# Slideshows as a Tool for Learning and Assessment: Pros and Cons as Perceived by Students

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https://doi.org/10.34190/ejel.23.2.3647



**Abstract:** In academic studies, some course assignments take the form of presentations. The art of presentation involves conveying messages and one of the methods is by delivering presentations, either face-to-face, synchronously, and/or asynchronously. Presentations require analyzing a topic, processing an article, analyzing ideas, dilemmas, lesson plans, etc. The current study examines the benefits and shortcomings of slideshow presentations as a means for learning and as an assessment tool, as perceived by students. The study included 66 respondents, undergraduate students in a department of education at an Israeli university. Slightly more than half were studying education, 24.2% were studying education and for a teacher diploma, and 24.2% were studying for a teacher diploma. The sample included 13 men, who constituted 20% of the entire sample, and 53 women who constituted 80% of the sample. The mean age was 28. The study combined qualitative and quantitative tools. From the research findings it is evident that the students perceive the benefits of slideshow presentations as improving learning capabilities, as well as enhancing learning and the student's personal development. Another benefit emerging from the findings is that students see presentations as a means not only for presenting their knowledge to the lecturer but rather also for conveying information to their peers. Namely, the presentation has meaning both on the academic level and on the collaborative level. This benefit is perceived by the students as very important in the current era, where the collaborative dimension is receiving extensive place and emphasis in processes of teaching, learning, and assessment, as well as constituting part of students' learning outcomes. Creating a supportive learning community that generates a social-academic climate and boosts one's sense of efficacy and resilience in an era of change is meaningful and will remain with them in their future jobs as well. Concerning the difficulties experienced by students, they noted that slideshow presentations give rise to stage fright, a finding that tops the list of human fears. At the same time, the students noted as benefit the fact that facing an audience is an important skill that should be mastered, where through use of presentations they can attempt to overcome their inner difficulties and develop. The research findings shed light on the use of slideshow presentations as a tool and as a means for supporting learning and assessment. These findings may contribute to improving students' learning processes and to assessing their scholastic and personal development. For this purpose, however, it is necessary to train students to experience the preparation of effective presentations and to present to an audience, as well as to develop a culture that entails a collaborative-learning climate suitable for an era of digital innovation. Delivering presentations and speaking to an audience are essential skills in the modern workplace. Students will find themselves in professional situations that require them to present information, usually via slideshows and by conveying messages to an audience of listeners or viewers. It is possible to learn how to present to an audience and to acquire presentation skills, and there are even ways of successfully dealing with fear and enhancing confidence in such situations. Good strategies and techniques will grant the necessary training and tools to prepare and deliver presentations in an efficient and relevant manner.

**Keywords**: Slideshows, Learning, Assessment, Students, Academia

## 1. Introduction

Many academic faculty members integrate slideshows in their lectures to improve the teaching process and increase participants' interest (Bar, 2010; Salant, 2022). Slideshows are the most common tool for delivering lectures by faculty members. Students have varied attitudes to slideshow presentations: they see lecturers' presentations as a type of summary of the study material, a summary of the main points raised in class, while some see them as a means of illustrating the topics studied – depending on the nature and structure of the presentation, how it is utilized by the lecturer, and the coordinated expectations between the lecturer and the students (Grieve et al., 2021).

Intensive use of presentations arouses criticism and leads to many questions, such as: Is the teaching and learning process more interesting and attractive when using presentations? Can presentations promote creative thinking, or do they limit the space for thought? Do digital presentations necessarily lead to superficial delivering of the material? Are the ideas indeed presented in full, considering the need to reduce, focus, discern the main points?



Cite this article: Davidovitch, N. and Wadmany, R. 2025. "Slideshows as a Tool for Learning and Assessment: Pros and Cons as Perceived by Students", *Electronic Journal of e-Learning*, 23(2), pp 30-45, https://doi.org/10.34190/ejel.23.2.3647

This study examines students' perceptions of presentations and slideshows concerning the benefits and shortcomings involved in use of this tool for processes of learning and assessment. The research questions include the following: Do presentations contribute significantly to students' learning process? What are the strengths and weaknesses of lecturers' use of presentations? Moreover, lecturers tend to assess students in their courses based on the work they do, how they portray this work using slideshows, and the presentation of their work. What do students think of this manner of assessment?

## 2. Literature Review

### 2.1 Using Slideshow Presentations in the Classroom

In slideshow presentations a presenter displays a certain topic to an audience. Over the years, the research literature has related to the benefits and shortcomings of slideshow presentations used as a tool for conveying information (Salant, 2022). Several benefits of slideshows as presentation tools can be mentioned (Hammer & Ankori, 2008; Bar, 2010):

**Potential benefits of integrating slideshows in class**

- **Enhancing the lecture's clarity:** Helping the user organize information systematically and clearly, using titles and subtitles.
- **Saving time:** Use of slideshows saves time for class management and allows the presentation of graphs, tables, and pictures (Hadiyanti & Widya, 2018).
- **Facilitating interest and curiosity**: Slideshows can change the nature of the lesson and create a richer language comprised of symbols that make it possible to vary how messages are conveyed (Osman et al., 2022).
- **Processing information**: Students are exposed to ideas that are clearly worded and formulated. They can copy the lesson plan and do not need to concentrate for long to process the information (Widhayanti & Abduh, 2021).
- **Presenting the lecturer's "road map"**: The slideshow can help lecturers remember the lecture's structure and manage the lesson.
- **Maintaining efficient class management**: Slideshows reduce lecturers' need to dictate the contents of the lesson.

