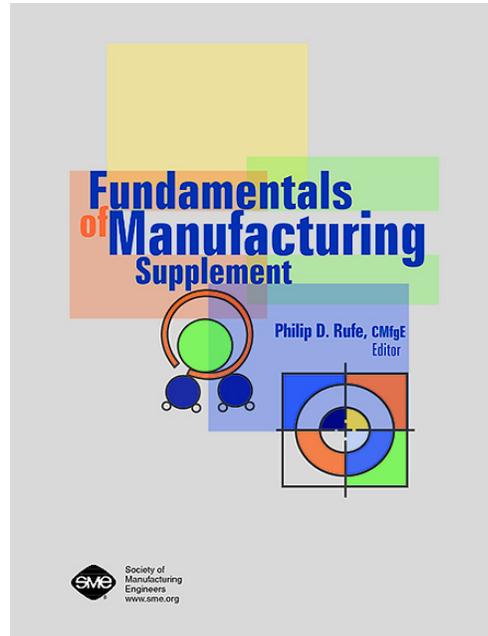


This PDF document
is a sample chapter
from the book, Item Code BK05PUB2...



Society of
Manufacturing
Engineers

Copyright © 2005

Personal Effectiveness

One of the largest competency gaps for engineers and managers is interpersonal skills. College graduates typically are proficient in areas such as mathematical reasoning, engineering mechanics, materials, quality, processes, etc. However, they generally lack proficiency in skills such as:

- written and oral communication,
- listening,
- negotiating,
- confrontation and conflict management,
- meeting management, and
- creativity and innovation.

48.1 COMMUNICATION

Communication is the process of sending and receiving messages. It is the exchange of information and ideas. Effective communication occurs when the receiver receives and interprets the message as intended by the sender.

There are two basic forms of communication: nonverbal and verbal. Examples of nonverbal communication include facial expressions, gestures, posture, clothes, grooming, and punctuality. Nonverbal communication is usually more spontaneous than verbal communication. People typically do not formulate their facial expressions, whereas they would give more thought to formulating a sentence or paragraph to express an idea.

Verbal communication, in the form of written or oral communication, conveys more complicated and structured messages

than nonverbal communication. Written communication can express highly detailed and complicated messages. It also is a form of communication that can be saved and/or stored. For example, meeting minutes often are stored for later reference if needed. Oral communication is sometimes more convenient than writing an e-mail or report. Nonverbal communication can also be combined with oral communication to increase the message's meaning.

LISTENING SKILLS

Listening is one of the most important communication skills for personal and organizational success. Listening accounts for a major part of the time spent communicating. Poor listening skills can result in miscommunications and costly errors in terms of lost time and money.

To be a good listener a person must first be motivated to listen. People are generally motivated if the communication is job related and/or if there is some interest in the communication. Generally, higher motivation results in better listening.

Being a good listener requires a person to focus on the content as opposed to the delivery style. This is referred to as content listening (Bovee 2000). Regardless of whether the presenter's communication style is entertaining or dry, it is the content of the message that counts. For example, a person with poor communication skills may convey an important message, whereas a person

who is entertaining may be easy to listen to but has nothing important to say.

Another important part of being a good listener is not jumping to conclusions, thereby deferring evaluation to the end. Often, a speaker may arouse emotions within the listener. This may cause the listener to stop listening and start formulating a response before the entire message is absorbed. Premature evaluation can seriously inhibit the listener's ability to understand the true meaning of the message.

A good listener gives nonverbal or verbal feedback to the speaker. For example, making eye contact with the speaker can mean the listener acknowledges the message. No eye contact can mean the listener has lost interest or disagrees with the message. Verbal feedback can express recognition, agreement, and disagreement. A listener may verbally indicate receipt of the message with agreement or disagreement.

In general, feedback should be constructive, timely, coherent, and impersonal (Bovee 2000). Feedback needs to be helpful rather than harmful, and practical. It has to relate to something within the speaker's realm of control. Feedback needs to occur soon after the message is sent or it is not very effective. Also, feedback loses its meaning if it is viewed as personal. If a speaker views feedback as personal, he or she may ignore it completely.

48.2 WRITTEN COMMUNICATION

There are many forms of written business communication such as letters, resumes, memos, reports, and proposals. The writing process generally follows a series of steps. First, what is the purpose of the message? Is it informative or persuasive? Second, who is the audience? Is the audience comprised of co-workers or strangers, for example? Is the audience familiar with the topic and what will their probable reaction be? It is generally advisable to anticipate the audi-

ence's questions and provide enough information as practical. Third, the appropriate communication medium is selected based on the purpose and audience. The most common forms of written communication are memos, letters, reports, and proposals. Memos are typically internal documents that communicate a brief message. They are typically one-page documents, which are normally directed to many people; however, the audience could be a single person. Figure 48-1 illustrates a generic memo.

Letters are more formal documents that are typically sent to people outside the company or organization. They are generally one to two pages in length and printed on company letterhead. Figure 48-2 illustrates a generic letter.

Reports are a form of written communication conveying facts, data, and other technical information. They can be written for readers internal or external to a company. Reports can communicate the results of a project or experiment. In the case of mutual funds, a report may disclose the yearly earnings and stock holdings to fund shareholders.

Proposals are similar to reports. However, they are generally persuasive in nature as opposed to objectively communicating factual information. Proposals can be a few pages to several hundred pages in length. A proposal typically asks for approval or support of an idea or project. The proposal's audience is typically internal to a company or organization; however, the audience also can be external.

After the communication medium has been selected, the author needs to organize and compose the message. In the organization process, the author identifies the main points of the message to be communicated. In other words, the author identifies what information he or she wants the audience to receive and remember. It is generally advisable for the author to develop an outline starting with a main idea and supporting

