Foundations for Success

Unit 3

Chapter 1

Know Yourself–Socrates

Lesson 1

Self-Awareness

Key Terms

assessment
associate
cluster
differentiate
introspection

What You Will Learn to Do

- **Determine your behavioral preferences**

Linked Core Abilities

- **Build your capacity for life-long learning**
- **Treat self and others with respect**

Skills and Knowledge You Will Learn Along the Way

- **Explain the four clusters of behavior in the Winning Colors® framework**
- **Illustrate your behavioral preferences using the four Winning Colors®**
- **Identify strengths for each behavior cluster**
- **Express appreciation for your own uniqueness**
- **Define the key words contained in this lesson**

Chapter 1

Introduction

You may notice that some people behave or conduct themselves like you, and others behave quite differently. For example, one person may be very quiet and contemplative while another may be the life of the party. Identifying your own preferences and the preferences of others can be an important building block in the foundation for your success. This knowledge can help you to understand situations as they unfold, improve your communication with others, and influence people and situations to get the results you desire.

Natural Tendencies

Everyone has preferences. How these are developed in each of us is a complex combination of things. Whether you are born with them or learn them—nature or nurture—can be an interesting question to explore. It is also interesting to think about how much preferences guide our behavior.

Behaviors that feel comfortable can all be considered to be natural tendencies, or your personal preferences. You might simply identify these behaviors as "the way you do things."

Being aware of personal preferences is an important step. Understanding others, being aware of what makes them tick, is another important interpersonal skill. You will learn more about that in the following lesson, "Appreciating Diversity through Winning Colors."

Learning to Grow

Self-awareness is just the beginning of a lifetime of growth and learning. After you understand what you prefer, what is comfortable for you, it is much easier to branch out of your comfort zone to learn new behaviors. You have options regarding how you behave in any situation, rather than reacting in whatever way feels natural to you. Those natural reactions might not be the best way to handle situations.

It is in these moments when you choose to be a bit uncomfortable that you have the most potential to learn and grow. This is especially true if you select the areas for development because you have a personal reason to do so. Motivation is a powerful influence on your success.

The Process of Self-Discovery

How do you discover more about your own natural tendencies, or preferences? The following are some ways you can enhance your self-knowledge:

- **Introspection**
- **Observation**

- **Feedback (giving and receiving)**
- **Assessment tools**

Introspection

You can pay attention and take note of your own experiences, actions, and reactions. Your own observations (**introspection**) are invaluable sources of information about who you are and what makes you tick. Paying attention to how you feel inside while you participate in a variety of activities can give you some insight into your own behavioral preferences. For example:

- **Do you feel happier when working in a group, or alone?**
- **Do you feel satisfaction when you accomplish a difficult task?**
- **Is it easy or difficult for you to tell others what to do?**

Your body language can also offer helpful clues. Paying attention to what is going on when you start to feel bored and tired—or lively and interested—is an indicator. If your body is responding positively to the situation, it is likely there are elements there that agree with your personal preferences.

Observation

In addition to what you see in yourself, the observations of others can also be helpful. Sometimes others see behaviors in us that we don't see, especially when we are too involved in activities to pay attention.

There are several key concepts to keep in mind if observation is to be a truly valuable self-discovery process.

Situation—What is going on? In terms of the situation, get a sense of the environment in which a behavior occurred. What are the significant factors? Who is involved? This context information offers additional perspective about the behavior.

Specific Behavior—What happened? For an observation to offer objective information rather than subjective, or merely an opinion, it needs to be specific. Vague comments are not as helpful as a concrete example.

Because behavior arises from complex factors, this protects us from being offensive or narrow in our interpretation, and allows for the processes of communicating our thoughts and asking questions to understand even more about others and ourselves. Jumping to conclusions often leads to errors or an incomplete picture.

Impact—What is the result? The impact also needs to be described in concrete terms when making an observation. Some results that could be observed include:

- **Change in body language**
- **Increased energy or animation**
- **Decreased energy or animation**
- **Focus changes**

Including impacts observed in reaction to specific behavior gives people a lot of information about not only what they are doing but how that influences people and situations.

Feedback (Giving and Receiving)

Sharing observations with others is a responsibility and a privilege. This kind of information can be given in a helpful or a harmful way. Sharing an observation is an interpretation of reality. This is true whether you are observing your own behavior or that of others. So, be kind—and real—to yourself and to others when sharing your observations.

Feedback from others is simply their impression or opinion, particularly when a belief or value judgment is included. Try asking for specific examples when getting feedback from others, since observations are more reliable when they are based on fact. An opinion is more understandable when backed up with specific examples.

Assessment Tools

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Key Note Term

assessment – the act of evaluating or appraising a person's ability or potential to meet certain criteria or standards.
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Putting some structure around observations, inner thoughts, feedback and specific examples helps to make sense out of all this information. That's where **assessment** tools come in. They are valuable instruments that you can use in your quest for self-knowledge.

One set of extremely applicable tools is Winning Colors®. The Winning Colors® process supports self-discovery in a positive and affirming way. Winning Colors® is about what you can do, not what you can't.

You actually have more behavior options than you ever imagined, and the four categories make new behaviors easy to comprehend and put into practice.

Because people understand the categories and processes so quickly, you can expect to make some interesting self-discoveries using the Winning Colors® assessment tool. You can then use the information to make a positive difference in your communication and in your life.

Winning Colors®

Key Note Terms

associate – to group things together when they have common characteristics.

differentiate – to make a distinction or state a difference between things so we can tell them apart.
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Similar to other assessment tools, Winning Colors® groups human behavior into categories. Categories help us to understand complex information, by associating related data. To **associate** means to group things together when they have common characteristics. To **differentiate** means to make a distinction or state a difference between things so we can tell them apart.

Purpose and Process

Winning Colors® is a present time behavior indicator. It can be used to:

- **Improve understanding of how to cooperate and communicate with others**
- **Provide clues to motivation**

- **Clarify learning styles**
- **Offer insight to conflict resolution style**
- **Uncover essential aspects of communication**

Behavior Clusters

Winning Colors® focuses on present behavior, a unique and very valuable characteristic of this tool. Four categories have been identified. Each of the four categories include behaviors that have enough characteristics in common to form a group (**cluster**).

Each category is labeled in a way that helps you remember the behaviors that go in that group.

Builder Behaviors (brown, decide)

Do you have behaviors that tend toward taking over and being in charge? Do you like to know the "bottom line" and be in control of people or things? Do you like giving orders and being "top dog"?

If you have developed these behaviors, you are a strong BUILDER. You might use the color BROWN, or compare these behaviors to the brown of the earth to describe this part of you.

Planner Behaviors (green, think)

Do you have behaviors that tend toward being quiet and contemplative? You like to devise and develop strategies. You act only after you have considered all the details, and you have many creative ideas.

If you have developed these behaviors, you are a strong PLANNER. You might use the color GREEN, or compare these behaviors to the growing grass or leaves to describe this part of you.

Adventurer Behaviors (red, act)

Do you have behaviors that tend towards action? You are always on the go. You like to be on stage and take risks and chances whenever possible. You act on the spur of the moment. You know what to do in an emergency before anyone else.

If you have developed these behaviors, you are a strong ADVENTURER. You might use the color RED, or compare these behaviors to fire to describe this part of you.

Relater Behaviors (blue, feel)

Do you have behaviors that tend toward showing feelings? You like to share your feelings with others and have them share theirs with you. You enjoy talking a lot.

If you have developed these behaviors, you are a strong RELATER. You might use the color BLUE, or compare these behaviors to the wide expanse and depth of the ocean to describe this part of you.

Your Key to Success

The key to success is to be balanced. Think when it is time to think (planner—green), decide and "bottom line it" (builder—brown), feel when it is time to feel (relater—blue), and take action when it is time to take action (adventurer—red).

It is crucial that you understand that you are capable of developing all four clusters, but you may presently be emotionally attached or locked into one cluster more than another. For whatever reason, certain behaviors have worked for you or felt more natural, so naturally you developed those more than the others.

Be forewarned—a single strength can get you into trouble. For example, if you favor acting quickly (adventurer), you may act without thinking (planner) or considering the feelings of others (relater). Or, if you have strong planner (green) but no adventurer behaviors (red), you may be unable to get up in front of a group of people and speak out clearly and confidently, without being embarrassed. Everyone benefits from the ability to shift between behavioral styles as needed, depending on the situation.

Conclusion

It's true that you can significantly improve your life by acquiring new behaviors to attain your goals. Making decisions, particularly effective ones, and making them quickly, is a complex set of behaviors. Because behavior is learned and can be reinforced until it becomes a habit, you have the power to choose new behaviors, even if they feel unfamiliar and alien to you today.

Taking an active approach in discovering your strengths and enhancing behaviors you find desirable is a healthy lifestyle choice. This lesson presented some information to help guide you on the path to self-discovery. As Socrates said, "Know thyself." It is the beginning of wisdom.

Chapter 1

Lesson Review

Lesson Review

1. **Which behavior cluster do you see yourself in? List five reasons for this choice.**
2. **How can you use observation today to learn something new about yourself?**
3. **How can you use introspection to learn something new about a friend?**
4. **Choose one behavior cluster you feel you need to improve. Explain why.**

Lesson 2

Appreciating Diversity through Winning Colors®

Key Terms

comfort zone
natural
preference

What You Will Learn to Do

- Apply an appreciation of diversity to interpersonal situations

Linked Core Abilities

- Communicate using verbal, non-verbal, visual, and written techniques
- Treat self and others with respect

Skills and Knowledge You Will Gain Along the Way

- Identify key characteristics for each Winning Colors® behavior cluster: Builders, Planners, Adventurers, and Relaters
- Determine factors that impact the behavior of others
- Determine factors that impact how others perceive your behavior

- **Select behaviors that promote success in a variety of situations**
- **Define key words contained in this lesson**

Introduction

Understanding yourself is an important aspect of creating a successful and happy life. It is also essential to develop your awareness of others so you can become sensitive to the differences and similarities between us all.

We're All Different

As a young child, you become familiar with behaviors you are exposed to by your parents. These behaviors are influenced by your parents' personalities as well as your own. Because these behaviors become familiar, you get "attached" to them; you attach a positive emotion to them, sometimes solely because it is what you know even though they may be negative or hurtful behaviors. This principle is crucial to understanding how to communicate effectively, and this is the first clue in understanding the make-up of anyone's **comfort zone**.

When you have identified the present strengths of your own behavioral clusters as well as those of others, you have targeted this comfort zone. Generally people are more at ease if allowed to communicate within their individual comfort zones.

Asking or expecting others to behave outside their comfort zone is as hard on them as believing for yourself that you should be good at something you've never learned. Remember, though, even an old dog can learn new tricks.

Seek First to Understand

A behavior that is **natural** for you might not be so for others. Assuming that all behaviors are natural for all individuals can lead to unreasonable expectations of others and unnecessary frustration for yourself. Instead, keep in mind that others might be approaching ideas and situations a little differently than you.

Effective Communication

Developing awareness of others can help you become a more effective communicator. By having insight into another's **preferences**, you may be able to adapt your personal communication skills and your behavior in such a way that they are more likely to hear, understand, and respond in a positive way. This is because you're "speaking their language," and what you say makes sense to them. When you speak out of a completely different behavioral style, you're much more likely to encounter resistance because they're not fully understanding what you're trying to say.

Key Note Term

comfort zone – behaviors that seem natural; behaviors you exhibit without realizing what you're doing.

Key Note Terms

natural – based on an inherent sense of right and wrong; occurring in conformity with the ordinary course of nature, not marvelous or supernatural; formulated by human reason alone rather than revelation; having a normal or usual character.

preference – the act of preferring, the state of being preferred; the power or opportunity of choosing.

Winning Colors® Power Words

It has been found through years of research that certain words affect people differently. Through word association discoveries, it has been learned that the mere mention of a particular word produces tension in certain individuals. This is the basis of the lie detector test. When a question is asked, the person becomes emotionally involved and begins to perspire.

When you speak with a person with Planner behaviors, you succeed by using Planner power words. The same is true if you want to communicate successfully with those inclined to Builder, Adventurer, and Relater behaviors.

The following is a list of words and phrases for each Winning Colors® behavior cluster. After identifying an individual's natural "cluster," use the list to help you communicate effectively with him or her.

Your Planner Power Words

- **Changing and improving**
- **Analyzing**
- **Being my best**
- **Dreaming**
- **Caring**
- **Inner life**
- **Thinking**
- **Inventing**
- **Knowing more**
- **Exactness**
- **Planning**
- **Revolution**
- **Knowing the future**
- **Freedom of thought**

Your Builder Power Words

- **Always leading people**
- **Power**
- **Results**
- **Responsible**
- **Duty**
- **Tradition**

- **Money**
- **Be prepared**
- **I give directions**
- **Do it my way**
- **I like to get things done now**

Your Adventurer Power Words

- **Test the limits**
- **Do it now**
- **Excitement**
- **Fast machines**
- **Fun**
- **Doing**
- **Action**
- **Risk**
- **Challenge**
- **Act and perform**
- **Freedom**

Your Relater Power Words

- **Always liking to be with people**
- **Hugs are special when I choose**
- **Friendly**
- **Giving**
- **I see everything**
- **Romantic**
- **Let's get along with each other**
- **Wanting people to like me**

Conclusion

Being aware of what motivates people is worth your time and attention. The information and insight you gain can help you be more effective in all your relationships.

You have been given words and behaviors that will assist you in having the best possible success as a leader or communicator with others after you have identified their comfort zones.

Think when it is time to think (Planner—green), decide when it time to decide (Builder—brown), feel when it is time to feel (Relater—blue), and act when it is time to act (Adventurer—red).

Lesson Review

1. **How can assuming something about a friend or family member lead to disappointment or frustration?**

2. **What differences and similarities do you see in yourself and your best friend? How do those differences and similarities affect your friendship?**

3. **List five words you would use to communicate effectively with an Adventurer.**

4. **Define the term "preference."**

Chapter 1

Lesson Review

Personal Growth Plan

Chapter 1

Key Terms

adaptability
assertion
change orientation
deference
emotional intelligence
intrapersonal
persistence

What You Will Learn to Do

- Develop a plan for personal growth

Linked Core Abilities

- Build your capacity for life-long learning

Skill and Knowledge You Will Gain Along the Way

- Match the key emotional skills to the relevant skills dimensions
- Develop strategies for growth in two emotional skill areas
- Plan self-directed development activities
- Define key words contained in this lesson

Introduction

You need to have goals in your life, and those goals should be clearly defined so you know how to achieve them. For example, to choose a certain career or lose a specific number of pounds, you should have a well-defined strategy for getting from where you are now to where you'd like to be in the future. You've probably heard the old adage, "If you don't know where you're going, any road can lead you there." Likewise, if you don't know where you are, how do you know which road to choose?

Most of the success-oriented products being marketed today, such as trendy diets and get-rich-quick programs, focus on a goal and tell you how to get there. These programs assume that if you "do as they do," you will be successful. The problem with this approach is that one method of planning doesn't work for everyone. Those who created the programs don't know where you are today, so how can they give you directions to where you want to go?

The Personal Skills Map

All of us at one time or another have taken a trip and gotten lost. Did you stop and ask for directions, look at a map, or call the person at your destination to get more information about how to get to where you're going? Regardless of the method you chose, you first had to ascertain, "Where am I now?" Only then could you determine how to get where you were going. The Personal Skills Map offers a way to discover where you are now and shows you how to get to where you want to go.

The Personal Skills Map helps you identify where you are now and shows you what you need to know to accomplish your goals.

The Success Profiler

The Success Profiler is a systematic, research-based assessment and skill-building system designed for the following purposes:

- **Adapt to change**
- **Develop leadership skills**
- **Enhance ability to learn**
- **Promote sensitivity/diversity**
- **Build teamwork skills**
- **Prevent violent behavior**

Rather than attempting to address knowledge and skills, this approach focuses on the **emotional intelligence** needed for success in key emotional skill areas. The assessment helps you identify those skills you need to develop, those that need strengthening, and those that can use some enhancement.

You begin the process of identifying where you are now by completing a four-part profiler assessment. After it's completed, you will transfer your results onto your personal map.

The personal map is divided into 14 critical areas—key emotional skills. The following section covers those critical areas.

Self-Esteem

The Self-Esteem scale indicates a self-perceived level of personal worth. Research indicates that it is the most fundamental skill and it relates to major aspects of mental health and a healthy personality.

Interpersonal Assertion

The Interpersonal **Assertion** scale indicates how effectively an individual uses direct, honest, and appropriate expression of thoughts, feelings, and behaviors in dealings with others. It indicates an ability to be direct and honest in communicating with others without violating the rights of the other person.

Interpersonal Awareness

This scale indicates an individual's evaluation of his or her ability for appropriate social, emotional, and physical distance in verbal and non-verbal interactions with others.

Empathy

The Empathy scale indicates an individual's ability to sense, understand, and accept another person's thoughts, feelings, and behaviors. Empathy is a primary characteristic of a skilled communicator. Persons with strong empathy tend to be sociable and outgoing.

Drive Strength/Motivation

The Drive Strength/Motivation scale indicates motivation and goal-setting abilities. Drive strength shows an ability to marshal energy and motivation toward the accomplishment of personal goals.

Decision Making

The Decision Making scale indicates perceived skill in formulating and initiating effective problem-solving procedures. The ability to make decisions is a key ingredient of self-acceptance and positive self-regard.

Time Management

The Time Management scale assesses ability to organize and use time to further individual and career goals. Ability to manage time is an ingredient in self-regard, sensitivity to needs, and perseverance in completing tasks.

Key Note Term

assertion – the act of asserting; to state or declare positively and often forcefully or aggressively.

Sales Orientation/Leadership

The Sales Orientation/Leadership scale indicates perceived skill in positively impacting and influencing the actions of other people. The ability to influence others in a positive way is an important aspect of leadership/sales.

Commitment Ethic

The Commitment Ethic scale indicates perceived skill in completing projects and job assignments dependably and successfully. Persons with strong commitment ethic are usually perceived as dependable and committed by others, are inner-directed, and persevere in completing projects regardless of difficulties encountered.

Stress Management

The Stress Management scale assesses perceived skill in managing stress and anxiety. Persons with skills in managing stress positively are competent managers of time and are flexible, self-assured, stable, and self-reliant.

Physical Wellness

The Physical Wellness scale reflects the extent to which healthy attitudes and living patterns that are important to physical health and well-being have been established. Physical wellness is highly correlated to positive stress management and high self-esteem. Persons with high scores have developed high levels of self-control over potentially harmful behavior patterns.

Interpersonal Aggression (Anger Management)

The Interpersonal Aggression scale assesses the degree to which communication styles violate, overpower, dominate, or discredit another person's rights, thoughts, feelings, or behaviors. High interpersonal aggression is related to the personality characteristics of rebelliousness, resentment, and oversensitive response to real or imagined affronts.

Interpersonal Deference (Fear Management)

The Interpersonal Deference scale measures the degree to which communication style is indirect, self-inhibiting, self-denying, and ineffectual for the accurate expression of thoughts, feelings, and behaviors. High interpersonal deference is related to the personality characteristics of apprehensiveness, shyness, and oversensitivity to threat or conflict.

Change Orientation (Comfort Level)

The **Change Orientation** scale indicates the degree of motivation and readiness for change in the skills measured by the Personal Skills Map. A high score indicates dissatisfaction with current skills and a strong conviction of the need to make personal changes.

Key Note Term

change orientation – a scale that indicates the degree of motivation and readiness for change in the skills measured by the Personal Skills Map.

