

# Sharing Your Stories: How to Create Dynamic Presentations

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I'll bet when you learn something that is really cool, the first thing you want to do is share it with others. It turns out that the ability to share your ideas and discoveries with others is tremendously important – it is a skill you will need your whole life. In the next pages we will explore this topic with enough depth to help you share your thoughts with ease in such a way that people will remember what you did, and remember that they heard about it from you, not from someone else.

The kind of sharing we'll explore falls under the category of presentations – formal or informal expressions that may or may not use various media to get your point across. Furthermore, we'll assume you will be giving presentations on something you explored in the Space Exploration course, although the skills you'll develop can be applied anywhere.

Why is this an important topic? Think about this:

A few years from now you are working on a tremendous project, one that can greatly advance your career. You are headed to your office and, as you get on the elevator, you see that the only other person there is the head of your enterprise. She asks what you are doing that excites you, and this is your big chance! But, you only have 30 seconds before the elevator stops and she gets off. You want her to feel the same excitement you do for your project, and

to remember the meeting, perhaps even going so far as asking for you to make a more formal presentation to the other heads of the company. How do you get your ideas across effectively? In 30 seconds? With no props?

Although it might sound very hard, if you have developed your skills in this area, always keep in mind that all your presentations should have in common is the ability to fully “engage” your audience in what you are describing. Engagement goes beyond just paying attention; it includes getting people to not only understand your own commitment, but for them to share your commitment and enthusiasm as well. This is important for any audience. For the next few years, your primary audience will likely be fellow students and your teachers. In the future you will reach a broader audience. When people are engaged, it is like you have tapped into their minds and your ideas are being planted there in ways that will not soon be forgotten. Otherwise you might give a presentation that just drags. Your audience may become bored, their minds may wander, and your great ideas will not even be heard, let alone remembered. Knowing how to give an engaging presentation is a skill that will last you a lifetime.

Now you might be saying, “But I’m afraid of speaking in front of groups.” If so, you have plenty of company. I give over 20 presentations per year all over the world, and each time I speak, I feel a little tension building up inside me. The trick is taking that “fear” and using it to keep you focused. If you are afraid of having what you say come out wrong, you just increase the likelihood that it will. The fact is that professional speakers make mistakes all the time. What makes them great is how they recover from their mistakes so smoothly that the audience hardly notices that anything was wrong.

I remember one time, many years ago, when I was giving an after dinner speech at a meeting held in a hotel and, an hour before my talk was to start, a truck ran into the power pole providing electricity to the hotel, and knocked it down. All the electricity went out. Waiters quickly brought out candles so the diners could see what they were eating, and everyone was having a great time. My challenge was that my presentation was supported by several pieces of electrical equipment along with my computer, and, without electricity, none of this equipment would be able to work. Instead of freaking out (very much!) I immediately moved to “Plan B” (a backup plan) and ended up giving a speech without any equipment at all. I was still able to engage my audience, and share lots of good information with them. At the end, I got a standing ovation, and had the satisfaction of knowing that, even in the face of adversity, I could still stay focused enough to make a good presentation.

The reason I’m sharing this story with you is simple. You will probably do lots of presentations using computers, the Web, or other tools. You might include photographs,

movie clips, and other media resources. But, the heart of your presentation needs to come straight from you. All the media in the world can not make you a better presenter. Good presenters, though, can make very effective use of media. And, in those rare cases when all the extra media fails, you'll always have Plan B. For this reason, I'm going to start by describing some tips that apply to all kinds of speeches, even if you don't have any visual aids at all! Later on we'll explore how to design and use visual aids effectively.

*What makes a presentation different from a written report?*

Every so often I attend a presentation at which the speaker pulls out a script and proceeds to read it word by word. Most times, the results are deadly. The spoken word is different from the written word. Ideas best expressed in writing should be distributed in that form, not read aloud to groups. (Possible exceptions are great poetry that can be read or spoken with similar impact. A report on the design of a new space suit probably doesn't fall into that category, though.)