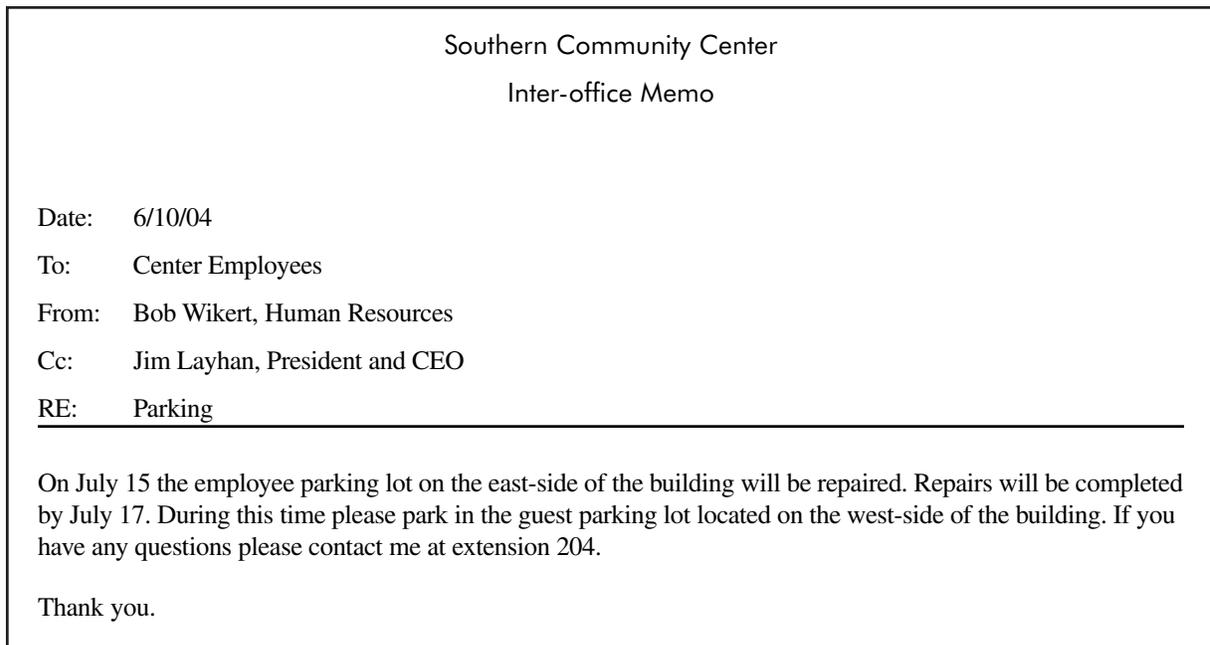


Figure 48-1. Example memo.

ideas. A coherent outline forms the framework for a coherent message. A well-organized and -crafted message will be easier and shorter for the audience to read, thereby making the audience more likely to accept it as opposed to dismissing it.

It is important to remember that the audience will infer the author's tone and mood from the message. The author does not have the luxury of reading the message and using nonverbal communication. Due to an author's poor choice of words or writing style, readers often infer the wrong impression from a message. This happens frequently with e-mails. E-mails are generally drafted quickly and little attention is given to how the reader interprets the words and writing style. For example, the reader may think the author is angry when he or she is not.

An author should choose the level of words and style appropriate for the audience and message. Avoid clichés, such as "time is money," for example. Words should be cho-

sen carefully and composed in a sentence structure that creates the desired tone.

There are three basic sentence structures: simple, compound, and complex. A simple sentence has one subject and one predicate, such as "Car prices have risen in the past year." A compound sentence consists of at least two main ideas or clauses. For example, "Car prices have risen in the past year and mortgage interest rates have fallen." A complex sentence has one main idea or clause and subordinate ideas or clauses. For example, "As a result of falling interest rates, more homeowners have refinanced their homes."

Coherent and fluid paragraphs increase the communication's effectiveness. Paragraphs are typically a group of sentences that all relate to one main idea. They contain a topic sentence, which is supported by the remaining sentences in the paragraph. The topic sentence, which can be a question, provides a summary of what the paragraph will

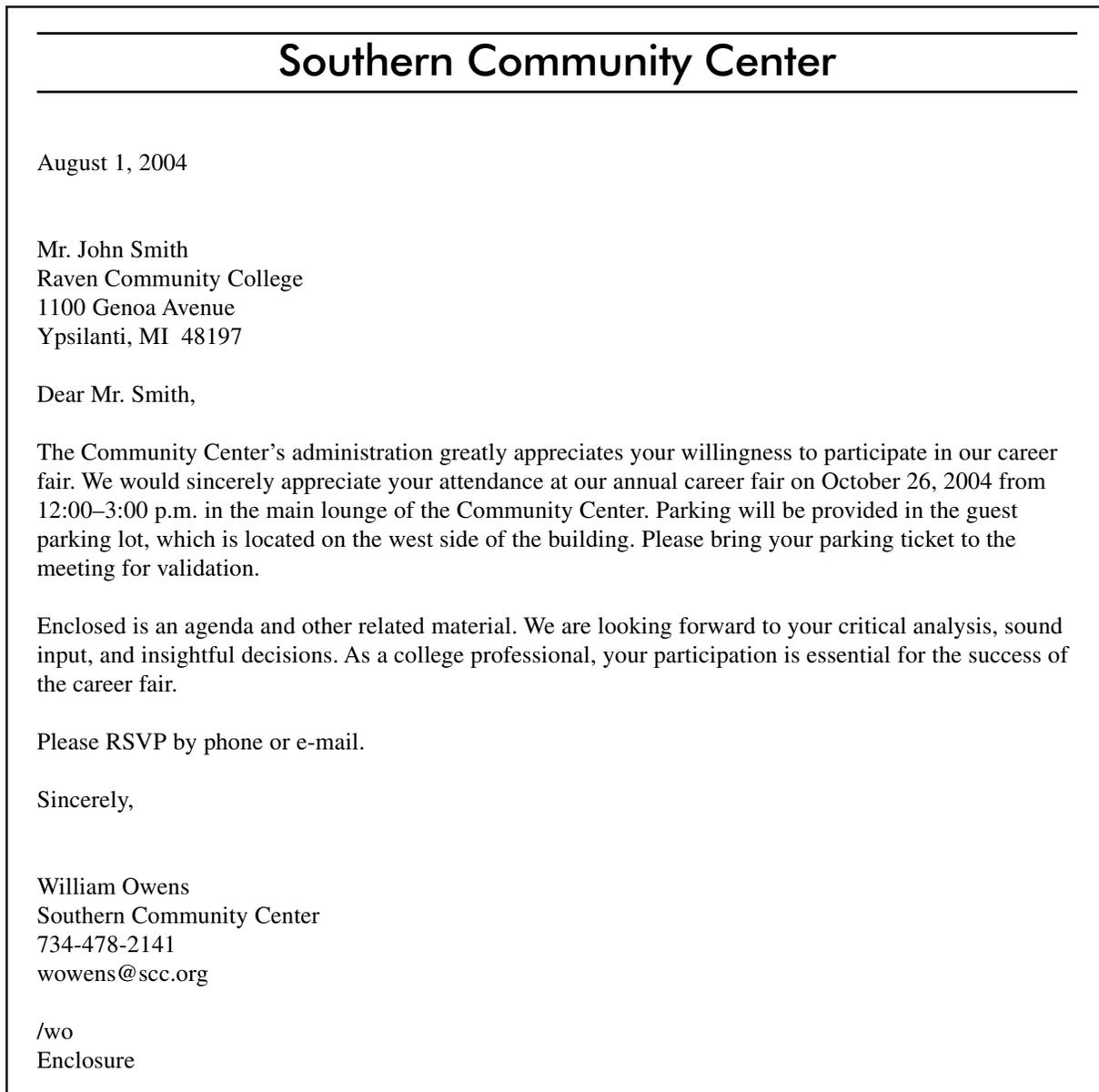


Figure 48-2. Sample letter.

discuss. For fluid communication, paragraphs must be arranged coherently to prevent confusion. There also must be smooth transition from one paragraph to the next. The transition can be a word, sentence, or paragraph.