Other studies indicate some **shortcomings of using slideshows as a presentation tool** (Kozminsky, Gad, & Baraki, 2000; Mercer, 1996, Fisk, 2019):

- **Compromised ability to concentrate in class**: When the lecturer focuses on the slideshow without introducing changes in class or without diversifying the teaching methods. Continuous use of slideshows throughout the entire lesson, even if they are well designed, diminishes listeners' ability to concentrate. At times, **excessive auditory and visual effects** overload the lecture; also, some lecturers make unnecessary use of bright colors and different fonts, though these do not serve the content of the lecture and only distract the students (Meishar-Tal, 2011; Salant, 2022).
- **Dictating the structure of the lesson**: pre-planned slideshows may limit the dynamic flow of the lesson following students' responses and restrict participants' space for thinking during the lesson. Moreover, lecturers who wish to display the "road map" of their lecture and to present the entire lesson plan at the beginning detract from students' inquisitiveness and interest in the lesson.
- **Deficient internalization of the study material:** Quite a few lecturers use slideshows inadequately. They read the text out loud without adding explanations and display overloaded slides that make it hard to understand the study material. Students are not required to try and organize the information in their own words. In contrast, in lessons with no slideshow they must listen to the lecturer and summarize the information. When students take notes during a lecture, this facilitates information processing. Their cognitive level must include comprehension and not only accumulating information or recalling. They formulate the ideas in their own words (Salant, 2022).
- **Presenting a partial picture:** Slideshows have a built-in failure; one of their constraints is the use of short messages or main points instead of thorough and expansive analysis of ideas, so much so that they form a superficial impression. Slideshows might compel users to rely on points to present contents, whereby ideas are shortened into mere titles. As a result, students are exposed to a partial and distorted result. Notably, some lecturers have "liberated themselves from the shackles of the slideshow"; they present a single slide and talk about it for a lengthy time. Hence, the slideshow might

radically reduce the presentation of data. On the other hand, an overloaded slideshow has the effect of overburdening the students (Meishar-Tal, 2011).

- **Lack of contact with students:** Lecturers who maintain lengthy eye contact with the computer screen may reduce their eye contact with the students.

In a meta-analysis of 40 studies, Christof Wecker (2013) found that slideshows result in superficial learning processes and that they serve more as an aid for lecturers than for students. In his view, good lecturers are those who ask questions and arouse interest and not necessarily those who utilize slideshows. The spoken word is much more effective than a visual slideshow and students' tendency to concentrate on visual means may detract from the cognitive deciphering of the written word. Research findings show that fascinating lessons are not associated automatically with slideshows but rather with how lecturers activate the students – and this has many possible avenues, including how slideshows are utilized (Salant, 2022).

Most studies conducted to date on slideshows have disregarded the association between students' cognitive style, slideshows, and the learning process (Margaret, 2015). Studies show that to enhance the connection between students' cognitive style, slideshows, and the learning process it is necessary to strengthen the pedagogical aspects of the slideshow and focus on visual elements. In most cases, the lecturers are those who plan and prepare the slideshow, while also receiving a more thorough grasp of the study material (Salant, 2022). One recommendation is to change direction and allow the students themselves to plan and prepare the slideshows, such that they will be more deeply acquainted with the study subject or research subject. Recently, we are discovering that lecturers are utilizing this constructivist approach and charging their students with preparing and presenting collaborative slideshows (Meishar-Tal, 2011; Kozminsky, 2000; Margaret, 2015).

In addition to the studies already reviewed regarding the benefits and drawbacks of slideshows as a presentation tool, recent research highlights the importance of effective presentation techniques that enhance both learning outcomes and students' presentation skills. This is particularly relevant as presentations have become a common learning and assessment tool in higher education. Moreno and Mayer (2007) conducted a large-scale quantitative study examining the effectiveness of multimedia presentations that combined short texts, images, and animations, compared to text-only presentations. Their findings demonstrated that students who were exposed to multimedia-enriched presentations achieved significantly better comprehension and retention than those who experienced traditional text-based lectures. Grieve (2021) quantitatively assessed the impact of body language, varied intonation, and eye contact on audience engagement during academic presentations. This study surveyed over 200 presentations at academic conferences and revealed a strong positive correlation between effective delivery techniques and audience attention and involvement.

Lee, Kang and Park (2023) conducted an experimental study to evaluate the effect of incorporating personal storytelling into academic presentations. Their results indicated that storytelling enhanced both students' emotional engagement and their ability to recall information, suggesting that narrative techniques foster deeper cognitive and emotional processing.

Gallo (2014) conducted a qualitative study based on in-depth interviews with leading academic lecturers, exploring their preferred presentation techniques. The analysis showed that techniques such as opening with a personal anecdote, using light humor, and actively engaging the audience through dialogue were identified as particularly effective for maintaining attention and fostering interaction. Carmine (2018) carried out qualitative content analysis on 50 highly successful TED talks, identifying patterns of presentation techniques that contributed to their success. Key findings highlighted the consistent use of powerful visuals, memorable soundbites, and emotional appeals as core strategies for impactful communication. Jones and Sheppard (2016) conducted an ethnographic study within communication courses at the university level, examining how students develop presentation skills. They found that the most effective learning occurred through repeated simulations, peer feedback, and reflective learning, underscoring the importance of iterative practice and collaborative learning environments.

Taken together, these studies emphasize that successful academic presentations require more than well-designed slides; they depend on the presenter's ability to use their voice, body language, narrative structure, and audience interaction effectively. This reinforces the argument that preparing students for high-quality presentations requires training in both content development and delivery techniques, supported by clear guidelines and constructive feedback throughout the learning process.

 

### 2.2 Slideshows and Presentations as Assessment Tools

In recent years, an era when lecturers are required to teach using new technological tools, an era of artificial intelligence (AI), an era of teaching and learning in situations of uncertainty and change such as Covid-19 – slideshows created by students are becoming a tool for assessing their performance in the course. Different approaches to assessment discern between summative and formative assessment. The traditional, prevalent type of assessment is based on quantitative elements, where the object assessed is usually the product (Jacobson & Spiro, 1995). This type of assessment is carried out at the end of a unit/chapter and constitutes an endpoint for receiving information on the student's achievements or for reaching judgments and decisions concerning students' placement in a class/group. In contrast, formative assessment relates both to the learning process and to the learning products and is carried out at all learning stages; it is intended to provide the teacher and students with feedback on progress in the study material and on specific difficulties. Formative assessment is usually descriptive, detailed, and makes it possible to address non-quantifiable aspects such as originality, spontaneity, creativity, teamwork, and intensive analysis (Meishar-Tal, 2011).

Research findings show that students of education ascribe a great deal of significance to producing slideshows for purposes of learning and some prefer to produce a slideshow over writing a final paper (Meishar-Tal, 2011; Kozminsky, 2000; Margaret, 2015). These studies contend that exams are usually given once or twice a semester, while when producing a slideshow, the assessment is procedural, collaborative, and occurs several times: self-evaluation, peer evaluation, evaluation by the teacher, and others. It is possible to participate, update, explain, persuade.

