

Developing Effective Presentation Skills: Evidence-Based Guidelines

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Professional presentations represent an important and common method of disseminating information, in general, and research findings and methodological, theoretical, and conceptual frameworks, in particular. However, for many persons, especially beginning researchers and scholars, delivering effective presentations is extremely challenging. As such, professional presentations can be exceedingly anxiety-inducing events. Thus, in this editorial, we provide helpful evidence-based guidelines to help beginning researchers and scholars refine their presentation skills. We present detailed information to readers regarding the components of a quality professional presentation for a variety of presentation media and audience types, design principles for slide show presentations, and general dress and demeanor guidelines.

In 1991, almost 500 international, national, regional, state, and local education-related conferences were reported to exist (Taheri & Seidman, 1990). Although this catalog of education-related conferences is no longer updated, another database exists in which an indication of the number of education and education-related conferences is provided. The ProceedingsFirst database maintains records of “every conference, exposition, and workshop meeting received by the British Library Document Supply Centre” (OCLC, 2008, para. 1). The graph depicted in Figure 1 was obtained via a keyword search for education (educat*) and education-related (educat* or psych* or sociol* or social science) proceedings by year from 1990 through 2007. Although not all meetings have conference proceedings and arguably not all those meetings that have conference proceedings provide them to the British Library Document Supply Centre, this database provides a good approximation of the number of conferences in education and education-related fields. The number of conferences alone does

not provide a direct response regarding the number of presentations given at these conferences. To answer this question, it is important to approximate how many presentations occur per conference. At smaller local or state conferences as few as 100 presentations may be given. At larger, national and international conferences, 10 or more times as many presentations could occur. For example, in 2010, at one of the largest education conferences, the American Educational Research Association (AERA), more than 8,000 papers were presented. Thus, even with a conservative estimate of approximately 1,000 education and education-related conferences with approximately 300 presentations per conference, at least 300,000 presentations could be given per year in education and education-related conferences!

Conference presentations are an important part of academic life. Yet, attendance at conferences typically requires extensive preparation time and effort as well as funding for travel. Why is it so important to invest the time, effort, and money necessary to attend academic conferences? One reason might be that the information presented at conferences is current. Journal articles in education and related social sciences can take anywhere from a few weeks to as long as a few years to make it to press (Ioannidis, 1998; Schwartz & Zamboanga, 2009; Summary report of journal operations, 2010).

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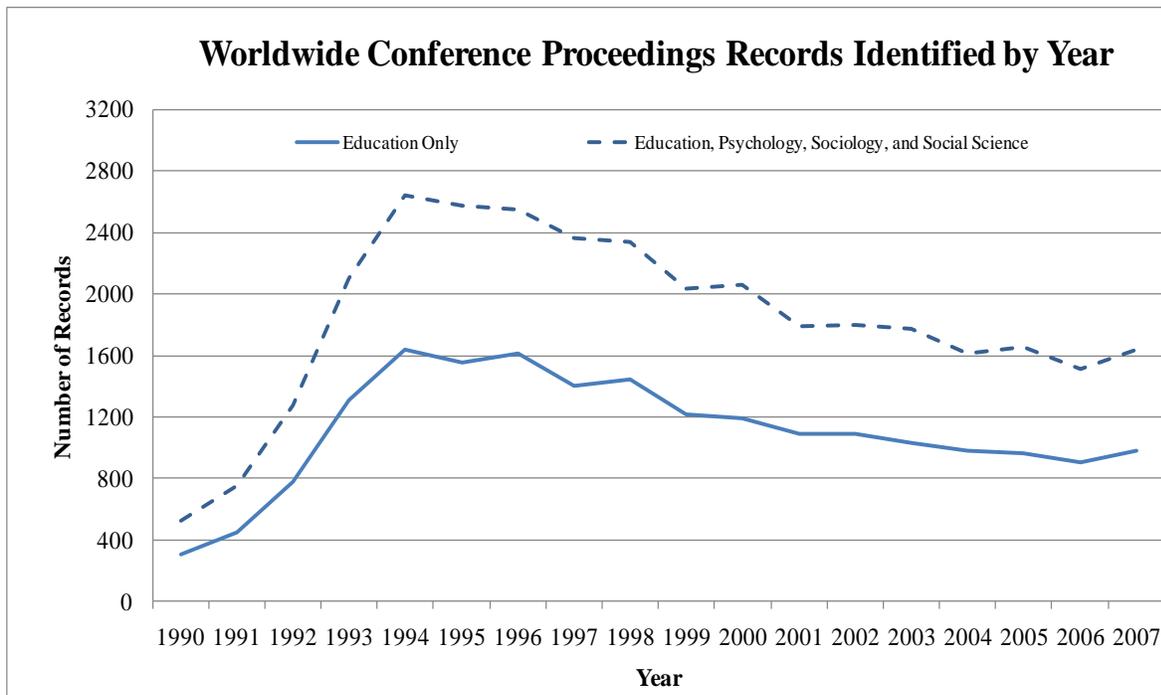


Figure 1. Number of conference proceeding records as identified by the ProceedingsFirst database

Conferences offer the ability to share pertinent, timely information to an interested audience in a relatively short amount of time. Moreover, feedback that is received at a conference can be used to improve a manuscript for future publication. Conferences also provide a unique opportunity to connect with other scholars and to develop professional associations across disciplines, universities, and geographical locations. Still another reason why conferences are important is that they provide an opportunity to demonstrate scholarly productivity. A consistent record of scholarly activity is typically one of the central components of good faculty evaluations. Academics record scholarly activity on a curriculum vita. Conference presentations are one way to document evidence of time- and effort-intensive research pursuits. A just compensation for this investment is the opportunity not only to make such research efforts visible but also to join the academic conversation. In this sense conferences provide an opportunity to build an academic reputation. It follows then that effective presentation skills at conferences are a critical part of an active and successful academic career.