The final step in the writing process is editing. Editing consists of rewriting, gram-

mar and spell checking, and proofreading. The key to good writing is rewriting. Depending on the type of writing, a few revisions may be adequate or 10–20 revisions may be necessary. The communication quality increases with the number of revisions. Good writers are not always naturally gifted.

They rewrite several times to perfect their message. Good writers are also typically good readers. In other words, people who read frequently usually are better writers than people who do not.

Word processing and e-mail software packages can check for spelling mistakes. However, there are situations where software will not catch a mistake such as “to or too.” Checking grammar can be more difficult, but many word processing software packages come with some form of grammar checking. Some common grammar errors to be aware of are subject-verb agreement, voice, and tense. A singular subject, for example, requires a singular verb, such as “the car travels fast” not “the car travel fast.” The two types of voice, referring to verbs, are active and passive. For example, in the active voice, “teenagers like to drive fast cars.” In the passive voice, “fast cars are typically driven by teenagers.” The voice needs to be consistent throughout the message. Tense refers to past, present, and future. Examples of present and past tenses are respectively: “I am watching the game” and “I watched the game.”

VISUAL AIDS

Visual aids can express some messages more simply and clearly than words. They can highlight specific points and, if appealing to the eye, can be persuasive. Visual aids generally consist of tables, charts, pictures, and maps. They provide another avenue for communicating a message.

Tables are generally applicable for displaying data, particularly numerical data. It is cumbersome to read data in paragraph form. Data formatted in a table is much easier to read as illustrated in Table 48-1.

Line charts and bar charts are typically used to illustrate data with respect to time such as stock market results. These charts also can be used to compare two or more variables over time. Figure 48-3 illustrates an ex-

Table 48-1. Example table (Rockwell hardness results for heat treating)

Reading	Air Quenched (HRC)	Oil Quenched (HRC)	Water Quenched (HRC)
1	8	35	56
2	10	38	60
3	6	35	52
Average	8	36	56

ample line chart. Bar charts, also called histograms, can also illustrate a set of data without respect to time as seen in Figure 48-4.

When comparing subsets of data relative to the complete set, a pie chart is typically used as illustrated in Figure 48-5.

Flow charts typically illustrate a sequence of steps or processes. Figure 48-6 illustrates a flow chart of required program courses and, based on prerequisites, the sequence in which they should be taken.

Radar charts, as illustrated in Figure 48-7, are used to graphically illustrate the value of each variable or indicator with respect to a maximum value such as 10. The chart allows the reader to quickly see the overall performance of a project or team, for example.

Regardless of the type of table or chart included in the communication, there are several universal rules for using them. First, the table or chart must be labeled. The reader must be given a description of the chart and the variables being displayed, including their respective units, if applicable. Second, the table or chart must be large enough to read without straining. Third, the information in the table or chart must enhance or complement the written information. If it does not, there is no reason to include it. Finally, the table or chart must be coherent and esthetically appealing. In some cases, a logical format, boldface letters, cross-hatching, or other formatting, including color, can enhance the message.

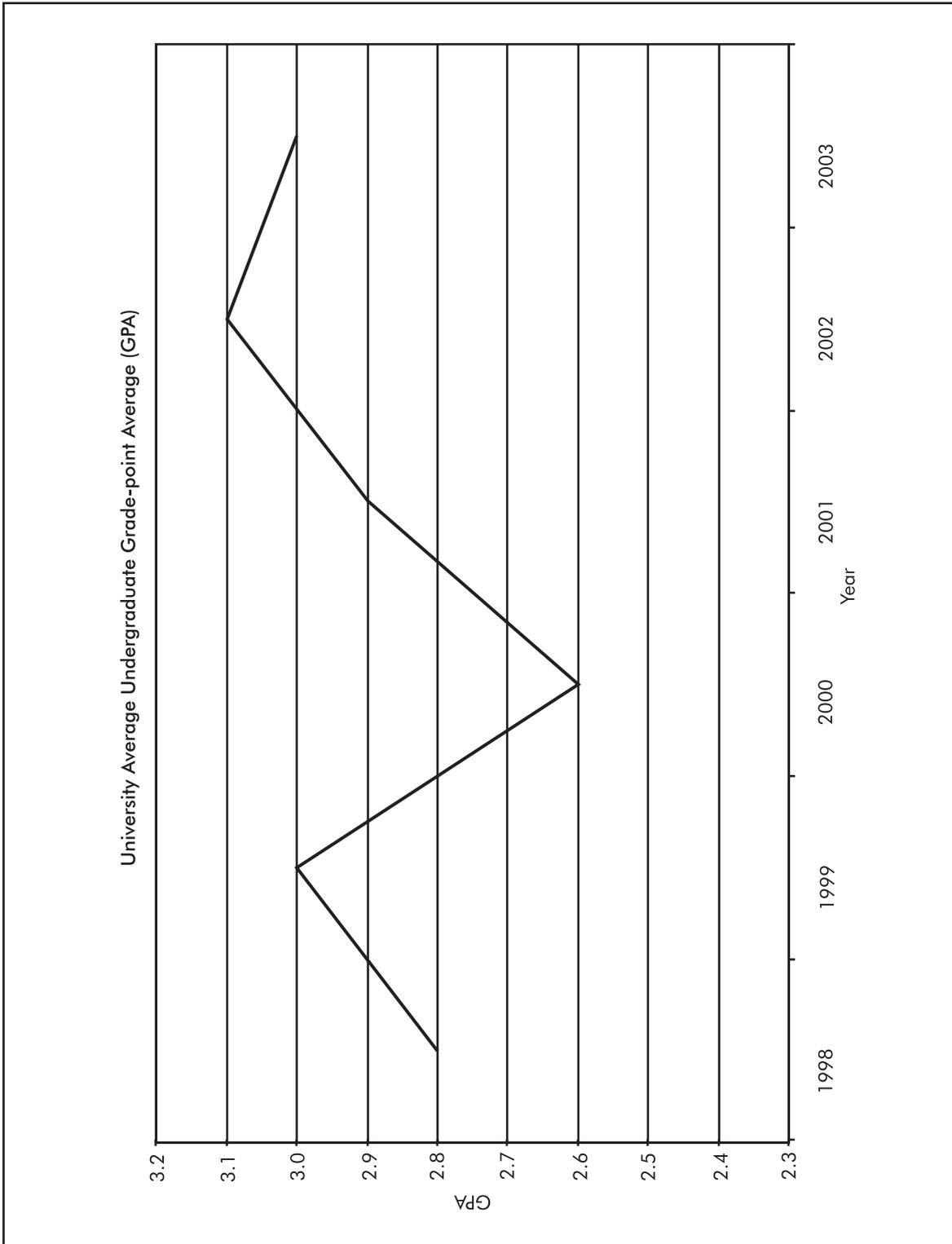


Figure 48-3. Example line chart.