Integrating the Personal Skills Map and Emotional Skills

On the Personal Map, the 14 key emotional skills are grouped into 5 skill dimensions. These skill dimensions help you identify your strengths and weakness in **intrapersonal** skills (those that occur by yourself), interpersonal skills (those that occur with others), any problematic behavior that needs to be addressed, and your willingness to change (**adaptability**).

The first skill dimension is Intrapersonal Skill and includes the Self-Esteem emotional skill. This skill dimension is related to how you evaluate and accept yourself as a person.

The second skill dimension is Interpersonal Skills and consists of the Assertion, Awareness, and Empathy emotional skills. This skill dimension is related to how you interact with others and how you tend to communicate in stressful situations.

The third skill dimension is Career/Life Skills and consists of the Drive Strength/Motivation, Decision Making, Time Management, Sales Orientation/Leadership, and Commitment Ethic emotional skills. This skill dimension focuses on skills that are important in effectively managing your daily environment and school demands.

The fourth skill dimension is Personal Wellness Skills and consists of the Stress Management and Physical Wellness emotional skills. This skill dimension is extremely important in both emotional and physical well-being.

The fifth skill dimension is Problematic Behavior and consists of the Interpersonal Aggression and **Deference** emotional skills. This skill dimension provides an indication of behaviors that negatively affect personal mental health and career effectiveness.

At the bottom of the Personal Skills Map is the Personal Change Orientation category. This score indicates your motivation and willingness to change behavior.

High scores on the Personal Skills Map indicate that you are aware of a need to improve your personal skills. It is possible that this awareness has caused some increased stress and anxiety in your life. Conversely, a low score on the map indicates that you are satisfied with your current interpersonal and intrapersonal skills and behavior.

Conclusion

Whether you are satisfied with your current skill level or desire a change, knowing where you are today can help you map a plan that leads you toward your goals.

It's nice to know that our personal skills are changeable and that we are capable of learning and growing throughout our life. If you are ready to strengthen or enhance your current skills, have **persistence** in your efforts, and use the results of the assessment to help guide you toward your personal goals, you will become a better, well-rounded individual.

Key Note Terms

intrapersonal – occurring within the individual mind or self.

adaptability – capability or willingness to adapt.

Key Note Term

deference – the respect and esteem due a superior or elder; also affected or ingratiating regard for another's wishes.

Key Note Term

persistence – the action or fact of persisting, to go on resolutely or stubbornly in spite of opposition, importunity, or warning; to remain unchanged or fixed in a specified character, condition, or position; the quality or state of being persistent.

Chapter 1

Lesson Review

Lesson Review

1. Choose one personal skill that you'd like to improve. Explain why and how you'd like to make this improvement.

2. Define the term "emotional intelligence."

3. How can physical wellness affect your self-esteem?

4. What motivates you to finish a project?

Becoming an Active Learner

Chapter 1

Key Terms

active
classify
creative
critical
objectivity
passive
subjective
visualize

What You Will Learn to Do

- Determine the thinking/learning skills necessary for improving active learning

Linked Core Abilities

- Build your capacity for life-long learning
- Apply critical thinking techniques

Skills and Knowledge You Will Gain Along the Way

- Identify the thinking types and related viewpoints necessary to address typical active learner questions
- Distinguish between traits and activities of critical and creative thinkers
- Describe the difference between objective and subjective thinking
- Distinguish between active learner and passive learner traits
- Define the key words contained in this lesson

Introduction

Active learners do not wait for learning to happen—they make it happen. You learned to crawl, stand up, walk, as well as other tasks because you wanted to learn them. This desire to learn made you ask the people around you for help. Active learning is an instinct with which you were born and will possess throughout your life.

Who Are Active Learners?

Active learners generally display specific traits and can:

- **Identify personal goals and the steps necessary to achieve the goals.**
- **Use resources. Identify the people and tools available to aid in goal pursuit.**
- **Learn how to solve almost any problem they ever have to face.**
- **Look at situations objectively.**
- **Ask the right questions.**
- **Use time well. They organize and set priorities.**
- **Apply good reading, studying, and questioning skills to written materials.**
- **Apply good listening skills in the classroom.**
- **Find patterns and take effective notes to organize materials for studying.**
- **Assess progress along the way and revise their plans.**

You can probably think of additional traits that active learners possess. In contrast, **passive** learners may work hard, but they do not take charge of the learning processes. Table 2.1.1 compares the differences between active and passive learners.

Active Learners Are Self-directed

Using active learning, you can solve problems, answer questions, formulate questions of your own, discuss, explain, debate, or brainstorm during class. **Creative** and **critical** thinking as well as the ability to view situations and problem objectively are common traits among those who are active learners.

Creative and Critical Thinking

Active learners think carefully. Thinking is a complex activity involving the brain's neurons (nerve cells) linking with other neurons as waves of impulses travel from neuron to neuron. Numerous skills comprise the act of thinking. As shown in Table 2.1.2, these skills can be grouped into two categories: creative and critical.

Key Note Term

active – characterized by action rather than contemplation or speculation.

Key Note Terms

passive – acted upon by an external agency; receptive to outside impressions or influences.

creative – marked by the ability or power to create; given to creating.

critical – of, relating to, or being a turning point or especially important juncture.

Table 2.1.1: Active Learner Versus Passive Learner

Passive Learner	Active Learner
Approaches learning as "remembering"	Approaches learning as "thinking"
Reads the textbook, takes some notes, and spends hours trying to memorize those notes	Reads the textbook, takes some notes using a method that captures the concepts and details; reviews the notes
Wastes or misuses a lot of study time; feels as if there isn't enough time to "remember it all"	Uses study time efficiently; concentrates on remembering the major concepts and details.
May be able to recall information, but often has problems using this information in contexts other than the textbook's scenario or the way he/she memorized the material	Can recall information and transfer the information to many different contexts
In tests, tends to get confused if the information is not presented in a manner similar to the way he/she memorized the information	Can use the information to respond to different types of questions in tests
Tends to see "words" on the page rather than ideas and concepts applicable to various situations	Looks for the basic concepts and uses those concepts as a structure on which to build secondary concepts and details; can apply the information to various situations when appropriate

Note

For more information about neurons and brain function, see Chapter 2, Lesson 1, "Brain Structure and Function."

Table 2.1.2: Examples of creative and critical thinking	
Brainstorming	Analyzing
Generalizing	Comparing/Contrasting
Inventing	**Classifying**
Predicting	Evaluating
Visualizing	Prioritizing

Active learners use both critical and creative thinking; critical thinking to define a problem, and creative thinking to solve it.

Critical thinkers tend to:

- **Be honest with themselves**
- **Resist manipulation**
- **Figure out how to overcome a confusing situation**
- **Ask good questions**
- **Base judgments on facts and evidence**
- **Look for connections between subjects**
- **Be intellectually independent**

Aside from being honest with themselves and resisting manipulation, reative thinkers tend to:

- **Use their imaginations**
- **Daydream**
- **Practice expansive thinking (think "outside of the box")**

Active learners know when to use each type of thinking.

Objective Versus Subjective Viewpoint

As you grow and mature, you learn to shift from **visualizing** the world as being centered only around yourself (**subjective**) to seeing it in a way that many people can agree on what it means (objective). **Objectivity** allows you to communicate effectively and persuasively with others. Using objectivity helps you persuade other people and can gain you allies when working towards change.

To support critical thinking, you need an objective viewpoint. You can learn to distinguish between objective and subjective observations and reactions.

If you tell how an event affected you or how you reacted to an event, you are being subjective. For example, consider the following statements.

- **His criticism of me was totally unjust and it made me angry.**
- **That was the funniest movie I've ever seen.**

If you tell about an event or relate a fact as anyone might see it, you are being objective. For example, consider the following:

- **It rained Saturday.**
- **Sick children need good medical care.**

Keep these subjective and objective viewpoints in mind when you are communicating with others. Both viewpoints are necessary in life, but learn to use them appropriately. Distinguishing between these viewpoints is especially important when you are asking questions, taking tests, or giving presentations. Table 2.1.3 shows examples of how critical, creative, objective, and subjective thinking are used.

Asking Questions

Active learners combine critical thinking and objectivity to ask good questions. They ask questions to get a complete picture and to expand their knowledge. You can't get anywhere without asking questions. To get specific facts, ask clear, concise questions requiring an objective answer. To learn opinions and feelings, ask subjective questions.

Form the habit of asking questions and learning from everyone you meet. You may be afraid to ask questions because you think people will feel you are not very smart. Don't be afraid. The only way to learn is to ask questions. And don't forget: The dumbest question is the one that's never asked.

Answering Questions

Active learners use both types of thinking—critical and creative—to give good answers to questions. You must recognize whether a question is asking you to be objective or subjective in your answer. Recognizing what type of question is being asked will help you identify whether your answer should be subjective or objective.

Answering questions is treated in more detail in the Test Taking Tips and Strategies later in this textbook. For reading, study skills, and test taking, you apply the objective and subjective viewpoints, critical and creative thinking, and techniques for asking questions.

Table 2.1.3:

Three Question Types	Related Thinking Type	Related Viewpoint	Notes
What?	Critical thinking	Objective	Facts form the basis of most of your studies.
• What are the facts?			
• What is the evidence or proof?			
So what?	Creative and critical thinking	Subjective and Objective	Use the facts to form an opinion.
• What do the facts mean?			
• What conclusion can I draw?			
• What else do I need to know?			
Now what?	Creative thinking	Subjective	Use the information to form a pattern or structure on which to build other facts.
• What can I do with the information now that I have the facts?			
• How do the facts link to other information I have?			

Conclusion

Active learning is a method that allows you to participate in class. It takes you beyond the role of passive listener and note taker and allows you to take some direction and initiative during the class. Active learning can encompass a variety of techniques that include small group discussion, role playing, hands-on projects, and teacher-driven questioning. The goal is to be part of the process of your own education.

Chapter 1

Lesson Review

Lesson Review

1. Compare active learners and passive learners. Which are you?
2. Compare and contrast creative thinking and critical thinking.
3. How can a combination of creative and critical thinking help you solve problems?
4. Explain how you can change the way you think about a situation by using an objective and subjective viewpoint.

Learning to Learn

Chapter 2

Lesson 1

Brain Structure and Function

Key Terms

axon
brain stem
cerebral hemispheres
cortex
dendrite
limbic system
neural plasticity
neuron
neurotransmitter
sensory flooding
sensory gating
synapse

What You Will Learn to Do

- Relate the structure and function of the brain to the learning process

Linked Core Abilities

- Build your capacity for life-long learning
- Apply Critical Thinking Techniques

Skills and Knowledge You Will Gain Along the Way

- Identify key areas and function of the midbrain/limbic system
- Associate major regions of the brain to their functions
- Explain the function of a neuron

- **Explain the three elements involved in transmitting stimulus from outside the body to the brain**
- **Assess the process required to enhance brain power**
- **Define the key words contained in this lesson**

Introduction

This lesson introduces you to the most marvelous and mysterious part of your anatomy—the human brain. Most humans never totally discover or exert the full potential of their brain. In this lesson you explore current research on what the brain is (structure) and how it works (function). You learn practical ways to apply complex concepts that put you in control of your own mind.

Evolution of the Human Brain

One way to look at the brain's structure is based on the theory of evolution. Only 100,000 years ago, the ancestors of modern man had a brain weighing only about a pound—roughly a third of the weight of our current brain. Most of this increased weight is because of a much larger cerebral **cortex**. Here most of the thinking that makes human beings such unique mammals occurs. This tremendous growth is an important aspect of the evolution of the human brain.

The Triune Brain

An early description of the human brain was conceived by neurologist Dr. Paul MacLean that attempted to explain its structure in terms of how it has evolved. According to MacLean's theory, three separate and distinct brains exist, from oldest to more recent. As each brain evolved, the older brain was retained for its specialized functions, and the new brain simply formed around it.
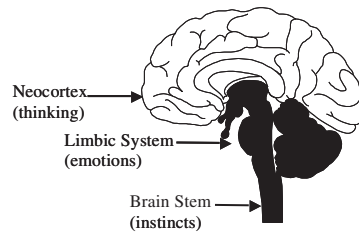
> **Note**
>
> At the time of this publication, Dr. Paul MacLean is serving as the director of the Laboratory of Brain Evolution and Behaviour in Poolesville, Maryland. He wrote "The Triune Brain In Evolution" in 1990 and explains his triune brain theory in this book. For more information about his book and his theory, you can read a book review at *http://www.thymos.com/mind/maclean.html*.

MacLean's theory provides a simple, easy-to-understand concept of the human brain. This description relates directly to evidence about how the brain actually works, as you will see in the sections "Brain Function" and "Downshifting" later in this lesson.

Key Note Term

cortex – the highly wrinkled outer layer of the cerebrum and cerebellum (forebrain); grey matter.

Figure 2.1.1: The triune brain.

Neocortex
(thinking)

Limbic System
(emotions)

Brain Stem
(instincts)

Key Note Terms

brain stem – the oldest part of the brain comprised of the mesencephalon, pons, and medulla oblongata, and connecting the spinal cord with the forebrain and cerebellum. Also referred to as the reptilian brain.

limbic system – a group of subcortical structures (such as the hypothalamus, hippocampus, and amygdale) of the brain that are concerned especially with emotion and motivation.

The human brain, as shown in Figure 2.1.1, has three parts: the neocortex (mushrooming out at the top), the **limbic system** (in the middle), and the **brain stem** (at the base).

The neocortex, sometimes called the *cerebral cortex*, is believed by researchers to have grown out of the limbic system at some time in human evolution. Though not exclusively, the neocortex is where most higher-order and abstract thoughts are processed. The two hemispheres of the neocortex also handle input from our sensory systems, making connections between various stimuli, such as associating what we see with what we hear. This makes comprehension possible, and is how we make it all meaningful.

The neocortex, the most newly developed part of our brain, also attaches feeling and value to stimuli it receives. When humans learn, the structure and chemistry of nerve cells in the neocortex are changed.

Let's take a closer look at how the brain functions, from top to bottom, and how it interacts with the rest of the body.

The limbic system, once thought to be associated exclusively with emotion, is now known to process not only emotional response but also a number of high-level thinking functions, including memory.

The brain stem, sometimes called the *reptilian brain* (R-complex), is considered to be the oldest part of the brain from an evolutionary standpoint. It follows then that much of the processing of basic survival needs (eating, breathing, and the "fight or flight" response) occurs here. Fight or flight is the common terminology for a complex set of reactions to a perceived threat, really the organism's ability to go on red alert and respond quickly. Many of the body's systems respond automatically to increase the chance of survival when under attack.

Brain Function

The brain is vital to human understanding and the ability to learn. Perhaps you've heard of "higher level" thinking skills. This phrase refers to the level of information processing and response required by a particular task. Some complicated tasks can require a high level of information processing.

For example, when you touch a hot stove, you pull your hand away quickly. That activity does not take much thinking, and it had better not take a lot of time! In fact, your nervous system is designed to process information like that automatically, with little help from the neocortex.

Think about getting burned. What information would be helpful to store long term about that experience? Maybe the size, shape, and color of the heat source will help you to avoid the problem in the future. But the "how to" of pulling away your hand is best left to the quick reactions of nerves and muscles. Given the brain structure presented in Triune Brain theory, which of the three major regions is probably in charge of the burn response?

If you said the brain stem, you're pretty close. In fact, muscles can react to nerve impulses without those impulses ever traveling up the spinal cord to the brain. The withdrawal reflex, where the finger is pulled away from the pain as muscles contract, is the simplest act that the nervous system can perform. It is automatic and unconscious; it does not involve any higher-level thinking.

Downshifting

Now let's look at a process we call *downshifting*. From the top to bottom view described in the previous section, downshifting describes what occurs when information processing moves from the higher-level thinking regions of the brain, the neocortex and even the limbic system, down into the brain stem and even into the automatic responses of reflex. Why does this happen? Why give up the ability to ponder and reflect and instead revert back to instinct and involuntary reflexes? Fear and intimidation are two main reasons downshifting occurs.

In the presence of perceived threat, survival becomes important and the brain discerns the need for speed. Like the burn example in the previous section, your nervous system is fine-tuned enough to automatically revert to more efficient processing methods to keep the organism safe and sound. In other words, the brain will downshift from neocortex involvement to rely more heavily on the survival and emotional processing of the brain stem and limbic system whenever the organism perceives a threat.

Perhaps you have a lot at stake in the outcome of that upcoming geometry test. Maybe you won't pass this year if you don't complete a major writing assignment. Or maybe you know someone who believes being tough helps motivate people to perform better. Sometimes tough comes out more like put-downs and threats, instead of inspiration, high standards, and a belief in your ability to succeed.

Psychological threats can produce the same kind of flight or fight response needed when an animal is under attack from a predator. And to be more efficient, the brain downshifts.

Trouble is, you need your whole brain involved, especially the neocortex, to solve these problems. Fight or flight reactions won't help. Notice when your emotions react and your mind seems to shift into an automatic mode of response. Being self-aware of a downshift gives you the chance to incorporate your higher-level thinking skills in evaluating the situation. Then your whole brain is in operation; ideas and creativity can flow to help you determine a better way to respond to the challenge at hand. This enhanced state of being fully engaged and aware is what we call whole brain activation. Taking in and processing information in many different ways activates the whole brain.
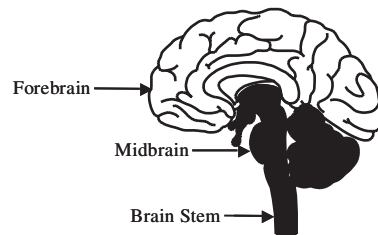
Major Brain Areas

The brain is composed of a number of different regions, each with specialized functions. Figure 2.1.2 shows a view of the brain's structure and function, also with roughly three separate parts.

The brain's central core, which includes the brain stem and the midbrain, is quite different than the cerebral cortex that envelops it. The central core is relatively simple, older and its activity is largely unconscious. In contrast, the cortex is highly developed and capable of the deliberation and associations necessary for complex thinking and problem solving. In humans, its size and function has increased rapidly; the older portions of the brain remain relatively static.

The Brain Stem

The brain stem seems to be inherited almost "as is" from the reptilian brain. It consists of structures such as the medulla (controlling breathing, heart rate, and digestion) and the cerebellum (which coordinates sensory input with muscle movement).

The Midbrain

The midbrain includes features that appear intimately connected to human emotion and to the formation of long-term memory via neural connections to the lobes of the neocortex. The structures contained here also link the lower brain stem to the thalamus—for information relay from the senses, to the brain, and back out to muscles—and to the limbic system.

The limbic system, essentially alike in all mammals, lies above the brain stem and under the cortex. It consists of a number of interrelated structures. Researchers have linked the limbic system to hormones, drives, temperature control, and emotion. One part is dedicated to memory formation, thus explaining the strong link between emotion and long-term memory.

The limbic system includes the following parts:

- **The hypothalamus is instrumental in regulating drives and actions. Neurons affecting heart rate and respiration are concentrated here. These direct most of the physical changes that accompany strong emotions, such as the "flight or fight" response.**

- **The amygdala appears connected to aggressive behavior.**

- **The hippocampus plays a crucial role in processing various forms of information to form long-term memories. Damage to the hippocampus will produce global retrograde amnesia.**

One important feature of the midbrain and limbic system is the reticular activating system (RAS). It is this area that keeps us awake and aware of the world. The RAS acts as a master switch that alerts the brain to incoming data—and to the urgency of the message.

