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Exploring Public Speaking: 2nd Revision

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The Free Dalton State College Public Speaking Textbook

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Chapter 7 Supporting Your Speech Ideas

Learning Objectives

After reading this chapter, the student will be able to:

- Explain why supporting materials are necessary;
- List the various types of verbal supporting materials;
- Discuss supporting material strengths in explaining and proving ideas and arguments;
- Incorporate supporting materials seamlessly into the speech;
- Use supporting materials ethically through correct citation.

Chapter Preview

7.1 – Why Supporting Materials are Needed

7.2 – Types of Supporting Materials

7.3 – Attention Factors and Supporting Materials

7.1 – Why Supporting Materials are Needed

As mentioned in previous chapters, preparing to give a presentation is not a totally linear process. It would be nice if the process was like a following a recipe, but it loops back and forth as you move toward crafting something that will effectively present your ideas and research. Even as you practice, you will make small changes to your basic outline, since the way something looks on paper and the way it sounds are sometimes different. For example, long sentences may look intelligent on paper, but they are hard to say in one breath and hard for the audience to understand. You will also find it necessary to use more repetition or restatement in oral delivery.

Therefore, although this is the seventh chapter in the book, it deals with some concepts that we have already been thinking about in Chapters 2-6. Specifically, this chapter is about supporting materials: what they are, what they do, and how to use them effectively. But you have already been thinking about how to support your ideas when you were researching and crafting a central idea and main points. Supporting material also relates directly to Chapter 9, presentation aids. Whereas presentation aids are *visual* or *auditory* supporting materials, this chapter will deal with *verbal* supporting materials.

Using your supporting materials effectively is essential because we crave detail and specifics. Let's say you are discussing going out to eat with a friend. You suggest a certain restaurant, and your friend makes a comment about the restaurant you have not heard before or don't accept at face value, so you ask in some way for explanation, clarification, or proof. If she says, "Their servers are really rude," you might ask, "What did they do?" If she says, "Their food is delicious," you might ask what dish is good. Likewise, if she says, "The place is nasty," you will want to know what their health rating is or why she makes this statement. We want to know specifics and are not satisfied with vagueness.

Supporting material can be thought of as the specifics that make your ideas, arguments, assertions, points, or concepts real and concrete. Sometimes supporting materials are referred to as the "meat" on the bones of the outline, but we also like to think of them as pegs you create in the audience's mind to hang the ideas on. Another even more useful idea is to think of them as pillars or supports for a bridge (Figure 7.1). Without these supports, the bridge would just be a piece of concrete that would not hold up once cars start to cross it. Similarly, the points and arguments you are making in your speech may not hold up without the material to "support" what you are saying.

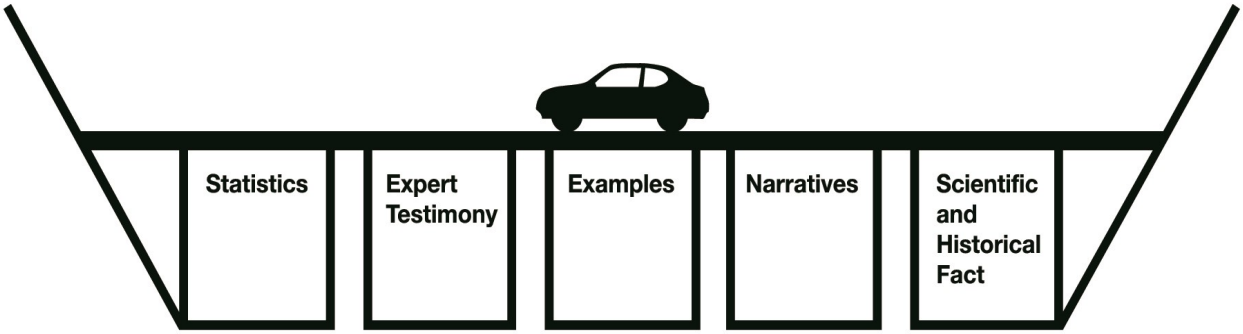


Figure 7.1

Of course, as we will see in this chapter, all supporting materials are not considered equal. Some are better at some functions or for some speeches than others. In general, there are two basic ways to think about the role of supporting materials: They either

1) clarify, explain, or provide specifics (and therefore understanding) for the audience, *or* they
2) prove and back up arguments and therefore persuade the audience. Of course, some can do both.

You might ask, how much supporting material is enough? The time you are allowed or required to speak will largely determine that. Since the supporting materials are found in the subpoints of your outline (A, B) and sub-subpoints (1, 2, etc.), you can see clearly on the outline how much you have and can omit one if time constraints demand that. However, in our experience as public speaking instructors, we find that students often struggle with having enough supporting materials. We often comment on a student's speech that we wanted the student to answer more of the "what, where, who, how, why, when," questions and add more description, proof, or evident because their ideas were vague.

Students often struggle with the difference between "main idea" and "supporting idea." For example, in this list, you will quickly recognize a commonality.

Chocolate

Vanilla

Strawberry

Butter Pecan

Of course, they are popular flavors of ice cream. The main idea is "Popular Flavors of Ice Cream" and the individual flavors are supporting materials to clarify the main idea; they "hold" it up for understanding and clarification. If the list were:

Rocky Road

Honey Jalapeno Pickle

Banana Split

Chocolate

Wildberry Lavender

you would recognize two or three as ice cream flavors (not as popular) but #2 and #5 do not fit the list (Covington, 2013). But you still recognize them as types of something and infer from the list that they have to do with ice cream flavors. "Ice cream flavors" is the general subject and the flavors are the particulars.

Those examples were easy. Let's look at this one. One of the words in this list is the general, and the rest are the particulars.

Love

Emotion

Sadness

Disgust

Tolerance

Emotion is general category, and the others are specific emotions. Here is another:

- Spaying helps prevent uterine infections and breast cancer.
- Pets who live in states with high rates of spaying/neutering live longer.
- Your pet's health is positively affected by being spayed or neutered.
- Spaying lessens the increased urge to roam.
- Male pets who are neutered eliminate their chances of getting testicular and prostate cancer.