Common Types of Presentations

Presentations do not come in only one flavor. A variety of formats exists in which to present: (a)

paper presentations, (b) roundtable discussions, (c) poster sessions, and (d) panel sessions and symposia. Less traditional, but increasingly more visible, are performances and demonstrations. Choosing the most appropriate format for a scholarly presentation requires an understanding of the unique characteristics of each type. A general summary of these presentation types is displayed in Table 1.

Total time allotted, ratio of presentation time to discussion time, space and equipment availability, audience fluidity, and type of handout varies by presentation media and conference norms. For example, whereas paper presentations typically last anywhere from 10 to 30 minutes per presenter, symposia, panel sessions, roundtables, and poster sessions can vary up to 90 minutes—and workshops can be as long as 2 days (e.g., <http://www.aera.net/Default.aspx?id=11142>). Although the audience is typically seated and constant throughout a paper presentation session, panel session, and symposium, audiences are much more fluid with poster sessions and roundtables.

Table 1

Differences Across Presentation Types

	Total Time per Individual Presentation/ Discussion	Percentage of Presentation Time vs. Discussion Time	Space And Equipment Possibilities	Audience Fluidity	Appropriate Handouts
Paper	10-30	90%-10%	Projector, screen	Typically consistent	Slides, paper
Roundtable	45-60	30%-70%	Table and chairs	Very fluid, people come and go at different times	Brief handout, paper
Poster	60-90	30%-70%	Panel to peg poster on	Very fluid, people come and go at different times	Poster handout, paper
Symposium/Panel	Varies	Varies	Microphone, podium	Typically consistent	Abstract, Paper (s)
Demonstration/ Performance	Varies	Varies	Varies	Varies	Varies

The type of appropriate handout across the presentation types also varies. Typically, the expectation at many conferences is that the presenter(s) will provide a copy of the paper being presented to the audience members. Often, it is difficult to anticipate the number of people who will attend a session, so a general recommendation of 15 to 25 copies is probably sufficient for most occasions. Some presenters prefer to distribute the paper in an electronic format, such as a CD. Still other presenters hand out business cards so that interested audience members can later request to have the paper delivered via email. Though this practice might sound appealing to some presenters, audience members will likely be disappointed if they came to the presentation expecting to walk away with a handout. Further, this practice might encourage or, at the very least, allow the opportunity for presenters not to complete their papers *prior* to the conference. An increasing number of conference organizers are offering a digital library or online paper repository option for their members on a volunteer basis (e.g., AERA beginning in 2010; American Psychological Association [APA] via PsycExtra beginning in 2004;

American Evaluation Association [AEA] via a digital library beginning in 2008; the National Council of Professors of Educational Administration beginning in 2010).¹

In addition to the general expectation of the conference paper handout, some presentation types lend themselves to other types of handouts. For example, if a slideshow is presented during a paper session, it is appropriate although not necessary to provide the audience with a handout of the slides in addition to (not in place of) the printed copy of the conference paper. Presenters should avoid handouts that have too many slides per page making the text unreadable and thus nullifying the purpose of the handout. Furthermore, handouts do not have to contain the entire slide presentation. That is, if a particularly complex figure or table is to be discussed within the presentation, it might be best to provide a full-size version of the figure or table as a handout. In this way, the handout augments rather than detracts from the presentation. For a roundtable discussion and poster session, a brief handout can facilitate the discussion and help reinforce the key points of the study. Recall from Table 1 that

roundtable discussions and poster sessions tend to be quite fluid; audience members tend to come in and out throughout the allotted time. Consequently, a presenter who has a one-page handout documenting the highlights of a study might have a distinct advantage over presenters who do not have such a handout. In addition, contact information provided within the handout provides audience members easy access should they wish to follow up at a later time.

Once a decision has been made regarding the type of handout, the next decision is when to provide the handout to audience members: before, during, or after the presentation. The most common scenario is to provide the handout before the presentation. In this way, the distraction of distributing the handout while presenting is removed. Unfortunately, people might read the handout instead of listening to the presentation. A good technique then is to direct audience members purposely to specific components of the handout so that their curiosity is satisfied. More detailed descriptions of the types of presentation formats and expectations for a particular conference can typically be located in calls for proposals (cf. ASHE, n.d.; Gutiérrez, 2010; SITE, 2010).

One common thread running throughout the various presentation media is that presenters have the opportunity to connect with the audience in a way that the text in a paper alone could not. As Duarte (2008) described, "Presentations are a wonderful medium to express your passion. You get to be human and connect with an audience emotionally and analytically" (p. 249). Thus, presenters need to understand the format and conference norms for the presentation type used so that full advantage can be taken of the opportunity to communicate research efforts.

