# Technically Speaking - Part I

# Preparation

Source: <a href="http://techspeaking.denison.edu/Technically-Speaking/Preparation.html">http://techspeaking.denison.edu/Technically-Speaking/Preparation.html</a>

# **Anticipate Questions**

A presentation should engage the audience. An audience that is engaged tends to ask questions. Thus, you should encourage your audience to ask questions not only at the end of your presentation, but at any time during your presentation as well. When preparing your talk, try to think of all the tangential ideas surrounding the talk and be prepared to answer related questions if they arise (even if your answer is something like "I wondered about that too...".)

When a question is asked, appropriate etiquette is to repeat the question so that the entire audience can hear the question being asked. You should strive to provide a short and concise answer to their question. If their reaction to your answer does not appear sufficient, simply ask for clarification. A second response should be provided. However, any further discussion should wait until after the presentation is over.

Frequently the depth of your understanding of the topic is exposed by a simple question from the audience. If a question is asked to which you do not know the answer, it's okay to say you haven't thought about that aspect and express gratitude for the audience member bringing it to your attention. Avoid giving excuses and/or apologies.

### Don't overestimate the knowledge of your audience

You must have knowledge of the appropriate level for your presentation before presenting. Deciding on an appropriate level does not mean "dumbing down a talk" which can be an insult to the audience. The level of a presentation can easily be adjusted by the choice of your examples used in your presentation, how many examples you use, the tone of your voice, etc.

In determining the level of your talk, common practice is to present at a level one step below your audience. If your assessment of the audience is correct, this means that a majority of your talk will be understandable. Presenting at exactly the level of the audience may result in a talk that the audience members are still unsure of in their understanding.

#### Make copies of slides used more than once

When referring to content on a previous slide, make a copy instead of flipping back through your presentation to display the content. The progression of your slides must be done seamlessly and without distraction. The audience should be concentrating on what you are saying and what they are reading from your slides, not on your inability to progress through your slides.

#### Avoid technical definitions

The presentation of technical content, e.g. mathematics, often requires knowledge of a certain set of definitions. Unless the point of the talk is some important definition on variation of a known definition, rarely does an audience appreciate the level of detail required to reason mathematically. Instead conceptual ideas and intuitive approaches should be emphasized. If an audience member asks for clarification, you should try to provide it quickly, but otherwise this level of detail should be discussed with members of the audience after your presentation.

### Use examples and non-examples

The appropriate use of examples should be your most important goal in presenting technical content. This is especially true for shorter presentations (15 minutes or less) and when your audience has varied background knowledge. The use of carefully constructed examples in the presentation of definitions, theorems, and even sophisticated methodology will assist in an audience understanding of the content. Using examples which do not meet certain conditions (i.e. non-examples) can be used in contrast to examples which meet conditions of definitions, theorems, etc.

### Segment your talk in case you run out of time

The amount of time allocated for your talk should be clearly defined. You should practice your talk repeatedly to ensure you can complete your talk in the time allotted. In fact, it is much better to end your talk five minutes early than going over time. A common mistake is presenters preparing too much content for the time allotted – this is natural as one wants to share their knowledge with the audience.

To avoid going over time, you can segment your talk to create natural breaks in order to stop early if necessary. You can also decide beforehand which, if any, slides may be skipped if you are running out of time. Planning ahead is the key to avoid skipping several slides near the end and quickly presenting a conclusion slide that lacks context.

## Don't compute in public

You should avoid doing "math", i.e. computations, in your presentation. This may be necessary on a homework assignment, but not during a presentation. You must strive to retain the attention of the audience. Furthermore, if a mistake is pointed out in a prepared computation during your presentation, do not attempt to fix it on the fly. Simply admit the mistake and move on.