers -towards integrating technology in the instructional process (Naidoo &Hajaree, 2021). These advances have dramatically transformed the way education is delivered relative to the traditional lecture-dominated classroom (Jiang, Julia, & William, 2019; Giles & Baggett, 2010). They also led to the development of new and innovative pedagogy to prepare the future workforce (Naidoo &Hajaree, 2021; Groshans et al., 2019) including the widespread use of PowerPoint presentations (Bolkan, 2018; Konstantinidis, Dimitra, Agorista, & Christos, 2017).

"Although it has not been developed for teaching and learning purposes" (Konstantinidis et al., 2017, p.71) but "was originally developed for use in business and industry" (Davies, Leon, & Erin, 2016, p.38) currently presenting and disseminating knowledge with the visual support of PowerPoint slides have become the popular, pervasive, indispensable, and default modes of communication in higher education (Uzun&Kilis, 2019; Torrau, 2019; Kvinge, Magne, & Kari, 2018; Ferreira, Ana, & Sandro, 2018; Davies et al., 2016; Yen & Yang, 2013; Nelson-Wong, Heidi, Amy, & Nicole, 2013; Kosslyn, Kievit, Russell, &Shephard, 2012). Similarly, Uzun and Kilis (2019) noted, "Although various products exist for such purposes, PowerPoint enjoys the reputation of being the most widely used standard presentation application on the market" (p.40), with an average of 30 million PowerPoint presentations made each day by the year 2001 (Kosslyn, et al., 2012).

The use of technology-based tools, PowerPoint presentations is a case in point, is meant to increase learners' motivation (Naidoo &Hajaree, 2021; Lari, 2014) and improve students' and schools' performances (Hughes & Read, 2018; although findings about its impact on students' achievement are inconclusive (Onivehu&Ohawuiro, 2018; Ferreira et al., 2018; Konstantinidis et al., 2017). They also help to facilitate learning, make classes more

organised, and improve students' attitudes towards education (Konstantinidis et al., 2017; Lari, 2014), to engage the audience in the communication process, assist greater and easier assimilation of information, and stimulate debate (Oulton, 2007), and to present many data and enhance retention (Mills, 2007) to large class size (Uzun&Kilis, 2019).

Despite the fact that PowerPoint, a standard part of the Microsoft Office software package (Giles & Baggett, 2010), has ushered in a new age and changed the way the world is presented, the effect was not as it was hoped (Oulton, 2007). Whereas studies mostly agree with the positive influence of PowerPoint presentation, its inappropriate use has adverse effects both for the teacher and the students (Ferreira et al., 2018; Konstantinidis et al., 2017) to the extent that student learning can even be impaired (Kosslyn et al., 2012). Although the strength of PowerPoint comes primarily from its ability to display high-impact visuals, too often, we see them filled with endless bullet points (Kosslyn et al., 2012; Mills, 2007). In 2007 Oulton added that "Instead of the features of PowerPoint being used to produce simple, attractive diagrams, well-animated and well-articulated, what we got was the bullet point, and we got it again and again and again [...] What was spoken in presentations became what was read off lengthy text slides" (p.7).

Fourteen years since their concern, Mills' (2007) and Oulton's (2007) explanations fit with my observations of many presentations in Ethiopia in general and in Addis Ababa University (AAU) in particular: text-heavy slides, teachers busy reading slides and students copying, and at times teachers busy reading aloud and students as silent readers, all resulting in audience boredom and side-talks. Moreover, contrary to the benefits of the tool, Tefera, Catherine, & Robyn (2018, p.8) found that in Ethiopia, "Teachers are bombarding students with information using Power Points rather than an interactive lecture". These observations of the never-ending slide-designing challenges and their consequences necessitated this study.

### **Review of Related Literature**

Using technology-based tools such as PowerPoint slides in instruction can let students actively participate in the classroom (Naidoo &Hajaree, 2021; ) and play a "central role in the production of knowledge" (Torrau, 2019, p.50). It also maximises learning and academic results (Mayer, 2009 cited in Uzun&Kilis, 2019; Ferreira et al., 2018; Giles & Baggett, 2010) and enhances learners' willingness to learn (Groshans et al., 2019; Onivehu&Ohawuiro, 2018; Davies et al., 2016). As a result, transitioning from using transparencies that would be presented using overhead projectors, PowerPoint presentations have become the most frequently used tools in higher education (Zhu, Merve, & Curtis., 2020; Balbay&Kilis, 2019).