Across paper, symposia, and panel sessions, one popular tool for oral presentations is the use of presentation software, such as PowerPoint, Corel Presentations, Apple Keynote, Open Office Impress, or Lotus Freelance. Of these programs, PowerPoint does appear to dominate, with a reported 95% of the market (Parker, 2001). Regardless of the medium, strong sentiments have been expressed regarding slideshows. With titles such as "Is PowerPoint the devil?" (Keller, 2003) and "Absolute PowerPoint: Can a software package edit our thoughts?" (Parker, 2001), it is apparent that the PowerPoint software does have its critics. Slideshows are not without supporters; however, as some people have argued software should not be blamed for its misuse (Doumont, 2005). Facetiously others have compared PowerPoint to a toddler, "it can be mischievous, and sometimes you have to wonder who really is in charge...[but] with vision, knowledge of the medium, and a little discipline, we can help shape this program

into a responsible classroom asset" (Dunn, Wilson, Freeman, & Stowell, 2011, p. 101). Clearly, presentation software is a tool that is pervasive in conference presentations. Next the effective use of presentation slides is addressed.

Designing a Presentation Slideshow

Before the background design, the font type, or even the font size is discussed, the most important part of the presentation—the *content*, needs to be emphasized. No software tool can transform poorly organized, disconnected ideas into cogent ideas. The presentation is not what is on the PowerPoint slides; rather the presentation involves speaking to and interacting with audience members about the essence of the paper. Accordingly, before developing PowerPoint slides, presenters need to take the time to reflect upon two or three major points that must be communicated. The more time spent thinking about and planning a clear, coherent take-home message the easier the remainder of the process will be. Once the intent of the presentation is established, the remaining decisions hinge upon these central points. The often quoted text, *Scientific Research in Education*, emphasized the idea that "It's the question—not the method—that should drive the design of education research" (Shavelson & Towne, 2004, para. 5). Similarly, here, we want to emphasize that the content of the presentation, and more specifically the take-home points, *not the presentation software* is what drives the presentation. Every other decision is made for the purpose of most effectively communicating those take-home points to the audience. Only after the content of the message is clear should the presenter begin to think about how the software medium can enhance the presentation. Several resources (e.g., Alley, 2003; Anholt, 2006; Kline, 2009; Storz, 2002) are available to help presenters organize their ideas.

Design Principles

Any discussion of presentation software should be grounded in educational technology, especially the idea of cognitive load (Sweller, Van Merriënboer, & Paas, 1998). Educational technology, as defined by the Association for Educational Communications and Technology, "is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources" (Richey, 2008, p. 24). Cognitive load is concerned with how information placed in the working memory through instruction is processed. Cognitive resources are limited; therefore, optimized multimedia presentations should be formatted in a way that minimizes unnecessary extraneous cognitive load. Extraneous cognitive load engages the working

memory in unnecessary processing, which does not facilitate learning but rather competes for the limited working memory capacity. On the other hand, germane load is the deeper processing that facilitates the integration of the material (Paas, Renkl, & Sweller, 2003; Sweller et al., 1998). Thus, presenters should seek to minimize extraneous cognitive load while maximizing germane load.

So how does a presenter help the audience manage cognitive load? Mayer has proposed the following nine ways to handle cognitive load effectively (Mayer, 2005b, 2005c; Mayer & Moreno, 2003):

1. *Segmentation effect*: provide learner-controlled segments of instruction (handouts are particularly useful here)
2. *Pretraining effect*: familiarize learners with names and characteristics of the components to assist with subsequent animations
3. *Modality effect*: provide words audibly rather than as text to relieve visual/pictorial overload
4. *Coherence effect*: remove irrelevant text or graphics
5. *Signaling effect*: highlight essential material
6. *Redundancy effect*: graphics + narration is better than graphics + narration + on-screen text
7. *Spatial contiguity effect*: place related words and visuals in close proximity to each other
8. *Temporal contiguity effect*: present related animation and narration concurrently
9. *Spatial ability effect*: learners who are able “to hold and manipulate mental images with a minimum of mental effort” benefit more from well-designed instruction than do those who are not (Mayer & Moreno, 2003, p. 50).

Slideshows can be used to create visually appealing presentations that minimize extraneous processing and maximize germane processing. A well-designed slideshow presentation with its image, audio, and video capabilities can capitalize on the notion that students “learn more deeply from words and pictures than from words alone” (Mayer, 2005a, p. 31).

Background. The word background is defined as “the ground or parts, as of a scene, situated in the rear (opposed to foreground)” (Dictionary.com, 2011, para 1). To keep the background as the backdrop of the presentation, it is best to keep the design plain or in Kline’s (2009) words “Drop-Dead Simple” (p. 289). Multiple bright colors or excessive use of multiple images in the background draw attention toward the background. If the slide background is emphasized to the point of becoming the foreground, what is intended to be the focus of the presentation—the content of the slides, is essentially displaced. Another reason to keep the background simple is that

it is not always possible to know ahead of time the background against which the slideshow will be projected. That is, the slideshow might not have a plain white screen against which it is projected. Although colors might look fine on a white screen, the same colors might not necessarily look the same, or even be visible on a different color background, such as the deep orange backdrop of an older hotel conference room. Thus, the color selected should allow for maximum visibility of the text and images, which are the foreground of the presentation. Moreover, some color schemes or templates might not load properly on a different computer (or laptop) than the one on which it was designed. Therefore, the best advice is to use a fairly generic background. Once the presenter has decided on a simple background, the theme should remain consistent throughout the presentation (Mandel, 1999, p. 41).