The Forebrain or Neocortex

The forebrain, which appears as a mere bump in the brain of a frog, balloons out into the cerebrum of higher life forms and covers the brain stem like the head of a mushroom. This, the newest part of the human brain, is called the neocortex, or cerebral cortex, and is shown in Figure 2.1.3.
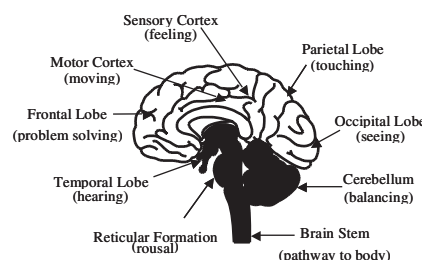
The Neocortex

The structure of the neocortex is complicated. Most of the higher-level functions associated with human thought are enabled here.

Brain Hemisphere

In humans, the neocortex has evolved further than in other mammals, into the two **cerebral hemispheres**. The wrinkled surface of the hemispheres is about two millimeters thick and has a total surface area the size of a desktop (about 1.5 square meters).

Key Note Term

cerebral hemisphere – when looked at from the top, the brain is composed of two interconnected spheres or lobes and is the seat of higher-level thinking.

Figure 2.1.3: The neocortex and all of its components.

> ### Note
>
> For more information about the two hemispheres and how they work together, refer to the next lesson, "Left Brain/Right Brain."

Remember that there is symmetry between hemispheres; however, not every specialized region is found on both sides. For example, highly specialized language centers exist only in the left hemisphere. The brain coordinates information between the two hemispheres, and does so with startling speed and skill.

The following is a brief description of the four lobes that make up the cerebral hemispheres, or neocortex.

Frontal Lobes

The frontal lobes occupy the front part of the brain and are associated with making decisions, planning, and voluntary muscle movement. Speech, smell, and emotions are processed here as well. The frontal lobes control our responses and reactions to input from the rest of the system. The saying "Get your brain in gear" refers to activity in the frontal lobes.

Parietal Lobes

The parietal lobes are most closely associated with our sense of touch. They contain a detailed map of the whole body's surface. More neurons are dedicated to some regions of surface area than others. For example, the fingers have many more nerve endings than the toes, and therefore they have more associated areas in the brain for processing.

The parietal lobe of the right hemisphere appears to be especially important for perceiving spatial relationships. The recognition of relationships between objects in space is important to activities such as drawing, finding your way, construction, and mechanical or civil engineering.

Temporal Lobes

The temporal lobes are concerned with emotions, and also contain the primary auditory cortex, which processes sound. Doesn't this provoke wonder at the profound connection between music and strong emotion?

Occipital Lobes

The occipital lobes are the primary visual cortex. This area at the back of the brain, just above the cerebellum, processes stimuli from our eyes, via the optic nerve, and associates that information with other sensory input and memories.

Recall that areas crucial to long-term memory also reside at the back of the brain. These association areas interpret sensory data by relating it to existing knowledge, and are essential to memory formation. More information on memory is included in later sections of the text.
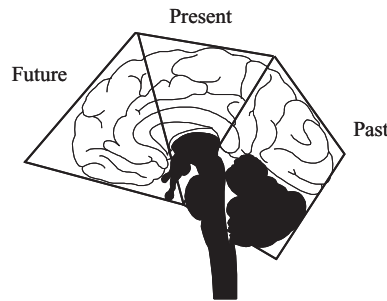
Figure 2.1.4: The lobes to the front and back of the brain are aware of the passage of time.

Sensory Cortex and Motor Cortex

Regions called the sensory cortex and the motor cortex are sandwiched between the frontal and parietal lobes at the top of the head. These areas specialize in the control of movement and in receiving information from the body's primary sensory systems (vision, smell, taste, touch, and sound).

Awareness of Time

According to some researchers, the lobes to the front and the back of the brain seem to be aware of the passage of time; thus the frontal lobe of the neocortex, shown in Figure 2.1.4, appears to be responsible for planning, decision-making, and risk-taking while the back of the brain stores memories.

The middle section is focused on experiencing the present moment because it houses the primary sensory and motor cortex. It is busily processing information from our five senses and sending control signals back out to our muscles.

The Nervous System

The nervous system links the body to the external environment through sensory organs, permitting us to see, hear, taste, smell, or feel and to respond to stimuli. Through your five senses you know that the air is cold, it's early morning, and someone has a fire burning. The hot chocolate smells wonderful and the birds are singing. But how do you know?

Sensory Systems

The five most commonly known sensory channels—our eyes, ears, skin, nose, and tongue—all rely on specialized receptor cells to take in data from the external world.

Then, mechanical, chemical, and electrical processes transform the glow of the sun in your eyes and its heat on your skin into electrical impulses and send them sparking along nerve fibers (called sensory neurons). Traveling at speeds up to 290 miles per hour, jumping microscopic gaps (called **synapses**) along the way, these messages make their way to nerve processing centers (called interneurons) in the spinal cord and brain. They then connect back out to your muscles and glands (called motor neurons), causing you to sweat in response to the sun's heat.

Key Note Term

synapse – the space between nerve cells; the point at which a nervous impulse passes from one neuron to another.

Key Note Terms

sensory gating – also called the neuron spike point, regulates the transmission of stimuli to the brain.

sensory flooding – sensory overload, this happens when too much data is getting through to the brain.

axon – long fibers that send electrical impulses and release neurotransmitters.

dendrite – any of the usually branching protoplasmic processes that conduct impulses towards the body of a nerve cell.

neuron – a grayish or reddish granular cell with specialized processes that is the fundamental functional unit of newcous tissue in the brain.

neurotransmitter – a chemical molecule (as norepinephrine or acetylcholine) that transmits nerve impulses across a synapse, within and between brain cells.

Sensory Flooding and Gating

A large amount of data comes into the brain all the time. We can't and don't pay attention to all of it. A "go or no go" signal occurs to regulate the transmission of stimuli. This is called the neuron spike point, or **sensory gating**. Without this monitoring, sensory overload, or flooding, would occur. This automatic physical process is a key aspect of what we actually process on a conscious level.

Sensory flooding is what happens when too much data is getting through. There is some indication that disorders such as autism are, in part, caused by this type of physiological data transmission problem.

Neuron Structure

The arm and hand in Figure 2.1.5 are used to illustrate a **neuron**. The arm represents the **axon**, long fibers that send electrical impulses and release **neurotransmitters**. The hand is like the cell body and the fingers are like **dendrites**.

Messages are transmitted as electrical impulses from the senses, muscles, or other neurons. The neuron processes the impulse and then sends the message to other neurons via axons. When the impulse reaches the end of the axon, the dendrites pick up the signal as a chemical neurotransmitter synapse.

Neurotransmitters

Neurotransmitters are chemical in nature and are used to accept an electrical impulse from the axon at a synapse and relay it to the dendrites.

The neurotransmitters carry excitatory or inhibitory messages and affect behavior patterns such as pain and pleasure.

Amazing Facts About Neurons

- 50 to 100 billion nerve cells act as information specialists in the brain and spinal cord.

- Tens of billions of messages travel as electro-chemical impulses every few seconds of every day of your entire lifetime.

- Some single nerve cells, such as the sciatic nerve in your leg, contain dendrite branches 3 feet long.

- Along these large nerve fibers, impulses travel up to 290 miles per hour.
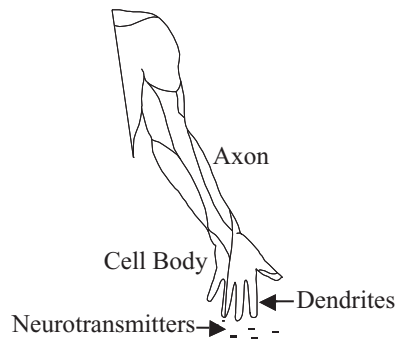
Figure 2.1.5: An arm and hand can show how a neuron works.

Brain Growth

The human brain has evolved over time to a three-pound mass of tissue, sparking with electro-chemical interactions. Our jaws and teeth have grown smaller, infancy and childhood last longer, and we physically mature and reproduce at an older age. All these evolutionary adaptations have reserved both time and energy to devote to brain development.

Human Thought

With the advantages of a larger brain and more processing power, humans now are able to solve problems, make decisions, and generate options. Emotions are now rich and complex, giving us the ability to fall in love, nurture each other, and hope for a better future. The wonder of a more highly developed limbic system and neocortex is lived out each day in processes we often take for granted.

Looking closely at complex processes such as learning, and understanding how these events occur can bring further advantages. With understanding comes the ability to make choices to improve our lives. And these choices can literally make our physical body work better by increasing the size, number, and connections between neurons, the basic cellular building block of the human nervous system.

Growing Dendrites, Making Connections

The billions of nerve cells connect to each other in billions of combinations, forming trillions of pathways for nerve signals to follow. This results in dendritic growth. The dendrites continue to grow throughout your lifetime.

Neural Plasticity

In addition to adding and refining neural networks through the growth of dendrites, the human brain is capable of adapting specialized nerve function for another critical use when called upon to do so.

Neural plasticity concerns the property of neural circuitry to potentially acquire (given appropriate training) nearly any function. For example, the connections between the eye and primary visual cortex suggest that neural circuits are wired by evolution exclusively for sight.

Key Note Term

neural plasticity – concerns the property of neural circuitry to potentially acquire (given appropriate training) nearly any function.

The brain's amazing adaptive ability has been demonstrated through the research of many scientists. Neural plasticity is an important adaptation. Similar to other tissue plasticities, it tends to occur when called upon for special skill development, or fine-tuning existing capabilities. For example, when a musician makes special demands for left hand skills in the process of learning how to play the piano, the brain adapts by increasing the number of neural circuits in the right primary motor cortex.

Similarly, the area of the brain devoted to the right index fingertip (what's known as the reading finger) is larger in Braille readers compared to that for their non-reading fingertips, or for sighted readers, according to researchers Pascual-Leone & Torres, 1993.

NOTE

To learn more about the research done by Pascual-Leone and Torres, go to *http://cogprints.ecs.soton.ac.uk/archive/00002255/00/buss.htm.*

Interesting Facts About Brain Growth

- We produce no new nerve cells after roughly the time of birth. These cells must be nurtured because they must work for the next 80 years or so.

- Our infant brain demonstrates on-the-job training; the brain is being used at the same time it is being assembled.

- We are fairly helpless at birth. Less than 1 percent of the portion of our brain circuitry that will be dedicated to receiving sensory information needed for perception and cognition is functional at that point.

- At birth, 100 billion nerve cells in our cerebral cortex set about wiring incredibly complex circuits (some 5,000 to 10,000 connections to each nerve cell).

- Through learning mechanisms in the brain, the brain continues to rewire and change its circuitry throughout our lives.

Memory Systems

Researchers have identified different types of neural systems that store memories, each with their own focus and purpose. Perhaps you've heard of long- and short-term memory. That's one way to categorize memory systems, in terms of how the brain intends to use the information—for short-term processing needs, or as a reference that will be useful to solve problems in the future.

Have you ever heard of the term "muscle memory"? Perhaps you're aware that people can ride a bike, swim, play the piano, or demonstrate a dance step after not doing those activities for many years. Recent research indicates that nerve fibers in the muscles, and not just the brain, are actually involved in some of this

long-term memory storage. It's as though, with enough repetition, the body will store signals to make body parts move in certain ways. That way, when the body is called upon to do those things, processing time is faster. You literally can do things "without even thinking about it."

Memory Storage

Recall the idea that both sides of the brain are processing sensory data about the same thing at the same time, but in different ways. This theory regarding how the brain hemispheres both specialize and synchronize was presented in the previous textbook section.

The research indicates that one system handles the detail work while the other creates a framework. The two systems are called *taxon* and *locale memories.*

Taxon memory handles rote memorization of data. Multiplication tables, spelling words, and the bones of the hand are examples of data that use the taxon memory system. It requires effort, such as repetition and practice, to store taxon memories (rote learning).

The locale memory system, on the other hand, stores mental maps. These are configurations of information connected to events or associated information (map learning).

Memory Retrieval

The brain has the ability to withdraw information stored in taxon memory more readily when they are stored as part of one of the locale memory system's mental maps. Anything you can do to increase the creation of a mental map, or schema, is critical to long-term memory storage.

For example, continuous, repeated practice is one way to aid memory and retrieval capacity. Another method is to create associations with things you already know, to take your understanding to a new level and enable application of the information in more complex ways.

Involving additional sensory systems is helpful to increase retrieval possibilities. Some people find using body movements will aid long-term storage and retrieval. These "kinesthetic/tactile learners" will recall a telephone number by repeating the movements needed to press the phone keys. Others might recall a rhythm or sound pattern formed when saying the numbers out loud. We'll further explore these interesting differences in Lesson 4, "Multiple Intelligences," later in this chapter.

Intelligence Defined

The ability to solve a problem is one way to define intelligence. Another way to describe intelligence is to talk about the ability to create something or to contribute in a tangible way to one's social system or culture.

These words describe a great deal of human activity. In fact, problem solving is one way experiments are designed to test the intelligence of other species. Researchers present a task to the animal and observe what resources she or he

brings to bear on the "problem" of task completion. For example, monkeys have been known to use sticks to access food or playthings.

The ability to solve a problem—from "the food is out of reach" to "how do we get to the moon"—or the capacity to create a product is how Howard Gardner defines intelligence in his theory of multiple intelligences. These capabilities are considered distinguishing characteristics of intelligent life. For Gardner to include a specific problem-solving style as a defined intelligence, the activity must meet additional criteria. For example, to make Gardner's list, each particular intelligence must have specific regions of the brain specialized to support that function.

Note

Howard Gardner is the John H. and Elisabeth A. Hobbs Professor in Cognition and Education at the Harvard Graduate School of Education. He also holds positions as Adjunct Professor of Psychology at Harvard University, Adjunct Professor of Neurology at the Boston University School of Medicine, and Chair of the Steering Committee of Project Zero. To learn more about Gardner and his theory of multiple intelligences, go to *http://www.infed.org/thinkers/gardner.htm.*

Organisms that do not take in sensory information, process that information, and make decisions about what action to take based on that information are, by definition, less intelligent. The amoeba that takes in nutrients as it drifts around in the water is not solving problems. Its biological processes support food intake in that environment. Without a food source, it would die. It would not be capable of generating any options to enhance survival.

You, on the other hand, are capable of resourceful ingeniousness when it comes to solving problems in order to survive. For more information on this exciting subject, take a look at Lesson 4, "Multiple Intelligences," later in this chapter.

Chapter 2

Lesson Review

Conclusion

Knowing how the brain functions should give you a better understanding for how we humans are so much alike, yet can behave and react to similar stimuli in completely different ways. Knowing how your brain works may make it easier for you to learn, communicate, and resolve conflict.

Lesson Review

1. **Which section of the brain makes humans different than animals?**
2. **Name the three parts of the brain.**
3. **Which part of the brain senses time?**
4. **Explain how both sides of the brain process sensory data differently.**

Learning Style and Processing Preferences

Key Terms

auditory
kinesthetic
mode
motivation
perception
reflex
schema
sensory
tactile

Chapter 2

What You Will Learn to Do

- **Explain how learning styles and preferences can impact learning**

Linked Core Abilities

- **Build your capacity for life-long learning**
- **Apply critical thinking techniques**

Skills and Knowledge You Will Gain Along the Way

- **Assess the uniqueness of individual learning styles and preferences**
- **Distinguish among the three sensory (perceptual) systems**
- **Explain the essential elements of the learning process**

- **Contrast an automatic and purposeful response to stimuli**
- **Explore how to expand beyond your current preferences**
- **Define key words contained in this lesson**

Introduction

People learn in different ways. Learning is a complex, interrelated system of accessing information, getting it into the brain, and processing that information to solve problems or support activities.

Learning styles describe the various ways people gather as well as process information. Each of us has a propensity for looking, listening, or touching: some read the instructions for Monopoly, others ask to hear the rules explained, still others get the dice rolling and learn as they play. Furthermore, we each have our most productive time of day, favorite chairs to sit in, and other environmental factors that help us concentrate or feel energized.

Understanding learning styles leads to success. After you know what learning environment works best for you and what your preferred learning style is, you will see how you can use your preferred learning style to move information through the learning process and to:

- **Learn new information more quickly and efficiently.**
- **Remember new information for a longer period of time.**
- **Increase your ability to recall the information more quickly and completely for performance, discussion, or test taking.**

The Learning Process

When you learn something, you are acquiring a skill, knowledge or attitude. The process of learning, shown in Figure 2.3.1, involves the ability to take in data, process it, store it, and retrieve it at a later time.

Figure 2.3.1: The learning process.
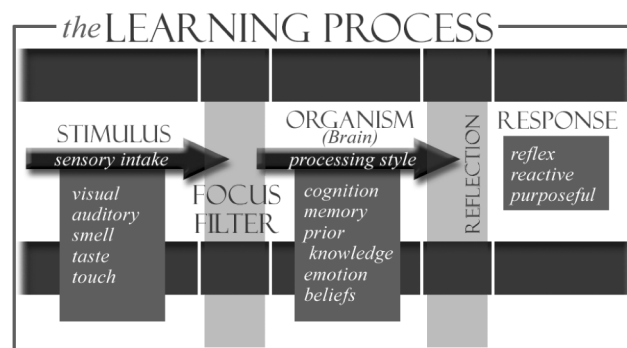
Your five senses (hearing, seeing, touching, tasting, and smelling) take in stimuli from the environment. The stimuli are subconsciously filtered, causing you to focus on some stimuli and ignore others. Those selected stimuli are sent to the brain (organism) for processing, where they are linked to prior knowledge, evaluated against your beliefs, and stored in memory. The stimuli, if encountered again, will then elicit a learned response.

If you touch a hot iron for the first time, the burning sensation is sent to your brain. The brain processes it as pain. This causes the **reflex** response of removing your hand quickly. The learned response, however, would be to not touch the iron again.

Preferred Learning Environment

Can you identify personal experiences that illustrate your preferences of a good learning environment? Can you recall times when learning frustrated you? If you examined each of those times, you would probably see that you were working outside of a preferred environment. The aspects of the learning environment that have an impact on the learning process are:

- **Sound—Some people need it absolutely quiet in order to concentrate. Others work or study more effectively only if there is music or noise around them.**
- **Light—Too little or too much light can either inhibit or encourage learning. Many adolescents usually prefer soft or dim lights to study.**
- **Design—This refers to the formal or informal settings and furniture in the room where you study. For instance, do you use a desk or do you prefer the floor, bed, or just the chair?**
- **Time of Day—Some people are night people and others are early morning workers.**
- **Food Intake—This is your need to eat, drink, or chew gum while studying or working.**
- **Social Aspects—This is your preference to work or study alone, with a partner, or in a group.**

Perceptual Modalities

Clearly our ability to learn is dependent upon our ability to take in, filter, select, process, and then apply new information.

We take in new information through our five senses: hearing, seeing, touching, tasting, and smelling. For most humans, three of the senses dominate our **perceptions**. Perceive means "to become aware of through the senses," and **mode** simply means method, route or way. Thus, perceptual modality is another term used to describe the different **sensory** channels.

Humans tend to rely on seeing, hearing, and touching as the primary methods for taking in stimuli from our environment. Of course, a physical limitation

might exist that limits one of the senses and the person might have to adapt. In other mammals, dogs for example, smelling and tasting are highly developed.

Learning styles are often categorized according to a person's strongest sensory system; thus we have **auditory**, **kinesthetic/tactile** and visual learners.

The next lesson will explore several learning models that consider how preferences affect the learning process.

The Big Three—Auditory, Kinesthetic, and Visual

How do you gather information? What is your strongest sensory system?

Auditory learners are the listeners. This 30 percent of the population may need to repeat instructions, even silently, to mentally "hear" information as they commit it to memory. They learn well by discussing ideas and asking questions. They like cooperative learning and group projects.