There are empirical evidence to support these claims. In their study, Naidoo and Hajaree (2021) found that the use of PowerPoint presentations inspired a fun and encouraging atmosphere for learning fractions. Onivehu and Ohawuiro (2018) evidenced that students taught with PowerPoint presentations achieved better results than their counterparts who were taught with the lecture method alone. Researchers also concluded that students identified such presentations to be the most useful learning strategies (Jiang et al., 2019), slides helped to keep order and pace in lecture (Hlynka& Mason, 1998 cited in Davies et al., 2016), and they have a general positive impact on teachers' sense of efficacy (Konstantinidis et al., 2017).

Furthermore, in two different studies, students who were taught physics and technical drawing with the support of PowerPoint slides performed better than their classmates who were taught with the traditional chalkboard methods (Onivehu&Ohawuiro, 2018). Moreover, electronic slides were found to enhance the creative thinking skills of those students who designed the slides (Mokaram, Ahmad, Fook, &Andaleeb, 2011).

Nevertheless, the tool can undoubtedly be misused in the hands of incompetent and novice educators since expert and novice instructional designers approach the designing process

differently (Zhu et al., 2020). For instance, incompetent and novice educators read packed slides and use bullets excessively (Konstantinidis et al., 2017). Furthermore, beginning presenters also type their presentation word for word onto the slides (Truesdell, 2013), leading to audience passivity and disengagement. A good presentation is like telling, not reading, a good story (Truesdell, 2013), and slides are supplements to what the presenter will explain orally in detail (Yen & Yang, 2013).

In their endeavour to advance students' learning, teachers' ability to exploit the potential of the available technology has become a challenge (Naidoo &Hajaree, 2021) and thus, "the use of PowerPoint has been subject to significant criticism and skepticism in the literature" (Uzun&Kilis, 2019, p.40). Similarly, how effectively and efficiently PowerPoint presentations can be used in education has become the subject of research (Uzun&Kilis, 2019) and education literature (Davies et al., 2016). Such unexpected consequences of the impact of PowerPoint presentation on effective communication that resulted from poor designing strategies and the global research interest in the tool called for the need to examine the situation in Ethiopia in general and AAU in particular.

## Designing PowerPoint Slides: challenges, consequences, and strategies

To benefit the most from the PowerPoint presentation tool, the competence to construct it is an important skill in educational and professional settings (Hammond, 2019). Using the tool effectively has also evolved to be one of the basic teaching skills (Konstantinidis et al., 2017). This study focused on the lack of such skills and competencies. Poorly designed PowerPoint slides have too much information on them (Truesdell, 2013; Mills, 2007), enabling a presenter to read line by line while the audience snores (Oulton, 2007), or else the audience skimming and reading often faster than the presenter (Mills, 2007; Oulton, 2007). Moreover, according to studies, such presentations over-simplify contents, emphasize short-term memorization more than deep learning, resulting in little interaction with the audience, and

make classes boring (Ferreira et al., 2018). They were also found to result in learner passivity (Davies et al., 2016) and dropping audience attendance rates (Lagares & Reisenleutner, 2017).

Are the limitations of bad presentations mentioned above the inherent problems of the tool? Unfortunately, not! "It is how it is used that causes the problem and the audience abuse. The PowerPoint system itself is not to blame. Transform its use, and you transform its effect" (Oulton, 2007, p.19). An effective presentation begins with effective slide design (Kosslyn et al., 2012).