The study performed by Meishar-Tal (2011) shows that most of the potential criteria and unique features noted were found significant by different groups of learners. Nonetheless, the criteria of reflectivity and the criteria of the conscious significance of the learning discourse have been emphasized relatively less than other potential criteria. Regular classes take exams once or twice a semester, while when producing a slideshow, the assessment is procedural, collaborative, and occurs several times: as self-evaluation, peer evaluation, evaluation by the teacher, and others. But it is possible to participate, explain, convince.

The research findings show that reservations have been voiced regarding including students in determining the assessment, for the following reasons: assessment that is mostly summative and is manifested in a grade is perceived by students as formal, comparative, sometimes threatening, and therefore it is important that it be carried out by the teachers. The teachers see it as part of their job, a product of their accumulated experience, and part of their professional authority. Teachers have the competence and experience to award a final grade.

Some have noted that a learning process that includes producing a slideshow involves different assessment methods than those customary in traditional classes. The process is important, and it suits experienced teachers.

**In the modern era the use of slideshows as a presentation tool has become routine.** Presentation is an important acquired skill that improves with practice. Well-made slideshows allow good portraying of information, arousing thought, moving, convincing, and even mobilizing the viewers to action. Salant (2022) relates to ways of integrating slideshows in teaching, learning, and assessment, and recommends accompanying slideshow presentations with portfolios. In the portfolio students document each stage of their work process, and at the end of the assignment both the portfolio and the presentation are assessed.

Lecturers who use this method of assessment perceive presentation as an acquired skill that improves with practice, and it is part of developing collaborative assessment. Some see assessment as a continuous multi-phase dialogue that involves continuous interaction between the teacher and students and among the students themselves. This discussion is at the heart of the constructivist approach to learning as a social process. Alternative assessment (particularly via digital portfolios or performance-based assessment) makes it possible to relate to students' capabilities as manifested in their products (Tannenbaum, 1996). The current study examines the benefits and shortcomings of slideshow presentations as a means of learning and an assessment tool, as perceived by students. The research questions include the following: Does the presentation contribute significantly to students' learning process? What are the strengths and weaknesses of lecturers' use of presentations? Considering that lecturers tend to assess students in their courses based on the work they do, how they portray this work using slideshows, and the presentation of their work, what do students think of this manner of assessment?

## 3. Research Findings

### 3.1 Quantitative Analyses

The study consisted of 66 respondents, undergraduate students at the Department of Education in Ariel University in Israel. Slightly more than half were studying education, 24.2% were studying both education and for a teacher diploma, and 24.2% were studying for a teacher diploma. The sample included 13 men who constituted 19.7% of the entire sample, and 53 women who constituted more than half the sample. The mean age was 28, with a standard deviation of about 9 years. Most of the respondents were single and a small proportion were divorced. The reliability of measures for assessing the quality of teaching using presentations as an assessment tool. See Table 1.

**Table 1: Reliability of measures for assessing the quality of teaching using presentations as an assessment tool**

| Assessment measures | Scale reliability (Cronbach's alpha) |
|---|---|
| Improving study capabilities | α = 0.93 |
| Comfort | α = 0.74 |
| Lecturer availability | α = 0.78 |
| Improving teaching-interest | α = 0.88 |
| Improving teaching-order and organization | α = 0.81 |
| Improving teaching-clarity | α = 0.79 |
| Innovation, creativity | α = 0.85 |
| Personal preference (for presentations) | α = 0.91 |
| Interpersonal interaction | α = 0.77 |

Measures for assessing the quality of teaching using presentations as an assessment tool were ranked on a Likert scale from 1 to 5, where a higher score indicates high assessment of the quality of teaching. Table 2 summarizes the means of measures for assessing the quality of teaching using presentations for the research participants.

**Table 2: Means and standard deviations of measures for assessing the quality of teaching using presentations (N=66)**

| | | |
|---|---|---|
| **Improving study capabilities:** | Mean | 3.24 |
| | Standard deviation | 1 |
| | Minimum | 1 |
| | Maximum | 4.87 |
| **Comfort:** | Mean | 3.17 |
| | Standard deviation | 0.90 |
| | Minimum | 1 |
| | Maximum | 4.67 |
| **Lecturer availability:** | Mean | 2.70 |
| | Standard deviation | 0.98 |
| | Minimum | 1 |
| | Maximum | 5 |
| **Improving teaching - interest:** | Mean | 3.40 |
| | Standard deviation | 1.09 |
| | Minimum | 1 |
| | Maximum | 5 |
| **Improving teaching - order and organization:** | Mean | 3.17 |
| | Standard deviation | 1.15 |
| | Minimum | 1 |

 

| | | |
|---|---|---|
| | Maximum | 5 |
| **Improving teaching - clarity:** | Mean | 3.28 |
| | Standard deviation | 1.22 |
| | Minimum | 1 |
| | Maximum | 5 |
| **Innovation, creativity:** | Mean | 3.33 |
| | Standard deviation | 1.25 |
| | Minimum | 1 |
| | Maximum | 5 |
| **Personal preference (for presentations):** | Mean | 3.34 |
| | Standard deviation | 1.15 |
| | Minimum | 1 |
| | Maximum | 5 |
| **Interpersonal interaction:** | Mean | 2.99 |
| | Standard deviation | 0.86 |
| | Minimum | 1 |
| | Maximum | 4.71 |

The assessment measure with the highest mean, according to the data, was "improving interest in teaching", with a mean of 3.40, followed by the measure of creativity, with a mean of 3.33. Preference for presentations as an assessment tool was also found to have a relatively high mean, at 3.34.

**The association between self-evaluation variables, demographic variables, and variables concerning the efficacy of teaching using presentations as an assessment tool**

To explore the association between variables related to self-evaluation of academic achievements, demographic variables, and variables concerning the efficacy of teaching using presentations as an assessment tool, a Pearson test was conducted. Table 3 presents a summary of the findings.