Kinesthetic/Tactile learners gather meaning through touch and movement. All young children depend heavily on this strength, which is why it's so hard to walk through an art gallery with a small child who wants to "see" by touching. About 5 percent of the population holds onto this style throughout their adult lives, continuing to learn best through physical interaction.

About 65 percent of us are visual learners who gather information best by looking, reading, and watching. Visual learners may tune out spoken directions and favor illustrated explanations or charts. They "see" ideas in the mind's eye, remembering visual details from places they've visited.

Adaptive Systems

With increased use, our sensory systems—and their associated neural networks in the brain—become more sensitive and are able to process data more efficiently. In turn, people are able to come up with more skilled responses. For example, not only does the concert pianist have more finely tuned abilities to hear sound than the average person, but his or her fine motor skills, and the sensitivity of their very fingertips, are increased through the growth of neuronal connections. Thus the old adage "Practice makes perfect" actually has a physical reason for being true.

The brain can also adapt to meet specialized needs when there is a physical disability or injury. For instance, a non-hearing person handles sophisticated language tasks, like storytelling, with no auditory stimulus and limited ability to speak aloud. Most of us create language by making words come out of our mouth. However, a non-hearing person is likely to tell a story by using sign language.

Although some people think that each of us is born with given strengths, others believe that we develop strengths through our experiences and skill building activities. The bottom-line is that people have strengths. Being aware of your strengths allows you to leverage those strengths to achieve your goals and increases your ability to make an informed choice to develop in key areas.

Key Note Terms

auditory – of or pertaining to hearing.

kinesthetic – a sensory experience dereived from a sense that perceives bodily movement.

tactile – of or relating to, or perceptible through, the sense of touch.

Metacognition

You have the ability to bring your perceptions and processing into conscious consideration. We call this process thinking about thinking, or metacognition. It is the simple process of becoming more aware.

In the learning process, metacognition can be a valuable tool for self-development. Paying attention—becoming more aware of your perceptions and thoughts and more deliberate in your choice of responses—is all part of developing as a person.

Attention and Motivation

An important component of our learning is the process of directing our attention. This brings us squarely into the question of **motivation**. What do we focus on, and why?

Your motivation or personal interest is an important component of what you consciously choose to focus on. You may ask yourself:

- **What is the "payoff" or reward?**
- **Are you learning for pleasure or for the avoidance of pain?**
- **Are you "grades" oriented or "learning" oriented?**
- **Are you learning to please yourself or someone other than yourself (parent, friend, teacher, officer)?**

Data Selection and Attention

You have the ability to direct your attention and decide what to focus on. For the sake of efficiency, however, these decisions are often made subconsciously. Lots of data comes in all the time, and we can't and don't pay attention to all of it. A lot of this data, depending on your goals, is potentially unimportant, depending on your goals, and therefore distracting. A "go or no go" signal occurs to regulate the transmission of stimuli. Thus, the sound of the air conditioner or refrigerator, many details in the visual field, traffic noise, and so on are simply ignored in terms of conscious thought.

This physical fact reflects an important reality in the learning process. Given the billions of sensory messages taken in and processed constantly, a key activity stands out as extremely important—the ability to filter and select what data to focus.

When some stimuli are present over a period of time, we adapt to them. Continuing stimuli of constant intensity will stop activating the receptors; in other words, we "tune out." Think about what this means about how you learn.

Key Note Term

motivation – to urge or push on.

If your teacher's voice drones on and on, same pitch, same tone, same type of words, your brain tends to switch off and filter that sensory input. Same thing if you keep trying to solve a problem the same way. The magic of active learning happens when you use a variety of stimuli. Even small changes can make a big difference in activating different regions of the brain.

Moving from a short lecture, to building something, to reading quietly, to talking over ideas with another student—this changes the manner in which information is taken in and processed. A mixture of activities will stimulate the brain with different types of impulses, to keep those receptors firing. Learning becomes even more activated when there are spaces in the constant data flow for quiet reflection.

Mental Filters

Not only is the data being absorbed, but it is also being evaluated against prior knowledge and then interpreted. After you have gathered your selected stimuli, you group them into a cluster that you can label, so that the label makes sense to you. This helps you to know, almost without thinking about it, whether it's safe to reach out and touch the hot iron.

You have a stored set of beliefs in your memory called a **schema**. The schema is an outline of the way things are, your own representation of reality. These beliefs cause you to monitor and select the stimuli you take in and to which you pay attention. These internal models limit the data you are curious about and explore.

Key Note Term

schema – a pattern imposed on complex reality or experience to assist in explaining it, mediate perception, or guide response.

Ladder of Inference

In his book, *The Fifth Discipline Field Book*, Peter Senge describes a type of schema called the Ladder of Inference, shown in Figure 2.3.2. In this model, we begin with real data or experience (stimuli), and from that "real data" we select the data to which we pay attention. Then we attach meaning to this selected data, make assumptions, and draw conclusions. From our conclusions, we adopt beliefs about the world, which then cause us to take actions, and help determine the data that we select the next time. This mental pathway can be a slippery slope that will often lead to misguided beliefs.

Note

Peter Senge is founding chair of the Society for Organizational Learning (SoL). His current areas of special interest focus on decentralizing the role of leadership in organizations so as to enhance the capacity of all people to work productively toward common goals.
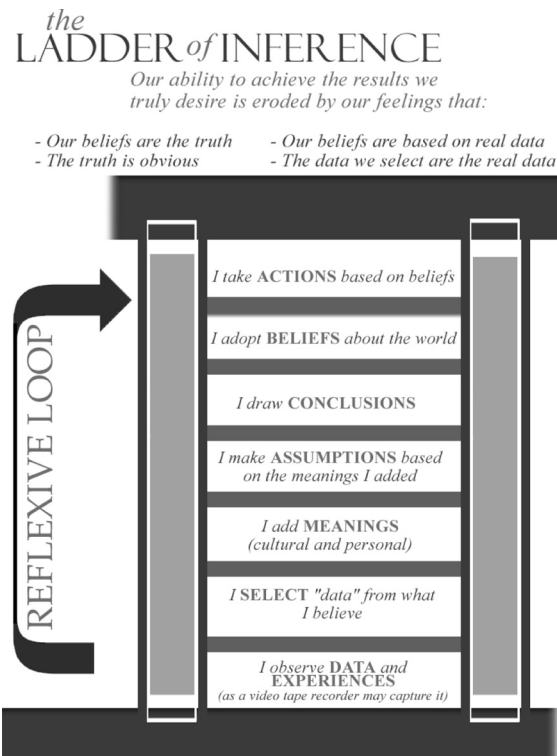
the
LADDER *of* INFERENCE
Our ability to achieve the results we
truly desire is eroded by our feelings that:

- *Our beliefs are the truth*   - *Our beliefs are based on real data*
- *The truth is obvious*   - *The data we select are the real data*

REFLEXIVE LOOP

I take **ACTIONS** *based on beliefs*

I adopt **BELIEFS** *about the world*

I draw **CONCLUSIONS**

I make **ASSUMPTIONS** *based on the meanings I added*

I add **MEANINGS** *(cultural and personal)*

I **SELECT** *"data" from what I believe*

I observe **DATA** *and* **EXPERIENCES** *(as a video tape recorder may capture it)*

Figure 2.3.2: Peter Senge's Ladder of Inference.

For example, if you believe that a particular person doesn't like you, you tend to only see and hear those actions or statements that support your belief. This is another way you filter information.
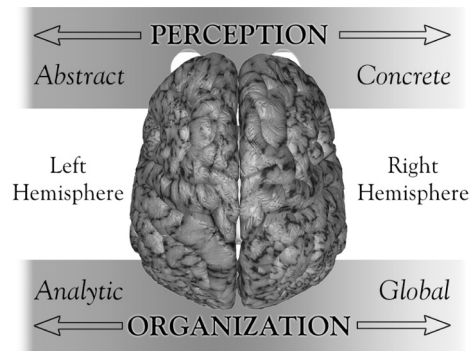
Processing Strengths

In addition to the preferred input modality, there are clear differences in processing preferences. This tends to break down in alignment with the right brain and left brain specializations discussed in an earlier lesson. For example, activities involving numbers, logic, word puzzles, sequential tasks, or analysis are normally more active on the left side of the brain whereas activities involving music, imagination, colors, or creative expressions are normally more active on the right side. As you grow, you continue to develop a brain preference; that is, you will prefer activity on one side of the brain over the other.

Figure 2.3.3 shows that during the memory phase of the learning process, learning occurs in both hemispheres. That is, both sides have the ability to perceive information, new ideas, and so on, then organize that information so you can later recall and use it.

Thus we have global and analytic learners, in accordance with the brain's ability to focus the abilities of the left hemisphere on details and of the right hemisphere on the big picture.

Figure 2.3.3: Learning occurs in both brain hemispheres during the memory phase.

In other words, besides visual, auditory, or kinesthetic intake strengths, people lean toward one of two styles for processing information: analytic (those individuals who see the individual elements most clearly) and global (those individuals who focus on the big picture).

Analytic Learners

Analytic learners examine information by breaking it down bit-by-bit and arranging it logically. One person's tidy suitcase displays a bent for order and sequence, as does a penchant for lists and punctuality.

An analytic learner is happiest when his or her life marches forward predictably, when he or she can follow a plan, and know the rules. Analytic learners are able to see the trees through the forest, which helps keep them (and those around them) rooted and productive.

Global Learners

Global learners, on the other hand, may miss a few trees, but they can surely see the forest. They organize by clustering information into groups. Their focus is drawn to the larger ideas underpinning the details; they concern themselves with the purpose behind the specifics.

Global learners can appear disorganized because of their impatience with minutiae and their willingness to jump between ideas in random ways. They'll bend rules—including schedules and deadlines—to fit what they see as a greater purpose.

We are all capable of absorbing data through any of our senses, and of processing new information in many different ways. This is a tribute to the brain's amazing adaptability and resourcefulness. Nonetheless, knowledge of our strengths and learning preferences helps us to understand our own processes, enabling us to make choices that will empower us as lifelong learners.

Is There One Best Way to Learn?

Your mind is the most powerful tool you will ever possess. You are accomplished at many skills and can process all kinds of information. However, when you have trouble accomplishing a particular task, you may become convinced that you can't learn how to do anything new. Not only is this perception incorrect, it can also damage your belief in yourself.

Every individual is highly developed in some abilities and underdeveloped in others. Many famously successful people were brilliant in one area but functioned poorly in other areas. Winston Churchill failed the sixth grade. Abraham Lincoln was demoted to a private in the Black Hawk war. Louis Pasteur was a poor student in chemistry. Walt Disney was fired from a job and told he had no good ideas. What some might interpret as a deficiency or disability may be simply a different method of learning. People have their own individual gifts—the key is to identify them.

There is no one "best" way to learn. Instead, there are many different learning styles, each suited to different situations. Each person's **learning style** is unique. Knowing how you learn is one of the first steps in discovering who you are. Before you explore your learning style, consider how the knowledge you will gain can help you.

Key Note Term

learning style – a particular way in which the mind receives and processes information.

What Are the Benefits of Knowing Your Learning Style?

Although it takes some work and exploration, understanding your learning style can benefit you in many ways—in your studies, the classroom, and the workplace.

Study Benefits

Most students aim to maximize learning while minimizing frustration and time spent studying. If you know your strengths and limitations, you can use techniques that take advantage of your highly developed areas while helping you through your less developed ones. For example, say you perform better in smaller, discussion-based classes. When you have the opportunity, you might choose a course section that is smaller or that is taught by an instructor who prefers group discussion. You might also apply specific strategies to improve your retention in a large-group lecture situation.

Following each of this chapter's two assignments, you will see information about study techniques that tend to complement the strengths and shortcomings of each intelligence or spectrum. Remember that you have abilities in all areas, even though some are dominant. Therefore, you may encounter useful suggestions under any of the headings. What's important is that you use what works. During this course, try a large number of new study techniques, eventually keeping those you find to be useful.

Reprinted from *Keys to Success: How to Achieve Your Goals,* Third Edition by Carol Carter, Joyce Bishop, and Sarah Lyman Kravits, (2001), Prentice-Hall, Inc.

Classroom Benefits

Knowing your learning style can help you make the most of the teaching styles of your instructors. Your particular learning style may work well with the way some instructors teach and be a mismatch with other instructors. Remember that an instructor's teaching style often reflects his or her learning style. After perhaps two class meetings, you should be able to make a pretty good assessment of teaching styles (instructors may exhibit more than one). Once you understand the various teaching styles you encounter, plan to make adjustments that maximize your learning. See Figure 2.3.4 for some common teaching styles.

Assess how well your own styles match up with the various teaching styles. If your styles mesh well with an instructor's teaching styles, you're in luck. If not, you have a number of options.

Bring extra focus to your weaker areas. Although it's not easy, working on your weaker points will help you break new ground in your learning. For example, if you're a verbal person in a math- and logic-oriented class, increase your focus and concentration during class so that you get as much as you can from the presentation. Then spend extra study time on the material, make a point to ask others from your class to help you, and search for additional supplemental materials and exercises to reinforce your knowledge.

Figure 2.3.4

Teaching Styles	
Lecture	Instructor speaks to the class for the entire period, little to no class interation.
Group Discussion	Instructor presents material but encourages class discussion throughout.
Small Groups	Instructor presents material and then breaks class into small groups for discussion or project work.
Visual Focus	Instructor uses visual elements such as diagrams, photographs, drawings, transparencies, graphic organizers
Verbal Focus	Instructor relies primarily on words, either spoken or written on the board or overhead projector.
Logical Presentation	Instructor organizes material in a logical sequence, such as by time or importance.
Random Presentation	Instructor tackles topics in no particular order, jumps around a lot, or disgresses.

Ask your instructor for additional help. For example, a visual person might ask an instructor to recommend visuals that would help to illustrate the points made in class. If the class breaks into smaller groups, you might ask the instructor to divide those groups roughly according to learning style, so that students with similar strengths can help each other.

"Convert" class material during study time. For example, an interpersonal learner takes a class with an instructor who presents big-picture information in lecture format. This student might organize study groups and, in those groups, focus on filling in the factual gaps using reading materials assigned for that class. Likewise, a visual student might rewrite notes in different colors to add a visual element—for example, assigning a different color to each main point or topic, or using one color for central ideas, another for supporting examples.

Instructors are as individual as students. Taking time to focus on their teaching styles, and on how to adjust, will help you learn more effectively and avoid frustration. Don't forget to take advantage of your instructor's office hours when you have a learning style issue that is causing you difficulty.

Career Benefits

Because different careers require differing abilities, there is no one "best" learning style. Develop self-knowledge through honest analysis and then accurately match what you do best with a career that makes the most of your strengths. Specifically, how can knowing your learning style help you in your career?

You will perform more successfully. Your learning style is essentially your working style. If you know how to learn, you will be able to look for an environment that suits you best. You will perform at the top of your ability if you work at a job in which you feel competent and happy. Even when you are working at a job that isn't your ideal, knowing yourself can lead you do on-the-job choices that make your situation as agreeable as possible.

You will be able to function well in teams. Teamwork is a primary feature of the modern workplace. The better your awareness of your abilities, the better you will be able to identify what tasks you will best be able to perform in a team situation. The better your awareness of personality traits—your own as well as those of others—the more skillful you will be at communicating with and relating to your coworkers.

You will be more able to target areas that need improvement. Awareness of your learning styles will help you pinpoint the areas that are more difficult for you. That has two advantages: One, you can begin to work on difficult areas, step by step. Two, when a task requires a skill that is tough for you, you can either take special care with it or suggest someone else whose style may be better suited to it.

Now that you know you have something to gain, look at some ways you can explore your particular learning style.

Learning Results

So, what are the tangible results of learning? If your parents ask, "What did you learn today?" can you answer the question accurately and completely?

The basic response to new information is to check it against what you already know, and then to either discard it, store it, or act on it. As we've discussed, you can do some of this processing unconsciously. When threatened, people can react quickly without rational thought. Detailed memories are stored of events that happen very quickly. That's why a smell or sight can trigger a memory long forgotten—the memory is stored intact, the connections are there, and the whole thing can come back in vivid detail when triggered.

It is important to be able to recall information when you need it, and to make connections between different things you've learned. These connections, linking new stimuli to prior knowledge, are called mental maps. The amazing thing is that your brain can actually improve by increasing the number of connections, and in the clarity of your internal mental maps.

These mental maps, or reference points, are among your greatest assets for taking in new data quickly and easily. You need them to have a framework, or schema, in which to store the data. Otherwise, your brain may drop data out of short-term memory without storing long term, or your brain may store information in a way that prevents access to it.

Conclusion

The learning process enables you to acquire knowledge, skill, and attitudes. As you become more aware of how you learn, you'll be able increase your abilities to absorb new information, and apply it in new situations. You'll also remember information longer and improve your recall ability.

Knowing how you prefer to learn and understanding how you do learn are very important aspects that can help you to succeed in school, in your employment, and in your career.

Chapter 2

Lesson Review

1. Give an example of your preferred learning environment. Why do you prefer this?

2. Are you an auditory, kinesthetic, or visual learner? Why?

3. Do you consider yourself an analytical or a global learner? Why?

4. Define the term "schema."

Lesson Review

Lesson 4

Multiple Intelligences

Key Terms

bodily/kinesthetic intelligence
interpersonal intelligence
intrapersonal intelligence
logical/mathematical intelligence
musical/rhythmical intelligence
naturalist intelligence
verbal/linguistic intelligence
visual/spatial intelligence

What You Will Learn to Do

- **Use your intellectual strengths to improve academic performance**

Linked Core Abilities

- **Build your capacity for life-long learning**
- **Apply critical thinking techniques**

Skill and Knowledge You Will Gain Along the Way

- **Assess Gardner's impact on the understanding of intelligence**
- **Identify the eight types of intelligences**
- **Distinguish between inter- and intra-personal**

- **Examine how to strengthen intelligence**
- **Define the key words contained in this lesson**

Introduction

In his book, *Frames of Mind*, Howard Gardner introduced his theory of Multiple Intelligences. Almost immediately, his theory took the educational community by storm. There are books, instructional strategies, tests, learning centers, and research studies centered on his theory that each individual is intelligent in a unique way. He asserts there is no single way of being smart and that the question should be "How are you smart?" not, "How smart are you?" With that question, he revolutionized the thinking about the definition of intelligence.

Note

Howard Gardner holds positions as Adjunct Professor of Psychology at Harvard University, Adjunct Professor of Neurology at the Boston University School of Medicine, and Chair of the Steering Committee of Project Zero. To learn more about Dr. Gardner, go to *http://www.pz.harvard.edu/PIs/HG.htm*.

Everyone is different from everyone else in appearance, interest, ability, talent, and personality. The brain is no exception. We all have different kinds of minds. We use our different intelligences to solve problems, to choose a profession, and to excel in different aspects of our lives. Some of us are good with language; we talk and write easily, tell good stories, and express our thoughts clearly. Others of us are designers who can decorate a room, design a house, or landscape a yard. Some are artistic and can create songs, draw paintings, play an instrument, or choreograph dances. Others are scientists or inventors who can solve problems, study issues, or do experiments. And some are team players that are good at working with, understanding, and influencing other people.

Eight Kinds of Intelligence

Traditionally, intelligence has been associated with certain standardized tests, such as the I.Q. test or the SAT; however, these tests only measure verbal and mathematical abilities. Gardner, on the other hand, defines intelligence as the "ability to solve problems or create products that are valued in one or more cultures or communities." He believes that, among other criteria, intelligence is universal to all human beings, regardless of where you live or your culture.