Pacing the information. Onwuegbuzie (2010) analyzed 240 presentations that were conducted by graduate students (i.e., master’s students, doctoral students) over a 10-year period. These presentations were evaluated using a form developed by Kain (1992) called the COPS form, wherein COPS stands for Content, Organization, Planning, and Style. Thus, the COPS form, which contains twenty 5-point Likert-format items (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree), facilitate the evaluation of content (7 items), organization (5 items), and planning and style (8 items) in students’ oral presentations. Scores on this form range from 20 to 100. In addition to the quantitative data stemming from the COPS form, qualitative data also were collected via structured observations (e.g., documenting evidences of appropriate and inappropriate practices).

Of the numerous problems that were identified via the COPS and qualitative data, the most prevalent pertained to the pacing of the presentation. In fact, 92% of the presenters did not adequately pace their presentations, culminating in their delivering the final stages of their presentations too quickly. In particular, 86% of the presenters spent a disproportionate amount of time discussing the extant literature (i.e., presenting the literature review)—for as long as 12 minutes in a 15-minute presentation—leaving themselves with an insufficient amount of time to present the findings and interpretations stemming from their own (primary) study. Yet, it is likely that some—if not many—of the audience members are familiar, at least to a degree, with the extant literature and, even if they are not familiar with it, they would already have access to it. Rather, these audience members are most interested in learning about the presenter’s findings, with which none of them would be familiar. As such, it is imperative that when presenting a primary research

study, presenters should allocate sufficient time to present their research findings. Specifically, we recommend that no more than one third of the presentation time be allotted to summarizing the extant literature, with the remaining two thirds of the time being reserved for the presentation of the methods, results, and interpretations pertaining to the primary study.

Text. Multiple rules of thumb have been created to provide guidance on how many words or bullets should be on a slide. For example, some authors recommend “no more than three bullets each [slide] with five words or less” (Kline, 2009, p. 289), which amounts to a maximum of 15 words per slide. Tufte (2003) quipped that a 6 x 6 rule “must be the Haiku rule for formatting scientific lectures” (p. 19). Still others warned, “if a slide contains more than 75 words, it has become a document...more than 50...a teleprompter” (Duarte, 2008, p. 7). At approximately 15 to 20 words for an average sentence, it is not unusual for slides to contain too many words. Perhaps this issue could be resolved through the use of an optimal font size. Unfortunately, no consistency exists in recommended font sizes either. Whereas some authors recommend a minimum font size of 30 point (Altman, 2007; Kline, 2009), other authors recommend a 20-point (Mandel, 1999), 18-point (Alley & Neeley, 2005), or even 14-point font size (Storz, 2002). Interestingly, Onwuegbuzie (2010) documented that approximately 65% of presenters included at least one PowerPoint slide that contained text with less than 14-point font and/or more than 75 words. So, is a larger or smaller font size best? At least two reasons exist to choose to use a larger font size. A larger font size is more easily read by the audience and a larger font size forces the presenter to be more selective with what text is chosen to be included on the slide. Altman (2007) provided an amusing rationale for his recommended 30-point font size stating, “If you don’t buy that 30 points is the right size, I’ll give you an algorithm. Find out who the oldest person in the audience is, divide his age by two. That’s your optimal font size” (p. 154). Still Mayer and Johnson (2008) emphasized the importance of considering the learner’s cognitive processing “rather than blindly following design rules” (p. 385). In other words, cognitive load-reducing methods can greatly facilitate slide design decisions.

Visual information. One of the great advantages that slide shows have over plain text is the ability to provide visual information. Note that what should be displayed are “visual aids not visual distracters” (Kline, 2009, p. 385). If a visual aid does not help convey the content of the message, it probably does not need to be included. Perhaps a presenter thinks that a lot of text is needed on the

slide alongside the visual to help recall talking points. However, audiences do not want to be read to from a PowerPoint slide (Paradi, 2003). People can typically read faster than presenters can speak, so avoid the “the sin of triple delivery” (Parker, 2001, p. 5) where what is on the screen and on the handout is also spoken. Also, recall the redundancy effect, it is better to provide a visual with narration than a visual with narration and text. Interestingly, Onwuegbuzie (2010) documented that approximately 72% of presenters read at least one of their slides in its entirety and without making sufficient eye contact with the audience members. Thus, such reading of slides reduced the ability of the presenter to connect with the audience members.

Visual information can come in the form of maps, diagrams, drawings, photographs, images, animations, and videos. Maps can serve to provide a reference point for audiences. In Figure 2, we demonstrate a less effective slide with too much text and below it an improved slide with a map replacing the text. Similarly, diagrams can explicitly identify key components for the audience. Drawings, photographs, and images also are particularly helpful in a slideshow. For example, if participants in a study have drawing or journal entries, a powerful tool to bring the participants to life in a presentation can be to display the actual images from the participants. In addition, photographs of a particular set up could be described while viewing a photograph of the actual set up. For example, in Figure 2, a poorer slide might provide a listing of all the materials for a laboratory set up or an improved slide could provide a photograph of an actual set up. Of course explicit details could be provided within a paper. The presentation and the paper are separate media; they should complement not duplicate each other. Videos also can have a demonstrable impact on audience members. Depending on the content, presentation videos might be a useful addition to a presentation. Videos can be used to show anything from a key part of an interview to living conditions of the homeless. Keep in mind that a video, like everything else in a presentation, should be included *only* if it helps convey the main points of a presentation effectively. Finally, resist the urge to provide interesting but irrelevant images within a slide presentation. Evidence consistent with cognitive load theory points to decreased understanding when highly interesting (seductive) details are included (Mayer, Griffith, Jurkowitz, & Rothman, 2008). More assistance in creating simple yet effective visual aids is available (cf. Altman, 2007; Daniel, 2011; Doumont, 2005; Duarte, 2008).