Which one is the main point (the general idea), and which are the supporting points that include evidence to prove the main point? You should see that the third bullet point ("Your pet's health is positively affected . . .") would be a main point or argument in a speech on spaying or neutering your pet. The basic outline for the speech might look something like this:

I. Spaying or neutering your pet is good for public health.

II. Spaying or neutering your pet is good for your pet's health.

III. Spaying or neutering your pet is good for your family's life and budget.

Of course, each of the four supporting points in this example ("helps uterine cancer in female pets, "etc.) cannot just be made up. The speaker would need to refer to or cite reliable statistics or testimony from veterinarians, researchers, public health organizations, and humane societies. For that reason, here is the more specific support, which you would use in a speech to be ethical and credible. Notice that the italicized sections in this example Main Point use statistics and specific details to support the claims being made.

II. Spaying or neutering your pet is good for your pet's health.

A. Spaying helps prevent uterine infections and breast cancer, *which is fatal in about 50 percent of dogs and 90 percent of cats,* as found in the online article "Top Ten Reasons to Spay or Neuter Your Pet," written in 2015 and posted on the website for the American Society for the Prevention of Cruelty to Animals.

B. The article also states that *pets who live in the states with the highest rates of spaying/neutering also live the longest*.

1. According to Natalie DiBlasio, writing for *USA Today* on May 7 of 2013, in Mississippi, the lowest-ranking state for pet longevity, *44% of the dogs are not neutered or spayed*.

2. She goes on to say that other issues *affecting pet longevity have to do with climate, heartworm, and income of owners*.

C. The Human Society of America's website features the August 2014 article, "Why You Should Spay/Neuter Your Pet," which states that spaying lessens their urge to roam, *exposure to fights with other animals, getting struck by cars, and other mishaps*.

D. Also according to the same article, *male pets who are neutered eliminate their chances of getting testicular and prostate cancer*.

With all the sources available to you through reliable Internet and published sources, finding information is not difficult. Recognizing supporting information from the general idea you are trying to support or prove is more difficult, as is providing adequate citation.

Probative

having the quality or function of proving or demonstrating something; affording proof or evidence

Along with clarifying and proving, supporting materials, especially narrative ones, also make your speech much more interesting and attention-getting. Later in the chapter we will look at the various "factors of attention" that are related to supporting material. Ultimately, you will be perceived as a more credible speaker if you provide clarifying, **probative** (proof-giving and logical), and interesting supporting material.

7.2 – Types of Supporting Materials

Essentially, there are seven types of supporting materials: examples, narratives, definitions, descriptions, historical and scientific fact, statistics, and testimony. Each provides a different type of support, and you will want to choose the supporting materials that best help you make the point you want to get across to your audience.

Examples

This type of supporting material is the first and easiest to use but also easy to forget. Examples are almost always short but concrete specific instances to illuminate a concept. They are designed to give audiences a reference point. If you were describing a type of architecture, you would obviously show visual aids of it and give verbal descriptions of it, but if you could say, "You pass an example of this type of architecture every time you go downtown—City Hall." An example must be quickly understandable, something the audience can pull out of their memory or experience quickly.

The key to effectively using examples in your speeches is this: what is an example to you may not be an example to your audience, if they have a different experience. One of the authors has been teaching for almost four decades and cannot use the same pop culture examples she used to use in class. Television shows from twenty years ago are pretty meaningless to audiences today. Time and age is not the only reason an example may not work with the audience. If you are a huge soccer fan speaking to a group who barely knows soccer, using a well-known soccer player as an example of perseverance or overcoming discrimination in the sports world may not communicate. It may only leave the audience members scratching their heads.

Additionally, one good, appropriate example is worth several less apt ones. Keep in mind that in the distinction between supporting materials that prove, those that clarify, and those that do both, examples are used to clarify.

Narratives

Earlier in this textbook the "power of story" was mentioned. Narratives, stories, and anecdotes are useful in speeches to interest the audience and clarify, dramatize, and emphasize ideas. They have, if done well, strong emotional power. They can be used in the introduction, the body, and the conclusion of the speech. They can be short (as anecdotes usually are. Think of the stories you often see in *Readers' Digest,* human interest stories on the local news, or what you might post on Facebook about a bad experience you had at the DMV). They could be longer, although they should not comprise large portions of the speech.

Narratives can be personal, literary, historical, or hypothetical. Personal narratives can be helpful in situations where you desire to:

- Relate to the audience on a human level, especially if they may see you as competent but not really similar or connected to them.
- Build your credibility by mentioning your experience with a topic.

Of course, personal narratives must be true. They must also not portray you as more competent, experienced, brave, intelligent, etc., than you are; in other words, along with being truthful in using personal narratives, you should be reasonably humble.

An example of a literary narrative might be one of Aesop's fables, a short story by O'Henry, or an appropriate tale from another culture. Keep in mind that because of their power, stories tend to be remembered more than other parts of the speech. Do you want the story to overshadow your content? Scenes from films would be another example of a literary narrative, but as with examples, you must consider the audience's frame of reference and if they will have seen the film.

Historical narratives (sometimes called documented narratives) have power because they can also prove an idea as well as clarify one. In using these, you should treat them as fact and therefore give a citation as to where you found the historical narrative. By "historical" we do not mean the story refers to something that happened many years ago, only that it has happened in the past and there were witnesses to validate the happening.

If you were trying to argue for the end to the death penalty because it leads to unjust executions, one good example of a person who was executed and then found innocent afterward would be both emotional and probative. Here, be careful of using

theatrical movies as your source of historical narrative. Hollywood likes to change history to make the tory they want. For example, many people think Braveheart is historically accurate, but is off on my key points—even the kilts, which were not worn by the Scots until the 1600s.