Although there is a shortage of research that gives absolute guidelines for designing slides (Kosslyn et al., 2012), there are frequently used criteria that are employed by researchers such as Uzun and Kilis (2019), Hammond (2019), Bolkan (2018), Lari (2014), Truesdell (2013), Kosslyn et al. (2012), and Oulton (2007) to evaluate whether slide shows are properly designed. Having this in mind, first and foremost, know that presentations must serve the audience, not the presenter (Oulton, 2007) and thus, while designing your slides:

- Criterion 1:The principle of coherence and relevance of Uzun and Kilis (2019): remove irrelevant content (Uzun&Kilis, 2019), include information that is 100% strictly relevant to the presentation (remove unnecessary text) and use non-self-explanatory slides (Oulton, 2007), extra details should not appear on the slides you show the audience (Uzun&Kilis, 2019; Kosslyn et al., 2012; Truesdell, 2013), slides should not be text-heavy (Yen & Yang, 2013), keep text to an absolute minimum and incorporate many words into your narration (Mills, 2007), and a well-constructed PowerPoint presentation "should not make sense until the presenter explains it to the audience" (Oulton, 2007, p.16).
- Criterion 2:The principle of segmenting of Uzun and Kilis (2019): avoid long sentences and paragraphs (Uzun&Kilis, 2019; Bolkan, 2018; Truesdell, 2013), think of K.I.S.S. (Keep It Short and Simple) (Mills, 2007), don't use complete sentences but

single words or phrases (Oulton, 2007), and "PowerPoint word lists should rarely if ever be written as full sentences" (Mills, 2007, p.116),

- **Criterion 3: Visuals:** whenever possible, use pictures instead of words (Oulton, 2007) because with visuals, less is more (Mills, 2007), and a picture is worth a thousand words (Truesdell, 2013).
- Criterion 4: Font size: make the text readable and large enough from the back of the room (Truesdell, 2013; Oulton, 2007), preferably use text font sizes not more minor than 24 points (Hammond, 2019; Oulton, 2007) and 20 points for graph labels (Oulton, 2007), otherwise use a fontsize from 18 to 24 points (Truesdell, 2013; Mills, 2007), and greater than 20 points is also large enough (Kosslyn et al., 2012).
- Criterion 5: Bullets: bullet points restrict creativity (Hammond, 2019) and the new generation of PowerPoint needs to ban the use of bullets (Mills, 2007). But "If you have to use PowerPoint, replace your bullets with key statements and visuals" (Mills, 2007, p.10), "limit each slide to no more than three or four bullet points" (Truesdell, 2013, p.13), have four bulleted items in a slide (Kosslyn et al., 2012), or six or fewer bullet points in one slide (Mills, 2007).

Given these criteria and although "The perceived value of the use of software such as PowerPoint is dependent upon how it is used" (Davies et al., 2016, p.37), as Ferreira et al. (2018), Oulton (2007) and Mills (2007) noted, how PowerPoint presentations are being used nowadays is becoming a great challenge. Moreover, Uzun and Kilis (2019) advise inexperienced presenters to focus on the content they want to impart and their slide-designing skills rather than on learning the PowerPoint technology itself.

Other than the work of Tefera et al. (2018) that slightly touched on the problem of using PowerPoint presentations, to the best of my search, I have not found a similar study on PowerPoint utilisation in general and designing strategies in particular in the Ethiopian or AAU context to refer to. Accordingly, this study answered the following basic questions:

- Q1. How are professionals at Addis Ababa University designing PowerPoint presentations?
- Q2. What are their major challenges in the designing process?

#### Objective

The utilization of the PowerPoint software is becoming a major challenge in academia. The benefits of the tool are being compromised as presenters fail to design slides in a way they should be designed. Thus, by reflecting on the major design weaknesses of the PowerPoint slides prepared by different AAU academic staff and a student as cases, this study aimed at indicating how the tool is being wrongly designed and misused for teaching.

## Significance

This study is a frank criticism of the overt weaknesses of already presented slides so that, as Konstantinidis et al. (2017) revealed, professionals, by taking this feedback into account, can make the pedagogical benefits of PowerPoint presentations outweigh the weaknesses, and they can overcome the inherent limitations of the tool. While doing so, the academic staff can also serve as better role models to their students and/or their audience, as suggested by Uzun and Kilis (2019). Kunda, Christopher, and George (2018) found that training higher education teachers on the use of PowerPoint presentations was the most important incentive to motivate them to incorporate ICT in their teaching. In line with this, the findings of this study can show the slide designing gaps that should be filled by future academic staff training. Besides, the study teaches students, especially graduate-level students, about how PowerPoint slides should be designed. Beyond the higher education environment, anyone, who presents information using slides, can also get an invaluable lesson from this study.

