

So You Have A Presentation?!

Michael R. Kozak
University of North Texas

There are not boring topics, only boring presentations. The effective communication of ideas is as important as the idea itself.¹ A presentation is a one-shot attempt to make a point, a sales pitch that promotes an idea, proposition, position, organization or product.^{2,3} Effective communication:

- transfers vital information
- provides a basis for judging your knowledge
- conveys your interest and competence
- increases the knowledge of others
- identifies to you the gaps in your information
- allows you to carry out desired changes.⁴

Most professionals give presentations at some point in their careers.⁵ However, according to Oakes, Leone and Gunn, one of the biggest complaints of employers of entry-level engineers is lack of communication and presentation skills.⁴ Therefore, the ability to present information effectively in minimal time with maximum impact is a critical success factor.⁶ As Gaughan states, reputation, self-image and even a career may be on the line every time an individual presents.⁵ Creating a presentation is more than putting text and graphics on slides.⁵ Jones states that a presentation should be high quality, powerful, dynamic, interesting, stimulating, persuasive, informative, neat, sharp-looking, clear, enjoyable, effective, and professional-looking.⁷

Presenters should always do their best for their audience. According to Froes, if a presenter does not have anything worthwhile to say, stay home; there are too many bad presentations.⁸ Remember however, any presenter no matter how great, cannot please everyone. According to Antion, two percent of every audience will be offended. Some people are not happy unless they are offended. Don't worry - it's their problem, not yours.⁹

Preparation of an Outline

The first step in preparing a presentation is making a general outline that includes headings and subheadings that enable the assembling of a cogent message. Oakes, Leone and Gunn state that an audience's understanding is more important than how much information is presented.⁴ According to Compton, the fewer items emphasized, the greater the impact.¹⁰

Problem/Purpose. Radcliff indicates that to begin a presentation is to write a clear statement of the problem that will result in a purpose to your presentation that addresses that problem. Then

target your audience because they must understand the purpose if the presentation is to be effective.^{2, 11}

Body. An essential aspect of any technical research project is dissemination through presentations of findings arising from the study. However, a technical presentation is an abstract, with only key points covered. Presentations should never contain a lot of information because the audience will get lost in the details. The biggest mistake a technical presenter can make is thinking the goal of the presentation is to place all the details on slides. Reality is that the audience needs less information than most presenters believe. An audience remembers about ten percent of a presentation; it is up to every presenter to ensure they remember the right ten percent.^{5, 12, 13}

Technical Level. Thoroughly understand the potential audience. A presentation at an inappropriate technical level can negate good research.¹⁴ According to Radding and Ptaszynski, presentations can express simple or complex ideas quickly and effectively, but only after it has been ascertained how deeply the audience understands the topic.^{3, 15} Don't shovel it. An overload of technical information can wear out any audience.

Questions & Answers. Radel states that the question-and-answer period influences the audience the most because the ability of the presenter to interact is being evaluated.² When answering questions, presenters should pause briefly to organize thoughts, restate the question, and answer the question completely but briefly.

Slides Preparation

According to Nordgren, presenters who use slides are perceived as significantly more prepared, professional, persuasive, credible and interesting.¹⁶ Slides should not distract from the talk but transform a mediocre presentation into a well-received and -understood informational experience.^{1, 12} Creating an effective presentation is a time consuming task with a little theatrics thrown into the mix. Jones directs presenters to always balance text on a slide with something visual.⁷ The audience's retention increases when presenters add a visual component to their slide presentation. However, visual components of slide presentations should only supplement and complement, not become the core of the presentation.¹⁷

A slide program template will not automatically enable a presenter to produce effective, compelling presentations. Any such program, used poorly, ruins presentations and wastes time of everyone who must endure slide after slide of dense text (instead of one central idea per slide), meaningless bullets, and unreadable charts. Tufte states that slides can become a substitute for a good presentation, a misuse that ignores the most important rule of presenting: respect the audience.¹⁸ The purpose of using slides, according to Goodman, is to provide visual elements that more clearly explain, more dramatically depict, and more emotionally emphasize each point.¹⁹

Color. Jones states that while lighter backgrounds with dark type have been the standard for years, darker backgrounds with light type appear more professional looking.⁷ A white or clear background should not be used because it may create glare and eyestrain.