Hypothetical narratives

a story of something that could happen but has not happened yet

Hypothetical narratives are ones that could happen but have not yet. To be effective, they should be based on reality. Here are two examples:

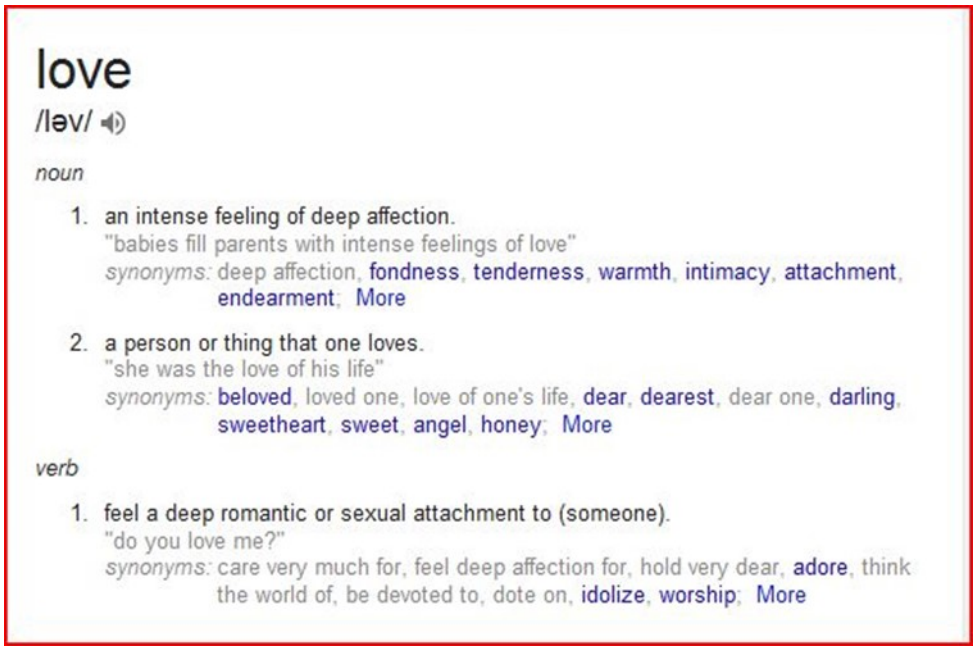
> Picture this incident: You are standing in line at the grocery checkout, reading the headlines on the *Star* and *National Enquirer* for a laugh, checking your phone. Then, the middle-aged man in front of you grabs his shoulder and falls to the ground, unconscious. What would you do in a situation like this? While it has probably never happened to you, people have medical emergencies in public many times a day. Would you know how to respond?

> Imagine yourself in this situation. It is 3:00 in the morning. You are awakened from a pretty good sleep by a dog barking loudly in the neighborhood. You get up and see green lights coming into your house from the back yard. You go in the direction of the lights and unlock your back door and there, right beside your deck, is an alien spaceship. The door opens and visitors from another planet come out and invite you in, and for the next hour you tour their ship. You could somehow understand them because their communication abilities are far advanced from ours. Now, back to reality. if you were in a foreign country, you would not be able to understand a foreign language unless you had studied it. That is why you should learn a foreign language in college.

Obviously, the second is so "off-the-wall" that the audience would be wondering about the connection, although it definitely does attract attention. If using a hypothetical narrative, be sure that it is clear that the narrative is hypothetical, not factual. Because of their attention-getting nature, hypothetical narratives are often used in introductions.

Definitions

When we use the term "definition" here as a supporting material, we are not talking about something you can easily find from the dictionary or from the first thing that comes up on Google, such as shown in Figure 7.2.



love

/ləv/

noun

1. an intense feeling of deep affection.
   "babies fill parents with intense feelings of love"
   synonyms: deep affection, fondness, tenderness, warmth, intimacy, attachment, endearment; More
2. a person or thing that one loves.
   "she was the love of his life"
   synonyms: beloved, loved one, love of one's life, dear, dearest, dear one, darling, sweetheart, sweet, angel, honey; More

verb

1. feel a deep romantic or sexual attachment to (someone).
   "do you love me?"
   synonyms: care very much for, feel deep affection for, hold very dear, adore, think the world of, be devoted to, dote on, idolize, worship; More

Figure 7.2—Typical dictionary definition

Define

to set limits on what a word or term means, how the audience should think about it, and/or how you will use it

First, using a dictionary definition does not really show your audience that you have researched a topic (anyone can look up a definition in a few seconds). Secondly, does the audience need a definition of a word like "love," "bravery," or "commitment?" They may consider it insulting for you to provide them definition of those words.

To **define** means to set limits on something; defining a word is setting limits on what it means, how the audience should think about the word, and/or how you will use it. We know there are denotative and connotative definitions or meanings for words, which we usually think of as objective and subjective responses to words. Only words that the audience would be unfamiliar to the audience or words that you want to use in a specialized way need to be defined.

For example, terms used in specialized fields, often called "jargon," (see Chapter 10) need to be defined and explained. These words may be in medicine, law, the military, technology, or the arts. Some of these words may be in foreign languages, such as Latin (*habeas corpus*, *quid pro quo*). Some of them may be acronyms; CBE is a term being used currently higher education that means "Competency Based Education." That is part of a definition, but not a full one—what is competency based education? To answer that question, you would do best to find an officially accepted definition and cite it.

You may want to use a **stipulated definition** early in your speech. In this case, you clearly tell the audience how you are going to use a word or phrase in your speech. "When I use the phrase 'liberal democracy' in this speech, I am using it in the historical sense of a constitution, representative government, and elected officials, not in the sense of any particular issues that are being debated today between progressives and conservatives." This is a helpful technique and makes sure your audience understands you, but you would only want to do this for terms that have confusing or controversial meanings for some.

Stipulated definition

a definition with clearly defined parameters for how the word or term is being used in the context of a speech

Although we tend to think of the dictionary definition as the standard, that is only one way of defining something. The dictionary tends to define with synonyms, or other words that are close in meaning. All of us have had the experience of looking up a word and finding a definition that uses another word we do not know! Synonyms are one way to define, but there are some others.

Classification and differentiation

This is a fancy way of saying "X is a type of Y, but it is different from the other Ys in that . . ." "A bicycle is type of vehicle that has two wheels, handlebars instead of a steering wheel, and is powered by the feet of the driver." Obviously you know what a bicycle is and it does not need defining, so here are some better examples:

> Laparoscopic adjustable gastric banding (LAGB) is a **(type of)** surgical procedure that **(how different)** involves the placement of an adjustable silicone belt around the upper portion of the stomach using a laparoscope. The band can be tightened by adding saline to fill the band like blowing air into a doughnut-shaped balloon. The band is connected to a port that is placed under the skin of the abdomen. This port is used to introduce or remove saline into the band.