#### **Methods and Procedures**

This study was qualitative in its design. Oulton (2007) classified the types and/or purposes of presentation into four: persuasion, motivation, education, and entertainment. Mills (2007), on the other hand, categorised them into three: inform, entertain, and persuade. Taking both classifications into account, this study focused on the purpose of education (to inform or impart information). Moreover, although slides can be examined at least at two stages - the designing stage and the presentation stage (Kvinge et al., 2018), in this study, slides were examined in the former stage. Again, while studies on the use of digital technology often focus on how young people use it out-of-school rather than in-school and examine in-school technology use from student perspectives (Hughes & Read, 2018), this study focuses on how teachers and students use the PowerPoint presentation tool in the university.

I attended various PowerPoint presentations during workshops, conferences, and these defense sessions. During the presentations, when I observe the audience and myself bored, yawning, sleeping, leaving the room frequently, and spending some minutes outside the presentation room, I was looking for what caused that boredom. Although the factors can be many, I focused on how eye-catching the slides are (how they are designed). To further examine the problem, I took pictures of selected slides. So during 15 presentations in different colleges and departments, I took as many as 21 different slide pictures.

All the slides shared similar problems. But based on academic rank and how long the student spent in AAU, only six slides (five from five AAU senior academic staff with ranks of Assistant Professor and above and one from a randomly selected fifth year PhD candidate) were chosen as cases and used for the analyses. Slides from these senior scholars were chosen deliberately, not because the slides of the rest were better, if not worse, but because one can imagine how the juniors, taking lessons from the seniors, would potentially design slides if the seniors designed slides the way they did.

Pictures of these slides were taken while the professionals were presenting them. Because all slides were given codes and an unreadable font style was used (for one of the slides), no one knows to whom these slides belong except the owners. The font styles of the five slides were not changed since consent was obtained. Regardless of who possesses them, other than using these slides as cases for the analysis to meet this study's objective, in one way or another, they were/are not meant to be used to compromise the professional capabilities of these scholars. After all, these slides are similar to almost all slides I saw throughout my career, be it at AAU or anywhere else.

Analyses were made based on the five slide-designing criteria mentioned above. These are *coherence and relevance*, which refer to what extent all the information included in the slide is strictly relevant to the presentation and is not self-explanatory; *segmentation* which refers to what extent the content is written with a word or short phrase, not a full sentence or paragraph; *visuals* which refer to using pictures in slides instead of written verbal details; *font size* indicating how big or small the size of the characters in the text is; and *bullets* which indicate to the number of bullets or bulleted items included in a single slide.

#### **Results and Discussion**

The contents in the pictures of the six slides were copied into new slides to determine font sizes and other variables relevant to the analyses. In an extreme effort to not expose the identity of the slide owner, codes were given as PowerPoint Presentation one (3P1), PowerPoint Presentation two (3P2)... up to PowerPoint Presentation six (3P6) and for one slide, texts were deliberately made unreadable by using a different font style.

### Slide 1: PowerPoint Presentation of the First Presenter (3P1)

"Addis Ababa University, as Higher Education Institutes (HEIs), generates and disseminate knowledge, therefore an integrated and technology driven system becomes effectively instrumental in learning and exercising research activities. Hence, from this standpoint, ICT serves as an appropriate and significant tool for HEIs in knowledge creation and dissemination. Besides teaching and research, there are several interdependent and interrelated activities that pillars simultaneously in Addis Ababa University, for example: semester planning, course allocation, course enrollment, course design, timetable, research allocation and supervision, examination planning, paper setting, results, assignments, quiz management, fee management, classroom allocation, dealing with probation students, workload management, aligning program objectives, course objectives and so on. For essentially stable and successful academic programs, some of the aforementioned activities, play a critical role. Substantially, the focus is on automation of the libraries in Addis Ababa University, whereas, numerous other, co-integrated and correlated activities that are taking place simultaneously are ignored. Traditional approach which is mainly focused on manual activities are considered to be non-interactive, therefore. ICT enabled systems can prove to uphold ameliorated coordination between faculty, students and administration which may, for its part, help Addis Ababa University."