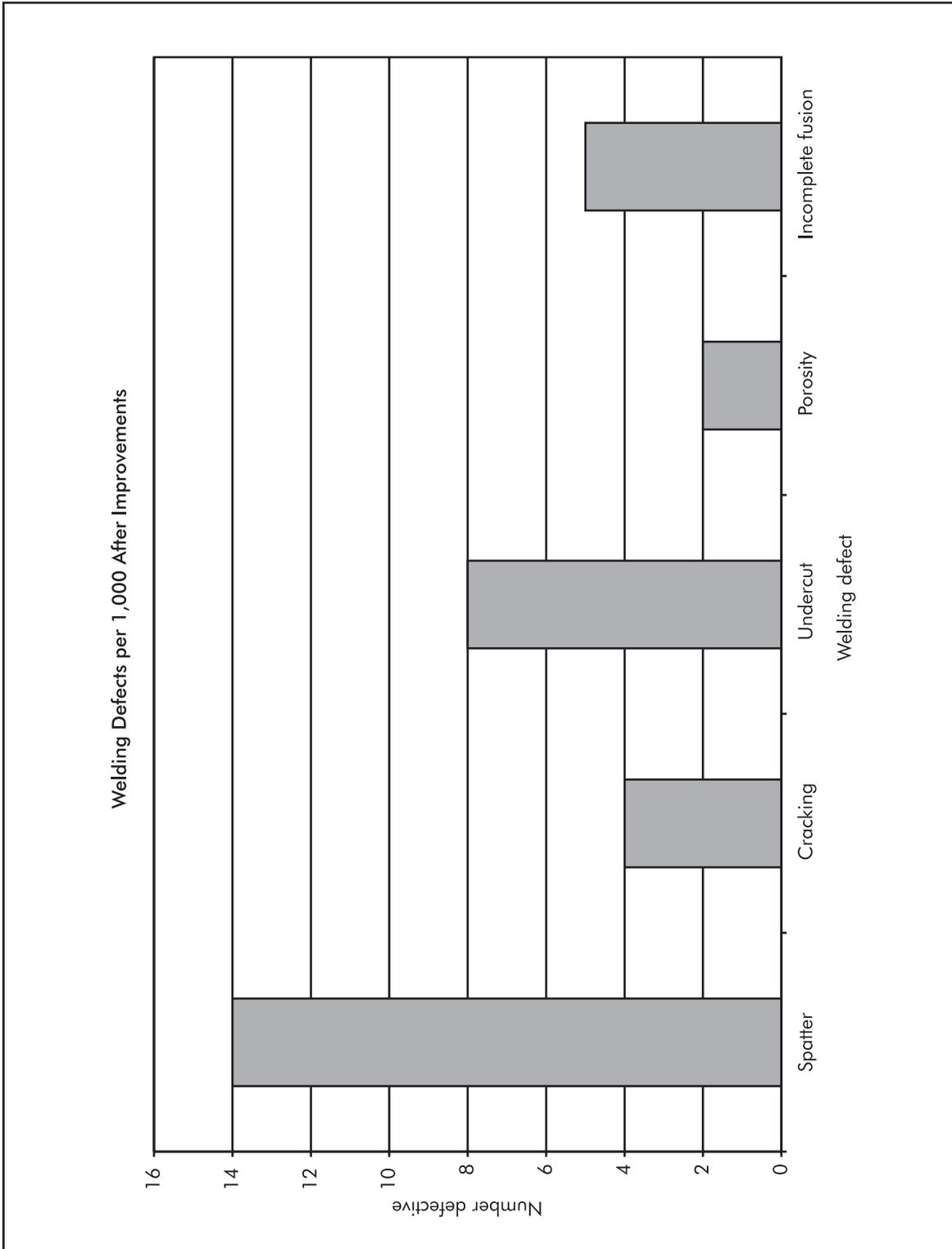


Figure 48-4. Example bar chart (Conner 2001).

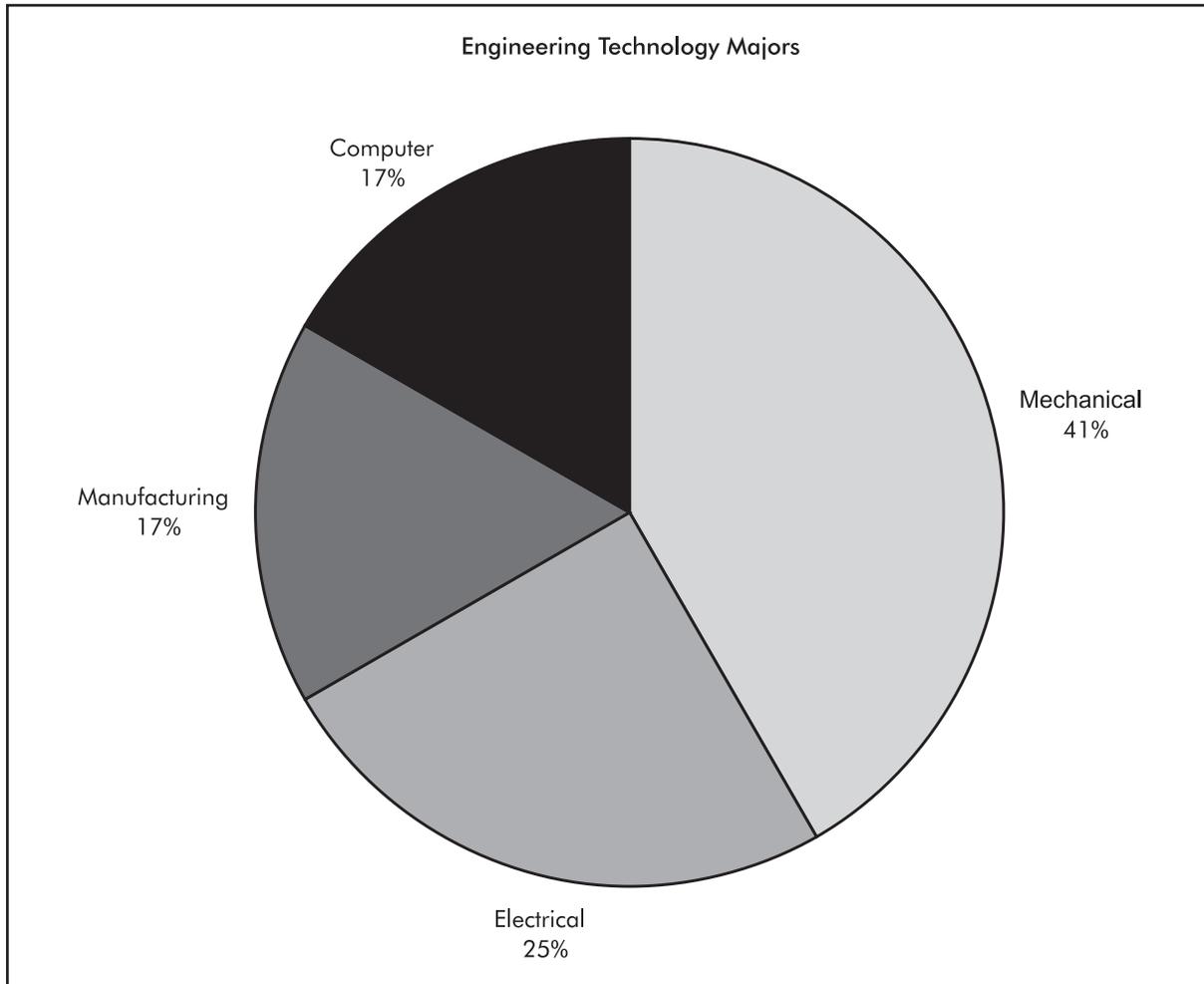


Figure 48-5. Example pie chart.