**Table 3: Pearson correlation between demographic variables, self-evaluation, and variables concerning the efficacy of teaching using presentations**

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | Age | -- | | | | | | | | | | | | | | |
| **2** | Gender female | -.168 | -- | | | | | | | | | | | | | |
| **3** | Grade average | **.337**$^{**}$ | .087 | -- | | | | | | | | | | | | |
| **4** | Self-evaluation as student | .210 | .129 | **.663**$^{**}$ | -- | | | | | | | | | | | |
| **5** | Preference for face-to-face courses | .236 | **-.287**$^{*}$ | .276$^{*}$ | **.252**$^{*}$ | -- | | | | | | | | | | |
| **6** | Preference for online courses | -.028 | -.057 | -.063 | **-.257**$^{*}$ | -.167 | -- | | | | | | | | | |
| **7** | Preference for hybrid courses | -.101 | -.125 | .032 | .007 | .207 | .539$^{**}$ | -- | | | | | | | | |
| **8** | Improving study capabilities | .178 | -.110 | **.385**$^{**}$ | **.316**$^{**}$ | .681$^{**}$ | .063 | .331$^{**}$ | -- | | | | | | | |
| **9** | Comfort with face-to-face presentations | .189 | -.184 | **.457**$^{**}$ | **.484**$^{**}$ | .704$^{**}$ | -.393$^{**}$ | -.026 | .602$^{**}$ | -- | | | | | | |
| **10** | Lecturer availability | .143 | **-.270**$^{*}$ | .113 | .150 | .345$^{**}$ | -.031 | .169 | .487$^{**}$ | .349$^{**}$ | -- | | | | | |
| **11** | Improving teaching-interest | .236 | -.197 | **.321**$^{**}$ | **.311**$^{*}$ | .640$^{**}$ | .066 | .362$^{**}$ | .876$^{**}$ | .524$^{**}$ | .466$^{**}$ | -- | | | | |

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **12** | Improving teaching-order and organization | **.287*** | -.094 | **.334**** | .200 | .524** | .165 | .362** | .706** | .446** | .474** | .748** | -- | | | |
| **13** | Improving teaching-clarity | .187 | .036 | **.331**** | **.276*** | .519** | .038 | .255* | .870** | .463** | .332** | .788** | .682** | -- | | |
| **14** | Innovation/creativity | .160 | -.005 | **.269*** | .269* | .510** | -.029 | .284* | .808** | .541** | .443** | .754** | .703** | .750** | -- | |
| **15** | Personal preference for presentations | .173 | -.066 | **.333**** | **.326**** | .685** | .067 | .355** | .900** | .624** | .393** | .869** | .712** | .815** | .773** | -- |
| **16** | Interpersonal interaction | .213 | -.020 | **.273*** | .237 | .577** | .073 | .346** | .868** | .475** | .592** | .775** | .678** | .750** | .749** | .755** |

***Correlation is significant at the 0.05 level (2-tailed); ****Correlation is significant at the 0.01 level (2-tailed).**

According to the findings, a strong positive association is evident between the student's self-evaluation of his or her achievements and their sense of comfort with face-to-face presentations in class. A positive association with medium power was also found between the perception of presentations as improving study capabilities and reporting a high average grade in the course. Other positive associations, although with lower power, were found between the student's self-evaluation of themselves and their achievements and the perception of presentations as contributing to interest, order and organization, clarity of the material, and improving interpersonal interactions in the course. A weak negative association was found between gender-female and preference for face-to-face courses, as well as lecturer availability. A weak negative association was also found between self-evaluation of the student's achievements and preference for presentations in online courses.

**The association between attendance levels in courses where students delivered presentations and variables comprising the efficacy of teaching using presentations as an assessment tool**

To explore the association between the level of attendance in courses where students gave presentations and variables comprising the efficacy of teaching, a Pearson test was conducted. Table 4 presents a summary of the correlation's measures.

**Table 4: Pearson correlations between level of attendance in presentation classes and variables comprising the efficacy of teaching using presentations**

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | Low attendance | -- | | | | | | | | | | |
| **2** | Moderate attendance | -.252* | -- | | | | | | | | | |
| **3** | High to very high attendance | -.377** | -.801** | -- | | | | | | | | |
| **4** | Improved study capabilities | **-.276*** | -.103 | **.269*** | -- | | | | | | | |
| **5** | Comfort with face-to-face presentations | **-.259*** | **-.258*** | **.407**** | .602** | -- | | | | | | |
| **6** | Lecturer availability | -.013 | -.147 | .148 | .487** | .349** | -- | | | | | |
| **7** | Improved teaching-interest | -.158 | -.119 | .212 | .876** | .524** | .466** | -- | | | | |
| **8** | Improved teaching-order and organization | -.065 | -.236 | **.266*** | .706** | .446** | .474** | .748** | -- | | | |
| **9** | Improved teaching-clarity | **-.325**** | -.144 | **.338**** | .870** | .463** | .332** | .788** | .682** | -- | | |
| **10** | Innovation/creativity | **-.251*** | -.030 | .184 | .808** | .541** | .443** | .754** | .703** | .750** | -- | |
| **11** | Personal preference for presentations | **-.251*** | -.112 | **.262*** | .900** | .624** | .393** | .869** | .712** | .815** | .773** | -- |
| **12** | Interpersonal interaction | -.209 | -.085 | .210 | .868** | .475** | .592** | .775** | .678** | .750** | .749** | .755** |

*Correlation is significant at the 0.05 level (2-tailed); **Correlation is significant at the 0.01 level (2-tailed).

The findings indicate a significant positive association between high to very high attendance of classes and comfort with face-to-face presentations. A positive association was also found between high attendance and the perception of presentations as contributing to clear understanding of the study material. Other positive associations, although with weak power, were found between high attendance of classes and improved study

 

capabilities, order and organization, and personal preference for presentations as an assessment tool in the course. In contrast, students who reported low and/or moderate attendance of presentation classes were found to have a negative association with the measures of teaching efficacy: improving study capabilities, comfort with face-to-face presentations, improved teaching-clarity, innovation/creativity, and personal preference for presentations. The strongest negative association was found between low attendance and the perception of presentations as improving clear understanding of the study material. In general, the findings show that high to very high attendance indicates high values in measures of the efficacy of teaching using presentations, while low to moderate attendance indicates low values for the measures of teaching efficacy.

**The association between level of experience with using presentations, types of tools used when giving presentations, and variables comprising the efficacy of teaching using presentations as an assessment tool**

To explore the association between students' level of experience with giving presentations (number of times the student gave a presentation to a class), the types of tools used by students in presentations (videoclips, animation, pictures, links to information sources, interviews), and variables comprising the efficacy of teaching using presentations as an assessment tool, a Pearson test was conducted. Table 5 presents a summary of the correlation's measures.