Regional Service Centers in Texas

Region	City	Website
1	Edinburg	Region 1 Website
2	Corpus Christi	Region 2 Website
3	Victoria	Region 3 Website
4	Houston	Region 4 Website
5	Beaumont	Region 5 Website
6	Huntsville	Region 6 Website
7	Kilgore	Region 7 Website
8	Mount Pleasant	Region 8 Website
9	Wichita Falls	Region 9 Website
10	Richardson	Region 10 Website
11	Fort Worth	Region 11 Website
12	Waco	Region 12 Website
13	Austin	Region 13 Website
14	Abilene	Region 14 Website
15	San Angelo	Region 15 Website
16	Amarillo	Region 16 Website
17	Lubbock	Region 17 Website
18	Midland	Region 18 Website
19	El Paso	Region 19 Website
20	San Antonio	Region 20 Website

- ### How to Set Up Inquiry Lab
- bottles of distilled water
 - bag of coarse sand
 - bag of white marble chips
 - bag of pea pebbles
 - Beakers
 - gallons of distilled water
 - Paper towels
 - Lab aprons
 - goggles
 - Muddy water in a five gallon container
 - Masking tape
 - Spoons
 - Rubber bands
 - Ring stands

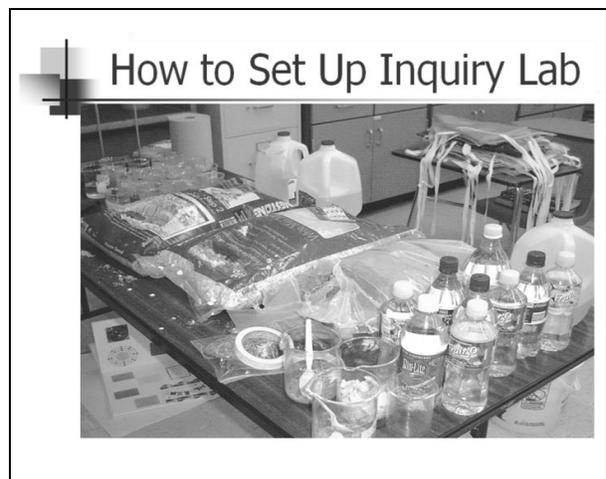
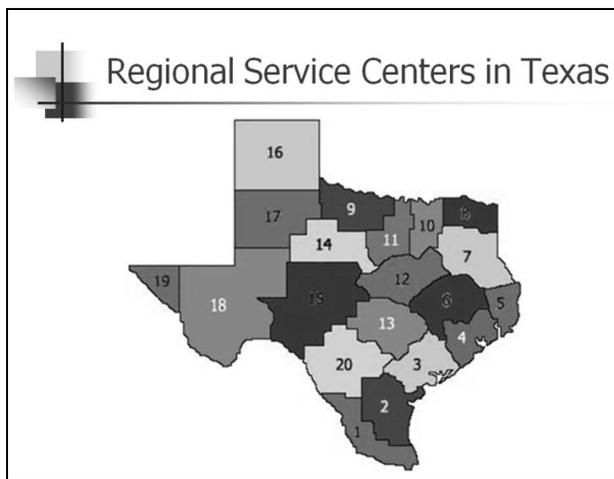


Figure 2. Examples of visually taxing (top) and visually improved (bottom) slides.

Displaying data. Often, part of the content of a presenter’s message requires the presentation of a graph or a table. Thus, it is surprising that only 12% of the presenters in Onwuegbuzie’s (2010) study presented one or more tables or graphs. Presenters should keep in mind that the graph or table projected onto the screen may not necessarily be the same graph or table that is given in a paper. In a paper, readers have time to study the graph or table. In a slideshow, a more simplified version of the graph that highlights the most salient features of the graph is presented. Tufte (2003), a harsh critic of slideshows, viewed the practice of simplifying charts and tables as a way “to victimize statistical data” (p. 20). However, the presentation does not exist in isolation. It is only a brief snapshot of the larger picture, the paper. Interested readers are free to read more details in the paper.

Although focused on providing recommendations on the statistical significance testing debate, Wilkinson and the Task Force on Statistical Inference (1999) offered pertinent advice on how to present complex data. Wilkinson et al. recommended that both tables and figures be provided for complex data, because “individuals have different preferences for processing complex information” (p. 601). Perhaps a figure would be best on the slide itself, whereas a table, especially a very detailed one, might be more clearly viewed in a handout. On the other hand, slides are not necessarily the best medium for complex data (Tufte, 2003). Instead, the burden to bring clarity to complex information falls on the presenter. This statement is not a proclamation of the futility of slides, rather a recognition that “slides are designed to be skeleton outlines that prompt the spoken word, not tell the whole story, while handouts

naturally require more detail and supporting data” (Endicott, 2010, p. 6).