48.3 SPEECHES AND ORAL PRESENTATIONS

Speeches and oral presentations are integral parts of business communication. Public speaking allows an audience to place a face with a name. It also provides an opportunity for individuals to “stand out” and advance in their career.

Similar to written communication, presentations require careful planning and preparation. Planning a speech or presen-

tation encompasses several steps, including determining the goal and topic, analyzing the audience, developing the main statement, organizing the flow of topics and support material, and determining the length and style.

Presentations generally have two main goals: to inform and/or persuade. In most situations the presentation’s goal and topic are already established by the need for the presentation. For example, a project leader may need to give an informative report to

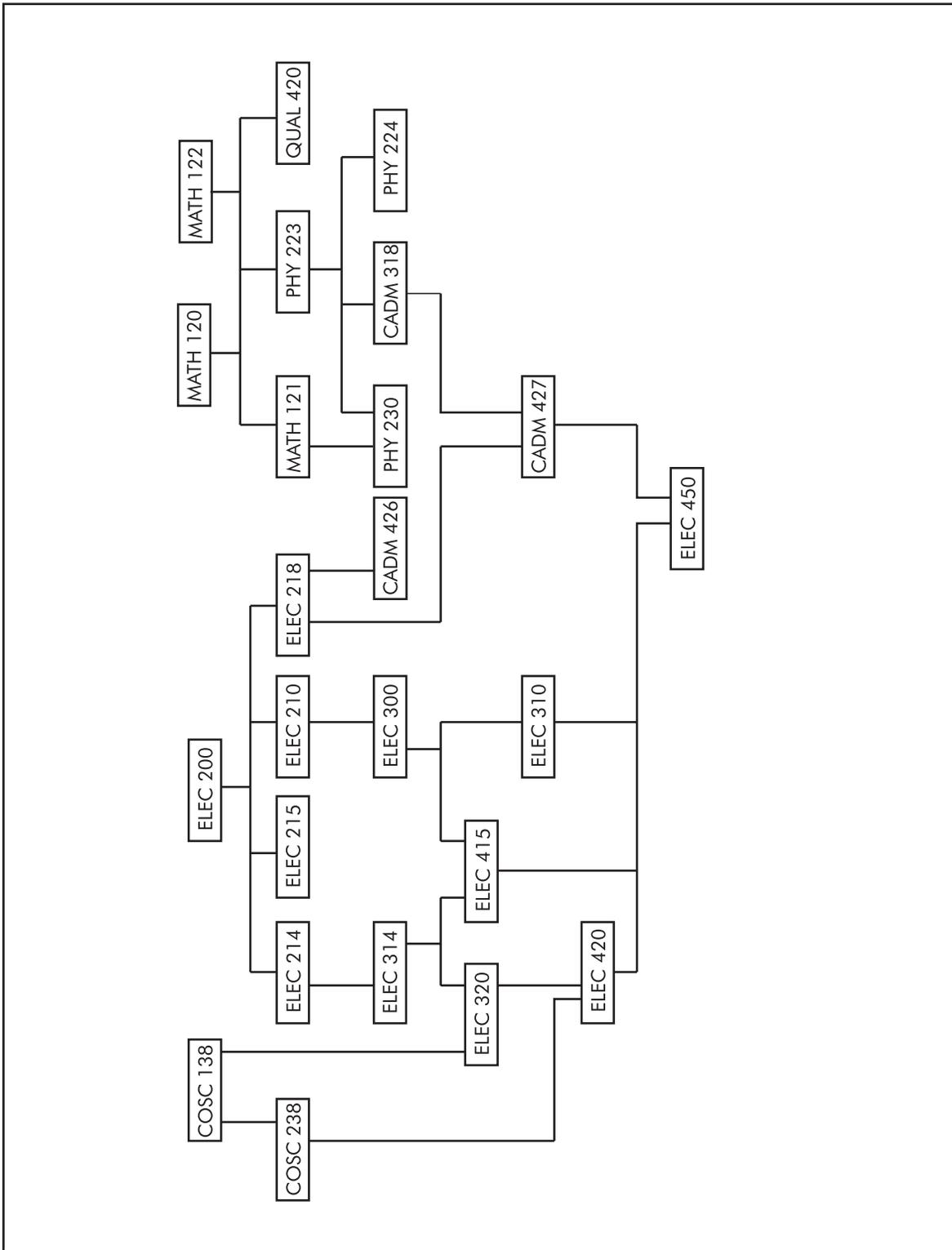


Figure 48-6. Example flow chart.