When 3P1 slide was closely examined, it violated all the criteria suggested by Uzun and Kilis (2019), Hammond (2019), Yen and Yang (2013), Truesdell (2013), Mills (2007), and Oulton (2007) in that it was packed with a paragraph with long sentences. The segmenting principle that calls for slides not to contain too much information that are not broken down into smaller units (Uzun&Kilis, 2019) was grossly violated. Moreover, only some information included in it was strictly relevant to the presentation, and the amount of text was not kept to an absolute minimum since extra details were included to the extent that every sentence was self-explanatory. This problem of unnecessarily putting too much content on a slide potentially overwhelms students' ability to process more relevant information (Bolkan, 2018).

Besides, there were no visuals, and the slide contained content with about 16 points font size, which in many cases, may not be readable to the presenter, leave alone to the audience who sits at the back of the room. Given the five slide designing criteria, I understand that this slide may fit to the 'PowerPoint presentation' catalogue only because information was posted on a slide.

#### Slide 2: Power Point Presentation of the Second Presenter (3P2)

## "Roles [b] Mentors

Mentors |in the context of teacher education, an experimented teacher whose teaching performance has been witnessed to qualify him/her to support the development of a novice practicing teacher. S/he works in partnership with teacher educators. Mentoring is a support process whereby the mentor shore up the growth of the novice teacher [mentee] according to the program guideline of the <u>preservice</u> teacher education college."

Comparatively speaking, the 3P2 slide appeared better than 3P1 in that it was not filled with one long paragraph and its font size (about 32 points) was readable for the audience sitting anywhere in the room. However, unlike the suggestions by Uzun and Kilis (2019), Hammond (2019), Truesdell (2013), Mills (2007), and Oulton (2007), the content included in the slide was not kept to an absolute minimum, not all information in the slide were 100% strictly relevant for the presentation, it was full of long rambling sentences, and there were no visuals. Though information was divided into two segments, it was impossible to say they are bulleted as there were no bullets. In addition, the paragraph alignment (right) made it appear boring.

#### Slide 3: PowerPoint Presentation of the Third Presenter (3P3)

- "The response of γραδυατε στυδεντσ to the question ' to what extent ασσεσσμεντ προμοτε student λεαρνινγ? Are there εξπεριενχεσ for this?" is quite ινστρυχτισε.
- The πρεμισε is, realty, true. But what I feel lacking in this φαχυλτψ is that στυδεντσ have not been χομμυνιχατεδ clearly about the ησω ανδ ωηατ of the ασσεσσμεντ, they are εξπεχτεδ to be assumed to. Do you believe that there is αν ινστρυχτορ who gives you some 15 ε-βοοκσ and writings of ηυνδρεδσ οφ παγεσ each and makes you ρεαδ the whole thing and provide him/her α ωριττεν ρεσιεω of each within ove το τωο ωεεκσ περιοδ? Others do not seem to have even the βασιχσ οφ γοοδ ιτεμ δεσελοπμεντ or are ρελυχταντ to what they prepare as tools for ωριττεν ασσεσσμεντ."

The 3P3 slide might look better than the 3P1 slide in that the font size was about 30 points (similar to 3P2) and incorporated two bullet points. However, worse than 3P2, especially the second bullet point, went against the suggestions forwarded by Uzun and Kilis (2019), Hammond (2019), Yen and Yang (2013), Truesdell (2013), Mills (2007), and Oulton (2007), in that it was packed with content (a paragraph instead of a word or phrase), unnecessary details that are self-explanatory and that violate what is known as the coherence principle, which advises designers to remove irrelevant content (Uzun&Kilis, 2019), was included in it, and there were no visuals. The paragraph alignment (right) also made it appear uncomfortable to watch.