**Table 5: Pearson correlation between experience with giving presentations, types of tools used for presentations, and variables comprising the efficacy of teaching via presentations**

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Number of presentations | -- | | | | | | | | | | | | | | |
| 2 | Use of texts | -.109 | -- | | | | | | | | | | | | | |
| 3 | Use of videoclips | .224 | -.028 | -- | | | | | | | | | | | | |
| 4 | Use of animation | .167 | -.183 | .232 | -- | | | | | | | | | | | |
| 5 | Use of pictures | **.319**** | .072 | .406** | .249* | -- | | | | | | | | | | |
| 6 | Use of links to information sources | **.319**** | .190 | .342** | .168 | .422** | -- | | | | | | | | | |
| 7 | Use of interviews | .062 | -.036 | .312* | .120 | -.048 | .107 | -- | | | | | | | | |
| 8 | Improved study capabilities | .026 | -.006 | .163 | .183 | .025 | .001 | .154 | -- | | | | | | | |
| 9 | Comfort with face-to-face presentations | .066 | -.195 | -.040 | .164 | .016 | -.157 | -.079 | .602** | -- | | | | | | |
| 10 | Lecturer availability | -.022 | .148 | .199 | .028 | .075 | .135 | -.030 | .487** | .349** | -- | | | | | |
| 11 | Improved teaching-interest | .035 | -.036 | .117 | .241 | -.017 | .069 | .018 | .876** | .524** | .466** | -- | | | | |
| 12 | Improved teaching-order and organization | .013 | -.069 | .132 | .160 | -.010 | .044 | .002 | .706** | .446** | .474** | .748** | -- | | | |
| 13 | Improved teaching-clarity | .115 | -.063 | **.273*** | **.250*** | .182 | .068 | .123 | .870** | .463** | .332** | .788** | .682** | -- | | |
| 14 | Innovation/creativity | .173 | .012 | **.285*** | **.291*** | .242 | **.259*** | .059 | .808** | .541** | .443** | .754** | .703** | .750** | -- | |
| 15 | Personal preference for presentations | .134 | -.087 | .134 | **.308*** | .101 | .084 | .107 | .900** | .624** | .393** | .869** | .712** | .815** | .773** | -- |
| 16 | Interpersonal interaction | .016 | -.005 | **.246*** | .205 | .074 | -.016 | .145 | .868** | .475** | .592** | .775** | .678** | .750** | .749** | .755** |

*Correlation is significant at the 0.05 level (2-tailed); **Correlation is significant at the 0.01 level (2-tailed).

According to the findings, a moderate positive association was found between experience with using presentations and use of pictures and links to information sources in the presentation, a moderate positive association between use of animation in presentations and personal preference for presentations. Other positive associations, albeit with low power, were found between use of video clips and use of animation, and the perception of presentations as improving teaching clarity and as improving innovation and creativity in teaching. Another positive association with weak power was found between the use of videoclips in presentations and perceiving the presentation as improving interpersonal interaction.

### 3.2 Open-Ended Questions

Following the quantitative analysis, the participants were asked to answer seven open-ended questions. In the first question the participants were asked to describe in their own words "What are the benefits of the assignment you presented by means of a slideshow?". All the students (100%) answered this question, where the large majority gave positive feedback on the presentation as an assessment tool. Only about 11% noted that there is no benefit to presenting using a slideshow, with no further details.

Approximately 36% of the participants noted that the presentation improves their study capabilities. For example, a student noted that through the presentation he managed to reach a more thorough understanding of the material and to better remember the study material: *"You study the topic better from all kinds of directions that are convenient for you in order to pass it on and this causes you to better remember the topic studied".* Other students noted that both the process of preparing the slideshow, and its presentation gave them a more thorough understanding of the study material. For instance: *"Increased knowledge of the topic", "I experienced the material actively, meaning that I created a slideshow and was able to present it, such that the knowledge became clearer".* About 35% of the students also noted that the presentation contributed to deeper learning, which led to a more thorough and clear grasp of the material: *"Deep and meaningful learning of the material", "allows a clearer grasp of the material studied and makes it possible to bring creative ways of conveying the knowledge "*, and also learning while experiencing: *"learning the material while exploring and experiencing and not by rote".*

Other students noted that beyond the more meaningful learning, the presentation helped them improve technical capabilities such as facing an audience and strengthened their self-confidence: *"overcoming concerns and reinforcing self-confidence", "carrying out the assignment requires handling the class, and this is beyond preparation of the slideshow".* The presentation, according to the participants, also contributed to their creativity and innovation: *"The possibility of improvising, using diverse means, answering questions that direct you to other places you did not address", "realizing creativity".*

About 20% of the participants noted that the interaction with the lecturer and their peers through the presentation was a positive component of the learning process, for example an improvement as part of the discourse between the presenters and the students and lecturer during the presentation: *"Forming eye contact with the lecturer, the possibility of explaining yourself immediately if something is unclear", , "that the lecturer heard me and didn't only read what I had written. She managed to understand me more clearly and precisely. As one who writes slowly and has attention disabilities, it was easier and better for me to speak than to write or consider what answer to opt for", "collaborative work in a group, oral expression skills".*

Other students reported additional benefits of giving presentations for understanding the study material, such as interest, order and organization, proving capabilities, etc. (Table 6).

**Table 6: Analyzing themes - first question (n=66)**

| Themes | % | n |
|---|---|---|
| Improving learning capabilities | 39 | 25 |
| Improving learning capabilities-clarity | 35 | 23 |
| Improving learning capabilities-self-expression | 33.3 | 22 |
| Interaction with lecturers and students | 20 | 13 |
| Improving self-confidence | 15.2 | 10 |
| Proving capabilities | 13.6 | 9 |
| Improving learning capabilities-creativity | 13.6 | 9 |
| Active learning based on experiencing | 13.6 | 9 |
| Improving learning capabilities-innovation | 7.6 | 5 |
| Additional improvements (saving time, comfort, order and organization, interest) | 16.5 | 11 |
| No benefits | 10.6 | 7 |

It is evident from the analysis that presentations as a method of assessment and as part of the learning process generate many significant benefits for students. Presentations contribute to more thorough understanding of the study material, better retention, and deeper and more meaningful learning. In addition, presentations help

 

develop important skills such as facing an audience, self-confidence, creativity, and innovation. Hence, students who saw a significant benefit to use of presentations as part of the teaching and assessment process perceived it as potentially enriching their learning experience and leading to better learning outcomes.