Gardner has identified eight intelligences:

- **bodily/kinesthetic**
- **visual/spatial**
- **logical/mathematical**
- **verbal/linguistic**
- **naturalist**
- **musical/rhythmical**
- **interpersonal**
- **intrapersonal**

He believes there are more types of intelligence, but only eight have met his stringent criteria for inclusion. You can think of these as "languages" that most people speak, and that can be understood regardless of cultural, educational, and ability differences. A description of all eight intelligences is listed below.

Bodily/Kinesthetic Intelligence

Bodily/kinesthetic intelligence is the gift of physical prowess, coordination, fitness, and action. It is manifested in the skills of athletic performing, dancing, doing, experiencing, fixing, forming, making, and repairing.

Learning activities that tap into this intelligence include: acting; body language; choreography; constructing; energizers; experiments; field trips; games; learning centers; manipulating; pantomimes; role play; sports; and use of materials and tools.

Visual/Spatial

Visual or spatial intelligence is the gift of visually representing and appreciating concepts, ideas, and information (visual thinking). People who possess this intelligence like to draw, build, design, and create things.

Learning activities that tap into this intelligence include: artwork; blueprints; cartoons; designs; drawings; films; graphic organizers; illustrations; layouts; photography; manipulatives; maps; models; murals; posters and charts; props; sculptures; storyboards; and videotapes.

Logical/Mathematical

Logical/mathematical intelligence is the gift of reasoning and thinking in symbols and abstractions. It is manifest in the skills of calculating, computing, problem solving, and logic. If you have strong logical/mathematical intelligence, you are a "questioner."

Learning activities that tap into this intelligence include: analogies; computer games; deductive and inductive reasoning; formulas; graphs and information organizers; learning logs; outlines; problem-solving; puzzles; statistics; surveys; symbols; and time lines.

Verbal/Linguistic

If you are endowed with **verbal** or **linguistic intelligence**, you have strong language and literacy skills. You are good at listening, reading, speaking, and writing.

Learning activities that tap into this intelligence include: biographies; books; crosswords; debates; dialogues; discussions; email; internet searches; letters; magazines and newspapers; poems; readers' theater; reports, research, short stories; speeches; and storytelling.

Musical/Rhythmical

Musical or **rhythmical intelligence** is the gift of melody, music, rhyme, rhythm, and sound. It is manifested in the skills of playing an instrument, vocal performance, appreciation of sounds and music, and timing and patterns.

Learning activities that tap into this intelligence include: ballads, cheers and chants, choirs, tapping, drumming, folk songs, imitations, jingles, percussions, raps, songs, and sound reproductions.

Naturalist

A **naturalist intelligence** is an environmental awareness. If you have this kind of intelligence, you understand the interrelationships of the natural world. It is manifested in the skills of classifying, observing, appreciating, and understanding the nature, recognizing patterns in nature, and identifying the impact and consequences on the environment.

Learning activities that tap into this intelligence include: astronomy; bird watching; ecology; environmental issues; field studies; gardening; geology; native plants; nature walks; outdoor education; mythologies; pattern identification; recycling; and weather forecasting.

Interpersonal

People with **interpersonal intelligence** are "socializers." They have the gift of working with people and understanding the complexities of human relationships. It is manifested in the skills of caring, collaborating, communicating, empathizing, leading, and peacemaking. They like to work in groups.

Learning activities that tap into this intelligence include: case studies; class discussions; classroom roles and responsibilities; constructivism; cooperative learning; group projects; interviews; jigsaw; pen pals; service learning; shared homework, structured conversations; team building; and tutoring.

Intrapersonal

Intrapersonal intelligence is the gift of inner thought, self-awareness, and self-reflection. It is manifested in the skills of goal setting, self-assessing, and self-regulating. People with intrapersonal intelligence prefer to work alone.

Key Note Term

verbal/linguistic intelligence – strong language and literacy skills.

Key Note Terms

musical/rhythmical intelligence – the gift of melody, music, rhyme, rhythm, and sound.

naturalist intelligence – environmental awareness.

Key Note Terms

interpersonal intelligence – the gift of working with people and understanding the complexities of human relationships.

intrapersonal intelligence – the gift of inner thought, self-awareness, and self-reflection.

Learning activities that tap into this intelligence include: authentic assessments; autobiographies; calendaring; choice theory; diaries; goal setting; independent reading; meditations; metacognition; personal essays; personal planning time; portfolios; quiet or reflection time; reflective or response journals; and rubrics.

Conclusion

Understanding how your own body works to support the learning process helps you to become a more active learner. We all have multiple intelligences; however, some are stronger than others. As you engage in learning activities that are compatible with how your brain takes in, processes and stores information, learning will occur more naturally, and comprehension and recall will increase. The power to learn quickly and to apply what you've learned is in your hands when you know how the process works.

Chapter 2

Lesson Review

1. **List the eight kinds of intelligence.**
2. **Which learning activities tap into musical/rhythmical intelligence?**
3. **Do you possess more interpersonal or intrapersonal intelligence? Why?**
4. **Define the term "intelligence."**

Lesson Review

Study Skills

Chapter 3

Lesson 1

Thinking Maps®

Key Terms

analogy
Brace Map
Bridge Map
Bubble Map
Circle Map
Double Bubble Map
Flow Map
Multi-Flow Map
relating factor
Tree Map

What You Will Learn to Do

- **Use Thinking Maps® to enhance learning**

Linked Core Abilities

- **Apply critical thinking techniques**

Skills and Knowledge You Will Gain Along the Way

- **Relate thinking to learning**
- **Correlate thinking processes to the eight Thinking Maps**
- **Use Thinking Maps® to visually depict a learning objective**
- **Define key words contained in this lesson**

Chapter 3

Introduction

Describing an item or a concept can be difficult. It's probably not hard for you to describe a flower or a dog, but it might be difficult to keep your description organized in your mind. And what gets even trickier is when you're asked to describe or define main and supporting ideas of a story, or the cause and effect of a specific action. Your thoughts and ideas can easily get confused, or you might even forget some of your descriptions and conceptual thoughts.

Thinking Maps® were created to help you organize your thinking so that you can construct knowledge, much like an engineer uses a certain set of tools to build a new bridge. This lesson introduces you to Thinking Maps®, and covers how each of the eight Maps shown in Figure 3.1.1 can be used to develop a common thinking-process language. Keep in mind as you read through this lesson how thinking and learning go hand in hand.

Figure 3.1.1: The eight Thinking Maps®.

INTRODUCING
THINKING MAPS®

© 2004 by Thinking Maps, Inc.
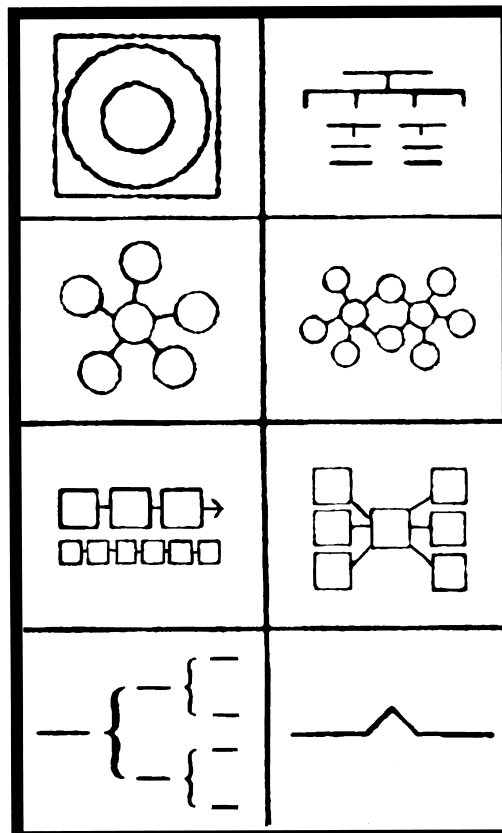
Types of Thinking Maps®

Thinking Maps® are visual learning tools. Each Map is based on a fundamental thinking process, such as describing a quality, sequencing, classifying, and comparing and contrasting, and can be used together as a set of tools for showing relationships. These Maps—the Circle Map, Bubble Map, Double Bubble Map, Tree Map, Brace Map, Flow Map, Multi-Flow Map, and Bridge Map—all serve a specific purpose for different types of thinking processes. The following sections describe the eight types of Thinking Maps®, and how they can best aid you in your learning process.

The Circle Map

The Circle Map, shown in Figure 3.1.2, is used for brainstorming ideas. It is used to define in context and answer the question, "How are you defining this thing or idea?" In the center of the circle, use a word, number, picture, or any other sign or symbol to represent an object, person, or idea you are trying to understand or define. Write or draw any information that puts this object, person, or idea into context. This type of map shows the most random type of thinking.

The square around the map is a frame of reference. It tells how you know or learned about the context. A frame of reference can be used with any type of Thinking Map.

Key Note Term

Circle Map – a tool used for brain-storming.

The Bubble Map

The **Bubble Map** (see Figure 3.1.3) is used to describe qualities of a person, place, or thing. In the middle circle, write the name of the object that you want to describe; then, in the six surrounding circles, write the adjectives or adjective phrases that describe that object, and answer the question, "Which adjective would best describe this object?" By the time your Bubble Map is finished, it may look similar to a web or a cluster.

Bubble Maps are also useful for developing vocabulary, distinguishing between fact and fiction, and valuing/evaluating. Bubble Maps should not be used for brainstorming. The Circle Map is best for that.
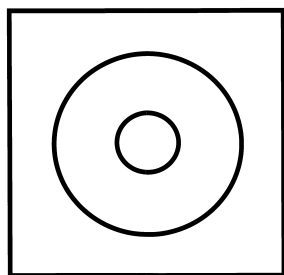
Key Note Term
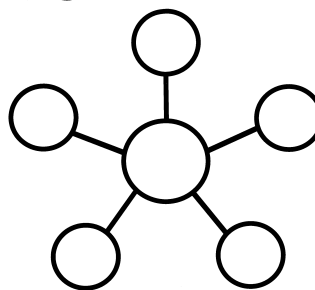
Bubble Map – a tool used for describing qualities.

CIRCLE MAP

Defining in Context

Figure 3.1.2: The Circle Map.

BUBBLE MAP

Describing

Figure 3.1.3: The Bubble Map.

The Double Bubble Map

The **Double Bubble Map** is used for comparing and contrasting. In the larger center circles, write the words for the two items or objects being investigated (see Figure 3.1.4). In the middle bubbles, use adjectives, adjective phrases, and other terms that show similarity between the two objects and answer the question, "What are the similarities and differences?" In the outside bubbles, as connected respectively to the two objects, write the words that describe their different qualities.

The Tree Map

Figure 3.1.5 shows a **Tree Map**, used for classifying and categorizing objects and ideas according to common qualities, information about the category, and answers the question, "What are the main ideas and supporting details of the topics?" On the top line, write the category name. One the second level of lines, list the subcatagories and then below each sub-category, write the specific members.

Tree Maps can be used for hierarchical classifications as well as for informal groupings of themes, concepts, and ideas.
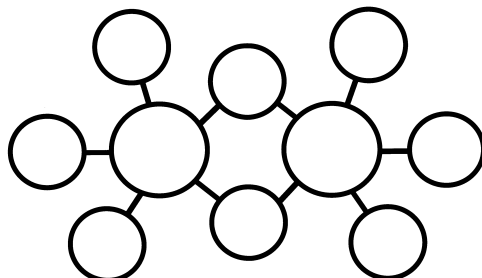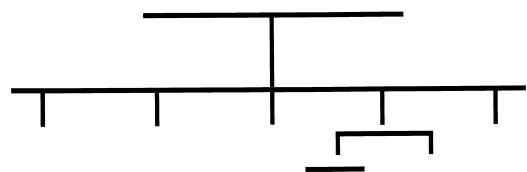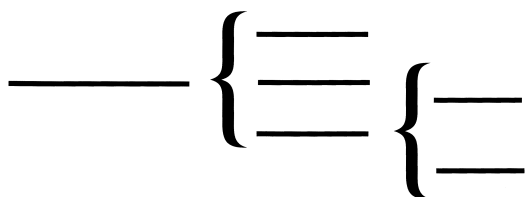
Brace Map

The **Brace Map** is used to analyze physical objects and shows part-whole relationships. It answers the question, "What are the part of the whole physical object?" On the line to the left, write the name of the whole object. On the lines within the first brace to the right, write the major parts of the object; then follow within the next set of braces with the subparts of each major part (see Figure 3.1.6).

Brace Maps can also be used to identify the anatomy of any object as well as developing special reasoning.

The Flow Map

If you need to sequence or order information, use the **Flow Map**, as shown in Figure 3.1.7. It answers the question, "What happened?" In the outside rectangle, write the name for an event or sequence. In the larger rectangles, flowing from left to right, write in the major stages of the event. In the small rectangles below, write in the substage of each major stage.

DOUBLE BUBBLE MAP

Comparing-Contrasting

Figure 3.1.4: The Double Bubble Map.

TREE MAP

Classifying

Figure 3.1.5: The Tree Map.

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BRACE MAP

Whole-Parts

Figure 3.1.6: The Brace Map.

FLOW MAP
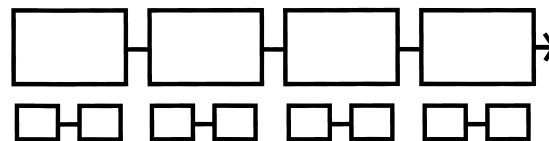
Sequencing

Figure 3.1.7: The Flow Map.

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Other uses for the Flow Map include the sequence of a plot, a timeline, order of operations, and framing long-term outcomes.

The Multi-Flow Map

The **Multi-Flow Map** is used for showing and analyzing cause-and-effect relationships. It answers the question, "What are the causes and effects of the event?" In the center rectangle, as seen in Figure 3.1.8, write an important event that has occurred. On the left side of the event, write the causes of the event; on the right side, write the effects of the event.

As you identify more causes and effects, add them to the map. If you are studying a system, you will find that there are effects in the system that, in turn, influence initial causes. This circular cause-and-effect relationship is called a feedback loop.

The Bridge Map

The **Bridge Map** gives you a tool for applying the process of seeing **analogies**, and answers the question, "What is the guiding metaphor?" On the line to the far left, write the **relating factor**. On the top and bottom of the left side of the bridge, write the first pair of things that have this relationship. On the right side of the bridge, write the second pair of relationships that have the same relationship. The line of the bridge represents the relating factor that is "bridged over" from one side of the analogy to the other. This is shown in Figure 3.1.9.

Key Note Term

Multi-Flow Map – a tool used for seeing cause and effect.

Key Note Terms

Bridge Map – a tool used for seeing analogies.

analogies – agreements, resemblances, or correspondence between different objects; explanations based on the similarities of two things.

relating factor – the similar phrase that fits both sides of an analogy.

MULTI-FLOW MAP
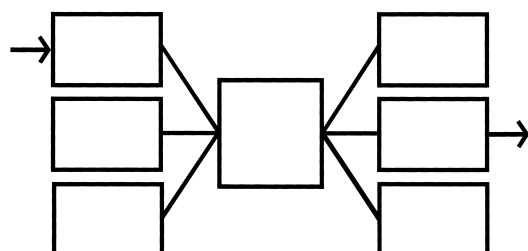
Cause-Effect

Figure 3.1.8: The Multi-Flow Map.

BRIDGE MAP

AS

RELATING FACTOR: _____
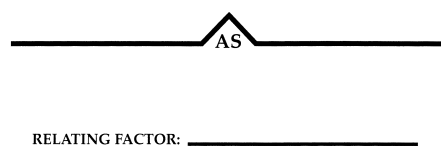
Seeing Analogies

Figure 3.1.9: The Bridge Map.

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Conclusion

Each Thinking Map® defined in this lesson was designed to help you develop a consistent way to process your thinking so you can learn more effectively. From brainstorming to comparing/contracting, from sequencing to seeing analogies, Thinking Maps® are tools that can aid you in keeping your ideas organized, your research easy to read, and also provide ways to stimulate your thinking.

Lesson Review

1. Give an example of when you'd use a Circle Map.
2. Why would you not want to use a Bubble Map for brainstorming?
3. Explain how a Brace Map can be used in the study of geography.
4. Define the term "analogy."

Lesson 2

Reading for Meaning

Key Terms

analogy
antonym
appositive
comprehension
concept
context
hypothesis
inventory
mood
prediction
property
purpose
strategy
synonym

What You Will Learn to Do

- Select reading comprehension strategies to enhance learning

Linked Core Abilities

- Communicate using verbal, non-verbal, visual, and written techniques
- Apply critical thinking techniques

Skills and Knowledge You Will Gain Along the Way

- Identify the purposes of reading
- Distinguish among reading comprehension strategies

Chapter 3

- Distinguish among the types of context clues readers use to determine word meaning
- Recognize how to apply vocabulary strategies to enhance vocabulary context
- Relate vocabulary in context strategies to reading comprehension
- Define the key words contained in this lesson

Introduction

Every day you are bombarded with things to read—junk mail, billboards, newspapers, magazines, and books. Sometimes it is hard to decide what to read and what to throw away. You read for many reasons: to gain information, for entertainment, to pass the time, or to study. If you want to improve your reading skills, read as much as you possibly can. You should read everything interesting—even backs of cereal boxes and comic books will increase your reading speed and comprehension. Soon, reading will come easily and it will be more enjoyable. But, do not give up looking for the types of material that you find interesting. All it takes is one good book and you will be enjoying the written word for all it is worth.

Reading is a communication skill that many people find difficult; however, similar to the other communication skills, practice will make reading easier and more enjoyable. This lesson covers a few guidelines you can follow that may make reading simple and more pleasurable.

Previewing

Preview (or scan) the material, especially a book, before you begin to read it. Previewing consists of looking over the table of contents, index, and title page. Search for familiar concepts and ideas that the material discusses. Do not spend too much time previewing, but do allow enough time to become familiar with the contents.

Questioning

After you preview the material, make a list of questions related to the topic about which you are reading. Your preview should help you come up with relevant questions. Make your questions detailed. Remember that you can increase your knowledge by asking questions. Also, your reading will be more directed because you will be looking for specific answers.

The following are three different kinds of questions you can ask to gain better understanding of what you are reading.

- **Empirical Questions.** These questions ask for information contained in the material that you are reading. They are questions to which the answers are factual. An example of an empirical question is "When did this event take place?"

- **Value Questions.** These questions reflect values or point of view. Answers to value questions are based on opinion. An example of a value question is "Do I agree with the principles expressed in this book?"

- **Analytical Questions.** These questions ask for a definition of what we mean by the words used in the question. Often they need to be asked before the other two types of questions are asked. For example, if you were asked, "How much of the material in this lesson did you comprehend?" you would first have to ask the question, "How do you measure comprehension?"

You will use all three types of these questions during your studies.

Reading and Note Taking

After you have previewed your material and developed questions about the material, you are ready to read. Clear your mind of all personal challenges, open up the book, and begin the first page slowly. Keep a dictionary nearby so you can look up unfamiliar words as you go along. As you read, take notes in the column of the book (if it is your own book) or on a separate sheet of paper. You will be making an **inventory** of the information in the topic.

Schedule breaks during your reading. Do not try to read for a long period of time or you may become bored or sleepy. Also, do not read little sections at a time or you may easily become confused and distracted. Allow yourself at least half-hour intervals of reading time and then reward yourself with a five-minute break. During your break, walk around, stretch, or get a glass of water or a piece of fruit, but have the self-discipline to return to your reading after the five-minute period is over.

As you progress in school, your instructors will require you to do research, give speeches, and prepare reports on material that may or may not be familiar to you. To complete these assignments, you may have to read as much material on your given subject as you can. Because you are reading for a **purpose** other than enjoyment, it may be helpful to first scan the material, then read it and take notes.

Taking notes on your reading gives you the opportunity to pick out the facts that are important to you. You will also remember what you are reading because you have to translate the material into your own words. Reading combined with note taking is an excellent way to remember important facts and to become familiar with new and challenging material.