> Gestational diabetes is a **(type of)** diabetic condition **(how different)** that appears during pregnancy and usually goes away after the birth of the baby.

> Social publishing platforms are a **(type of)** social medium where **(how different)** long and short-form written content can be shared with other users.

Operational Definitions

Operational definitions give examples of an action or idea to define it. If we were to define "*quid pro quo* sexual harassment" operationally, we might use a hypothetical narrative of a female employee who is pressured by her supervisor to date him and told she must go out with him socially to get a promotion. Operational definitions do not have to be this dramatic, but they do draw a picture and answer the question, "What does this look like in real life?" rather than using synonyms to define.

Definition by Contrast or Comparison

You can define a term or concept by telling what it is similar to or different from. This method requires the audience to have an understanding of whatever you are using as the point of contrast or comparison. When alcoholism or drug addiction is defined as a disease, that is a comparison. Although not caused by a virus or bacteria, addiction disorder has other qualities that are disease-like.

When defining by contrast, you are pointing how a concept or term is distinct from another more familiar one. For example, "pop culture" is defined as different from "high culture" in that, traditionally, popular culture has been associated with people of lower socioeconomic status (i.e. less wealth or education), as compared to the "official" culture of the more highly educated within the upper classes. Here, the definition of popular culture is clarified by highlighting the differences between it and high culture.

A similar form of definition by contrast is defining by negation, which is stipulating what something *is not*. This famous quotation from Nelson Mandela is an example: "I learned that courage was not the absence of fear, but the triumph over it. The brave man is not he who does not feel afraid, but he who conquers that fear." Here, Mandela is helping us draw limits around a concept by saying what it is *not*.

Descriptions

The key to description is to think in terms of the five senses: sight (visual; how does the thing look in terms of color, size, shape), hearing (auditory; volume, musical qualities), taste (gustatory; sweet, bitter, salty, sour, gritty, smooth, chewy), smell (olfactory; sweet, rancid, fragrant, aromatic, musky), and feel (tactile; rough, silky, nubby, scratchy). The words **kinesthetic** (movement of the body) and **organic** (feelings related to the inner workings of the body) can be added to those senses to describe internal physical feeling, such as straining muscles or pain

(**kinesthetic**) and nausea or the feelings of heightened emotions (**organic**).

Kinesthetic

issues related to the movement of the body or physical activity

Description as a method of support also depends on details, or answering the five questions of what, where, how, who, when. To use description, you must dig deeper into your vocabulary and think concretely. This example shows that progression.

Organic

feelings or issues related to the inner workings of the body

Furniture

A chair

A recliner

A La-Z-Boy rocker-recliner

A green velvet La-Z-Boy rocker recliner

A lime green velvet La-Z-Boy rocker recliner with a cigarette burn on the left arm

As you add more description, two things happen. The "camera focus" becomes clearer, but you also add tone, or attitude. A recliner is one thing, but who buys a lime green velvet recliner? And someone who sat in it smoked and was sloppy about it. In this case, the last line is probably too much description unless you want to paint a picture of a careless person with odd taste in furniture.

Description is useful as supporting material in terms of describing processes. This topic was discussed in Chapter 6 in chronological patterns of organization. Describing processes

requires detail and not taking for granted what the audience already knows. Some instructors use the "peanut butter sandwich" example to make this point: How would you describe making a peanut butter and jelly sandwich to someone who had never seen a sandwich, peanut butter, or jelly? You would need to put yourself in their shoes to describe the process and not assume they know that the peanut butter and jelly go on the inside, facing surfaces of the bread, and that two pieces of bread are involved.

Historic and Scientific Fact

This type of supporting material is useful for clarification but is especially useful for proving a point. President John Adams is quoted as saying, "Facts are stubborn things," but that does not mean everyone accepts every fact as a fact, or that everyone is capable of distinguishing a fact from an opinion. A fact is defined by the *Urban Dictionary* as "The place most people in the world tend to think their opinions reside." This is a humorous definition, but often true about how we approach facts. The meaning of "fact" is complicated by the context in which it is being used. The National Center for Science Education (2008) defines *fact* this way:

> In science, an observation that has been repeatedly confirmed and for all practical purposes is accepted as 'true.' Truth in science, however, is never final and what is accepted as a fact today may be modified or even discarded tomorrow.

Another source explains fact this way:

> [Fact is] a truth known by actual experience or observation. The hardness of iron, the number of ribs in a squirrel's body, the existence of fossil trilobites, and the like are all facts. Is it a fact that electrons orbit around atomic nuclei? Is it a fact that Brutus stabbed Julius Caesar? Is it a fact that the sun will rise tomorrow? None of us has observed any of these things - the first is an inference from a variety of different observations, the second is reported by Plutarch and other historians who lived close enough in time and space to the event that we trust their report, and the third is an inductive inference after repeated observations. ("Scientific Thought: Facts, Hypotheses, Theories, and all that stuff")

Without getting into a philosophical dissertation on the meaning of truth, for our purposes facts are pieces of information

with established "backup." You can cite who discovered the fact and how other authorities have supported it. Some facts are so common that most people don't know where they started—who actually discovered that the water molecule is two atoms of hydrogen and one of oxygen (H_2O)? But we could find out if we wanted to (it was, by the way, the 18th century chemist Henry Cavendish). In using scientific and historical fact in your speech, do not take citation for granted. If it is a fact worth saying and a fact new to the audience, assume you should cite the source of the fact, getting as close to the original as possible.

Also, the difference between historical narrative (mentioned above) and historical fact has to do with length. An historical fact might just be a date, place, or action, such as "President Ronald Reagan was shot by John Hinckley on March 30, 1981, in front of Washington, D.C. Hilton Hotel." An historical narratives would go into much more detail and add dramatic elements, such as this assassination attempt from the point of view of Secret Service agents.

Statistics

Statistics are misunderstood. First, the meaning of the term is misunderstood. **Statistics** are not just numbers or numerical facts. The essence of statistics is the collection, analysis, comparison, and interpretation of numerical data, understanding its comparison with other numerical data. For example, it is a numerical fact that the population of the U.S., according to the 2010 census, was 308,700,000. This is a 9.7% increase from the 2000 census, which is a statistic. However, for the purpose of simplicity, we will deal with both numerical facts and real statistics in this section.