In the second question, students were asked to describe the difficulties they encountered when preparing the slideshow or presenting it. All participants but one answered this question (98.5%). The most conspicuous theme was the concern and difficulty involved in facing an audience while making the presentation, both technically and emotionally. On the emotional dimension, for instance, respondents reported low self-confidence: "concern of being judged by other people, concern of a blackout, trembling voice during the presentation, fast respiration that makes it hard to breathe", "a concern of standing and talking before the class". Students also indicated concerns regarding their ability to express themselves concisely while facing an audience for a set time "Difficulty summarizing the text in the slideshow and remembering where to expand. Also, it was very difficult to face an audience of students and talk to them", "…the only difficulty was giving the presentation in a very short time span and summarizing everything. I felt that I didn't really manage to convey everything I had wished".

A considerable portion of the respondents noted a difficulty with condensing and clarifying the material also while preparing the slideshow, namely, a difficulty distinguishing between the significant and the insignificant and with proper presentation of the main points: "fine-tuning the text in the slides", "when preparing the presentation, I battled with the complexity of encompassing the wide topic and conveying the precise message in a limited time span". Also reported were difficulties with oral expression: "difficulty learning to present things by rote", "knowing what to say beyond what is written", as well as keeping to the schedule: "with the amount of knowledge that has to be included in the few minutes of the presentation".

Other difficulties noted, regarding the process of preparing the presentation, were lack of technological knowledge on preparing slideshows: "a few technological problems with preparing the slideshow". Students also reported difficulties involving lack of proficiency in the study material: "Analyzing and understanding the material accurately requires lots of energy", unclear instructions for the assignment: "misunderstanding the instructions", as well as lack of accompaniment and support by the lecturer: "that there is no focused guidance by the lecturers on how to perform assignments", "collaboration with peers; lack of time by the lecturer". Also, assessment that does not reflect one's performance: "stage fright and the feeling that the grade usually does not reflect the [actual] presentation".

In summary, the analysis shows that the major challenges of students with preparing a slideshow and presenting it stem from concerns and difficulties with facing an audience, trouble condensing and summing up the material, difficulties with oral expression and keeping to a schedule, and also a dearth of technological knowledge, lack of proficiency in the study material, unclear instructions for the assignment, and an absence of sufficient accompaniment and support by the lecturers (Table 7).

**Table 7: Analysis of themes - second question (n=65)**

| Themes | % | n |
|---|---|---|
| Difficulties with giving a presentation to an audience | 38 | 25 |
| Difficulty pinpointing and condensing the material | 19.7 | 13 |
| Difficulties with free speech and retaining in memory | 12.1 | 8 |
| Difficulties with expression – conveying messages | 12.1 | 8 |
| Technological difficulties | 10.6 | 7 |
| Lack of proficiency in preparing a slideshow | 9.1 | 6 |
| Lack of time | 7.6 | 5 |
| Difficulties with teamwork while preparing the slideshow | 7.6 | 5 |
| Concern of being assessed | 6.1 | 4 |
| Lack of self-confidence | 6.1 | 4 |
| Difficulties with the lecturer | 6.1 | 4 |
| Misunderstanding the instructions | 6.1 | 4 |
| Lack of proficiency in the study material | 6.1 | 4 |
| No difficulties | 12.1 | 8 |

In the third question, the students were asked: "Did you feel empowered by giving the presentation?". All participants but one answered the question (98.5%). The large majority gave short answers of yes (45.5%), no (39.4%), or partially (9.1%), with no additional details. A small proportion of the respondents (4.5%) reported a sense of relief immediately upon concluding the presentation (Table 8).

**Table 8: Analysis of themes - third question (n=65)**

| Themes | % | n |
|---|---|---|
| Yes | 45.5 | 30 |
| No | 39.4 | 26 |
| Sense of relief upon concluding the presentation | 9.1 | 6 |

In the fourth question, the students were asked: "Did you feel that your ability to convey messages to the group of learners was empowered by use of a presentation?". All participants but one answered the question (98.5%). Slightly more than half the respondents answered "yes" (51.5%), with no further details, and 38.9% answered "no" with no further details. Approximately 15% of the respondents also reported other positive sensations after giving the presentation, such as satisfaction with their self-expression capabilities. *"It was more that I was able to express my understanding and present it as I wished, rather than empowerment,* as well as sensations of enjoyment, capability, and confidence. *"Yes, the presentations gave me a sense of confidence and strengthened my capabilities. In addition, there were several courses where I enjoyed giving the presentations and experiencing an array of fields" (*Table 9).

**Table 9: Analyzing themes - fourth question (n=65)**

| Themes | % | n |
|---|---|---|
| Yes | 51.5 | 34 |
| No | 37.9 | 25 |
| Positive feelings after concluding the presentation | 15.2 | 10 |

In the fifth question, the students were asked to express their opinion about ways of improving the preparation and presentation of the slideshow: "What do you think should be done to improve the preparations for planning and presenting the slideshow?". Sixty-four of the 66 respondents answered this question (approximately 97%). As evident from their replies, some 38% of the respondents contend that clearer and more focused instructions should be emphasized: *"clearer instructions regarding the amount of text"*, as well as practical guidance by the lecturer concerning the material: *"giving detailed instructions on how to prepare it", "meeting with the lecturer before"*, or giving examples: *"giving more detailed explanations with prepared examples".*

Approximately 24% of the respondents noted that it is necessary to add workshops on general topics related to providing tools for proper presentation: *"Perhaps in class to give more preparation and tools for how to do it right and how to build a slideshow and not only instructions on the assignment itself",* , giving tips for facing an audience: *"teaching tips for facing an audience…", "dividing between relevant and irrelevant content. It is necessary to develop skills of conveying messages"*, and workshops for strengthening the student's self-confidence: *"work on self-confidence, body language…", "imparting tools that will help acquire self-confidence and deliver the presentation optimally",*

About 26% of the respondents aimed their criticism/suggestions not necessarily at the system but rather inwards, emphasizing the steps that they themselves should take to improve their personal capacity to give a presentation. For instance, practicing before the presentation: *"Preparing and practicing face-to-face before giving the presentation on Zoom in the course"*, preparing before writing the slideshow: *"to first read lots of information"*, good planning and emphases: *"write down what you want to say, prepare a good slideshow, rehearse before giving the presentation, and prepare everything in advance and not at the last moment In addition, preparing a slideshow that will connect the audience to the topic, pictures and less text in the slideshow".*

Students also noted the need for direction and guidance to improve technical skills of using aids and tools for preparing a slideshow, as well as general knowledge of preparation, planning, and presentation: *"showing how to build a good presentation on a university level and more thorough guidance on the topic", "better learning of the capabilities of new media tools", , "improving the ability to present, plan time, and choose the presentation method".* A small proportion of the respondents suggested adaptations of the presentation environment as a

 

tool for improving capabilities of presenting slideshows, namely, reducing the number of viewers while presenting the slideshow: *"that the presentation will be only to the lecturer", "small groups of students to whom the presentation is given, so that it will be less stressful"*. A small proportion noted that presentations should be avoided altogether: *"not give presentations, but rather exams", "cancel the presentations" (*Table 10).