Key Note Terms

inventory – an itemized list of current assets; a survey of natural resources; a list of traits, preferences, attitudes, interests or other abilities used to evaluate personal characteristics or skills.

purpose – something set up as an object or end to be obtained.

Outlining

Outlining is an important part of reading. After you have read through the material once, create an outline. Your outline should capture the main points or ideas and answer the questions that you came up with earlier. If you have a large reading assignment, you may find it easier to outline sections of the material rather than trying to outline the entire assignment at once. You will find outlining a helpful tool for you when it is time to review the material you have read for a test.

Hints for Difficult Reading

Sometimes, you must read about difficult subjects. During times of difficult reading, use the following suggestions to assist you in understanding the material better:

- **Look for key words in your material.**
- **Hold a mini-review at the end of each paragraph. When reading a paragraph, you will see that it contains a main idea or topic. Notice that the other sentences support the main idea. If you determine what the main idea is first, you will better understand the concept of the paragraph.**
- **Listen as you read the material aloud.**
- **Ask an instructor questions about the material.**
- **Find a tutor who can help you to understand the material better.**
- **Explain what you have read to another person.**
- **Take notes while you read the material; make an outline when you finish reading.**
- **After reading your material, take a break from it. Work on or think about other projects.**
- **Find another book, reference materials, and/or textbooks that cover the same topic. Sometimes other books can describe the same topic and concepts more clearly.**
- **Imagine that what you are reading is real. Look at the pictures in the book and develop mental pictures in your mind about the material. Try to imagine that you are a part of them.**
- **Keep a dictionary nearby so you can look up unfamiliar words as you read.**

Reading Comprehension Strategies

The following reading comprehension strategies will assist you in gaining a better understanding of what you read.

Directed Reading–Thinking Activity (DR–TA)

The DR-TA reading comprehensive **strategy** is used to **predict** or define the author's purposes for writing the material you are reading. When you read, select relevant data, evaluate it, and use it to form predictions of the content of

the material based on the information that you acquire. In this lesson, you can predict that the author wants to help you improve your reading comprehension.

GIST

Have you heard the expression, "Did you get the gist of the movie?" Gist means the main point of the movie. In the GIST reading comprehensive strategy, the letters actually stand for Generating Interactions between Schemata and Text. The strategy asks you to focus on short passages in your reading, three to five paragraphs in length, and create summaries for each passage in a structured step-by-step process. This will help you comprehend, or get the gist of the passage.

Think-Alouds

Think-Alouds help you monitor your comprehension and apply self-correction strategies to get the most out of your reading. Five strategies that can be used during think-alouds are:

- **Develop a hypothesis by making predictions. For example, by reading the introduction in this lesson, you can make a prediction that this lesson is about learning how to become a better reader.**
- **Develop images by describing the pictures forming in your mind from the information that you are reading. For example, when you continue with the lesson, you might picture yourself reading a schoolbook.**
- **Link new information with your prior knowledge by sharing analogies. For example, while reading this lesson, you remember how you became a better football player when you approached each game with a plan. You now apply that analogy to becoming a better reader by following the plan in this lesson.**
- **Monitor comprehension by verbalizing a confusing point. For example, sometimes it can help your comprehension by "talking through" a point in the reading that might be confusing.**
- **Regulate comprehension by demonstrating strategies. For example, if your predictions about the meaning of this lesson turns out not to be what you originally thought, you can talk it through until you can comprehend the correct meaning of the lesson.**

Key Note Terms

hypothesis – an assumption or concession made for the sake of argument; an interpretation of a practical situation or condition taken as the ground for action.

analogy – resemblance in some particulars between things otherwise unlike.

Question-Answer Relationships (QARS)

As stated earlier in this lesson, one of the guidelines to help you become a better reader involves asking questions about the material that you have read. The type of question you ask must be based on the information you need to answer the question. In this reading comprehension strategy, you must draw on two different information sources to answer your questions: the information in the material that you read and the information inside your head. For example, you can find the answer to the question, "What are some hints to help you understand difficult reading?" in the lesson material. However, if your question was, "Does one hint work better for you than another?" you would have to rely on your knowledge of what works best for you.

Vocabulary Comprehension

Reading forms the basis of your study skills. An active learner pursues information on his or her own through reading. Class reading assignments provide a chance for you to practice all the skills you have learned from this chapter. This lesson covers vocabulary comprehension.

Studying vocabulary increases word recognition. As you read, you recognize the meaning of words and interpret the information in the text. The more you read, the more new words you acquire and understand. This builds your vocabulary, makes reading become easier and faster, and raises your reading comprehension.

Three Strategies to Improve Vocabulary Comprehension

The following sections show you strategies to help improve vocabulary comprehension: context clues, word structure, and word mapping. Each clue will help you build your vocabulary and get more out of what you read.

Context Clues

Learning the meaning of words from the **context** of your reading material can be the most useful strategy to increase your vocabulary comprehension. Using the context that surrounds an unknown word helps to reveal its meaning.

There are several different types of context clues that you can use to find the meaning of a word within the context of what you are reading. They are:

Key Note Term

context – written or spoken knowledge that can help to illuminate the meaning of a word or passage.

- **Definition.** The author equates the unknown word to a word that is known or more familiar to you. For example, "Physiology is a branch of biology that deals with the functions and activities of life or of living matter (as organs, tissues, or cells)."

- **Synonyms.** The author pairs the unknown word with a synonym or other closely related words. For example, "The President's wife possessed the traits of a promising leader: wisdom, judgment, and sagacity."

- **Comparison Clues.** Often an unfamiliar word is used in a comparison with a familiar word. Your knowledge of the familiar word may help you figure out the meaning of the new one. For example, "The thatch in the roof was as likely to burn as any other straw."

Key Note Term

appositive – a grammatical construction in which two usually adjacent nouns having the same referent stand in the same syntactical relation to the rest of a sentence; as the poet and Burns in "a biography of the poet Burns."

Another example of a comparison clue is the use of an **appositive**. An appositive uses two adjacent nouns that refer to the same thing. For example, using the words poet and Burns adjacent to each other in the phrase "a biography of the poet Burns" helps define both words.

- **Contrast Clue.** In a comparison clue, you learn that a new word is like a known word. In a contrast clue, you learn that a new word is different from the known word. For example, "At night the street was pacific, unlike the crowded, noisy chaos it was during the day."

- **Examples in Context.** You can predict the meaning of an unfamiliar word when it is used with an example of a familiar word. For example, "At the show we saw magicians, ventriloquists, and other performers."

- **Inferring Meaning from Context.** The author sets a **mood** (ironic, serious, funny, etc.) in which the meaning of the unknown word can be hypothesized. For example, "The tormented lion roared in pain as he tried to escape from his captors."

Word Structure

Sometimes a word can give clues to the meaning in its structure. Analyzing the word's structure and **properties** is a vocabulary strategy that you can use to figure out the word's meaning. When you approach an unknown word, you can guess at its meaning by breaking down the parts of the word.

Longer words can be some of the most difficult to figure out, but they can be put into categories that will help you.

- **Compound words are two known words joined together. Examples include matchmaker, bookkeeper.**

- **Words that contain a familiar stem to which an affix (prefix or suffix) has been added. Examples include** *micro***scope,** *tast***eless.**

- **Words that can be broken down into regular pronounceable parts. Examples include subterfuge, strangulate.**

- **Words that contain irregular pronounceable parts so that there is no clear pronunciation. Examples include louver, indictment.**

Word Mapping

A vocabulary word map is a graphic organizer that helps you think about new words or **concepts** in several ways.

To build a word map, start by entering the new word in the middle of the map; then fill in the rest of the map with a definition, synonyms, antonyms, and a picture to help illustrate the new word. This is shown in Figure 3.2.1.
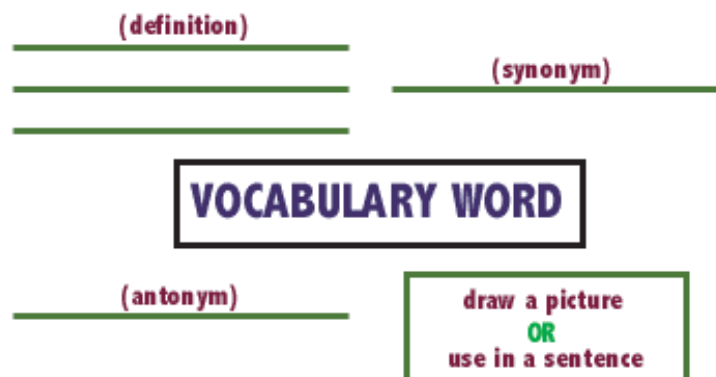
Figure 3.2.1: Building a word map.

Visual Imaging

When you use visual imaging, you think of a word that either looks like or sounds like the word whose meaning you are trying to learn. Thinking of the picture of the look-alike word and/or image will help you remember the word and its meaning.

For example, the word *potable* means suitable for drinking. You can break the word down to a familiar word, pot. You can then associate the word pot with something you can put in it, such as water. When you see the new word potable you will picture a pot with water for drinking and remember that the word potable means something suitable for drinking.

Some suggestions that may help you include:

- **Read. The more you read, the more words with which you will come in contact.**
- **Use newfound vocabulary in your everyday communication (writing, speaking).**
- **Become familiar with the glossary of your textbooks.**
- **Become familiar with the dictionary. Understand the pronunciation keys as well as why there are multiple meanings for words.**
- **Try to learn five new words a day. Use them when communicating. This practice will help you retain the words in your long-term memory.**

What Are Some Challenges of Reading?

Everyone has reading challenges, such as difficult texts, distractions, a lack of speed and comprehension, or insufficient vocabulary. Following are some ideas about how to meet these challenges. Note that if you have a reading disability, if English is not your primary language, or if you have limited reading skills, you may need additional support. Most colleges provide services for students through a reading center or tutoring program. Take the initiative to seek help if you need it. Many accomplished learners have benefited from help in specific areas.

Working Through Difficult Texts

Although many textbooks are useful learning tools, some may be poorly written and organized, perhaps written by experts who may not explain information in the friendliest manner for nonexperts. Because texts are often written to challenge the intellect, even well-written texts may be difficult to read.

Generally, the further you advance in your education, the more complex your required reading is likely to be. You may feel at times as though you are reading a foreign language as you encounter new concepts, words, and terms. Assignments can also be difficult when the required reading is from *primary sources*—original documents rather than another writer's interpretation of these documents—or from academic journal articles and scientific studies that don't define basic terms or supply a wealth of examples. Primary sources include:

- **historical documents**
- **works of literature (novels, poems, and plays)**
- **scientific studies, including lab reports and accounts of experiments**
- **journal articles**

The following strategies may help you make your way through difficult reading material:

Approach your reading assignments head-on. Be careful not to prejudge them as impossible or boring before you even start to read.

Accept the fact that some texts may require some extra work and concentration. Set a goal to make your way through the material and learn, whatever it takes.

When a primary source does not explain concepts, define them on your own. Ask your instructor or other students for help. Consult reference materials in that subject area, other class materials, dictionaries, and encyclopedias. You may want to create your own minilibrary at home. Collect reference materials that you use often, such as a dictionary, a thesaurus, a writer's style handbook, and maybe an atlas or computer manual (many of these are available as computer software or CD-ROMs). "If you find yourself going to the library to look up the same reference again and again, consider purchasing that book for your personal or office library," advises library expert Sherwood Harris.

Look for order and meaning in seemingly chaotic reading materials. The information you will find in this chapter on the SQ3R reading technique and on critical reading will help you discover patterns and achieve a greater depth of understanding. Finding order within chaos is an important skill, not just in the mastery of reading but also in life. This skill can give you power by helping you "read" (think through) work dilemmas, personal problems, and educational situations.

Managing Distractions

With so much happening around you, it's often hard to focus on your reading. Some distractions are external: the telephone or a child who needs attention. Other distractions come from within, as thoughts arise about various topics; for example, a paper due in art history or a Web site that you want to visit.

Identify the Distraction and Choose a Suitable Action

Pinpoint what's distracting you before you decide what to do. If the distraction is *external* and *out of your control,* such as outside construction or a noisy group in the library, try to move away from it. If the distraction is *external* but *within your control,* such as the television or telephone, take action; for example, turn off the television or let the answering machine answer the phone.

If the distraction is *internal,* different strategies may help you clear your mind. You may want to take a study break and tend to one of the issues that worries you. Physical exercise may relax and refocus you. For some people, studying while listening to music helps to quiet a busy mind. For others, silence may do the trick. If you need silence to read or study and cannot find a truly quiet environment, consider purchasing sound-muffling headphones or even earplugs.

We all have distractions. Talk with or write one of your close friends about the proactive way in which you are dealing with your distractions. Solicit your friend's perspective on how he or she handles similar issues.

Find a Study Place and Time That Promote Success

Any reader needs focus and discipline in order to concentrate on the material. Finding a place and time to study that minimizes outside distractions will help you achieve that focus. Here are some suggestions:

Read alone unless you are working with other readers. Family members, friends, or others who are not in a study mode may interrupt your concentration. If you prefer to read alone, establish a relatively interruption-proof place and time, such as an out-of-the-way spot at the library or an after-class hour in an empty classroom. If you study at home and live with others, try putting a "Quiet" sign on the door.

Find a comfortable location. Many students study at a library desk. Others prefer an easy chair at the library or at home, or even the floor. Choose a spot comfortable enough for hours of reading but not so cushy that you fall asleep. Make sure that you have adequate lighting and aren't too hot or cold. Choose a regular reading place and time. Choose a spot or two that you like, and return often. Also, choose a time when you feel alert and focused. Try reading just before or after the class for which the reading is assigned, if you can. Eventually, you will associate preferred places and times with focused reading.

Turn off the television. For most people, reading and television don't mix.

Building Comprehension and Speed

Most students lead busy lives, carrying heavy academic loads while perhaps working a job or even caring for a family. It's difficult to make time to study at all, let alone handle the reading assignments for your classes. Increasing your reading comprehension and speed will save you valuable time and effort. Because greater comprehension is the primary goal and actually promotes faster reading, make comprehension your priority over speed.

Methods for Increasing Reading Comprehension

Following are some specific strategies for increasing your understanding of what you read:

Continually build your knowledge through reading and studying. What you already know before you read a passage will determine your ability to understand and remember important ideas. Previous knowledge, including vocabulary, facts, and ideas, gives you a **context** for what you read.

Establish your purpose for reading. When you establish what you want to get out of your reading, you will be able to determine what level of understanding you need to reach and, therefore, on what you need to focus. A detailed discussion of reading purposes follows later in this chapter.

Remove the barriers of negative self-talk. Instead of telling yourself that you cannot understand, think positively. Tell yourself: *I can learn this material. I am a good reader.*

Think critically. Ask yourself questions. Do you understand the sentence, paragraph, or chapter you just read? Are ideas and supporting examples clear? Could you explain what you just read to someone else? Take in the concepts that titles, headings, subheadings, figures, and photographs communicate to you.

Methods for Increasing Reading Speed

The average American adult reads between 150 and 350 words per minute, and faster readers can be capable of speeds up to 1,000 words per minute. However, the human eye can only move so fast; reading speeds in excess of 350 words per minute involve "skimming" and "scanning.. The following suggestions will help increase your reading speed:

- **Try to read groups of words rather than single words.**
- **Avoid pointing your finger to guide your reading, because this will slow your pace.**
- **When reading narrow columns, focus your eyes in the middle of the column. With practice, you'll be able to read the entire column width as you read down the page.**
- **Avoid *vocalization*—speaking the words or moving your lips—when reading.**
- **Avoid thinking each word to yourself as you read it, a practice known as subvocalization.**

Expanding Your Vocabulary

Vocabulary is a work in progress—part of lifelong learning is continually learning new words. A strong vocabulary increases reading speed and comprehension; when you understand the words in your reading material, you don't have to stop as often to think about what they mean. Improve your vocabulary by reading and writing words in context and by using a dictionary.

Reading and Writing Words in Context: Natural Language Development

Most people learn words best when they read and use them in written or spoken language. Although a definition tells you what a word means, it may not include a context. Using a word in context after defining it will help to anchor the information so that you can remember it and continue to build on it. Here are some strategies for using context to solidify your learning of new vocabulary words.

Use new words in a sentence or two right away. Do this immediately after reading their definitions while everything is still fresh in your mind.

Reread the sentence where you originally saw the word. Go over it a few times to make sure that you understand how the word is used.

Use the word over the next few days whenever it may apply. Try it while talking with friends, writing letters or notes, or in your own thoughts.

> **Consider where you may have seen or heard the word before. When you learn a word, going back to sentences you previously didn't "get" may solidify your understanding. For example, most children learn the Pledge of Allegiance by rote without understanding what "allegiance" means. Later, when they learn the definition of "allegiance," the pledge provides a context that helps them better understand the word.**

> **Seek knowledgeable advice. If after looking up a word you still have trouble with its meaning, ask an instructor or friend to help you figure it out.**

Use a Dictionary

When reading a textbook, the first "dictionary" to search is the glossary. The definitions there are usually limited to the meaning of the term as it is used in the text. Standard dictionaries provide broader information such as word origin, pronunciation, part of speech, and multiple meanings. Using a dictionary whenever you read will increase your comprehension. Buy a standard dictionary, keep it nearby, and consult it for help in understanding passages that contain unfamiliar words.

You may not always have time to use the following suggestions, but when you can use them, they will help you make the most of your dictionary.

> **Read every meaning of a word, not just the first. Think critically about which meaning suits the context of the word in question, and choose the one that makes the most sense to you.**

> **Substitute a word or phrase from the definition for the word. Use the definition you have chosen. Imagine, for example, that you read the following sentence and do not know the word *indoctrinated:***

> **The cult indoctrinated its members to reject society's values.**

In the dictionary, you find several definitions, including *brainwashed* and *instructed.* You decide that the one closest to the correct meaning is *brainwashed.* With this term, the sentence reads as follows:

> **The cult brainwashed its members to reject society's values.**

Facing the challenges of reading is only the first step. The next important step is to examine why you are reading any given piece of material.

Why Define Your Purpose for Reading?

As with other aspects of your education, asking questions will help you make the most of your efforts. When you define your purpose, you ask yourself *why* you are reading a particular piece of material. One way to do this is by completing this sentence: "In reading this material, I intend to define/learn/answer/ achieve . . ." With a clear purpose in mind, you can decide how much time and what kind of effort to expend on various reading assignments.

Achieving your reading purpose requires adapting to different types of reading materials. Being a flexible reader—adjusting your reading strategies and pace—will help you to adapt successfully.

Purpose Determines Reading Strategy

When you know why you are reading something, you can decide how best to approach it. Following are four reading purposes. You may have one or more for any "reading event":

Purpose 1: Read for understanding. In college, studying involves reading for the purpose of comprehending the material. The two main components of comprehension are *general ideas* and *specific facts or examples.* These components depend on each other. Facts and examples help to explain or support ideas, and ideas provide a framework that helps the reader to remember facts and examples.

> ***General ideas.* Reading for a general idea is rapid reading that seeks an overview of the material. You search for general ideas by focusing on headings, subheadings, and summary statements.**
>
> ***Specific facts or examples.* At times, readers may focus on locating specific pieces of information—for example, the stages of intellectual development in children. Often, a reader may search for examples that support or explain general ideas—for example, the causes of economic recession. Because you know exactly what you are looking for, you can skim the material quickly.**

Purpose 2: Read to evaluate critically. Critical evaluation involves understanding. It means approaching the material with an open mind, examining causes and effects, evaluating ideas, and asking questions that test the writer's argument and search for assumptions. Critical reading brings an understanding of material that goes beyond basic information recall.