Statistics

the collection, analysis, comparison, and interpretation of numerical data, understanding its comparison with other numerical data

Statistics are also misunderstood because the science of statistics is difficult. Even terms like mean, median, and mode often confuse people, much less regression analysis, two-tailed T-tests, and margin of error. Before you can use statistics in a speech, you should have a basic understanding of them.

Mean is the same as mathematical average, something you learned to do early in math classes. Add up the figures and divide by the number of figures. Related to mean is the concept of standard deviation, which is the average amount each figure is different from (higher or lower) than the average or mean. Standard deviation is harder to figure (and usually done by computer!) but it does let you know if a group is more similar than alike. If the average on a test in a class is 76, but the

Mean

the mathematical average for a given set of numbers

standard deviation is 20, that tells you students tended to do really well (96) or really poorly (56) on it.

Median
the middle number in a given set of numbers

The **median**, however, is the middle number in a distribution. If all salaries of ballplayers in MLB were listed from highest to lowest, the one in the exact middle of the list would be the median. You can tell from this that it probably will not be the same as the average, and it rarely is; however, the terms "median" and "mean" are often interchanged carelessly. **Mode** is the name for the most frequently occurring number in the list. As an example, Figure 7.3 is a list of grades from highest to lowest that students might make on a midterm in a class. The placement of mean, median, and mode are noted.

Mode
the number that is the most frequently occurring within a given set of numbers

Percentages have to do with ratios. There are many other terms you would be introduced to in a statistics class, but the point remains: be careful of using a statistic that sounds impressive unless you know what it represents. There is an old saying about "figures don't lie but liars figure" and another, "There are liars, damn liars, and statisticians." These sayings are exaggerations but they point out that we are inundated with statistical information and often do not know how to process it. Another thing to watch when using numerical facts is not to confuse your billions and your millions. There is a big difference. If you say that 43 billion people in the US are without adequate health care, you will probably confuse your audience, since the population of the planet is around 7 billion!

In using statistics, you are probably going to use them as proof more than as explanation. Statistics are considered a strong form of proof. Here are some guidelines for using them effectively in a presentation.

1. Use statistics as *support*, not as a main point. The audience may cringe or tune you out for saying, "Now I'd like to give you some statistics about the problem of gangs in our part of the state." That sounds as exciting as reading the telephone book! Use the statistics to support an argument. "Gang activity is increasing in our region. For example, it is increasing in the three major cities. Mainsville had 450 arrests for gang activity this year alone, up 20% from all of last year." This example ties the numerical fact (450 arrests) and the statistical comparison (up 20%) to an argument. The goal is to weave or blend the statistics seamlessly into the speech, not have them stand alone as a section of the speech.

   By the way, it is common for speakers and writers to say "According to research" or "According to studies." This tag is

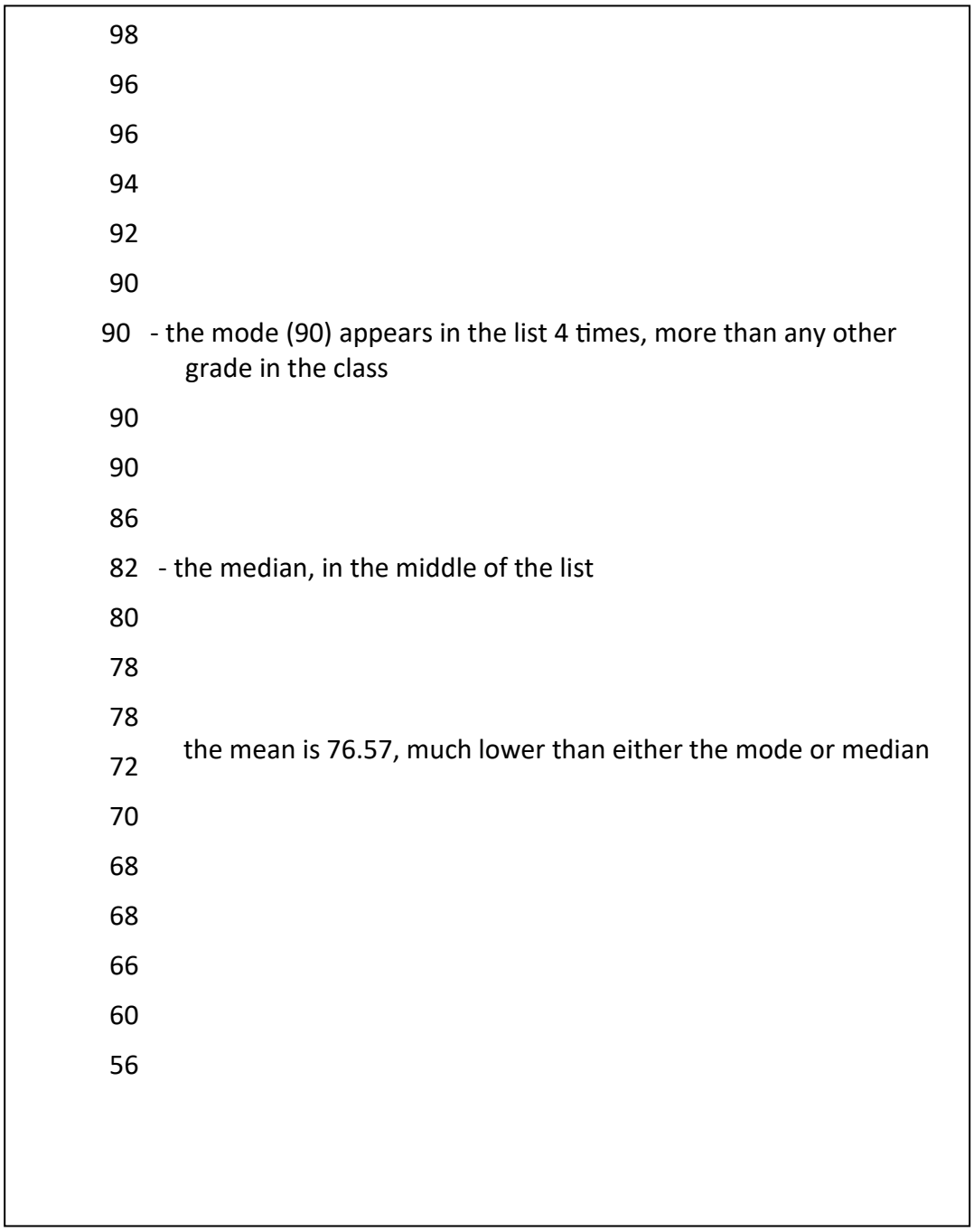


Figure 7.3—Mean, Mode, Median

essentially meaningless and actually a logical fallacy. Give a real source to support your argument.