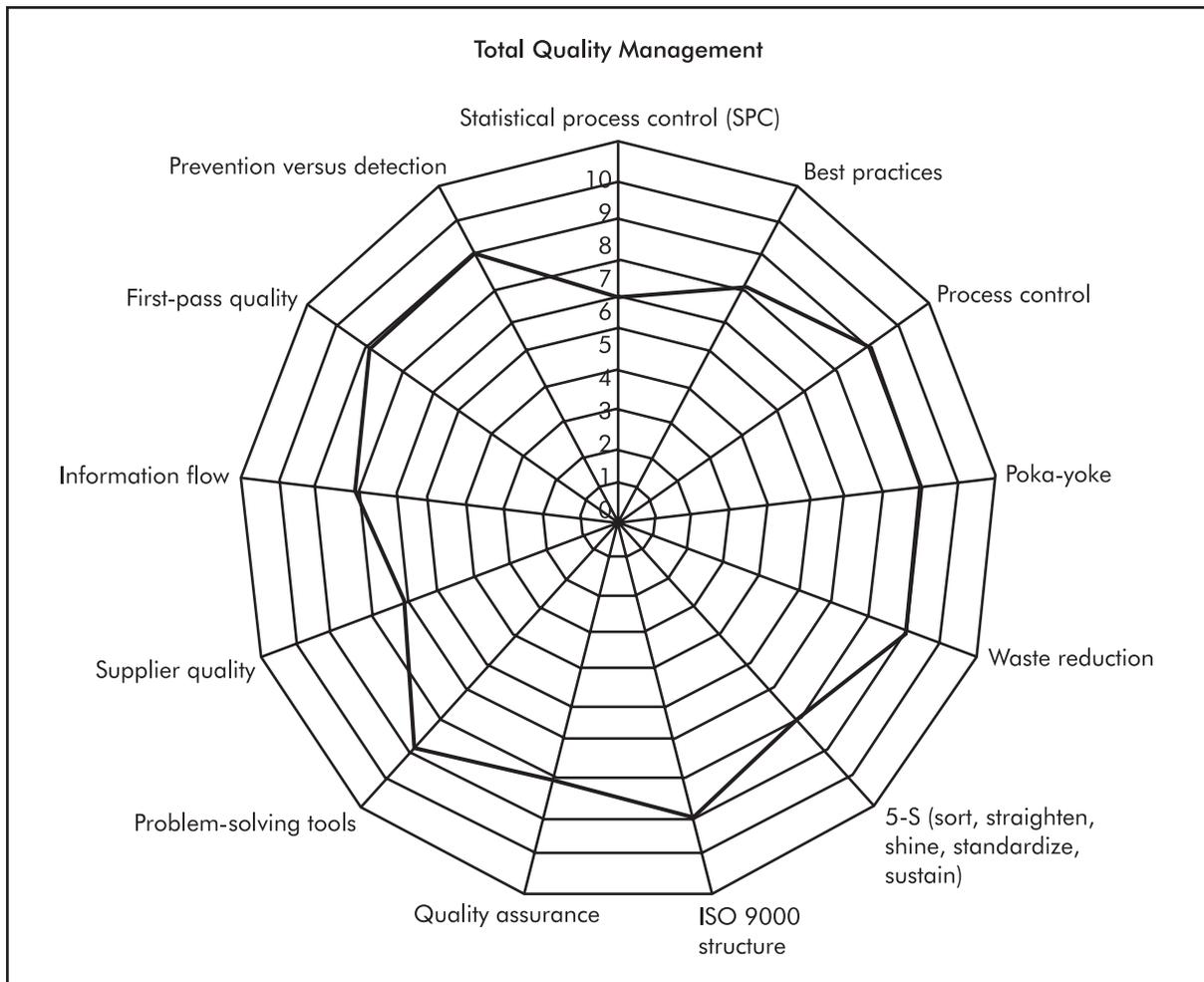


Figure 48-7. Example radar chart (Conner 2001).

his or her superiors. In this case, the presentation is informative and the topic is the project summary.

The next planning step is to evaluate the audience by addressing the following criteria. How big is the audience? Large audiences generally require a more formal presentation without much opportunity for audience interaction. Smaller audiences can be less formal and more interactive. What is the audience's composition, such as gender, age, and ethnicity, for example? What is the audience's motivation for attending? Is at-

tendance required or optional? What is the audience's probable reaction to the presentation? If the presentation is about company downsizing, then the probable audience reaction will be fear and anger. Addressing the probable reaction in the planning stages increases the chances of a successful presentation. What is the level of knowledge of the audience? The level of detail and complexity given in the presentation should correlate to the audience's level of interest and motivation. If the audience is attending the presentation for a project summary, a de-

tailed analysis is not necessary even though the audience may have the appropriate technical background. Finally, what is the relationship between the audience and the speaker? The presentation tone will be different if the audience is comprised of immediate co-workers and friends versus supervisors and/or strangers.

The main statement should inform the audience of the presentation's topic and scope. In the beginning, the speaker needs to identify the presentation's goal. In other words, where is the speaker taking the audience and why?

To guide the audience, the presentation topics should be sequenced logically. The presentation also should be interesting to hold the audience's attention. This can be accomplished by explaining why the presentation topic is important and how the topic personally affects the audience.

Finally, the presentation should close with a brief summary of the main points and a restatement of the purpose. If the audience is expected to formulate a decision or incorporate the presentation material into future actions, the speaker should provide the audience with some guidance as to what to do next.

Prior to the speech or presentation, supporting material or data pertinent to the purpose of the speech or presentation should be compiled. Convincing or supporting information is helpful in communicating the message.

How long should the speech or presentation be? If there is a predetermined time limit, then the speech or presentation must be designed accordingly. However, being allotted 30 minutes, for example, does not mean the presentation or speech must necessarily consume the entire time. An audience is likely to react negatively if a speech or presentation that lasts 30 minutes could have been done adequately in 20 minutes.

Which presentation style should be employed? The style is dependent on the purpose and environmental setting for the presentation. If the purpose, for example, is to present a technical paper at a national conference, then a formal style would be appropriate. If the audience is small and/or comprised of co-workers, an informal presentation style may be appropriate. An informal style also would be appropriate if the presentation involves audience interaction with the presenter. A formal presentation style would be appropriate for larger audiences and/or when the audience is comprised of superiors or strangers. In a formal presentation, the speaker may stand behind a podium and possibly on a stage. The speaker in an informal presentation may simply stand in front of or mingle with the audience.

48.4 NEGOTIATION

Negotiating is the process of working with others to determine a mutually acceptable solution. Negotiations of all types and sizes take place every day and are an integral part of any organization. They can be on a small scale, such as between co-workers, or on a much larger scale, such as between management and labor unions, for example. For all the successful negotiations that occur there are an equal number of those that are unsuccessful. Unsuccessful negotiations generally result in one party conceding more than it needs to or, in the case of labor unions, a strike. Strikes may be considered by some people to be a necessary or acceptable part of negotiating. However, strikes can be detrimental to individuals, families, and the economy. The damage caused by a strike or unsuccessful negotiation, in terms of poor attitudes and hurt feelings, for example, can require a long time to repair.

In negotiating, one party tries to advance its own interests as much as possible and persuades the other side to agree. From that

point, compromises and concessions begin. The best case scenario in any negotiating situation is to persuade the other side to agree to your terms because it is in their own best interest (Sebenius 2001).

It is important to understand personal interests and limitations or no-deal options. However, it is equally important to understand the other side's limitations and perspectives and not dismiss them. For example, asking for a substantial raise in the next contract may seem reasonable. However, from management's perspective, the company may be on the verge of bankruptcy. A raise would ensure the company's demise.

Negotiated agreements are seldom based strictly on price. Most people will not accept a deal if it is not equitable and fair. In other words, something is not always better than nothing. For example, an employer may offer employees a choice between a 10-cent raise or nothing at all. Theoretically, 10 cents is better than nothing. However, the employees may view the raise as unfair and insulting, thereby rejecting the offer. Building a healthy relationship between the negotiating parties is equally important and, in some countries, more important than the deal negotiated. The lesson is to not ignore the negotiating process itself. The process must be viewed as personal, respectful, and fair.

In negotiations there are issues, positions, and interests (Sebenius 2001). For example, if employees are asking for raises because childcare costs are rising, the issue is pay raises. The employees' position is that pay raises are mandatory and management's position is strictly no pay raises. Alternately, if the opposing positions converge, then there is an agreeable solution. If not, then there will be a stalemate. What about the interests of both sides? Employees are interested in quality childcare and management is interested in maintaining profits and satisfying shareholders. Is there a deal that can satisfy the interests of both sides? Company-sponsored,

in-plant childcare may be less expensive than providing raises and it would satisfy the employees' interest. There are obviously other issues with in-plant childcare. However, the example illustrates how satisfying interests is an alternative to converging positions. Conventionally, negotiating seeks to provide a win-win solution based on common ground between two parties. Common ground is always helpful; however it is not the only source for solutions (Sebenius 2001). In the previous example, the agreeable solution was not based on common interests.