Purpose 3: Read for practical application. A third purpose for reading is to gather usable information that you can apply toward a specific goal. When you read a computer manual or an instruction sheet for assembling a gas grill, your goal is to learn how to do something. Reading and action usually go hand in hand. Remembering the specifics requires a certain degree of general comprehension.

Purpose 4: Read for pleasure. Some materials you read for entertainment, such as *Sports Illustrated* magazine or the latest John Grisham courtroom thriller. Recreational reading may also go beyond materials that seem obviously designed to entertain. Whereas some people may read a Jane Austen novel for comprehension, as in a class assignment, others may read her books for pleasure.

Conclusion

Reading is an essential skill because you use it every day of your life. Do not allow weak reading skills to interfere with the life goals that you have set for yourself. You will need to be a good reader to succeed in school, obtain a job,

and advance in the work force. As with your other communication skills, you must practice reading daily to improve your reading skills.

Learning vocabulary is an on-going process. It continues throughout your entire life. Look at the following examples:

- **at the age of 4 you probably knew 5,600 words**
- **at the age of 5 you probably knew 9,600 words**
- **at the age of 6 you probably knew 14,700 words**
- **at the age of 7 you probably knew 21,200 words**
- **at the age of 8 you probably knew 26,300 words**
- **at the age of 9 you probably knew 29,300 words**
- **at the age of 10 you probably knew 34,300 words**

This demonstrates that the older you become, the more you learn, and the more vocabulary you will know. No matter what your age, you must continue to learn. Words are "symbols" for ideas. These ideas formulate knowledge which is gained largely through words.

[Some of the material used in this lesson was adapted from:
- Virginia Tech—Division of Student Affairs—Cook Counseling Center at www.ucc.vt.edu
- Mrs. Dowling's Virtual Classroom at www.dowlingcentral.com/MrsD.html
- Context Area Reading: Literacy Across the Curriculum]

Chapter 3

Lesson Review

1. **How does previewing material help your comprehension?**
2. **Compare and contrast empirical, value, and analytical questions.**
3. **Explain three hints for difficult reading.**
4. **How does note taking help you remember important facts?**

Lesson Review

Lesson 3

Study Habits that Work for You

Key Terms

allocate
aural/auditory
compare
contrast
efficient
enumerate
inference
interpret
justify
paraphrase
prove

What You Will Learn To Do

- Develop personal study and test-taking strategies

Linked Core Abilities

- Build your capacity for life-long learning
- Apply critical thinking techniques

Skills and Knowledge You Will Gain Along the Way

- Relate personal learning preferences to study habits
- Identify effective study skill strategies
- Identify test preparation strategies
- Distinguish among various note-taking tips and strategies
- Define key words contained in the lesson

Introduction

The word *studying*, as used here, includes homework assignments along with writing papers, and seeking information to prepare presentations. To write a paper you must perform research, arrive at critical judgments, and put your thoughts into coherent sentences and logical paragraphs. To prepare for a presentation, you perform the same tasks, but are further required to stand and present before others.

Good study skills support:

<div style="float:left; border:1px solid; padding:5px;">

Key Note Term

efficient – productive of desired effects; productive without waste.

</div>

- **Being efficient.** You are probably busy and you want to get as much out of your study time as possible. You need to study as much material as possible in the amount of time that you spend.
- **Being effective.** You want good results for the amount of time that you spend. You want to take good notes and commit them to memory so you do not have to do the studying over.
- **Taking tests.** The more that you learn the first time when you study, the less you need to do before the test.
- **Demonstrating the basics.** You can produce good written assignments and presentations.

Other skills can be included, such as identifying resources, taking good notes, and researching information. These skills support your personal goals and your desire to increase your general knowledge. As an active learner, you do not just use study techniques for homework. If you identify a topic of interest or a career goal not included in your school subjects, you can pursue it. If you want to know about the early attempts of women pilots, a biography on your favorite musician, or how to make ice cream, you can find the information.

Study skills include:

- **Comprehending (understanding what you read)**
- **Thinking critically and objectively**
- **Thinking creatively and subjectively**
- **Identifying patterns**
- **Using reference materials**
- **Identifying resources**
- **Using time wisely**
- **Selecting strategies**

Developing an Effective Study Strategy

A strategy is a plan of action especially for attaining a goal. The word **strategy** implies a plan. Develop a strategy to use these study skills for homework and schoolwork. Your strategy reflects what you think works for you. If you think a study suggestion will not work for you, try to think what would. For example, is it easier for you to study alone or with a group? After you have decided to study, keep the following hints in mind:

- **Choose a quiet place where you can study.**
- **Study at one particular time each day. Do not change the time that you study.**
- **Avoid noise and distractions.**
- **Ask friends and family to support your efforts while you are studying.**
- **Learn to say no to distractions: the phone, friends, chores, and TV. Hang a "Do Not Disturb" sign on your door.**
- **Allow sufficient time for sleep.**
- **Schedule 50-minute blocks of study.**
- **Schedule as much study time as possible during daylight hours.**
- **Clear your mind of all thoughts when you are trying to remember something.**
- **Give yourself a break, include some leisure time.**

Personal Learning Preferences

You need to find the reading, writing, and study approaches that fit your schedule, your learning style, and your learning needs. The strategy factors and recommendations are probably things all students can agree on, but where, how, and when you study involves your personal preferences.

Productive studying occurs when you have everything you need when you begin. Being prepared is a signal to your mind that you are ready to study seriously and accomplish your objectives.

SQ3R—A Reading/Study System

You often read textbooks in the same way you read books for entertainment—you read without stopping from the first page to the last page of the chapter. This works when you are reading novels, but it is not likely to help you understand and retain what you read in your textbooks. Survey/Question/Read/Recite/Review (SQ3R) provides a different study system for reading textbooks that will increase your understanding and retention of what you read.

The steps for SQ3R include:

- **Survey – Before you read a chapter, do a quick reading to get an overview. Look at the headings, chapters, and setup of material.**
- **Question – Establish the purpose of your reading. Ask yourself: Why am I reading this? What am I looking for? When your mind is actively searching for answers to questions, it becomes engaged in learning.**
- **Read – A slow, thorough reading aimed at understanding the content will help find answers to the questions you first raised.**
- **Recite – Reciting material as you go, exercising your aural ability to learn, retrains your mind to concentrate and learn as it reads. Paraphrase what you have read into your own words.**
- **Review – Reviewing is an ongoing process. Check the accuracy of your recall with the text you have read.**

No study technique is guaranteed 100 percent of the time. It is important to decide when to use each study technique. Different study strategies work best in different situations.

Time Management

Some students seem to study well without trying. How is it that some students easily manage their study time while others cram hopelessly at the last minute? The answer is simple: People who manage their time wisely will plan well ahead.

Writing down your plan of study makes your responsibilities less overwhelming. Use the following as an example of your plan.

Manage Your Time

- **Monitor your time—set priorities on your assignments.**
- **Reflect on how you spend your time.**
- **Be aware of when you are wasting your time.**
- **Use "dead time" wisely (time between classes, waiting for a bus, riding the bus).**
- **Identify your most productive time.**

Keep a "To Do" List

- **Write down things that you have to do.**
- **Decide priorities—what to do at the moment, what to schedule later, what someone else can do.**

Key Note Terms

aural – of or relating to the ear or to the sense of hearing; of, reating to, or experienced through hearing.

paraphrase – a restatement of a text, passage, or work giving the meaning in another form.

- **Check off items you have done to give yourself a sense of completion.**
- **Know that the satisfaction of "crossing off" the completed task can yield a sense of accomplishment and reward.**

Use a Planner Calendar (Daily/Weekly/Long-Term Planner)

- **Use a planner so you can always plan ahead.**
- **Enter dates for course quizzes, exams, important papers, project deadlines, holidays, breaks, and study days.**
- **Write down assignments, appointments, classes, errands, and meetings.**
- **Always check the next day's schedule. Go to sleep knowing you are prepared for tomorrow.**
- **Review course work each week.**

Check Up

- **Ensure you are using your time to the best of your advantage.**
- **Ensure you are studying when you planned to study.**
- **Determine if there are areas where you can use your time more efficiently.**

Post your calendar and study plans in your study area. Chart your progress, check off finished tasks and give yourself a periodic studying check-up.

Making the Most of Class Time

Attending classes takes a large part of your day. Here are a few hints to help you get the most out of the time that you spend in class.

- **Be prompt. Always be on time for class. When you're late, it shows a lack of interest, and can be disruptive to other students.**
- **Be prepared. Do your homework and review your notes before class to prepare to ask questions. Prepare for discussion courses before class.**
- **Ask your questions about the last assignment before the teacher starts the new class.**
- **Attend with attention. Avoid distractions, concentrate as the instructor covers the content, and listen before writing.**
- **Take notes.**
- **Be sure you understand homework assignments before leaving the class.**
- **Schedule time to go over the classroom material after class.**

Listening

Preparation before class makes listening in class easier. Know what to expect so that you will know what to listen for. Good listening skills are an important part of your life. If you listen well, you will improve your study, speaking, and writing skills. Effective listening enables you to comprehend information then process it to formulate new ideas and to make sound decisions—essential characteristics that are necessary for communicating properly.

Note-Taking

Good reading and listening skills are the basis for effective note-taking. Developing good note-taking skills takes lots of practice and experimenting until you find a style that you like.

Concentrate in class to get the most out of note-taking. When you need to clarify a point, ask questions. Be specific. Leave blanks for words, phrases, or ideas that you missed, and fill in the gaps later. If the teacher emphasizes or writes a special point on the blackboard, put it in your notes. Always record the teacher's examples.

Pay as much attention to note-taking in the last few minutes of class as you would during the beginning and middle of the class. Reading assignments before class, being alert in class, and reviewing your notes after class will help you to perfect your personal note-taking style.

Test-Taking Techniques

Two essentials for test taking are knowledge and attitude. You are in control of these two essential factors—knowledge and attitude.

Knowledge means that you are prepared. As an active learner, you are most likely knowledgeable about the topics on which you will be tested. You are studying all the time to gain that knowledge about the changing topics as you advance in your studies.

Attitude can help you control your feelings prior to an exam. You are calm and cool. Your attitude can help you do well on a test. Work on your attitude before going into the test.

You also need knowledge about another area—test-taking techniques. After you are knowledgeable about these techniques, you don't have to study them again.

You should include the following in your test-taking techniques:

- **Have a strategy for taking the entire test.**
- **Recognize characteristics of specific question types and directions.**

You either know the material or you don't. Being nervous won't improve your performance. Being nervous can cause you to forget the material and lower your

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Note-Taking Hints

Here are a few note-taking hints that can help you find a comfortable method:

- Do not try to write down every word that the speaker says.
- Condense the information.
- Listen for key phrases and transitions such as:

    "the four causes were"

    "to sum up"

    "therefore"

    "in conclusion"

    "in summary"

    "this is important"

    "remember"

    "memorize"

    "you should know."

- Listen for information that the speaker repeats; it is probably important.
- Words such as "because," "in addition," and "later" are normally keys to relationships that the speaker is presenting.
- If you miss something, ask the speaker to repeat it.

grade. When you are tense and anxious, you drain energy away from your test per-formance. Tell yourself that you will do well. Repeat positive statements to yourself.

Some sample positive statements follow:

- **I can keep my cool because I studied. I'll put that information together in inspired new ways that help me shine.**
- **Tests are challenges, but I can do it.**
- **I can keep calm and think logically.**
- **I planned my work so I didn't have to cram.**
- **I'll stay calm and let my memory work.**
- **I think extremely well during tests.**

Preparing for Tests

The best preparation for taking tests is to keep up with assignments. Complete all study assignments when they are assigned, and take notes in class and while studying. Keep a copy of all previous study materials and all graded work.

Review your class notes each day. At the end of each week, review all reading assignments.

The old expression "a picture is worth a thousand words" means that visual pic-tures impress the memory better than verbal thoughts. For example, students who routinely visualize what they read in books perform better on tests.

When a test is announced or anticipated, identify the material that will be cov-ered in a test. For best test-taking results, you should create a study plan for yourself. Determine what review material you have and how much time you have to study for the test; then make a schedule for yourself. Divide the study material into small, easily completed chunks. For example, during one study period, review your class notes. In the next study session, review your homework.

Divide your study time to help you overcome any fears you may be experiencing. Familiarize yourself with test question styles and directions. Keep calm and cool; think positively. And, **allocate** your time carefully.

On the day of the test, follow these tips to help you achieve your best results.

- **Arrive early.**
- **Take your seat and breathe deeply.**
- **Let go of negative feelings about the test.**
- **Pace the test by looking over the entire test and allotting your time, or look over as much of the test as you are allowed to see at one time.**
- **Read the test directions slowly and carefully before you answer the first ques-tion. Reread the directions if necessary.**

Key Note Term

allocate – to appor-tion for a specific purpose or to partic-ular persons or things.

- **Pick the parts of the test that you know and do those first. Answer the easiest questions first. Don't spend a lot of time on the questions you need to figure out.**

- **Keep an eye on the time. Assess how much time you have to finish unanswered questions.**

- **Look for answers to the hard questions in other parts of the test.**

- **When you are unsure of the correct answer, try to eliminate the obvious wrong choices.**

- **Review your test answers before you turn them in.**

Taking the Test

Tests are composed of two main components: the directions or directives, and the test questions. You just learned that you should review the test directions to help you answer questions correctly, and that you should answer the easiest questions first. The following material will introduce you to several different question directives, followed by some helpful information regarding test question formats.

Directives

The following is a list of test directives and definitions. Test directives tell you how to answer questions.

- **Compare—Examine qualities or characteristics to discover resemblances. "Compare" is usually stated as "compare with." You are to emphasize similarities, although differences may be mentioned.**

- **Contrast—Stress dissimilarities or differences of things, qualities, events, or problems.**

- **Criticize—Express your judgment on correctness or merit. Discuss the limitations and good points or contributions of the plan or work in question.**

- **Define—Definitions call for concise, clear meanings. You must keep in mind the class to which a thing belongs and whatever differentiates the particular object from all others in the class.**

- **Describe—In a descriptive answer, you should recount, characterize, sketch, or relate in narrative form.**

- **Diagram—If you are asked to diagram, present a drawing, chart, plan, or graphic representation in your answer. Generally, you are expected to label the diagram and in some cases add a brief explanation or description.**

- **Discuss—This word directs you to examine, analyze carefully, and present considerations both for and against the problem or topic involved. This type of question calls for a complete and detailed answer. As you discuss, you may compare, contrast, define, and describe.**

- **Enumerate—This word specifies a list or outline form of reply. In such questions, recount one by one the points required.**

Key Note Terms

compare – a test directive that requires you to examine qualities or characteristics to discover resemblances; usually stated as "compare with." Similarities are usually emphasized; athough differences can also be mentioned.

contrast – a test directive that stresses dissimilarities, differences, or unlikeness of things, qualities, events, and problems.

enumerate – a test directive that specifies a list or outline form of reply. In such questions, recount one by one the points required.

- **Evaluate**—This word specifies a careful appraisal of the problem, stressing both advantages and limitations. Evaluation implies authoritative and, to a lesser degree, personal appraisal of both contributions and limitations.

- **Explain**—In explanatory answers, you must clarify and interpret the material you present. In such an answer, state "how or why," reconcile any differences in opinion or experimental results, and, where possible, state causes. Make plain the conditions that laid the foundation for the topic.

- **Illustrate**—This word requires you to explain or clarify your answer to the problem by presenting a figure, picture, or concrete example.

- **Inference**—When asked to infer, you are required to make a determination of a given problem based on the proposition, statement, or judgment considered as true within another problem.

- **Interpret**—An interpretation question is similar to one requiring explanation. You are expected to translate, solve, or comment upon the subject and usually to give your judgment or reaction to the problem.

- **Justify**—When you are instructed to justify your answer, you must **prove** or show your grounds for decisions. In such an answer, present evidence in a convincing form.

- **List**—To list is to enumerate. You are expected in such questions to present an itemized series or tabulation. Such answers should always be given in concise form.

- **Outline**—An outline answer is organized description. Give the main points and essential details. Omit minor details. Present the information in a systematic arrangement.

- **Prove**—A question that requires proof is one that demands confirmation or verification. Establish something with certainty by evaluating and citing evidence or by logical reasoning.

- **Relate**—If you are asked to relate or show the relationship, emphasize the connections and associations in descriptive form.

- **Review**—A review specifies a critical examination. Analyze and comment briefly in an organized sequence upon the major points of the problem.

- **State**—In questions directing you to specify, give, state, or present, you are called upon to express the high points in brief, clear narrative form. Omit details and illustrations or examples.

- **Summarize**—To summarize, give in condensed form the main points or facts of the problem or topic. Omit all details, illustrations, and elaboration.

- **Trace**—To trace, give a description of progress, historical sequence, or development from the point of origin. Such narratives may call for probing or deduction.

Question Formats

Tests are used to determine how much you know about a given subject. The questions are used to elicit response and come in many forms. Typically, questions can be objective or subjective in nature. Objective questions, such as multiple-choice and binary-choice, test your ability to recall, compare, or contrast information and to choose the right answer among several choices. The subjective question, such as an essay question, demands the same information

recall, but asks that you use critical-thinking strategies to answer the question and then organize, write, and revise a written response.

This section covers five question formats:

- **Multiple-choice**
- **Binary-choice**
- **Short answer**
- **Essay**
- **Reading comprehension**

Each question format is described with tips for answering the question format.

Multiple-Choice

Multiple-choice questions are the most popular format. Typically, you are given four possible answer choices and are asked to select the best answer, or most appropriate response.

Read the question carefully and determine if you are to select one correct response or select several correct responses.

An answer choice of "All of the above" is typically the correct answer. If more than one choice is correct, "All of the above" is probably correct as well.

If you don't know the answer immediately, try to eliminate obviously incorrect answer choices. Also, you can check to see if any other question has the answer to your question or a clue as to the correct response.

Binary-Choice

Binary-choice questions are really multiple-choice questions with only two choices. Typical answer choices for this question format are the True/False, Yes/No, and Agree/Disagree.

Pay attention to qualifiers and negatives. Qualifiers like "never," "always," "none," and "only" usually indicate a false statement. They require the question statement be 100 percent correct to be true. Qualifiers like "sometimes," "often," "generally," and "frequently" usually indicate a true statement.

Negative words such as "can't" and "no" can be confusing. Try to evaluate the statement without the negative word.

Short Answer

Short answer or fill-in-the-blank questions require you to know (recall) the answer; binary-choice and multiple-choice questions test your ability to recognize and select the correct choice amongst several possible choices.

Look for grammatical clues within the question to help you determine the correct answer. If you can think of several correct answers, let your teacher know and you may be rewarded with a clue as to the answer he or she is looking for.

Essay

Remember that the essay question is a subjective question that demands information recall, and also asks that you use critical-thinking strategies to answer the question; then organize, write, and revise a written response.

Start by identifying how much time you can devote to answering the question. Jot down key words or ideas so you can retrieve them later when writing your essay.

Begin with a strong sentence that clearly states your essay's main theme. Follow that with the key points that you will discuss. Expand upon your key points by writing a paragraph for each point.

Reading Comprehension

In reading comprehension questions, you read a short paragraph and answer questions about it. Comprehension is especially critical during test taking. You must read and interpret correctly the test directions, the questions, and the answers. Questions can relate to the reading's main theme. Questions may also ask for general or specific information about the reading material.

You will find it helpful to read the questions before you read the text.

Conclusion

Remember to divide your study time; keep calm and cool; and think positively. Becoming a good student does not happen automatically or overnight. It requires time and patience. Studying is a process that is learned through trial and error. You have to discover a strategy that works for you and adapt it for different learning situations. Most importantly, make studying a priority.