This doesn't mean that some written notes aren't valuable. Written notes can keep you on track, and can hold some numbers or other information you want to share that might easily be forgotten. Some presenters build an outline of their presentation highlighting the major points. They refer to their notes as needed. My personal style (which you may or may not like) is to include "trigger phrases" *in* my slides. These help keep me on track. This strategy should be used carefully, so you don't end up just reading your slides to your audience.

You are the key component in your presentation. It needs to reflect *your* ideas and beliefs. People will be listening not only to what you say, but how you say it. If you share your views with a flat voice without any excitement, people may come away with some information, but none of the enthusiasm or joy you feel for the topic. They may remember what you said, but not remember who said it. In some sense, giving a presentation is a little like giving a performance, except that you aren't acting – if you try to express an idea with a passion you don't feel, this will come across as fake, and you will quickly lose your audience. Unless you are a tremendous actor, you should speak your ideas with honest feeling.

One problem is that many people are afraid of expressing their ideas in public. These same people have no trouble expressing their ideas to a few close friends. With their friends, they are full of energy and excitement. But put these same people in front of a bigger audience and they get nervous, fidget with their hands, speak too softly, and maybe even mumble. Nervousness can turn a great presentation into a disaster! So, how do you overcome this challenge?

First, be prepared. When you know what you are confident about the points you want to

make, the task is easier. Second, avoid two extremes. We already mentioned that you shouldn't read your talk from a script. The other extreme is to memorize your talk word for word. Aside from the fact that this is hard to do, it can mess you up if you forget part of the things you memorized. The key is to find a middle point where your written outline is all you need to trigger the things you want to say, and the order in which you want to say them. For example, if you are giving a talk about how the US started its program to put a man on the Moon, your outline might look something like this:

### **Man on the Moon presentation**

- 1) President Kennedy gave a speech calling for the US to put a man on the Moon within a decade
- 2) Why were we interested in the Moon?
  - A) Science fiction
  - B) Cold war pressured us to show superiority in space
  - C) Technical challenge would capture the attention of the whole world
- 3) History of the Apollo project
- 4) Neil Armstrong's first steps (show video here)
- 5) Challenges in the program (Apollo 13)
- 6) When and how will we go back?
- 7) Why should we go to the Moon again?
- 8) We achieved Kennedy's dream. What dreams do we have today?
- 9) Any questions from the audience?

This rough outline shows the logical progression of your presentation and points out when you should show a video clip. Your outline might be more detailed, but make sure it is printed clearly enough that you don't have to search for your place along the way.

As you develop your speech, keep in mind the amount of time you will be given. It is very rude to run your speech beyond this time by more than one or two minutes (maybe five minutes if you are a beginner.) There might be another speaker scheduled to talk right after you, or your group might have to go back to class. Don't get lost in your own words, or let your enthusiasm translate into an attempt to take over everyone's time. If you time things correctly, some folks may stick around to talk with you informally once your presentation is done.

### *Body language*

When you are in the spotlight, all eyes are on you. This means you should take care to look your best and pay attention to your body while speaking. Let's start with your head. You should make eye contact with audience members while speaking. Perhaps you have a few

friends sitting in the audience. Look at them from time to time and make eye contact. If the room is large, be sure you look at folks in different parts of the room, especially in the back. Also, hold your head level so you are talking out to your audience, not down to a podium or table holding your notes. If you are using a microphone, see if you can use one that is clipped to your blouse or shirt so it will always be the right distance from your lips. A microphone that is too close will pick up breath sounds (these can be spooky!) and, if it is too far away, the sound will be too soft, or mixed with other noises. And, don't forget to breathe! Breathe normally and have your voice come from your chest, not from your throat. Pronounce words clearly and with a consistent volume. Project your voice so it reaches the back of the room, but don't scream! Some people see screaming as a sign of discomfort. Also, try to smile while you are speaking. This gives an extra boost to your message.