**Table 10: Analysis of themes - fifth question (n=64)**

| Themes | % | n |
|---|---|---|
| Focused instructions and guidance by the lecturer | 37.9 | 25 |
| Self-criticism (ways of self-improvement) | 25.8 | 17 |
| Workshops on rules | 24.2 | 16 |
| Workshops to improve technological capabilities | 13.6 | 9 |
| Cancelling presentations | 7.6 | 5 |
| Adapting the presentation environment | 4.5 | 3 |
| Giving examples of presentations | 4.5 | 3 |
| Evaluation of presentation/ preparation time | 4.5 | 3 |

It is evident from the analysis that the participants contend that clear guidance by the lecturers, imparting relevant tools and skills, encouraging awareness and personal responsibility among students, improving the technical aspects, and adapting the presentation environment, can contribute significantly to improving the process of preparing and presenting slideshows and to increasing their success with the assignment.

In the sixth question, the students were asked to express their satisfaction with the use of presentations as an assessment tool: "Are you satisfied with the use of presentations as an assessment tool in the course?". Sixty-five of the 66 participants answered the question (98.5%). More than half the respondents (approximately 59%) answered that they are satisfied. About 8% noted that the presentation helps reach deeper learning of the material: *"Yes, it makes it possible to investigate the topic presented in depth…" "…You learn a million times more from an assignment than from a course…"* and express their proficiency in the material: *"Yes, an exam does not check the material, an assignment does", "Yes, it allowed me to present what I understand and to convey it to the lecturer and students"*. Students who expressed satisfaction also noted that the presentation contributed to developing creative thinking and interest: *"Yes, it allows you to investigate the topic presented in depth and to share it with others in an interesting way",* as well as the ability to overcome difficulties: *"Yes, I think that it's a tool that teaches how to confront a stressful situation".*

Approximately 27% of the respondents expressed dissatisfaction with the use of presentations as an assessment tool; 12% reported that the assignment had caused them emotional difficulties such as pressure: *"No, in my opinion presentations cause unnecessary stress and don't really help you understand the material"* and harm to their self-confidence: *"Sort of. On the one hand you learn a million times more from an assignment than from a course. On the other, for those who have social anxiety it reduces their confidence"*. A small proportion of the students who expressed dissatisfaction complained that the presentation is unsatisfactory due to the imbalance between its contribution to their achievements in the course and the efforts put into preparing and presenting the slideshow: *"…and not when in practice it adds a point or two to the final grade although much work is put into it"* as well as its contribution to understanding the study material: *"No, in my opinion presentations cause unnecessary stress and don't really help you understand the material".*

Approximately 12% of the students expressed partial satisfaction with presentations as an assessment tool. Some contended that the assignment should be combined with a final paper *"It depends, if it's combined with a final paper…"* or offered as an elective, as an alternative assessment tool: *"It's nice as an elective. Some people find it hard to speak to an audience and would prefer not to give a presentation…"* (Table 11).

**Table 11: Analysis of themes - sixth question (n=65)**

| Themes | % | n |
|---|---|---|
| Yes | 59.1 | 39 |
| No | 28.8 | 19 |
| Partially | 12.1 | 8 |
| Improving capabilities (creativity and handling difficulties) | 9.1 | 6 |

| Themes | % | n |
|---|---|---|
| **Improves proficiency in the material** | 7.6 | 5 |
| **Allow self-expression** | 6.1 | 4 |
| **Allows conveying a message** | 6.1 | 4 |
| **Emotional difficulties** | 4.5 | 3 |
| **Unsatisfactory** | 4.5 | 3 |

From the analysis shown it appears that most of the students expressed satisfaction with use of presentations as an assessment tool in the course. The students noted several benefits of using presentations, including more thorough learning of the material, the possibility of showing proficiency in the study material, developing creative thinking and interest, and the ability to overcome difficulties such as facing an audience.

At the same time, slightly less than one third of the respondents expressed dissatisfaction with the use of presentations. The reasons included causing emotional difficulties such as stress and harm to one's self-confidence, the feeling that the assignment does not contribute enough to the final grade considering the necessary efforts and also doubts regarding its contribution to understanding the study material. A relatively small proportion expressed partial satisfaction and suggested combining the presentation with other assignments or offering it as one of several choices. In summary, although most of the students saw presentations as a beneficial assessment tool that contributes to learning and to personal development, some pointed to their challenges and shortcomings.

In the seventh question, the participants were asked to state their opinion about the possibility of utilizing the presentation assignment as an exclusive assessment tool: "Would you prefer the presentation to be the exclusive assessment tool in the course? Explain…". All participants but one answered the question. The aggregated answers indicate that a large majority of the respondents, about 65%, were not in favor. Of these, some 32% claimed that the presentation assignment does not sufficiently reflect all aspects necessary for evaluating the student, as evident from the direct quotations: *"No, because giving a presentation still does not say anything clear about the student".* Others added that presentations as an assessment tool do not reflect their capabilities: *"No. Because I'm sure that there are many other students like me who find it less comfortable to speak to an audience or who cannot do it at all, so I think that presentations should not be an exclusive assessment tool in the course", "No, because sometimes there are students who find presentations difficult and who do not have the ability to prepare a presentation that meets the lecturer's requirements".*

Approximately 18% of the respondents expressed a preference for combining presentations as assessment tools with other tools such as writing a paper or an exam: *"No, because I think that there is also need for a more theoretical detailed paper that is the basis for the shortened presentation".*

A similar proportion noted that presentations as an assessment tool might discriminate against students who find it hard to stand before an audience. *"No. Because I'm sure that there are many other students like me who find it less comfortable to speak to an audience or who cannot do it at all, so I think that presentations should not be an exclusive assessment tool in the course".*

Another claim that arose from the participants' answers is that presentations are not suitable as exclusive assessment tools for various reasons, such as lack of comprehensibility, *"No, it doesn't allow you to display everything"*, lack of contribution to understanding the material: *"No, in my opinion it is a terrible assessment tool, the course material is not truly internalized"*, limited time restrictions: *"No, because a presentation is 10 minutes at most and it is not possible to assess an entire semester based only on a presentation"*, and lack of clarity regarding assessment criteria: *"I need to know more details to answer that question. What exactly would they assess…"*

Other students expressed reserved consent with the exclusive use of presentations as an assessment tool, depending on the type of course: *, "It depends on the course and the number of students"* and of the presentation duration: *"Yes, if there is enough time", "I would be very glad, but I think that there is a problem with the time, because when I give presentations the time is usually limited to 10 minutes and that is not really sufficient to convey the knowledge acquired".* Only about 17% of all respondents expressed consent with using presentations as an exclusive assessment tool, in the claim that it helps and improves the learning experience through experiencing. *"Yes… in my opinion it's the best way for students to show what they are learning and also to*

 

*convey their views", "Yes, it imparts experience with an audience and learning the study material by processing and not by revision"* (Table 12).