2. Always provide the source of the statistic. In the previous example, it should read, "According to a report published on the Georgia Bureau of Investigation's website, Mainsville had 450 arrests . . ." There are a number of "urban myth" statistics floating around that probably have a basis in some research done at some point in time, but that research was outlived by the statistic. An audience would have reason to be skeptical if

you cannot provide the name of the researcher or organization that backs up the statistics and numerical data.

3. In regard to sources, depend on the reliable ones. Table 7.1, originally published in Wrench, Goding, Johnson, and Attias (2011), lists valid websites providing statistical information.
4. Do not overuse statistics. While there is no hard and fast rule on how many to use, there are other good supporting materials and you would not want to depend on statistics alone. You want to choose the statistics and numerical data that will strengthen your argument the most and drive your point home. Statistics can have emotional power as well as probative value if used sparingly.
5. Use graphs to display the most important statistics. If you are using presentation software such as PowerPoint, you can create your own basic pie, line, or bar graphs, or you can borrow one and put a correct citation on the slide. However, you do not need to make a graph for every single statistic. More information on these types of visual aids and what type of information they convey best can be found in Chapter 9.
6. Explain your statistics as needed, but do not make your speech a statistics lesson. Explain the context of the statistics. If you say, "My blog has 500 subscribers" to a group of people who know little about blogs, that might sound impressive, but is it? You can also provide a story of an individual, and then tie the individual into the statistic. After telling a story of the daily struggles of a young mother with multiple sclerosis, you could follow up with "This is just one story in the 400,000 people who suffer from MS in the United States today, according to National MS Society."
7. If you do your own survey or research and use numerical data from it, explain your methodology. "In order to understand the attitudes of freshmen at our college about the subject of open source textbooks, I polled 150 first-year students, only three of whom were close friends, asking them this question: 'Do you agree that our college should encourage the faculty to use open source textbooks?' Seventy-five percent of them indicated that they agreed with the statement."
8. It goes without saying that you will use the statistic ethically, that there will be no distortion of what the statistic means. However, it is acceptable and a good idea to round up numerical data to avoid overwhelming the audience. In the citation above of the U.S. population from the 2010 census was a rounded figure. The actual number was 308,745,538, but

Website	Type of Information
http://www.bls.gov/bls/other.htm	Bureau of Labor Statistics provides links to a range of websites for labor issues related to a vast range of countries.
http://www.fedstats.gov	Federal Stats provides information on the US federal government.
http://bjs.ojp.usdoj.gov	Bureau of Justice Statistics provides information on crime statistics in the United States.
http://www.census.gov	US Census Bureau provides a wide range of information about people living in the United States.
http://www.cdc.gov/nchs/datawh.htm	National Center for Health Statistics is a program conducted by the US Centers for Disease Control and Prevention. It provides information on a range of health issues in the United States.
http://www.stats.org	STATS is a nonprofit organization that helps people understand quantitative data. It also provides a range of data on its website.
http://www.ropercenter.uconn.edu	Roper Center for Public Opinion provides data related to a range of issues in the United States.
http://www.nielsen.com	Nielsen provides data on consumer use of various media forms.
http://www.gallup.com	Gallup provides public opinion data on a range of social and political issues in the United States and around the world.
http://www.adherents.com	Adherents provides both domestic and international data related to religious affiliation.
http://people-press.org	Pew Research Center provides public opinion data on a range of social and political issues in the United States and around the world.

Table 7.1—Statistics-Oriented Websites

saying "almost 309 million" or "308.7 million" will serve your purposes and not be unethical.

9. Additionally, do not make statistics mean what they do not mean. Otherwise, you would be pushing the boundaries on ethics. In the example about your survey of students, if you were to say, "75% of college freshmen support . . . ." That is not what the research said. Seventy-five percent of the students you surveyed indicated agreement, but since your study did not meet scientific standards regarding size of sample and how you found the sample, you can only use the information in relation to students in your college, not the whole country. One of the authors had a statistics professor who often liked to say, "Numbers will tell you whatever you want if you torture them long enough," meaning you can always twist or manipulate statistics to meet your goals if you want to.
10. An effective technique with numerical data is to use comparisons. "The National Debt is 17 trillion dollars. What does that

mean? It means that every American citizen owes $55,100." "It means that if the money were stacked as hundred dollar bills, it would go to . . ." Or another example, "There are 29 million Americans with diabetes. That is 9.3%. In terms closer to home, of the 32 people in this classroom, 3 of us would have diabetes." Of course, in this last example, the class may not be made up of those in risk groups for diabetes, so you would not want to say, "Three of us have diabetes." It is only a comparison for the audience to grasp the significance of the topic.

11. Finally, because statistics can be confusing, slow down when you say them, give more emphasis, gesture—small ways of helping the audience grasp them.

Testimony

Testimony
the words of others used as proof or evidence

Testimony is the words of others. You might think of them as quoted material. Obviously, all quoted material or testimony is not the same. Some quotations you just use because they are funny, compelling, or attention-getting. They work well as openings to introductions. Other types of testimony are more useful for proving your arguments. Testimony can also give an audience insight into the feelings or perceptions of others. Testimony is basically divided into two categories: expert and peer.

Expert
someone with recognized credentials, knowledge, education, and/or experience in a subject

Expert Testimony

What is an expert? Here is a quotation of the humorous kind: An expert is "one who knows more and more about less and less" (Nicholas Butler). Actually, an **expert** for our purposes is someone with recognized credentials, knowledge, education, and/or experience in a subject. Experts spend time studying the facts and putting the facts together. They may not be scholars who publish original research but they have in-depth knowledge. They may not have certain levels of education, but they have real-world experience in the topic.