The next part of body language to be addressed is the use of your hands. If your hands are not calm, your audience will notice. There are a few tried and tested rules about hand placement for speakers. First, do not give a speech with your hands in your pockets. While this keeps them from visibly shaking, it makes it look like your speech is a casual effort, not something that is going to blow people away with your great ideas. Second, don't clasp your hands together in front of you (or behind you). This brings too much attention to them. Just let your hands hang normally at your side, or rest easily on the top of the podium. If you have a strong point to make, or want to point to a visual (we'll explore visuals later), then it is appropriate to point. Instead of pointing with the index finger, I like using both the index and middle fingers together. (I first saw this being done during the safety instruction speech on an airplane). The reason for having both fingers together is that it is less aggressive than pointing with just one finger. Pointing with your index finger can be seen as an accusation. Two fingers together is not aggressive, and it is easier to see from the back of the audience.

### *Movement*

There seem to be two types of speakers: the standers and the walkers. Both can be quite effective. If you are relying on your outline to keep you on track, you probably don't want to be far from your notes, so you might start out as a "stander." As you gain more experience, you might find it more natural to walk a little on the stage to be sure you are addressing everyone. You have to do what comes most naturally to you. Your teachers and friends can coach you if you want. Note that, if you plan to be a walker, make sure you have a clip-on microphone that gives you freedom to move from behind the podium.

### *Additional tips*

The speed of your delivery should be the same as you use in conversation. Avoid the temptation to speak more slowly as this can get boring. Believe me, even if you are a rapid talker, audiences will get everything you are saying as long as you speak clearly. In fact, a fast

pace can lead to engagement. Above all, be yourself. When you say something that doesn't come out right (and, believe me, every professional speaker has this happen more often than you'd think), just restate what you meant to say and keep going. The chance is that the audience won't notice. If you *really* mash up your words, you can say something like "And for those of you who speak English, what I *meant* to say was..." and say the sentence properly.

This brings up another topic: humor. Humor can be a great tool in speeches under very few conditions. You don't need to be a comedian to give a great speech. If you *do* decide to use humor, use it very sparingly. First, don't tell jokes unless you are using them to make a point that relates directly to your speech. Second, if you have a funny line (funny to you anyway), don't wait for laughter. Just keep speaking as if nothing happened. When in doubt, leave humor to the professionals.

Be aware that, in a formal presentation, when you come on stage to give your speech, shake hands and thank the person who introduces you and start your speech by thanking the audience for their attention. When you are done, thank the audience again before asking for questions.

Wow! This is a lot of stuff to remember. Don't worry, presentations get easier with practice.

*What if I'm STILL so nervous my stomach feels funny?*

Some people get really nervous before they speak in public. Even professional speakers feel some butterflies in their stomachs as they get started. The most nerve-racking time comes at the start of the speech before you are into your content deeply enough to forget about all those people who have come to hear you. If you are really nervous, I think the best thing to do is let the audience know this right away. To start with, they will probably notice anyway, and, if you are telling them you are nervous, they will be extra supportive of your efforts. I promise you, most of them probably are nervous about public speaking as well. There are all kinds of tips on how to avoid nervousness before giving a speech. Some of them work for some people, and not for others. I promise you, once you share your ideas with enough groups, your nervousness will go way down.

*What should I wear?*

The reality is that people will form opinions of you as soon as they see you. This means that you should dress nicely (but not overdress) for your speech. Comb your hair, wash your face and hands, and make sure there is no ketchup on your chin and that everything has been buttoned and zipped before going on stage. (I could tell some stories of my own problems in this area!)

*And now for visual aids...*

When you are presenting without visual aids, all the attention is on you. Once you bring in visuals, these extra tools will support your words. The attention will be on your voice and the visuals, not so much on your stage presence. The reason visual aids can be powerful has to do with how we think the brain works. The part of the brain that deals with speech is different from the part that deals with images. Since you want your ideas to have impact, the more ways you have of reaching the audience's brains, the better. You know from your own experiences that you can handle information coming from several sources at the same time. This applies to everyone.