Type. Serif type (i.e. Times Roman) became acceptable during the 17th century. Documents printed in Serif type are less tiring to read, improve comprehension, and improve retention.⁷ However, serif type should never be used on slides. Instead, use a sans serif, bold type such as Arial. People should not "read" a volume of information on slides because slides are for highlighting important points. Therefore, the impact of slides is more important than comprehension or retention. If needed, color can be used for additional impact or emphasis, but not italics nor all caps.⁷

Graphics. Nearly all who produce graphics are trained in the fine arts and have little experience with analysis of data. According to Tufte, illustrators who get ahead are those who beautify data without regard to statistical integrity, design and edit statistical graphics and see their work as an exclusive artistic enterprise. Tufte further states that a puny data set cannot be rescued by a graphic. In fact, some graphics distort data, making it hard for the viewer to learn.²⁰ Instead, remembering that a presentation is an abstract, present key points in a table, graph, chart or photo and provide the boring data in a support document.⁷ People comprehend graphs, charts and photos more easily than tables.^{4,14} Graphics, charts, and photographs communicate a wealth of information in a concise way. Cropping images is an excellent way to highlight the main subject. A JPEG file is usually the best choice for photographs to be used in presentations.²¹

Graphical Excellence. Graphical excellence is the well-designed presentation of interesting data found in simplicity of design and complexity of data. Tufte states the most effective way to describe, explore, and summarize a set of numbers is to look at pictures of those numbers. Excellent graphical displays induce the viewer to think about substance rather than design. Graphical excellence communicates with clarity, precision, and efficiency through designs that are intriguing and curiosity-provoking, drawing the audience into the wonder of the data.²⁰

Bullets & Numbers. A slide with five bullets appears; the audience automatically reads the five bullets and ignores anything said until the next slide appears. Instead, use transition to introduce each bullet in sequence and avoid bullet-point overload.¹⁹

6 x 6 Rule. Slide mistakes include putting too much information on a single slide. Jones says to use the 6x6 rule: no more than six lines of text per slide and no more than six words per line.⁷ Streamline information into bite-size, easy to digest pieces.

Animation. Animation is when something moves within the slide, but be careful not to overuse animation.^{7,17,22} Tufte says not to overwhelm the message with snazzy and dazzling effects that overshadow the message. If an item of a presentation is not important, making it dance in color won't make it relevant.¹⁸

Accompanying Documents

Jones and Radding state that a document should be of excellent quality, include additional details beyond that covered in the presentation and be distributed only at the conclusion of a presentation.^{7,3} Audiences tune out a presentation if they already have a document in their hands. Furthermore, Compton indicates that documents should never include a copy of the slides. If a

presenter wants to distribute slides, make them available on a web site and/or utilize business cards to send the presentation to interested individuals.¹⁰

Delivery Techniques

Many sessions should come with a health warning not to operate heavy machinery while listening to them. Presenters sometimes forget what it is like to be cramped into a dimly lit room, listening to dry information. Greenberg states that keeping the attention of an audience is not accomplished by slides alone.²³ How the content is presented is just as crucial, if not more so.

Karlin states that first impressions impact perceptions.¹² An expert must project authority. Therefore, Jones indicates that presenters should always dress a slight bit better than the audience.⁷ Attitude determines how ideas are received. Be enthusiastic about your message and your audience; everyone enjoys listening to speakers who care about their subject.¹ A presenter should learn to project, pausing before and/or after important points.

It is critical that time be spent efficiently and productively. Radel states that the optimal rate for a scientific talk is approximately 100 words per minute.² Some presenters devote too much time covering background information and run out of time when covering the main material. Involve the audience by asking questions and by having examples to which the audience can relate. Use a story to reinforce retention of material and repetition to drive home an important point.²⁴

Many speakers fail to acknowledge the audience's ability to read for themselves. Ellis states to never read slides; the audience can read.²⁵ If the presenter reads slides, or uses notes or cue cards, it is boring and an indication of unpreparedness.^{7,8,22} Talk while changing slides to make the presentation more fluid. Never look at a watch; this action will cause the audience to look at theirs. Lose the podium. Move around and do not be anchored to the floor. Make regular eye contact. Jones states that presenters should never use a laser pointer; it is distracting, can produce a headache, and demonstrates the nervousness of the presenter.⁷

Related Professional Associations

You may want to contact one or more of the following professional associations for additional information.

Communications Media Management Association (CMTA) is exclusively composed of managers of corporate and education media department. Provides networking opportunities, training, and information on effectively managing media services departments.

International Association of Presentation Professionals (IAPP) is a global association for professional presentation designers, graphics producers, service bureaus and internal media-services departments.

International Communications Industries Association (ICIA) charges itself with "educating, training and certifying the communications industry", and providing information, services, training and certification for manufacturers, dealers, installers and users of audiovisual and presentation technologies.

Media Communications Association International (MCAI) is a global community of visual communication professionals who create visual media to convey important information for

corporations, small businesses, agencies, non-profit organizations, the government, education, the medical field, and broadcast and cable television.

National Speakers Association (NSA) includes more than 3,800 professional speakers and businesses that serve the speaking industry and offers the Certified Speaking Professional (CSP) program.