**Table 12: Analysis of themes - seventh question (n=65)**

| Themes | % | n |
|---|---|---|
| Does not reflect all aspects | 31.8 | 21 |
| Does not reflect capabilities | 21.2 | 14 |
| Preference for combining with other assessment tools | 18.2 | 12 |
| Discriminates due to concerns of facing an audience | 18.2 | 12 |
| Is inappropriate as an assessment tool (time and comprehensiveness) | 16.7 | 11 |
| Does not contribute to understanding the material | 13.6 | 9 |
| Depends on the time and place | 10.6 | 7 |
| Splitting into small assignments throughout the course | 4.5 | 3 |
| Yes, constitutes a tool for learning based on experiencing | 16.7 | 11 |

The analysis presented shows that most of the students objected to using presentations as an exclusive assessment tool in the course. Their main claim is that presentations do not reflect all the student's capabilities and knowledge and might discriminate against those who find it hard to face an audience. Some of the students noted additional shortcomings of presentations as an assessment tool, such as the time restriction, lack of clarity regarding assessment criteria, and lack of contribution to understanding the study material.

Nevertheless, several students suggested different ways of improving presentations as an assessment tool, for instance by combining them with other tools such as papers or exams, adapting them to the specific course type, lengthening the presentation time, and splitting the assignment into several short presentations throughout the semester. Only a relatively small minority of the students supported exclusive use of presentations as an assessment tool, particularly due to their contribution to improving presentation skills and experiential learning.

In conclusion, the main insight is that despite the potential benefits of presentations, most students contend that they cannot be relied on as a single and inclusive means of assessment. It is also evident that, according to the respondents, in order to integrate them more significantly in the assessment process it is necessary to think of adaptations and improvements that will give proper expression to students' different capabilities, while reducing its shortcomings as an assessment tool.

**Summary and conclusions from analysis of the responses to the open-ended questions**

The overall analysis of the open-ended questions indicates participants' contention that use of presentations as an assessment tool in academic courses has significant benefits alongside challenges and shortcomings. Most of the students noted that presentations contribute to enhancing understanding of the study material, allow self-expression and creativity, and help develop skills such as facing an audience.

Nonetheless, a considerable portion of the students raised challenges stemming from concerns and difficulties involving facing an audience, trouble condensing the material and adapting it to a slideshow format, and lack of clarity regarding instructions and assessment. Accordingly, a large majority of the students objected to use of presentations as an exclusive assessment tool, claiming that it does not truly reflect students' full range of capabilities and might discriminate against students who find it hard to face an audience.

The students suggested several ways of improving presentations as an assessment tool, such as giving clear instructions and closer guidance, holding workshops for imparting relevant skills, combining presentations with other assessment tools, and adapting them to the nature of the course. Hence, it is evident from the findings that there is room for developing and improving presentations as an assessment tool, while providing a response to needs and challenges raised by the students and gradual assimilation of advanced technology.

## 4. Summary and Conclusion

Overall analysis of the quantitative and qualitative (open-ended questions) research findings indicates a correspondence between the findings in the two types of analysis. The quantitative analysis points to a positive association between high self-evaluation by students and a sense of comfort with face-to-face presentations and the perception of presentations as improving learning capabilities. Similarly, in the qualitative analysis most

of the students expressed satisfaction with use of presentations as an assessment tool and noted benefits such as enhancing understanding, improving retention, and contribution to more thorough and significant learning.

Furthermore, the quantitative analysis indicates the importance of attendance in classes where presentations are given for succeeding in one's studies; in the qualitative analysis as well the students noted the contribution of interactions during the presentation to the learning process. In addition, the hierarchical regression in the quantitative study emphasizes the importance of integrating various assessment tools alongside the presentations, while in the qualitative findings as well the students objected to presentations as an exclusive assessment tool and suggested that they be combined with other tools.

**Other general insights arising from the findings:**

- Presentations have significant potential to contribute to enhancing learning beside developing important skills, but they cannot be an exclusive assessment tool.
- Factors such as self-esteem, self-efficacy, as well as attendance and interaction during presentations, affect the effectiveness of the presentation.
- It is necessary to think about adaptations in order to transform presentations into more effective assessment tools, such as clear instructions, imparting tools, improving technical aspects, and adaptation to students' needs.

In conclusion, the integrated findings stress the complexity of presentations as tools for learning and assessment and the need for thorough consideration of how to realize their full potential while addressing their limitations. In current processes of teaching, learning, and assessment, the research findings shed light on presentations using slideshows as tools and means that support learning. The research findings may contribute to improving students' learning processes and evaluating their academic and personal development. For this purpose, however, it is necessary to train students to experience the preparation of presentations by effective slideshows and to face an audience, and it is also crucial to develop a culture with a cooperative-learning climate appropriate for an era of digital innovation.

Delivering presentations and facing an audience are essential skills in the modern workplace. Students will find themselves in professional situations that require presentations, usually using slideshows and conveying messages to an audience of listeners or viewers. Facing an audience and presentation skills can be learned and there are even ways of successfully dealing with fear and reinforcing confidence in such situations. Good techniques will grant the necessary tools for delivering presentations in a more efficient and focused manner and increasing the chances of attaining the goals of the presentation.

**Ethics Statement**: Ethical approval for this study was obtained from Ariel University of Samaria Institutional Review Board (Approval number AU-SOC-ND-20240814).

**AI Statement**: The authors declare that they have not used any type of generative artificial intelligence for the writing of this manuscript, nor for the creation of images, graphics, tables, or their corresponding captions.

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