Be cautious, though, visual aids need to be chosen very carefully. They should be used only if they add value to your speech by conveying ideas that are hard to express through words alone. You will want to be sure that the words you speak do not conflict with the images you show. Basically, your visuals and video clips (if used) should reinforce your words, neither distract nor conflict with them.

It is important for your visuals to be free of clutter, and presented with a clear style that shows common design elements. For example, if you have some slides with text, they should all be on the same background and the text on each slide should (generally) all be the same color and made with the same typeface. This style of "dress" for your visual aids should show the same attention to detail you give to your personal appearance when giving a speech. There are at least two reasons for this. First, it shows that you put a lot of care into the design of your presentation, which is a sign of respect for your audience. Second, if you constantly change text background and text color, your audience will be distracted and likely miss some of the points you are trying to make.

It is likely that you will be designing your visual aids with a slide show tool like *Impress*, which is part of the *OpenOffice* suite you have installed on the computers you have at school. Since this is free software, you can use it on your home computer, so you can use the same tool on any computer to which you have access.

The starting point for designing your slides is likely to be the outline of your speech. You should have this outline printed out so you can mark it up as you put the slide show together. One caution is to resist the temptation to build the outline into a set of text slides using a lot of bullet points. The result can look something like this:

## Putting a Man on the Moon

- **Kennedy speech**
  - Put a man on the Moon by end of the decade
- **Apollo program**
  - Took a great effort and had some problems
  - Several astronauts died
  - Finally was successful
- **First steps on the Moon**
  - Whole world celebrated
  - Now preparing to go back

So what's wrong with this picture? Well, for one thing, your audience can read the whole bullet chart in less time than it takes for you to give the speech. If they are ahead of your words, they won't be listening. Second, we live in an image-rich world. The appearance of pure text (especially if this is how all the slides are created) can be amazingly boring. I like to say, "The reason they call them bullets is because they are deadly."

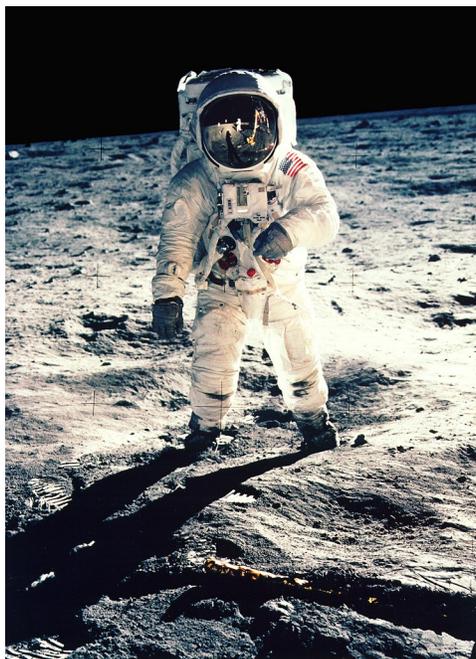
Now this doesn't mean that you can't use bullet points from time to time. There are some times you want to emphasize some part of your message in a way that makes great sense. For example, let's say we are defining the concept of STEM skills. We might have a slide like this:

## STEM areas:

- Science
- Technology
- Engineering
- Mathematics

This slide provides a written description of each letter in STEM and is the sort of thing someone taking notes might want to write down. By the way, if you have slides that people want to write down, be sure they are simple enough to copy, and that they are on the screen long enough for folks to transcribe them. One of the general rules when using text effectively in slides is to not have more than six words per line, nor six lines per slide. This “six by six” rule is one of many helpful tips you can get from the book *Visual Literacy* by Dr. Lynell Burmark (<http://www.lynellburmark.org/>).

Now let's move beyond words to images. Images (especially photos) can be very powerful because they can touch the mind and the heart at the same time. Consider this image of Dr. Buzz Aldrin standing on the Moon:



(image source: NASA)

Do you think this is an impressive picture? What messages do you think this image conveys? My point is that images like this can impart a lot more information than a slide filled with words. If you were talking, for example, about Buzz Aldrin, you could just have easily shown a picture of him taken here on Earth. Showing this picture from the Moon delivers a lot more information, and it does this in an instant.