#### Slide 4: Power Point Presentation of the Fourth Presenter (3P4)

#### "Statement of the Problem

- Education is a tool for individual and societal growth. It is a means to attain knowledge, skills and attitudes that can help individuals to cope up with the ever changing environment (<u>Mirunalini</u> & <u>Anandan</u>, 2012).
- □ Quality of nation → Quality of individual citizen → Quality of education → combined efforts of stakeholders → Quality of excellent teachers (capable, energetic, mentally healthy, and having positive attitudes)
- Profession refers to an occupation, vocation or high status career, usually involving prolonged academic training, formal qualifications, and membership of a professional or regulatory body (Duatepe & Cikla, 2004).
- The topic whether a teaching is a profession or not has long been debated upon. The question is not whether a teacher is professional or not, the basic question being raised is whether teachers are performing their duties as professionals or not.
- □ Attitude is considered as a mind set or tendency to act in a particular way based on **individual experience** and temperament.
- Attitude describes a tendency (favorable/unfavorable) towards an object."

Relatively speaking, this slide looked better in that contents in the 3P4 slide were segmented into six bullet points instead of one enormous paragraph as was the case in 3P1 and 3P3. But still, 3P4 violated much of the slide designing criteria suggested by Uzun and Kilis (2019), Hammond (2019), Yen and Yang (2013), Truesdell (2013), Mills (2007), and Oulton (2007) in that the slide was full of long sentences, the amount of information was not kept to an absolute minimum, irrelevant details were packed in it, there were no visuals, and with a font size of about 20 points, its readability is questionable.

#### 1. Introduction 1.1 Background of the Study (Cont.) Policy-Practice trends of TE in Ethiopia Attracting high-quality candidates, providing rigorous preparation experiences grounded in theory, offering high-quality mentoring, and granting teachers respect and autonomy. Haile I Derge (1974-1991) also The reform planes of Selassie Government initiated to launched a reform based EPRDF: ETP, ESDPs, Education Sector on ERGESE, after GEQIP/TDP, TESO, Review (ESR), targeting arguing the education PGDT & Education rural population policy of the Imperial Development Road map and regime was elitist, and brought opened more schools, have some which enforced to recruit established a Ten Year recorded progresses on National Perspective best performer students some specific areas, based as 10 +2 diploma and Plan, in which grade 12 on a research-QETEE, as:-12+4 degree (Be'de as eligibility to join the Mariam school). profession.

Slide 5: PowerPoint Presentation of the Fifth Presenter (3P5)

The 3P5 slide is from a senior PhD candidate at AAU. It is a good example to show that students are highly likely to design slides like their instructors do. Like the preceding slides, 3P5 slide was also designed contrary to the criteria suggested by Uzun and Kilis (2019), Hammond (2019), Yen and Yang (2013), Truesdell (2013), Mills (2007), and Oulton (2007) in that, irrelevant text-heavy details were packed in the slide, it was full of self-explanatory sentences, and there were no visuals. One can imagine how crowded the slide would have been, if the abbreviations in it were written in their long form. Perhaps information in the three min-shapes and the statement above would have constituted four separate slides. The font size (24+ points) was within the range suggested by the above scholars.

#### Slide 6: Power Point Presentation of the Sixth Presenter (3P6)

- □ "The Department supports AAU's motto "**זר ה** <u>המיח</u>ה <u>שוועירך</u> האיזטי" (<u>ורותהיזט</u> 5:21) (Ge'ez)[ "Prove all things, hold fast that which is good".] the ideal of intellectual pursuit and using knowledge in the service of humanity.
- We endeavor to advance professional studies in the service of social justice, engaged with Addis Ababa, the nation, and the world.
- To achieve this vision the Department participates in the discovery, development, demonstration, and dissemination of professional knowledge and practice within a context of ethics, service to others, and social justice"

The readability (font size of about 32 points) of 3P6 and the fact that information was broken into three different bullet points were up to the slide designing criteria and 24 or larger for body text (Hammond, 2019; Truesdell, 2013; Kosslyn et al., 2012; Mills, 2007). However, the 3P6 slide was against some of the criteria suggested by Uzun and Kilis (2019), Hammond (2019), Yen and Yang (2013), Truesdell (2013), Mills (2007), and Oulton (2007) in those bullets were full of long complete sentences filled with irrelevant details. In addition, the slide should not wait for the presenter's explanation since it was self-explanatory and there were no visuals. The paragraph alignment also made the slide appear awkward.