For example, one of the authors is attending a quilt show this week to talk to experts in quilting. This expertise was gained through years of making, preserving, reading about, and showing quilts, even if they never took Quilting 101 in college. To quote an expert on expertise, "To be an expert, someone needs to have considerable knowledge on a topic or considerable skill in accomplishing something" (Weinstein, 1993). In using expert testimony, you should follow these guidelines:

- Use the expert's testimony in his or her relevant field, not outside of it. A person may have a Nobel Prize in economics, but that does not make him or her an expert in bio-ethics.

- Provide at least some of the expert's relevant credentials.
- Choose experts to quote whom your audience will respect and/or whose name or affiliations they will recognize as credible.
- Make it clear that you are quoting the expert testimony verbatim or paraphrasing it. If verbatim, say "Quote . . . end of quote" (not unquote—you cannot unquote someone).
- If you interviewed the expert yourself, make that clear in the speech also. "When I spoke with Dr. Mary Thompson, principal of Park Lake High School, on October 12, she informed me that . . ."

Expert testimony is one of your strongest supporting materials to prove your arguments, but in a sense, by clearly citing the source's credentials, you are arguing that your source is truly an expert (if the audience is unfamiliar with him or her) in order to validate his or her information.

Peer Testimony

Any quotation from a friend, family member, or classmate about an incident or topic would be **peer testimony**. It is useful in helping the audience understand a topic from a personal point of view. For example, in the spring of 2011, a devastating tornado came through the town where one of the authors and many of their students live. One of those students gave a dramatic personal experience speech in class about surviving the tornado in a building that was destroyed and literally disappeared because she and her coworkers (it was a chain restaurant) were able to get to safety in the freezer. While she may not have had an advanced degree in and field related to tornadoes or the destruction they can cause, this student certainly had a good deal of knowledge on the subject based on her experience of surviving a tornado.

Peer testimony

any quotation from a friend, family member, or classmate about an incident or topic

7.3 – Attention Factors and Supporting Material

In Chapter 2, we discussed how public speaking as an oral form of communication is different from written forms of communication. Therefore, as a speaker, you must work to maintain the attention of your audience. In this section, we will look more deeply at attention and how you can use supporting materials to keep the audience's attention in addition to the important functions of clarifying and proving ideas.

What is Attention?

Attention and perception are closely tied concepts, but they are not exactly the same. If you have taken an introduction to psychology course, one of the earliest chapters in the textbook was probably about perception, since our perceptual processes are so foundational to how we think and process. **Perception** deals primarily with how we organize and interpret the patterns of stimuli around us. The key words in this definition are patterns, organize, and interpret. The brain does the work of taking thousands of stimuli around us and making sense of them. Sensation is taking in the stimuli in the physical realm; perception is doing something with it psychologically. Perception is obviously influenced by memory, experiences, past learning, etc. If you taste a desert, the scent and taste are physically going to your brain, and thus you are sensing it. But if you say, "This tastes like my mother's recipe for this desert," then you are perceiving.

Perception

how people organize and interpret the patterns of stimuli around them

Attention, on the other hand, is focused perception. **Attention** is defined as focus on one stimulus while ignoring or suppressing reactions to other stimuli. It has been referred to as the "allocation of limited processing resource" (Anderson, 2005, p. 519). Although we think we can multitask and pay attention to three things at a time, we cannot.

Attention

focus on one stimulus while ignoring or suppressing reactions to other stimuli

The diagram in Figure 7.4 might help show why multitasking is a problem rather than a benefit. In the figure, two balls from the upper chutes (which represent the two sources of stimuli, such as two auditory messages) are trying to enter the central chute at the same time. For a practical example that you can probably relate to, let's say these balls represent watching TV and playing a game on your phone at the same time. Only one ball can go through the single chute at a time, which is representative of your focus (the ideas or tasks you can actually think about at a given moment). The "balls" or stimuli must take turns, therefore making your attention shift back and forth , affecting your ability to do one task versus the other.

When you try to pay attention to two things at once, you are going to let the information in but have to switch back and forth on the pathways, making your attention (listening, reading, processing) less efficient. This means that in our example above, you're either going to miss something that is being said on TV or you're going to not play the game very well because you can't divide your focus between the two activities. Multitudes of studies have been done on how inefficient multitasking behavior is, especially for students (Weimer, 2012).

When you pay attention, you focus and other stimuli become muted or nonexistent in your mind for that amount of time. We have all had experiences when we so focused on a stimulus—it could be a concert, a movie, a roller coaster ride—that we almost "wake up" to the rest of the world when it is over. This video is a humorous look at attention.

Why Do We Pay Attention?

Perception is not something we have a good deal of control over, but we do have more say in attention. There are basically five reasons we pay attention to what we do when confronted with lots of competing stimuli.

1. We *choose* to focus on one thing over another. Plain and simple, we grit our teeth and pay attention, such as when we are making ourselves study difficult material for a test. While this is a behavior we accept as adults, as public speakers we should not expect the audience to do all the work of paying attention just because they feel a duty to do so; they probably will not. We should attempt to meet the audience half way by using our understanding of attention. We should use various techniques in our speech to help the audience pay attention.
2. Expectations. If a speaker started a lecture with "In this presentation I am going to say the word 'serendipity,' and when I do, the first person who jumps up and says 'gotcha' will get this $100 bill." The audience is expecting to hear something and tuning in for it. Of course, this is an extreme

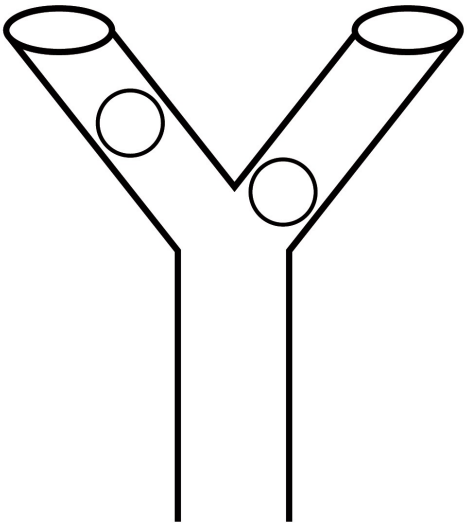


Figure 7.4 – How Attention Works

example (and we don't recommend it!) but when a speaker gives an introduction that sets up for the audience what to expect, attention can be helped.