Summary/Conclusions

How does this information relate to the Engineering Technology Division of the American Society for Engineering Education? Members of the Division may have something to say. But if what is said is dry and boring, or if the presentation contains the latest bells and whistles but little content, who will care?

Identify a purpose for your presentation. Analyze the prospective audience. Consider your presentation an abstract. Prepare to answer questions. Prepare slides that make appropriate use of color, type font and size, graphics, bullets and numbers, and animation and transition. Prepare documents for distribution. Practice your delivery. Dress slightly better than the expected audience. Do not read your slides or use a pointer. Come out from behind the podium and mingle with the audience. Answer questions, but finish on time.

Most presentations are "post-presentations". The work is complete. The new concept has been tried and found effective. The paper for the proceedings contains tables, charts and figures. The presentation is about what has been accomplished and tends to duplicate the paper.

This presentation, however, is prescriptive - what to do in the future when you are to present a paper. To address this goal/objective, the total package for this presentation includes three separate elements: this proceeding which is generic and prescriptive - without the tables and figures, the presentation itself which is an abstract and hopefully demonstrates a good presentation, and a document which is to be distributed at the conclusion of the session and that contains sufficient detail so you too can prepare an effective presentation.

Bibliography

¹Tips for Effective Oral Presentations. (2004). www.engr.sc.edu

²Radel, J. (2004, September 14). *Preparing an Oral Presentation*. www.kumc.edu.

³Radding, A. (2002). *The Ultimate Business Presentation Guide: Deliver Your Message With Real Impact*. Newton, MA: www.technologywriter.com.

⁴Oakes, W. C., Leone, L. L. & Gunn, C. J. (2004), *Engineering Your Future: An Introduction to Engineering*. St. Louis: Great Lakes Press.

⁵Gaughan, R. (1995). "Technical Presentations: Basic Rules for Success", *OE Reports*.

⁶Communications, LLC. (2004). *Communication Skills*. www.corcommunications.com

- ⁷Jones, R. E. (2004). *Creating and Delivering Technical Presentations (Second Edition)*. Denton, TX: RonJon Publishing.
- ⁸Froes, F. H. (n.d.). "Making Your First Technical Presentation a Hit". *Professional Preface*, (2:4), p. 2.
- ⁹Antion, T. (2004). *Wake 'em up!* Virginia Beach: Anton & Associates.
- ¹⁰Compton, J. (2003, December). "PowerPoint Dos and Don'ts". *Laptop*. www.techworthy.com
- ¹¹Computer Strategies. (2004). *eCoach Opportunity: Effective Professional Presentations*. Author. www.my-ecoach.com.
- ¹²Karlin, N. J. (2004) *Creating an Effective Conference Presentation*. www.kon.org
- ¹³Warfield, A. (2004). *Three ways to Make a Technical Presentation More Interesting*. www.salesvantage.com
- ¹⁴PanTechnica. (2002, June 3). Presenting a Professional Paper at a Scientific Meeting. PanTechnica Corporation.
- ¹⁵Ptaszynski, J. G. (1997, June). *Using PowerPoint in Academic Meetings and Professional Presentations*.
- ¹⁶Nordgren, L. (1998, October 26). *Why use Visuals?* www.plu.edu
- ¹⁷Whatley, R. P. (2004). *High-Tech Presenting: Benefits and Challengees*. www.cypressmedia.net
- ¹⁸Tufte, E. (2003, September). *PowerPoint is Evil: Power Corrupts, PowerPoint Corrupts Absolutely*. *Wired Magazine*. 11.09.
- ¹⁹Goodman, A. (2004, April). "PowerPoint Corrupts". *Free-range Thinking*. Los Angeles: a goodman.
- ²⁰Tufte, E. R. (2001). *The Visual Display of Quantitative Information* (2nd Ed.). Cheshire, CT: Graphics Press.
- ²¹Terberg, J. (2004, October). "Creative Techniques", *Presentations*, 18:10, pp. 18-19.
- ²²Whatley, R. P. (2000). *High-tech Presenting: Benefits and Challenges*. www.cypressmedia.net.
- ²³Greenberg, H. J. (2000, January 20). *Tips for Oral Presentation*. www.cs.utexas.edu
- ²⁴Jones, C. (2004). How to Fire up and Motivate People While Delivering Technical Information! *Technical Presentation Skills Program*. www.cindyjonesassociates.com.
- ²⁵Ellis, H. (2003). *Guide to Presenting a Seminar Paper*. Rensselaer at Hartford. www.rh.edu.

MICHAEL R. KOZAK

Graduate Program Coordinator. Active member of ASEE and Engineering Technology Division. More than 100 publications and 100 presentations. Funded external grants from ASEE, SPE, TFA, TEA, and NSF. Consultant to the US State Department, industries, and educational institutions (most recently on TC2K preparation and technical presentations). General Operating Chair of numerous state, national and international conferences.