One caution offered by Wineburg (2004) is that “your data mean more to you than to your audience” (p. 13). In other words, although other persons may recognize that countless hours have been spent planning, collecting, and analyzing data, the audience is primarily interested in the findings that emerged from the study. Because audience members are not as enamored with the study’s results as the presenter might be, presenters should be very selective with the data that are delivered. Again, the content filter for the presentation should be based upon whether or not the data help support the main take-home message.

Delivery. Speech, posture, facial expressions, and movements are the means by which a presentation is conveyed. A speaker can communicate energy and passion or nervousness and self-doubt. To project a confident disposition, a presenter should stand straight but relaxed and avoid fidgeting. Movements should be purposeful, not distracting. Throughout the presentation, eye contact with the audience should be maintained. Unfortunately, maintaining appropriate eye contact was not the case for 78% of the presenters in Onwuegbuzie’s (2010) sample. To help build rapport, a presenter should display a natural and friendly expression. As a presenter scans the room, audience attitudes and comprehension levels can be gauged that can help the presenter make quick adjustments to the presentation.

The speaker’s voice should project a confident but friendly tone. By varying voice pitch and loudness a presenter can help maintain audience attention. Sometimes a microphone is provided, often it is not. It can be quite annoying not to be able to hear a speaker, or only to hear parts of a presentation; thus, presenters should make sure that they project their voices. Because the overwhelming majority of students in Onwuegbuzie’s (2010) sample were educators of one type (e.g., present or former public school teachers) or another (e.g., college instructors), only a small proportion of students (i.e., 4%) experienced difficulties projecting their voices. When people become nervous, they tend to speak more rapidly; therefore, another important component of good delivery is to know when to slow down—a difficulty experienced by 67% of Onwuegbuzie’s (2010) sample of presenters. If a presenter is going through more than two slides per minute, the presenter probably needs to slow down. Fillers such as uh, like, well, er should be avoided. It is appropriate to pause such as when transitioning from one point to the next, for emphasis, or simply to allow for audience reflection time. Finally, as Mandel (1999) cautioned, it is important to remember that

while you may need to use slides to present your data, remember that building rapport and interacting with your audience is critical. Slides alone cannot make a presentation interesting—your enthusiasm and delivery is the key to making a presentation lively. (p. 42)

Presentation view. To illustrate how PowerPoint can help manage not only the audience’s cognitive load but that of the presenter as well, we highlight a tool known as Presentation View (Presentation Tools in Mac). Presentation view is available when multiple monitors are enabled (most laptops have multiple monitor capabilities). Figure 3 provides a screen shot of the three simple steps needed to enable Presentation View. First, Presenter View within the Slide Show tab must be selected. Second, the desktop should be allowed to extend onto the second monitor within the Control Panel’s Display Properties’ Settings tab. Finally, the second monitor should be selected as the one where the presentation slideshow will be displayed. Figure 4 provides a screen shot of Presentation View from the presenter’s viewpoint. Presentation View is helpful in reducing extraneous cognitive load in several ways. First, presentation notes are easily accessible (see Callout Box 2) to the presenter. This feature also allows a presenter to reduce the amount of text on the slides because it is not necessary to write everything down within the slide. Instead, a few key words on a slide can serve to prompt verbal elaboration, with presentation notes available as needed. Another nice feature is the ability to see thumbnail views (see Callout Box 3) of the entire slideshow. This feature helps the presenter quickly search (see Callout Box 12) for any particular slide. Moreover, the presenter does not need to tax cognitive processes by recalling the order of the slides because the upcoming slide can be anticipated or previewed. Next, the presenter is able to see the current time (see Callout Box 5) as well as the time elapsed since the presentation began (see Callout Box 6). This information can be invaluable as presenters are usually on a fixed schedule. Furthermore, if something is present on the slide that the presenter wishes to highlight or to mark for the audience, the pen feature (see Callout Box 9) can easily provide a pen or highlighter in a variety of colors for this use. Other features are detailed in Figure 4.