So how do you go about selecting your images? As we said, you start with an outline of your talk. Next to each point in your outline, you should ask yourself if the idea to be expressed is

best put in the form of text, a graph, an image, or even a video clip. If you think you need a picture, then you should search for the best images related to your topic on sites like those maintained by NASA. For example, NASA maintains a whole library of images associated with the Apollo missions, and you are free to download any of these for incorporation into your presentation.

Unless you have taken the photographs yourself, you need to be sure that you have permission to use them in your presentation. There is a law called “copyright” that deals with the conditions under which you can use images you find on the Internet or elsewhere. In general, you are free to use images from NASA or other US Government sites in your work. You should always give credit for your images, though. After all, how would you feel if someone used one of your photographs in a talk without getting your permission, or giving you credit? Your teachers can give you some guidance on the ethical use of images in your work.

If the pictures you choose need to be edited for size, or to focus on just one part of the picture, this kind of editing can be done with tools like the *GIMP* image editing software on the school's computers. As with *OpenOffice*, you can install this professional image editing software on your home computer for free! Instructions on using *GIMP* for simple image editing are provided in the TCSE software manual.

Once you get through your first set of plans for your talk and identified (and downloaded) the images you need, it is time to start putting your presentation together using *Impress*.

If you are just starting with this software, you can build your presentation using one of their built-in templates. When you launch *Impress*, you will be asked if you want to build a presentation from a template. When you click in the right button, you will see a list of pre-installed templates from which you can choose. Some of these are better than others (in my opinion). The choice is ultimately up to you. In fact, if you don't like any of the templates, you can even build your own. For now, let's stick with one of the choices they provide. The key to choosing backgrounds and text is to make your slides easy to see. Once you pick a background, click **Next** and choose **Screen** as the output medium if your talk will be given using a computer and a projector. When you click **Next** again you'll be given a chance to choose the slide transition. I prefer using “wipe right” at a medium speed. This is a smooth transition from slide to slide that does not distract your audience. (Later you should try other transitions to see which you like best.) Your template will have made some choices for you regarding typeface and size. For now, you can safely stay with these choices. The popularity of *OpenOffice Impress* is encouraging folks to create more templates for you to use. For example, Presentation Helper in the United Kingdom ([www.presentationhelper.co.uk](http://www.presentationhelper.co.uk)) has

some nice templates you can download. Another large collection of extra templates can be found at <http://smalldataprobblem.org/ooextras/downloads/simpres/>

If you decide to design your own template, here are some tips to follow:

First, people look at slides from left to right, and from the top to the bottom. Your backgrounds and layout should make it easy for the viewer's eyes to do what comes naturally.

Second, your typeface should be fairly plain:

1. Which of these lines is easier to read?
2. Which of these lines is easier to read?
3. Which of these lines is easier to read?
4. Which of these lines is easier to read?
5. Which of these lines is easier to read?

Sometimes simpler is better. That said, there is also the emotion conveyed in the typefaces that has to be considered. For example, lines 3-5 seem less formal than lines 1 and 2. Line 4 is both easy to read and informal. The choice is up to you; there is no one right answer. One way to choose a typeface is to show samples to some friends, peers, and parents and see which ones they like best. Once you choose a typeface, you generally should use it on all your slides that have text. Bouncing from one typeface to another on each slide can be confusing.

Independent of typeface, type size is critical. Your text slides should not be eye exams. The type size should be big enough for the average adult to read from the back of the room. (Note, many people start to need glasses as they get older, so keep this in mind!)

Finally, we come to the issue of color. Text color depends on background color. Light backgrounds can be used with (for example ) black text. Dark backgrounds can be used with white or yellow text. My personal favorite is yellow text on a dark blue background. Whatever you choose, be sure the contrast is enough that people who are color blind can read your slides easily. (Note this problem shows up in only a few percent of the male population, and less than half a percent of women.)