The best alternative to a negotiated agreement (BATNA) can be a powerful negotiating tool (Sebenius 2001). The threat of walking away from a tentative negotiated agreement provides leverage. If management offers an employee a 5% raise but a competitor is willing to hire the same employee at 10% higher salary, then the employee has some leverage to improve the deal. Both sides need to fully understand and appreciate their respective BATNAs.

Finally, for successful negotiations, each side must keep an open mind and not demonize the other side. It is easy to view one's own side as better, smarter, and more honest. It is also easy to view the other side as less moral and dishonest. The perceptions of the other side may become self-fulfilling prophecies. Contending the other side is dishonest, for example, in some cases may actually cause the other side to be dishonest.

The negotiating concepts discussed in this section do not constitute an all-inclusive list. There are other issues to be considered such as communication, timing, personalities, etc.

48.5 CONFRONTATION AND CONFLICT

In the workplace a variety of situations and personal habits can annoy others. In many circumstances annoying habits or actions are not intentional but rather unintentional. Often people are unaware that

their actions are being construed as irritating. The following section describes how some of these irritating issues and people can be confronted constructively without conflict.

Confrontation and conflict are not the same thing (Craumer 2002). *Confrontation* implies addressing or bringing issues to another person's attention. *Conflict* implies disagreement, arguing, and hurt feelings. It is possible to confront someone without making them defensive. Not all issues require confrontation. However, the absence of confrontation can result in stress, resentment, and lower productivity.

Before confronting someone, make sure you have enough information and are objective (Craumer 2002). In some cases what you find annoying is unique to your personal biases and most people may not find it annoying. For example, the wording and punctuation of e-mails may be misinterpreted by the reader. One person may view an exclamation point as humorous and another may find it offensive; the interpretation is entirely subjective.

Before confronting someone be sure about the expected outcome and its reasonability. If someone uses a body gesture you find irritating, what do you expect him or her to do about it? It is not fair to confront someone unless there is a reasonable solution. Additionally, if you do not work with this person daily it may be awkward to confront him or her and the situation could become defensive. In this instance you may have to foster a relationship prior to confrontation.

Prior to a confrontation think about the approach, words, and language to use. Be conscious that certain approaches and language may make the other person defensive. Be polite; do not accuse or judge. Do not make the issue personal; focus on the problem (Craumer 2002). Another advisable technique is to discuss joint responsibility and

solutions while confronting the other person. In other words, indicate that you may be part of the problem by the way you are interpreting the other person's actions. Also, how can you be part of the solution? What can you do together to solve the problem?

Finally, choose the best place and time for the confrontation. Normally, a confrontation is a private matter. However, if unsure how the other person will react, having a third person in the vicinity or doing it in public may be a good idea. Make sure the setting is conducive to confrontation. Confronting someone in their office or your office may make them defensive. Confronting someone in the lunchroom or away from the workplace may make the other person less defensive.

Finally, remain objective and emotionally detached from the situation (Craumer 2002). When emotions are involved, people can make inappropriate comments or body gestures, resulting in defensiveness and conflict.

CONFLICT

Some conflict within an organization or team is normal and unavoidable. In a team or workplace conflict typically involves:

- manpower resources,
- capital expenditures,
- technical opinions and trade-offs,
- priorities,
- scheduling,
- personality clashes, and/or
- administrative procedures.

Without conflict or without enough conflict, a phenomenon called *group think* can result. Group think occurs when group members do not express their personal opinions but rather willingly submit to what the group as a whole thinks. Group think can lead to bad decisions and inappropriate actions.

Too much conflict, however, can have negative effects. When an excessive amount

of conflict exists, teams cannot cooperate effectively and making decisions or taking action is difficult.

There are five basic modes of managing conflict: withdrawal, smoothing, compromising, forcing, and confrontation. Some people tend to withdraw from conflict rather than participate in it, thereby reducing the tension.

Smoothing results from de-emphasizing or avoiding areas of difference and emphasizing areas of agreement. For example, if someone is upset about a decision, the conflict can be reduced by discussing the many areas of agreement that outweigh the one area of conflict.

Compromising involves bargaining for solutions that bring some satisfaction to all parties involved. Compromising works if the parties are willing to give in for something in return. If only one party gives in they feel like the losers. Even if all parties give in they may feel like losers if they are not getting completely what they want.

Forcing is exerting one's viewpoint at the potential expense of another's (win/lose situation). This means one person argues their viewpoint until the other person gives in and abandons their viewpoint. Forcing can result in a poor decision or action. The viewpoint that is forced may not result in the best decision or action to solve the particular problem.

Finally, confrontation involves facing the conflict directly. It is a problem-solving approach whereby affected parties work through their disagreements. The problem-solving approach allows people who firmly believe in their individual viewpoints to work together to create a mutually acceptable solution.

The best mode of conflict management depends on the situation. In general, compromising and confrontation are usually the best modes of conflict management because each party's viewpoint formulates the final decision or idea. Withdrawal, smoothing, and

forcing eliminate one party's viewpoint and rely exclusively on the other's viewpoint.

48.6 MEETING MANAGEMENT

Meetings consist of a number of people gathered together to exchange information, generate ideas, and develop collective decisions. Meetings can be a contentious issue among employees. It is not uncommon to hear people say they could get their work done if it were not for all the meetings they attend. Meetings with appropriate objectives and planning can be very useful. The following section discusses how to plan and execute good meetings, and the common pitfalls of poor meetings.

MEETING PREPARATION

Prior to a meeting the person facilitating it must determine the objectives and if the potential outcome will be worth the time and money invested in the meeting. Typical meeting objectives include information sharing, idea generation, and assigning responsibilities (Jay 1976).

Information sharing is an important meeting objective, but there are other modes of sharing such as e-mails and memos. A meeting is not advisable if the information could be communicated effectively through an e-mail or memo. A meeting is necessary if the information needs to be disseminated by a particular person or the information is complicated and requires further explanation. If a particular problem within the group needs to be solved or a new policy generated, a meeting would be productive. Some idea-generating techniques such as brainstorming require live interaction as opposed to e-mails or memos. Group discussion allows collective decision making on problem solutions and policies.

Finally, a meeting is a forum for assigning responsibility for implementing any

ideas or policies generated in the meeting. In other words, “who is going to do what?” Individual roles and responsibilities should be clear to everyone in the group.

Meetings are not free and therefore should have a good return on their investment. The cost of a meeting includes wages or salaries and time. Is it worth paying someone to participate in a meeting (investment) rather than for working on his or her own responsibilities? The meeting outcome (return) needs to be of some value since the participants are being paid for their contributions to the meeting and not performing their individual responsibilities. The value of the outcome is sometimes hard to quantify. Certainly cost-cutting ideas generated by the group, for example, can be quantified. However, outcomes such as policy changes that affect employee morale are more difficult to measure.