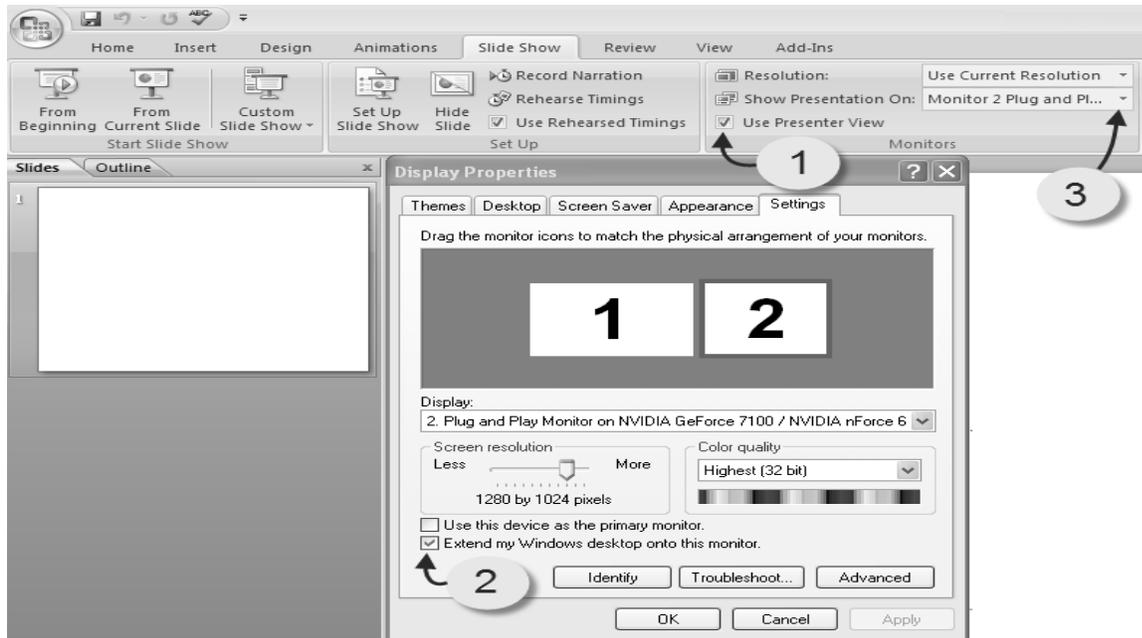


Figure 3. Setting up Presentation view in PowerPoint.

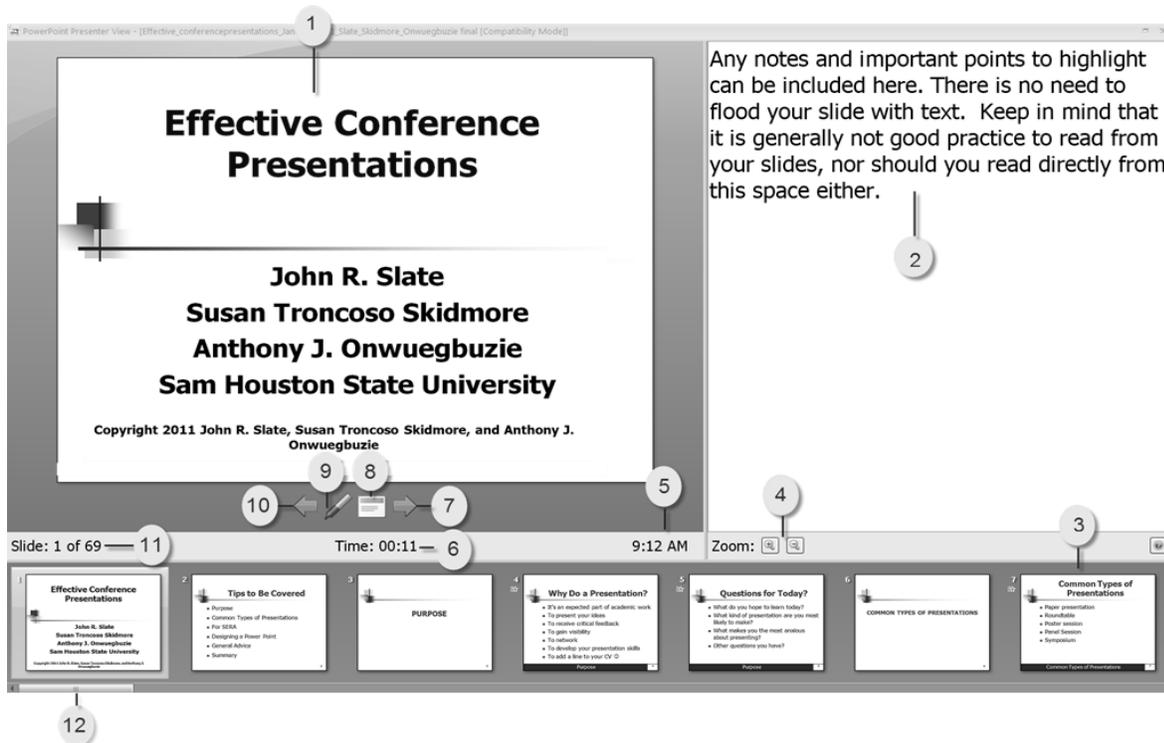


Figure 4. Presentation view in PowerPoint.

Note. 1. The slide the audience is currently viewing. 2. Presentation notes. 3. Thumbnails of slides. 4. To adjust the size of presentation notes. 5. Current time. 6. Time elapsed since Presentation View was selected. 7. To move forward one slide. 8. To move to a particular slide number, black out or white out the screen, or switch programs. 9. To switch the mouse pointer to a pen or highlighter. 10. To back up one slide. 11. The current slide number the audience is viewing. 12. To search for a particular slide within the thumbnail view.

Do Not Depend on Technology

The idiom “technology is great when it works” hints at the inevitable failure of technology. Although we have outlined best practices in the use of the most ubiquitous presentation program, PowerPoint, it is important to have a back-up plan just in case. What could possibly fail? Jump drives, computers, and projectors, are all prone to failure. However, preparing for the unexpected insures that the presentation can proceed seamlessly even when technology fails. Accordingly, a presenter must be prepared to present without the use of technology. A printed copy of presenter notes is a practical asset. Handouts become an even more important resource in the absence of other visual aids. If the unexpected does happen, consider it an opportunity to connect more closely to the audience. Be flexible and have fun.

