# Tips for Abstracts and Presentations

## On the road the 16ᵗʰ Annual Arizona Space Grant Consortium Symposium

Barron Orr, UA/NASA Space Grant

March 4-5, 2009

# Abstract Tips

- The Space Grant Symposium abstracts are short and concise -- only 150 words. It is therefore wise to focus on the major elements

- Begin by capturing the problem / question(s) you have been trying to address and your objective(s)

- Next, summarize the methods / activities pursued to address the problem

# Abstract Tips

- Next, summarize your results / accomplishments

- Finally, conclude with interpretations of those results and their significance

- In the case of R&D work, science education, or science writing, conclude with your interpretations of the potential utility and impact the product / activities / articles will have.

# Abstract Tips

- Don't be deceived – the shorter it is, the harder it is to write *well*.
- Be professional.
  - This starts with creating a draft and sharing it with colleagues and your mentor, and then rewriting the draft with their feedback.
  - This should be done on your initiative. Both the writing and the communication with them about your request for their feedback.
  - It continues with submitting the abstract on time and by the means specified by Space Grant (do not call in ask before you have thoroughly read the website and email messages).Finally, conclude with interpretations of those results and their significance
  - Last minute changes are not only extremely difficult for those organizing the conference, they place the burden of success on someone else other than you. Do not do this – it is impolite and comes off as very unprofessional, even imature.

# Presentation Tips

- All presentations (no exceptions) must be in PowerPoint.

- File size matters a lot – so it pays to learn how to make images small (file size is the key, not screen size), and then compress images in PowerPoint.

- Do not submit your presentation late, and be sure it is done. It is EXTREMELY difficult to change a presenation just prior, or worse, during a conference session. It is also unprofessional.

# Presentation: Core Content

- Much like the abstract, the core of your presentation will flow through
  - statement of the problem,
  - objectives,
  - methods/activities/analysis techniques,
  - results and
  - interpretations of the results and their significance/use/impact.

# Audience?

- The audience will be scientifically aware
  - other Space Grant students
  - mentors
  - parents
  - friends
- Though aware, they will *not* necessarily be versed in the jargon of your specific topic.
- So: always define technical terms and spell out acronyms.

# How long and how many slides?

- Presentations at the Space Grant Symposium are 7 minutes long with 1-2 minutes for questions afterwards.
- How many slides depends on your pace, etc., but a general rule of thumb is one minute per slide, so start by targeting no more than than 7 slides.
- You might have more slides if you have images which illustrate something well, but do *not* require much air time.
- Avoid prolonged discussion on any one slide. Timed practice runs will help you fine tune your presentation length and number of slides.
- A clever trick – after your "Thank You" slide, you can have a few backups of things you think might help address questions, like a more detailed explanation of a method.

# Opening?

- Most presentations use the title slide to begin:
  - title
  - your name
  - key acknowledgements (your mentor's name and affiliation and folks who worked with you directly),
  - the name/place of the symposium
  - date.
- Somewhere on the edges of this slide it is a good idea to put logos of organizations key to the research (the department, NASA, etc.), and *especially*, the Space Grant logo (a number of versions are available at http://spacegrant.arizona.edu/about/azsgc_logos).
- Since Space Grant is the primary sponsor, it is common to place the Space Grant logo in the bottom corner of all subsequent slides as well.

# Outline of Presentation?

- It is a good idea to *briefly* summarize what you are going to present at the beginning.
- It helps focus the audience and organize your own thoughts.
- This can be done verbally on the opening slide, or as a bullet list on the second slide.
- Which depends on your style, comfort and pace.

# Closing?

- Generally presenters close on the second to last slide where they discuss their interpretations, giving some insight of future directions.
- After completing that slide, they advance to a "Thank you" slide that offers the opportunity for questions.
- Do not end your slide with "Questions?" – it is much more polite to end with "Thank You"
- The moderator usually is the one who asks the audience for questions.
- Do NOT close your PowerPoint because you may need it to help you answer a question!

# Positive vs. Negative?

- Research, R&D, science education and science writing all have moments of success surrounded by periods of trial and error -- and frustration!

- While your presentation may include mention of the challenges overcome and not overcome, the focus should be on those elements that you did do and which moved things forward rather than those things which had to be discarded for whatever reason.

- Be positive! Focus on what you did do and what worked, not the opposite.

# Images

- Images are excellent, particularly where they aid comprehension.
- They often are better than strings of detailed text.
- They can be core to a slide or used to add clarification and break up text.
- NOTE: It is very important that you credit the source of the image on your slide. (usually in smaller font below the image).

# A Picture is Worth 1000 Words



Jive Software CMO Sam Lawrence http://gobigalways.com/10-roi-charts-you-cant-live-without/

# Background Colors

- Background colors have the potential to add energy to a presentation, but should never be permitted to impede comprehension.

- Be careful about standardized, fancy backgrounds – some are distracting to the audience and others take up far too much real estate without adding to your message.