In addition to the return on investment of the overall meeting, the same cost/benefit analysis should be applied to each agenda item. In other words, do not spend 95% of the allotted meeting time on an agenda item or items that likely have a minimal outcome.

If a meeting is justified, further preparation is required, such as determining the meeting length and participants, and preparation of the agenda and other written materials as needed. In general, a meeting is more successful and valuable if the number of participants is small. Larger meetings can be successful; however, more intensive preparation is necessary. The length of the meeting is also a factor in its success. Approximately two hours is the maximum length for an effective meeting (Jay 1976). The most valuable meeting outcomes are derived from the first half of the meeting. After this time period, the participants get tired and their attention and focus diminishes. In some cases, it is a good idea to assign a time limit to the meeting and time limits to each agenda item to keep the group focused.

The agenda, which has been mentioned several times, is the outline or blueprint for the meeting’s facilitation. All potential items should be evaluated for appropriateness prior to placement on the agenda. All issues to be discussed should be on the agenda. The inclusion of “other business” or “other items” as the last agenda item is an invitation to waste time (Jay 1976). If it is important enough to discuss in the meeting, then it should be distinctly listed on the agenda. Additionally, for the facilitator to be in complete control of the meeting there cannot be any surprise items raised by a member of the group. Topics for discussion should be solicited from group members prior to the meeting. If the topic warrants discussion it can be placed on the agenda.

Finally, any proposal or lengthy written material to be discussed should be distributed before the meeting. If members are expected to intelligently discuss the material they need time to review it beforehand. If members are expected to read material during the meeting, it obviously should be kept short.

MEETING EXECUTION

Conducting a meeting effectively and efficiently is the facilitator’s responsibility. The facilitator guides the participants toward achievements they could not make individually. A facilitator should not impose his or her ideas on the group. In measuring personal achievement, being busy or spending time in meetings does not mean someone is effective. Activity for the sake of activity is not necessarily productive.

It is the facilitator’s job to keep the meeting on schedule and the participants focused. The facilitator should make the meeting objectives clear and make sure the participants understand all the issues. The facilitator should politely and objectively prevent participants from making long speeches and

defer issues that will not be concluded in the time allotted to the next meeting.

The facilitator can lead group discussions by adhering to the following technique (Jay 1976). First, at the beginning of discussion of each agenda item, the facilitator makes sure the reason for the item is clear. Second, the history of the agenda item is discussed. For example, how long has this problem existed? Third, what is the current status of the problem? Diagnosis is the fourth step. What is the root cause of the problem? Finally, the last step is the derivation of a solution. How can the problem be solved?

Additionally, it is the facilitator's job to control those in the meeting who take a long time to say very little and to encourage those who are silent to voice their opinions and/or facts. The facilitator should encourage differing viewpoints and ideas while maintaining control of the discussion. It is important that everyone in the meeting feels their input is welcome and that their ideas will not be immediately dismissed. This is one reason, if possible, to call on the more senior people last (Jay 1976). If the senior participants speak out first, then the less senior participants may feel the need to publicly agree with them. The less senior participants may be reluctant to contradict the senior participant's ideas.

POST MEETING

Following the meeting, the minutes taken during the meeting should be distributed to all meeting members and others if appropriate. The minutes should contain the following information:

- time, date, and location of the meeting;
- members present;
- agenda items and summaries of their respective discussions;
- issues that were voted on with the voting results;
- time the meeting was adjourned; and

- if appropriate and available, the time, date, and location of the next meeting.

48.7 CREATIVITY AND INNOVATION

Creativity and innovation are important for competing in the global economy. Creativity and innovation also help individuals become personally successful. If it is critical for success, how does a person become creative and innovative? How does a person generate original thoughts and ideas? To begin, creativity is not limited to people with creative talents. To be creative, a person must first decide to be creative and then emulate the acts of creative people (Zelinski 1998). In other words, do not give up on being creative because you do not have any creative talent. Also, intelligence is not a strong indicator of creative ability (Gary 1999). If people have enough intelligence to understand the field they are working in, then their intelligence will not limit their creativity.

Young people are generally thought to be creative. The psychology of a "creative" type person is similar to that of a three-year old or preschool-age child. They are frequently inquisitive and ask the question "why." With age, people tend to become more accepting, less inquisitive, and more conforming. Though subject to more paradigms, older, more experienced people can rely on their experiences to be creative and innovative.

Being creative and innovative involves risk taking. With the development of anything new there is always the risk of failure and criticism. It is safer not to have an original thought or idea. However, the benefits of successful ideas and innovations can be enormous in terms of professional and economic success. Without sharing creative ideas the physical transformation into innovation is impossible. In fact, the merits of creative thinking can only be proven through implementation.

Finally, being creative and innovative is hard work. Successful ideas and corresponding innovations occur after long periods of experimentation, testing, and failures. In the case of patents, invention is defined as the combination of conception and reduction into practice. Conception is the “eureka, I’ve got it” moment and reduction into practice is the process of making the concept functional. Reduction into practice could take hours, days, or years.

How can people become creative or more creative? To start with, a person should become more open-minded, less complacent, and more willing to take risks or risk being wrong and/or criticized. Look for the unexpected, which usually is found in failures (Drucker 1998). Innovations arise from the process of implementing creative ideas. Following industry and market changes can be helpful in creatively thinking about good ideas for the future. Also, demographic changes can influence creative thinking. Take advantage of the perception of others. For example, if the public perceives fuel economy to be very important, then focus creative energy on fuel economy related ideas such as hybrid automobiles. Finally, creativity and innovation involving completely new knowledge and technology can involve a fairly long implementation period. Creativity and innovation can, however, originate from existing knowledge and technology. For example, it is common for individuals and companies to improve upon patented products and technology.

REVIEW QUESTIONS

- 48.1)** Describe content listening.
- 48.2)** How are proposals different than reports?
- 48.3)** Name the two types of charts typically used to illustrate data with respect to time.
- 48.4)** What does BATNA refer to?
- 48.5)** How is confrontation different than conflict?
- 48.6)** What mode of conflict management is being used when someone refuses to participate in a conflict?

REFERENCES

- Bovee, C.L. and Thill, J. V. 2000. *Business Communication Today*, Sixth Edition. Upper Saddle River, NJ: Prentice Hall.
- Conner, Gary. 2001. *Lean Manufacturing for the Small Shop*. Dearborn, MI: Society of Manufacturing Engineers.
- Craumer, M. 2002. “Confrontation Without Conflict.” *Harvard Management Communication Letter*, June.
- Drucker, P. F. 1998. “The Discipline of Innovation.” *Harvard Business Review*. November-December.
- Gary, L. 1999. “Beyond the Chicken Cheer: How to Improve Your Creativity.” *Harvard Management Update*, July.
- Jay, A. 1976. “How to Run a Meeting.” *Harvard Business Review*, March-April.
- Sebenius, J. K. 2001. “Six Habits of Merely Effective Negotiators.” *Harvard Business Review*, April.
- Zelinski, E. J. 1998. *The Joy of Creative Thinking*. Berkeley, CA: Ten Speed Press.