What to Wear

Generally business attire is appropriate for conference presentations. Casual attire is generally discouraged. Although conference organizers do not typically post suggested appropriate attire, pictures from the conference are often available within conference newsletters (see <http://www.sera-edresearch.org/news/2011spring.pdf>). Some associations even have videos from the conference (see www.apa.org/convention). Despite the fact that the purpose of these photographs and videos is generally to promote the conference, the images do provide a preview of what participants are wearing. Resources are available online that provide explicit details about what is considered appropriate business attire (see Proper business attire and etiquette: Presenting the complete package, n.d.).

Ways to Placate the Anxiety Monster

So, after all the time and effort involved in planning the content of a presentation, putting these thoughts onto a well-designed slide show, and rehearsing a presentation, presenters can still feel anxious about the presentation. How does a presenter combat the often present feelings of butterflies, cold feet, and sweaty palms, among other feelings? The main antidote for anxiety is preparation. But what exactly does it mean to prepare. Of course, it is critical to know the content of the presentation really well. Therefore, practice is also imperative. The content should be well organized. Even the best of topics if not well organized cannot be effectively communicated. It also helps to be eager to communicate this content with others. Some presenters practice in front of a mirror, but a better option might be to practice in front of a real audience who can evaluate the presentation. These critical friends can provide valuable feedback to help

improve presentation skills that, in turn, can help presenters feel more confident and less anxious about the presentation. Various sources provide more detailed descriptions on how to reduce anxiety levels (cf. Kline, 2009; Mandel, 1999; Siddons, 2008).

Summary Advice for Effective Presentations

Some persons argue that the beginning is the most important part of a presentation because this is the time when audience rapport is established (Storz, 2002). It is at this critical time that the audience can decide to tune out a presenter and flip through the pages of the conference program, or actually listen to what the presenter has to say. Yet, the ending to a presentation is also important. Indeed some persons argue the beginning and the end are equally important, noting that a presentation “is a diamond—the beginning and the end are the cutting edges of your talk” (Wineburg, 2004, p. 14). Therefore, to this end, the simplest advice to insure the audience hears what the presenter came to say is to begin and end with the most important points: “*tell them what you’re going to tell them, tell them, and then tell them what you told them*” (Alley, 2003, p. viii).

Another general piece of advice is to have empathy and respect for the audience. They came to hear the presenter speak for some reason, perhaps the title of the presentation, the general topic of the session, or even because of the academic reputation of the presenters. Alley (2003) advised, “for your audience, purpose, and occasion, you should strive to craft a presentation that is truly worth your audience’s time” (p. 207).

Finally, although we have set down some guidelines and rules of thumb to assist more novice presenters improve their presentation skills, we want to emphasize that that these guidelines are not unbreakable laws. Students in particular have been known to fixate on the rigid application of presentation rules versus the “contextual flexibility” that is evident in more experienced presenters (Haber & Lingard, 2001, p. 310). Unfortunately, although students were aware that effective presenters at times deviated from general guidelines, they “could not articulate how, when or why these alterations were chosen... and were not easily able to understand or mimic those successful presentations that they witnessed by more experienced team members” (Haber & Lingard, 2001, p. 310). Although we have provided a general checklist for a professional presentation as a tool to assist beginning researchers in preparing for a presentation (cf. Figure 5), we want to emphasize that these statements are only general guidelines. Thus, it is important not only to be flexible but also to enjoy the experience!

<p>Preparation</p> <ul style="list-style-type: none"> <input type="checkbox"/> Unambiguous purpose <input type="checkbox"/> Organized content <input type="checkbox"/> Two or three key take-home points <input type="checkbox"/> Back-up plan <p>Conference and Presentation Type Norms to Know</p> <ul style="list-style-type: none"> <input type="checkbox"/> Time allotted per presenter? <input type="checkbox"/> Space and equipment availability? <input type="checkbox"/> Handout? <ul style="list-style-type: none"> ◇ Type? ◇ Quantity? ◇ Distribution time (beginning or end?) <p>Slide Show Points to Remember</p> <ul style="list-style-type: none"> <input type="checkbox"/> The presentation is not the paper! <input type="checkbox"/> Minimize extraneous cognitive load <ul style="list-style-type: none"> ◇ Simplify background ◇ Text <ul style="list-style-type: none"> ▪ Display only relevant text ▪ Minimize text on slide ▪ Consistent fonts throughout ◇ Visuals <ul style="list-style-type: none"> ▪ Enhance understanding of key points ▪ Focus attention using color, size or shapes ▪ Narrate graphics instead of providing on-screen text ▪ Related words and visuals are within close proximity ▪ Animation and narration occur concurrently ◇ Data <ul style="list-style-type: none"> ▪ Appropriate level of detail or complexity ▪ Focus attention on most salient feature <p>Delivery</p> <ul style="list-style-type: none"> <input type="checkbox"/> Building rapport and exuding confidence <ul style="list-style-type: none"> ◇ Demeanor <ul style="list-style-type: none"> ▪ Purposeful movements ▪ Straight but relaxed posture ▪ Eye contact ◇ Voice <ul style="list-style-type: none"> ▪ Varying pitch and loudness ▪ Pace ◇ Professional dress <input type="checkbox"/> Contextual flexibility – be responsive to your audience <input type="checkbox"/> Grand entrance and exit
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Figure 5. Checklist for a professional presentation.

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