- Be very careful about the relationship of your background with the color of your text.

- Many presenters use a simple background (basic white with black text or dark blue with white or yellow text), using images and the actual words chosen to provide energy to the slides.

# Text Colors

- Red text is almost always very difficult to read regardless of the background. Do not use red.
- Light text on light background or dark text on dark background should be avoided.
- If you place text on an image, make sure it is easy to read. If it is not, put a color background beneath the text on top of that part of the image.
- Ask someone good with colors to comment on your choices. A simple test? Flash a slide to someone who has never seen your presentation and ask them what they saw first – if it is *anything* other than your main message, change your slide!

# Animations?

- PowerPoint animations (e.g. flashing text, appearing and disappearing bullet points, fancy slide transitions, etc.) should be used very carefully if at all.

- Avoid anything that can distract the audience from your message and impede comprehension, or that forces your audience to look at specific text.

- What you really want is for the audience to concentrate on what you are *saying*, while taking in / reading the slide at their leisure.

# Capturing Images

- Capturing images of websites is fairly easy in most browsers: right click the image, and either "copy" or "save" the image.

- Capturing windows, screens, and parts of screens can be a bit more tricky. There are a number of simple methods (e.g. Print Screen key on many keyboards provides these functions).

- There are also a number of freeware or shareware applications that make this very easy and fast, such as ScreenRip (http://www.progency.com/).

(Remember to *credit* the source in your PowerPoint either on or next to the image, including who took the photo and the web page you borrowed it from.)