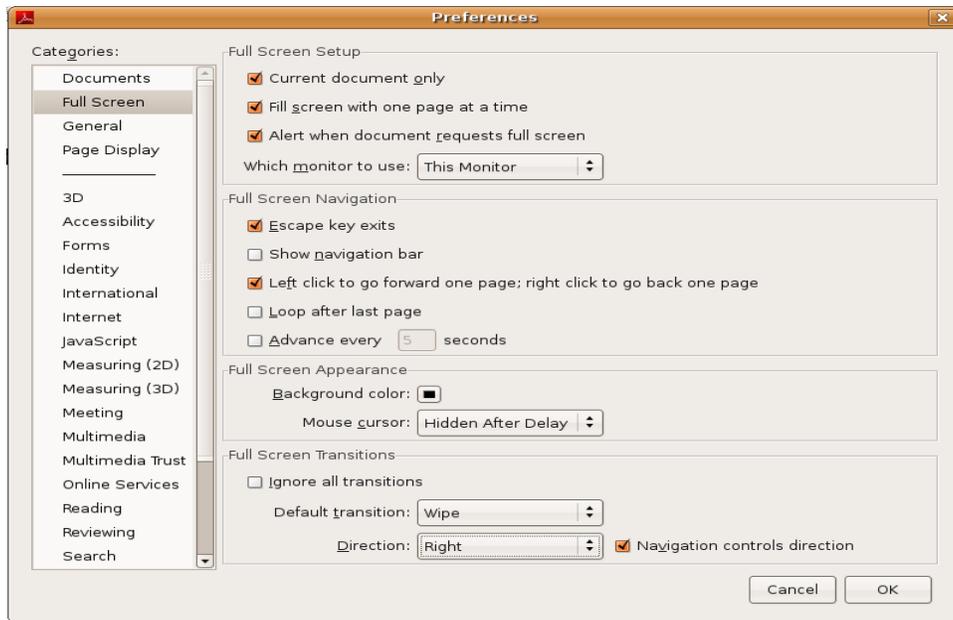
Slides containing images may or may not have some text associated with them, depending on

how self-explanatory the image is. Remember you will have a copy of your outline with you, so you can always refer to that if you forget the purpose of an image on the screen.

On the technology front, think about the setting where you will be giving your presentation. You might have a laptop computer with you containing your presentation, in this case all you need is a projector to show your visuals to your audience. But suppose you don't have your own computer to use. What then?

The trick I use, which makes a great backup plan, by the way, is to save a copy of my presentation as a PDF file (using the **Export as PDF** command in the *Impress File* menu). This file can be opened in Adobe's *Acrobat Reader* ([www.adobe.com](http://www.adobe.com)), a free program that is usually installed on all computers. One huge advantage in using PDF files is that they contain the typefaces you actually used in your presentation, even if they are not installed on the computer you will be using! This is of tremendous value to you, especially if you use uncommon typefaces, or are giving your presentation on a completely different computer system than the one you used to create your slides.

In case *Acrobat Reader* isn't already installed you'll want to download the *Acrobat Reader* installer and put it and your presentation PDF file on an pen flash drive you can carry with you anywhere. Pen drives with a gigabyte or more of storage are pretty cheap these days, and you can buy them almost anywhere. Once you have your pen drive ready to go, all you need to do to run your presentation is launch your presentation PDF file on the borrowed computer and choose the **Full Screen Mode** under the **View** menu and then click your mouse on each slide when you want to advance to the next one. You can even add transitions in the **Preferences** option in the **Edit** menu. If *Acrobat Reader* is "missing," install the version you downloaded and you will be ready to go!



Our final piece of advice is to jump into giving presentations as soon as you can. Try it at home, at your friends' houses, as an exercise in front of the mirror and you'll get better through practice. Soon you'll be able to convey your ideas clearly in any setting, from a 30-second elevator ride to a one-hour presentation at a conference!