Overall, the general principle that content on slides should be audience-focused and should not serve as presenter cues (help the presenter stay on track) (Oulton, 2007), the principle of audience reliance on the spoken words of the presenter than on too much on-screen text (Uzun&Kilis, 2019), and the principles of segmenting and coherence (Uzun&Kilis, 2019) were all violated. All six slides shared similar challenges: information that was not hundred per cent strictly relevant to the presentation was included; the slides were self-explanatory as they were full of complete sentences (and paragraphs in two of the six cases), extra details appeared on them, and text was not kept to an absolute minimum. Moreover, text readability for the audience from all corners of the room was questionable, at least in half of the case

slides. Moreover, unlike the findings by Uzun and Kilis (2019), where students favoured visual aids used in slides, there were no visuals in all the cases. Though "there may not be a best practice for lecture slide completeness and maybe course/content dependent" (Nelson-Wong et al., 2013, p.33), the result of this study supports the findings of Kosslyn et al. (2012), who, after conducting three researches, concluded that what is expected in PowerPoint presentations is that all are flawed, although some error types are more common than others. It also supports the conclusion by Inoue-Smith (2015, p.10) that "Few professors truly use PowerPoint well" (cited in Ferreira et al., 2018, p.121).

Given these challenges, as Uzun and Kilis (2019), Truesdell (2013) and Oulton (2007) warned, these slides call for reading than telling that can make these senior professionals appear as if they are incompetent educators (Konstantinidis et al., 2017) or beginning presenters (Truesdell, 2013). This is a gross mistake. "Most PowerPoint presentations are rubbish: reams of irrelevant text, boring slides and presenters who think that reading is something we all forget how to do the moment we sit down in a presentation room" (Oulton, 2007, p.15). Studies also found that teaching effectiveness was related to less text on slides (Hammond, 2019), students complained about their instructors' frequently reading from the slides verbatim (Uzun&Kilis, 2019), and students disliked presenter-directed PowerPointsupported lectures (Hughes & Read, 2018). Generally, "If what you have to say is not more beautiful than silence, shut up" (Oulton, 2007, p.32).Poor presentations that have resulted from poor designing strategies also put the audience in a poor position. Unlike the findings by Naidoo and Hajaree (2021), the audience in the room cannot actively participate, will have diminished willingness to attend (Groshans et al., 2019; Onivehu&Ohawuiro, 2018), can be forced to snore as the presenter reads or can be bored since extensive words that are read out verbatim make slides dull and lifeless (Oulton, 2007), can face PowerPoint overload that compromise their limited cognitive resources (Uzun&Kilis, 2019), and there is no reason for

the audience not to read the information on the slides faster than the presenter (Mills, 2007; Oulton, 2007).

## **Conclusion and Recommendations**

The main objective of this study was to indicate the consequential challenges professionals face while designing PowerPoint presentations and how the tool is thus being misused for teaching. Based on the analysis, it is concluded that except for the font size and limited bullet usage in some of the slides, the slide-designing criteria, including the principles of segmenting and coherence, as suggested by scholars in the field, were all violated.

We all know that using PowerPoint slides is becoming our preferred way of teaching. Nevertheless, we are wrongly designing and misusing slides to the extent that there are presenters who show text-heavy slides on a screen while explaining them in Amharic, which is doubly bad. So we need to reassess and change the way we use the tool. Employing the tool does not necessarily result in deep learning, or even it can end up with shallow learning and poor quality education. Thus, although the extent of the problem can vary from individual to individual, higher education institutions, and other organizations for that matter, need to train their professionals on how presentation slides should be designed and presented. Similar training needs to be arranged for students as well since students are highly likely to repeat similar mistakes as they are exposed to model how their teachers are doing things.

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