# ScreenRip by Progency



**http://www.progency.com/**
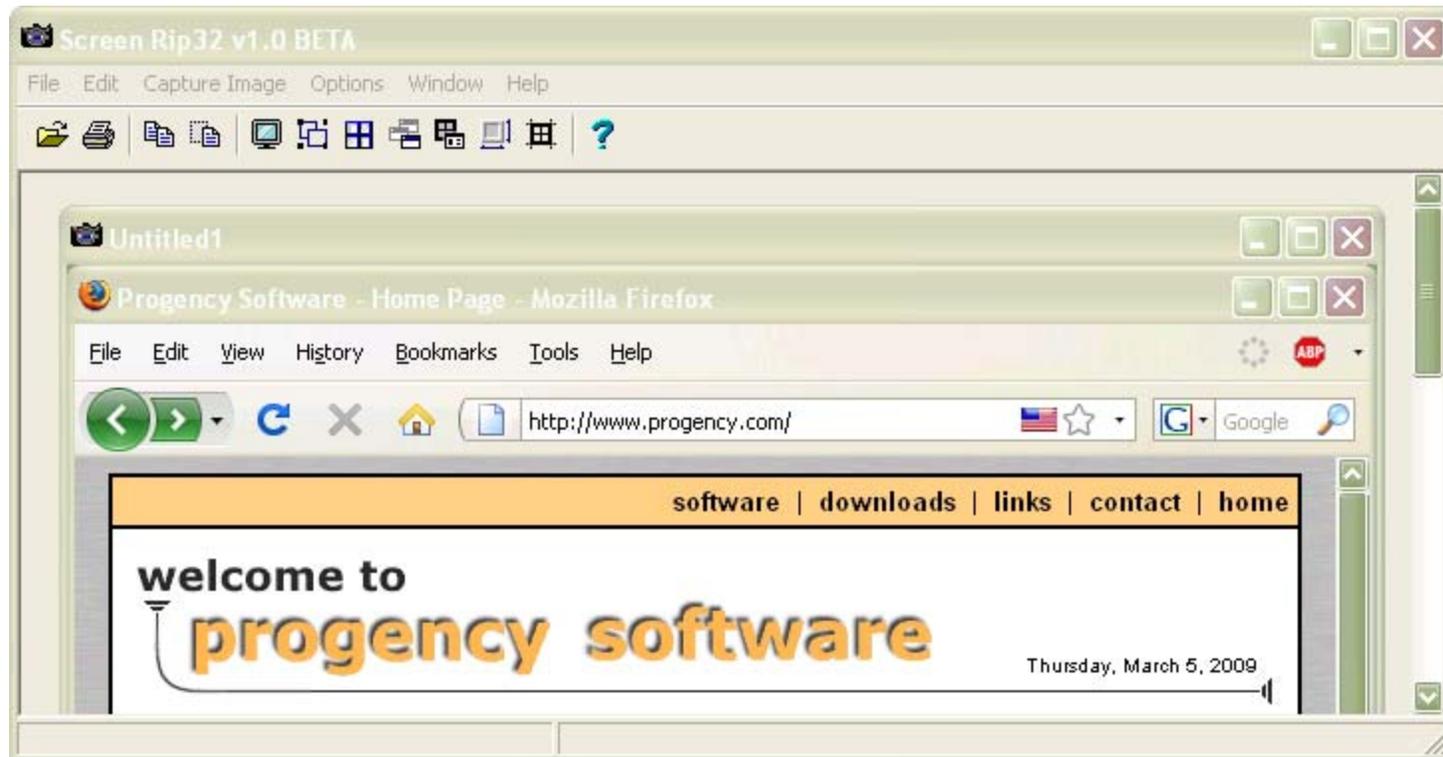
# Font Type?

- Sanserif fonts lend themselves well to computer projection. Computer projectors rarely handle light, thin lines well. It is therefore recommended that presenters avoid serif fonts (which are wonderful for documents, but hard to read when projected onto a screen).
- **Encouraged:** sanserif fonts (a category of typefaces that do *not* use serifs, small lines in or at the ends of characters). These include, among many others, Arial, Helvetica, Avant Garde, and Geneva. Why? Easier to read when projected on a screen.

# Font Type?

- **Discouraged:** serif fonts (typefaces that use serifs, light lines or curves called serifs projecting from the top or bottom of a mainstroke of a letter). These include, among many others, Times Roman, `Courier`, New Century Schoolbook, and Palatino. Why not? Light lines do not project well, making them harder to read.

# Font Type?

- **Strongly Discouraged**: playful fonts such as Comic Sans, which was developed as a as a casual, non-connecting script, and was designed to imitate comic book lettering, for casual use in informal documents and the packaging of children's software. Thus, the only time one might consider using it in a presentation is for expressing thoughts or dialogue in a comic – but it should never be used as the main text font.

# Font Size

- Too many words in tiny font sizes should be avoided! Specific font sizes will vary, but generally slide titles should be larger (e.g. 40pt), while bullets can be smaller 32 or 28pt.

- Avoid using smaller than 24pt, other than information less critical to topical comprehension (e.g. providing credit for a photo).

- The **only** exception is where text is used as a visualization to illustrate a concept or an activity and the details therein are not essential for comprehension.

  - For example, a snapshot of a table with numbers used to illustrate a concept like "Database Development" or "Statistical Analysis" *if and only if* you do not expect the audience to read the table.

# How Best to Present?

- The answer to this comes from practice.

- When you practice alone – something recommended as you form the presentation – make sure to speak out loud (full voice) and, in at least one run through, watch yourself in a mirror.



- Next, do a practice run with people who you know well (comfort is important at this stage, as is an audience which is *not* versed in the specific topic you are presenting as they will catch jargon and technical terms that need to be defined).

# How Best to Present?

- Finally, do a practice run with your colleagues where you work. In all practice runs, it is very important to pretend that each run is a live presentation.

- Before starting, ask your audience to do the same, and ask them to note any suggestions which you can discuss afterwards.

- Remember to time each practice run so that you eventually are able to consistently complete in 7 minutes

# Strong Beginning, Strong Finish?

- Memorization rarely if ever helps a presentation.

- However, having a strong beginning and strong finish can make a world of difference.

- These get you rolling, reduce nerves because you are rolling, and help you gracefully off the stage!

# Transition?

- Rather than memorizing what you will say on each slide, identify the transitions you want *between* slides.

- Two complimentary methods work well: a) plan for the last thing you say on a slide to be the opening for the next slide, and/or b) place something on the slide (a word in the last bullet or an image) that cues you as to what is coming next.

- Good transitions lead to good presentations and are much more effective than rote memorization.

# Delivery?

- Your slides should speak for themselves -- so face your audience (rather than the screen) and avoid reading your own slides out loud or to yourself.

- Eye contact is very helpful for communication, and walking, gestures, and *occasionally* (too much can be distracting) directing audience attention to a particular aspect of a slide (e.g. with a laser pointer) can add energy and focus to a presentation.

# Delivery?

- Face your audience, not the screen.
- Do not read your slides.
- Other than the first and last, do not memorize your slides
- Some presenters use note cards, but a *much* more effective method is to use cues in the slides to prompt what you want to say.
- For example, you may have a slide which has the title "Methods" with an image of your laboratory (or classroom or newsroom), a field site, or some key piece of equipment accompanied by a succinct list of major methods, activities and/or analysis steps.

# Delivery?

- Use the title or the image to cue your discussion and summarize the major points.
- Important information that you do not have time to discuss directly during the presentation can and should be included in the list.
- Let the slide address the general substance of what you are saying and the related details you do not have time to say.
- If any particular method requires more explanation because it was essential to achieving results, have a follow up slide highlighting / explaining that particular method.

# The End?

- Some end with "Future Directions" – but do not make this overly long. Do *not* waste precious time you could use to talk about what you did discussing the future.
- It is good idea to end with a more detailed Acknowledgements slide.
- Remember your mentor, any graduate students, the funding agency, the Department, the name of the grant, etc.
- A final slide for questions can be a simple "Thank You"
- At the end there is generally 1 to 2 minutes for some questions. Most of these you will be able to answer directly, however you always have the option to move back through your presentation to support your response with a particular slide when needed.