3. Need states. Have you ever noticed that the hamburgers on the fast food commercials look juicier and more delicious when you are hungry? When we are in a need state, we will be focused on those items that meet the need. When your instructor begins discussing in class what you can expect on the next exam, you probably perk up a bit, since this is information students generally need to know in order to do well in the class. Because that information meets a personal need, they will be more receptive to and focused on it.
4. Past training and experiences. You will notice what you have been taught or trained, either directly or indirectly, to focus on. Sometimes you will not even be aware that you are doing so. For example, if you have a background in rodeo competition, you will see aspects and details in a rodeo scene in a movie that someone else would just take for granted.
5. All of these reasons for paying attention are relevant to the public speaker, but the last one is most directly usable and related to supporting material. There are certain qualities or characteristics of stimuli that naturally attract our attention. These have been termed the "factors of attention." If a public speaker puts these traits into the speech and presentation aids, the audience's ability to pay attention will be bolstered. These characteristics, listed below, are generally ways to "perk up" you audience's ears and gain their attention, at least temporarily. Our attention can wane rather quickly and a speaker must work to keep the audience engaged. Incorporating attention factors can help.

Attention Factors

The list of factors that can help you get or maintain attention during your speech is rather long, and a speaker cannot of course use all of them in one speech, but they are useful tools in certain speech situations. As you progress as a public speaker, you can use them in an "impromptu" fashion if you think the audience needs an attention boost.

The first factor in getting or maintaining attention is *movement*. A moving object will gain more attention than a stationary one. Movement is one of the factors of attention you can use in different ways. You can use stories that have movement in plot. You can use physical movement in your delivery. Transitions give a sense of movement to a speech, as well as not

dwelling on one idea too long. The animation of words and graphics in PowerPoint or other slide presentation software is another use of animation.

At the same time, because animation attracts attention and therefore distracts attention too, it should be used strategically and intentionally (for a good purpose). For example, little animated figures, pacing back and forth, and repetitive gestures are uses of movement that you would not want to use because they are not purposeful.

The second factor of attention is *conflict*. Showing ideas, groups, teams, etc. that are in conflict draws attention. Stories can also utilize conflict.

The third factor of attention is *novelty.* Your ideas and the way you approach them should be fresh and new to the audience. When we get to persuasion in Chapter 13, we will also see that evidence used to persuade an audience should be new to them.

The fourth factor of attention is *humor*. Humor is usually not the focus of your speech, especially in a class situation, but well-placed and intentional humor can be helpful to maintain attention of your audience. It should be appropriate to the topic and well-practiced. It is probably a good idea to "road test" your humor to be sure it is funny to other people. We all have our own sense of what is funny and have had experienced those times when friends or family don't seem to "get" what we find funny. If you want to tell a joke, be sure to tell it, not read it, and practice the delivery well.

The fifth factor of attention is *familiarity.* As mentioned already, supporting materials should be immediately accessible and draw from your audience's experience so they can understand quickly in an oral communication setting. Familiarity is attractive because it is comfortable. Familiarity may seem in conflict with novelty, and in a sense they show both sides of how our minds work. We like new things (such as the most recent design of a sports car) but we also like comfortable, familiar things (such as our favorite movie we have seen ten times already). They function differently in a speech. Familiarity works better to explain a new concept; novelty works better to pique an audience's interest.

The sixth factor is *contrast*. This one is particularly useful to a speaker in creating visual aids so that key words stand out, for example, on presentation slides. Contrast also applies to the variety in your voice (avoiding what we would call monotone or monorate).

The seventh factor of attention is *repetition*. We have already seen how key repetitions at points in the speech can remind the audience of your structure and main ideas.

Suspense is the eighth factor of attention. Although not as useful in public speaking as some of the factors, suspense can be useful in an introduction. You can use a series of questions asking the audience to guess your topic; however, this is a risky approach if you disappoint your audience when the "real" topic is not what they are guessing. You can also tell a story in the introduction and say you will give the outcome of the story at the end of the speech, or pose a question and promise that by the end of the speech they will know the answer. However, always be sure to deliver on the promise!

The ninth factor is *proximity*, which refers to physical closeness. While not applicable to supporting materials, proximity does relate to public speaking delivery. The more physical distance between the audience members and the speaker and the audience, the harder it will be for the audience to remain attentive. If you know that only 20 people are going to attend a presentation, it is best to have it in a 20-seat room, not an auditorium that seats 100. The audience members will spread out and feel detached from each other, and it will be harder for you to closer to them.

The tenth factor of attention is *need-oriented* subjects. We pay attention to what meets our needs. For example, when you are hungry, you probably notice fast food advertisements more on television (which advertisers recognize and use against us).

The eleventh factor is *intensity*, which is also useful in the delivery aspect of public speaking. Raising your voice at key times and or lowing down are useful for attention.

The last attention factor is *concreteness,* which in a sense describes all of them. All of the factors and types of supporting materials are tied to real or concrete experience. The more a speaker can attach the speech to real experience, either her own or preferably the audience's, the more effective she will be.

Conclusion

It is hard to imagine an effective speech without a variety of supporting materials. Think of it like cooking a flavorful cuisine—there will be a mixture of spices and tastes, not just one. Statistics, narratives and examples, testimony, definitions, descriptions, and facts all clarify your concepts for the audience, and statistics, testimony, facts, and historical examples also support logical arguments. In the process of composing your speech, be sure to provide sources and use varied and interesting language to express the support your speech ideas require and deserve.

Something to Think About

One type of supporting material that is commonly used but was not fully discussed in this chapter is quotations such as "The only limits to our realization of tomorrow will be our doubts of today" (Franklin D. Roosevelt). You can go to websites to find quotable quotes on various topics. What category (testimony, narratives, statistics, examples) would quotations such as this fall into? Would they be for proof or explanation? When would they be useful? What could be some downsides to using them? (Some of these answers are discussed in Chapter 8.)