By understanding test-taking techniques, keeping a positive attitude, overcoming your fears, and following the tips for answering different questions formats found in this lesson, you will improve your test-taking ability.

Lesson Review

1. **Which ten Hints for Studying will work for you? Which won't? Why?**
2. **List the study skills you might want to improve for yourself.**
3. **What would you add to your "to do" list today?**
4. **Define the term "paraphrase."**

Chapter 3   Lesson Review

Chapter 4

Communication Skills

Lesson 1

The Communication Process

Key Terms

audience analysis
channel
feedback
mixed messages
noise
nonverbal
receiver
setting
verbal

What You Will Learn to Do

- Demonstrate how the communication process affects interaction between individuals

Linked Core Abilities

- Communicate using verbal, non-verbal, visual, and written techniques
- Treat self and others with respect

Skills and Knowledge You Will Gain Along the Way

- Describe the communication model for interpersonal interactions
- Compare verbal and nonverbal means of communication
- Explain how to avoid mixed messages

- **Evaluate your communication style**
- **Define key words contained in this lesson**

Introduction

Every day, one of your main activities is communicating with others. You communicate at home, at school, with your friends, and in the community. Some of you might also communicate in a job environment. For adults, communication at work can be the difference between success and failure.

The Need for Communication

You fulfill many different needs through communication, and effective communication can give you considerable pleasure. It is pleasing when you have a stimulating conversation with a friend. You are also pleased when you participate in a group discussion that leads to a solution for a problem. You are happy if a letter you write is answered, and it's confirmed that the recipient took what you said seriously.

Sometimes, however, communication does not work, and you end up feeling frustrated.

You have a disagreement with a friend and do not know what to say to fix it. There may be certain subjects your parents do not want to discuss at all. You write a message to someone and that person completely misunderstands what you said. It's very easy to misinterpret email and get a totally unexpected response.

Even though you have been communicating since birth, you might not always be as effective as possible. Effective communication seems to be a problem for many people.

All communication depends on understanding others and having them understand you. Much of your communication is intended to influence what people think and feel. Most of the time, you want someone to take some action as the result of your communication. You want a friend to spend vacation time with you; you want your friends to like each other; you want your parents to give you permission to go somewhere; you want your employer to more clearly answer a question you have.

Perhaps your most important need is to maintain and improve your relationships with others. You use communication to discover other people's needs and share your own needs with other people.

Our need for communication is important in all areas of our lives. To live is to communicate.

A Definition of Communication

Communication is a process in which people are able to transfer meaning between themselves. The communication process allows people to share information, ideas, and feelings. This is the transfer of meaning. When no meaning is transferred, no communication has taken place.

Seven Communication Skills

There are many ways to communicate. Your ability to read, listen, think, study, write, remember, and speak are the seven communication skills that will help you to express your feelings, knowledge, and ideas. Communication is innate within everybody; from the cries of a baby, to the smile of a friend, to the handshake of your doctor. Everybody uses communication skills differently. In JROTC, as in your other high school courses, you will have many opportunities to improve these skills.

Elements of Communication

The communication process is made up of various elements. These elements are communicators (senders), messages, receivers, channels (written words, sound, sight, radio, television), feedback, noise, and setting.

- **The communicator is the originator of the message. Speakers, writers, artists, and architects can all be considered communicators.**

- **The message is made up of ideas, data, and feelings the communicator wants to share. The medium may be a speech, essay, painting, or building.**

- **The channel is the route traveled by the message as it goes between the communicator and the receivers.**

- **The receiver is the audience for whom the message is intended. The communicator must gain the receiver's attention to have effective communication.**

- **Feedback allows communicators to find out whether they are "getting through" to the receivers. You get feedback from your instructors, your parents, and your friends.**

- **Noise is interference that keeps a message from being understood. Physical noise keeps a message from being heard. For example, the physical noise of a loud television program may interfere with reading a letter. Psychological noise occurs when the communicators and the receivers are distracted by something. For example, the psychological noise caused by hunger can prevent concentration.**

- **Setting is the time, place, and circumstances in which communication takes place. It can also be considered the context and environment in which a situation is set.**

Key Note Terms

channel – in communication theory, a gesture, action, sound, written or spoken word, or visual image used in transmitting information.

feedback – the return or a response to information, as in the evaluation of a communication; the return of evaluative or corrective information to the sender (point of origin).

noise – that which interferes with the successful completion of communication; a disturbance, especially a random and persistent disturbance, that obscures or reduces the clarity of communication.

receiver – one or more individuals for whom a message in intended.

setting – the context and environment in which a situation is set; the background; time, place, and circumstances in which a narrative, drama, or film takes place.

Communicating Effectively

After you understand the process of communication, you can begin to understand why communication does or does not work.

In an ideal situation, the message is perceived in the way it was intended. For example, you write an apology to your friend for a mistake that you made. If the friend accepts the apology, the communication worked. If the friend was offended by your message and the apology was not accepted, the communication did not work.

Your communication may not have worked due to a problem with the message (not written or spoken clearly), the channel used may not have been the best choice (writing a note rather than speaking in person), or psychological noise may have interfered (the recipient couldn't hear over loud noise in the room). Asking the right questions about why communication did not work is the best way to improve communication skills.

Most of us already have considerable communication skills. We have been sending and receiving verbal and **nonverbal** symbols all our lives.

Key Note Terms

nonverbal – being other than verbal; not involving words.

verbal – of, relating to, or associated with words.

> ### *Note*
> Verbal symbols utilize the words in a language to stand for a particular thing or idea. Nonverbal symbols allow us to communicate without using words. Facial expressions and gestures are examples of nonverbal symbols.

Nevertheless, we have all had times when we have not communicated as effectively as we should. You may have received a lower grade on a paper than you expected. You may have unintentionally hurt someone's feelings. An instructor may not have understood a question when you asked it in class.

You can work to increase the likelihood of effective communication. There are certain basic steps to follow when preparing any oral or written communication.

The following six steps for effective communication are not always used in sequence, nor are they exclusive of each other. Tailor them to your own style and approach; you will not use all these steps each time you communicate. These steps will help you focus your attention on how to increase your effectiveness as a communicator.

Key Note Terms

audience analysis – the examination of the characteristics that describe the receivers of communication, to include categories such as age, background, education, political opinions, location, and so on.

- **Analyze your purpose and your audience. Make sure you know why you are communicating and to whom you are addressing your ideas. Knowing about the receivers of your communication is called an audience analysis.**

- **Conduct the research. Use a variety of resources.**

- **Support your ideas. Find facts, figures, statistics, and explanations that give credibility to your ideas. The more you can back up your ideas, the more your audience will understand what you are communicating.**

- **Get organized.** Use an outline or notes to organize your ideas into a logical sequence. A logical sequence helps your audience follow along with you.

- **Draft and edit.** Use language to your best advantage. There may be many ways to express the same idea. Look for the best way. If you are unclear about what you are saying, you may be sending **mixed messages.**

- **Get feedback.** Test your work with one or more people. Testing your communication with others will ensure that you are not the only one that can make sense out of what you are saying.

Conclusion

Communication is how you transfer ideas to other people. Because communication does not always work as you intend, you must ensure that you message is delivered so you get your point across without any misunderstanding.

It's important to understand your audience and your purpose. You should conduct research and support your ideas. You should decide on an organization for your information and outline your ideas.

Follow the basic steps and people will pay attention to your ideas, and be impressed by your ability to express yourself.

Lesson Review

1. Name the various elements of communication presented in this lesson.
2. Define the term "communication."
3. Compare and contrast verbal and nonverbal communication.
4. Explain how getting organized might help you with a homework assignment.

Key Note Terms

mixed messages – communication transmitted by words, signals, or other means from one person, station, or group to another with unclear meaning to the receiver.

Chapter 4

Lesson Review

Lesson 2

Becoming a Better Listener

Key Terms

hearing
listening
thought speed
trigger words

Chapter 4

What You Will Learn to Do

- Use active listening strategies

Linked Core Abilities

- Communicate using verbal, non-verbal, visual, and written techniques
- Treat self and others with respect

Skills and Knowledge You Will Gain Along the Way

- Explain how barriers prevent effective listening
- Compile a list of trigger words
- Identify four tips to improve effective listening skills
- Define key words contained in this lesson

Introduction

Listening is the neglected communication skill. We spend nearly half of our communication time listening, but few of us make any real effort to be better listeners.

Although all of us have had instruction in reading, writing, and speaking, we rarely get any training in listening. This seems like a misplaced emphasis when you consider that out of all the time we spend communicating (70 percent of our awake time), 10 percent of that time is spent writing, 15 percent is spent reading, 30 percent is spent talking, and an overwhelming 45 percent is spent listening.

Good listening is important to everyone. In the business world, listening is the communication most critical for success; but, listening also is important in other places—at home, in school, in houses of worship, in civic clubs, and at social gatherings. Listening is important, not only for gaining information, but also for the building of relationships.

Listening is the skill that can make or break a relationship. It is as important for you to understand the person as it is to understand what the person is saying. There is a lot more to listening than just understanding the meaning of words.

The Process of Listening

Listening is a complex process. It is an essential part of the total communication process. Unfortunately, it is a part that is often ignored. There are two reasons why this happens.

Speaking and writing, which are the sending parts of the communication process, are highly visible and are much easier to evaluate. You are much more frequently tested on what you read than on what you hear.

Also, we are not as willing to improve our listening skills. Much of this unwillingness results from our incomplete understanding of the listening process. To understand the process, we must first define it.

You can define the listening process as the process of receiving, attending, and understanding messages transmitted through the medium of sound. Often the steps of responding and remembering may follow. Figure 4.3.1 shows the flow of the message from the sender to the receiver, and what the receiver does when the message is heard.

Receiving

Speaking is the call to listening. The speaker has not communicated until the receiver interprets and understands the message sent. Remember that **hearing** and **listening** are not the same. *Hearing* is the reception of sound. *Listening* is the attachment of meaning to sound. Hearing is, however, a necessary step for listening, and an important component of the listening process.

Key Note Terms

hearing – to perceive by the ear; to listen attentively.

listening – making an effort to hear something; paying attention.
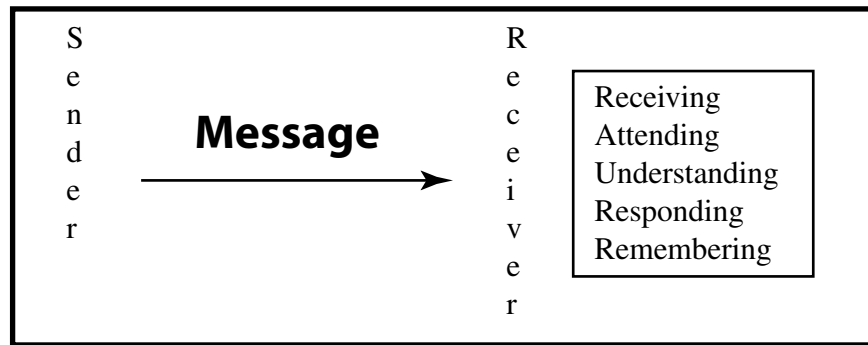
Attending

Hearing is only the first part of listening. You must then interpret, appreciate, or evaluate what you are hearing. Good listening requires energy and concentration, even though you tend to think of it as an automatic process. After you have received a message, you must attend to it. Whether or not you attend to an incoming message is a choice you actually have to make. Until you pick up the math book and study for the test, you have not attended to the message that a "math test is tomorrow."

Understanding

Effective communication depends on understanding. That is, effective communication does not take place until the receiver understands the message. Understanding must result for communication to be effective.

Responding

Sometimes, during communication, a response is appropriate. There are several types of responses.

- **Direct verbal responses. These may be spoken or written.**
- **Responses that seek clarification. This involves asking for further information.**
- **Responses that paraphrase. You may say, "in other words, what you are saying is, ..." A paraphrase gives the sender a chance to confirm that you understand the message.**
- **Nonverbal responses. Sometimes a nod of the head or a "thumbs up" may communicate that the message is understood.**

Responding is a form of feedback that completes the communication transaction. It lets the sender know that the message was received, attended to, and understood.

Remembering

Memory is often a necessary and essential part of the listening process. What is the relationship between memory and listening? Understanding the differ-

ences between short-term memory and long-term memory will help explain the relationship.

With short-term memory, information is used immediately, as with looking up phone numbers. This type of memory can only hold a limited amount of information, and is very sensitive to interruption.

Long-term memory allows you to recall information and events hours, days, weeks, and sometimes years later. For example, think of all the things you can remember that happened to you as you were growing up.

Types of Listening

Different situations require different types of listening. You may listen to obtain information, improve a relationship, gain appreciation for something, make discriminations, or engage in a critical evaluation.

Although certain skills are basic and necessary for all types of listening (receiving, attending, and understanding), each type requires some special skills. Before you can fully appreciate the skills and apply the guidelines, you must understand the different types of listening.

Informative Listening

With this type of listening, the primary concern is to understand the message. Much of your learning comes from informative listening. For example, you listen to lectures or instructions from teachers, and what you learn depends on how well you listen. If you listen poorly, you are not equipped with the information you need. There are three key factors for informative listening.

- **Vocabulary. Increasing your vocabulary will increase your potential for better understanding.**

- **Concentration. Sometimes it is hard to concentrate because more than one thing is going on at a time. Perhaps the listeners are preoccupied with other thoughts, or with their own needs. It may also be true that they are just not interested. Others have not learned how to concentrate while listening. They have not made themselves responsible for good listening. Concentration requires discipline, motivation, and acceptance of responsibility.**

- **Memory. You cannot process information without bringing memory into play. Memory helps informative listening in three ways. It provides the knowledge bank for you to recall experiences and prior information. It also allows you to create expectations and make decisions concerning what you encounter by calling on your past experiences. Finally, it allows you to understand what others say. Without memory of words and concepts, you could not communicate with anyone else and understand the meaning of messages.**

Relationship Listening

The purpose of relationship listening is to either help an individual or to improve the relationship between people. Although relationship listening

requires you to listen for information, the emphasis is on understanding the other person. Three behaviors are key to effective relationship listening: attending, supporting, and empathizing.

- **Attending.** In relationship listening, attending behaviors indicate that the listener is focusing on the speaker. Little things such as nodding your head or saying "I see," will let the speaker know that you are involved.

- **Supporting.** Many responses have a negative or non-supporting effect. For example, interrupting the speaker or changing the subject are not supportive. Sometimes the best response is silence. Three characteristics describe supportive listeners.
  - They are careful about what they say,
  - They express belief in the other person,
  - They demonstrate patience (they are willing to give the time).

- **Empathizing.** What is empathy? It is not sympathy, which is a feeling for or about another. Nor is it apathy, which is a lack of feeling. Empathy is feeling and thinking with another person. This characteristic enables you to see, hear, or feel as others do. It allows you to "walk in someone else's shoes." Empathetic listening is critical to effective relationship listening.

Appreciative Listening

Appreciative listening includes listening to music for enjoyment, to speakers because you like their style, to your choices in theater, television, radio, or film. It is the response of the listener, not the source of the message, which defines appreciative listening. The quality of appreciative listening depends in large part on three factors: presentation, perception, and previous experiences.

- **Presentation.** Presentation encompasses such factors as the medium (the form or way it is presented), the setting, or the style and personality of the presenter.

- **Perception.** Your attitudes determine how you react to and interact with the world around you. Perceptions are critical to how and whether or not you appreciate the things to which you listen.

- **Previous experiences.** Sometimes the experience you have had in the past influences how you appreciate or enjoy things. If you know too much about the topic, you may be too critical about it. If you associate pleasant experiences with the topic, you may have a more positive attitude toward the subject.

Critical Listening

Critical listening goes beyond appreciative listening because it adds the dimension of judgment. Critical listening is listening to comprehend and then evaluate the message. The ability to listen critically is especially essential in a democracy. For example, to make an informed decision in any governmental election, or to form intelligent opinions, you must be able to listen to all the information presented to you, evaluate what is relevant and what isn't, and come up with your own ideas. Not knowing, understanding, or critically listening to the information leads to misunderstanding of any issue.

Discriminative Listening

By being sensitive to changes in the speaker's rate, volume, force, pitch, and emphasis, the discriminative listener can detect both small and major differences in meaning. Small clues can strengthen relationship listening. Small differences in sound can enhance appreciative listening. Sensitivity to pauses and nonverbal cues allow critical listeners to more accurately judge not only the speaker's message, but the intentions of the message as well. There are three skills important for discriminative listening.

- **Hearing ability. Obviously, for people who do not hear well, it is difficult to discriminate among sounds.**
- **Awareness of sound structure. Listeners that understand the structure of the language being used for the message will have an advantage in discriminative listening.**
- **Ability to integrate nonverbal cues. Words do not always communicate true feelings. The way they are said or the way the speaker acts may be the key to understanding the true or intended message.**

Effective listening, whether informative, relational, appreciative, critical, or discriminative, requires skill.

Barriers to Effective Listening

To become a better listener, it is important to understand the barriers that can get in the way of effective listening. After you understand these barriers, you can work to overcome them. These barriers include:

- **Laziness. Effective listening can be hard work.**
- **Internal distractions. Sometimes you have a lot on your mind and it is hard to concentrate on what someone else is saying to you.**
- **Past relationships. Both a poor and an excellent past relationship with the speaker can affect how you listen.**
- **Lack of trust. Believing that the speaker has betrayed your trust or that the speaker does not have your best interests in mind is a barrier that can hinder effective listening.**
- **Lack of self-confidence. If the speaker does not sound confident, you will have a harder time staying focused on what you hear.**
- **Prejudice. Prejudice can effect how you hear the speaker as well as how you receive the information.**
- **The "halo" effect. If the speaker has an association with someone or something you already like, you are much more likely to be receptive to the speaker as well as the information. You may not question what you should question.**
- **The "horns" effect. If the speaker has an association with someone or something about which you have negative feelings, you may not listen the way you should.**

- **External distractions. Sometimes there are a lot of things going on in the same location where you are trying to listen to the speaker.**

- **A different level of power between you and the speaker. Either you may have the authority, or the speaker may. Either way, it can impact how you listen.**

- **Gender preferences. You may have different expectations because of the gender of the speaker.**

- **Emotionality on the part of the speaker. If the speaker becomes passionate about the topic, it may distract you from hearing the real message.**

- **Prejudging the message before the entire message has been delivered. Sometimes a speaker will say something at the start of a speech or conversation that may distract you from effectively listening to the rest.**

- **Allowing personal characteristics of the speaker to get in the way. If the speaker is unkempt or dresses sloppily, for example, you might not attend to everything that is said.**

- **Not caring about the speaker. Being indifferent to the person can affect how well you pay attention to the message.**

- **Interrupting. Sometimes the listener is so excited about an idea he or she wants to share, that the listener does not wait for the speaker's thoughts to be completed. This distracts both the listener and the speaker.**

- **Trigger words. Some words evoke an emotional response that prevents effective listening. These words are distracting because they make you concentrate on something else besides what is being said. If a speaker uses the word "lottery," your mind might wander to untold riches. Words like "homework" or "test scores" may also distract you.**

- **Delivery style. Sometimes the way the speaker communicates can be distracting. The speaker might have a very monotone voice, or may stutter. Some people continuously put in verbal pauses like "uh" or "you know." Any of these things may cause you to concentrate more on the delivery than the content.**

How to Be an Effective Listener

There are many guidelines that will help you to become a more effective listener. Most involve listening "actively" while others speak.

- **Find an area of interest. Listen with a purpose. Be interested. Try to organize what you hear.**

- **Judge content not delivery. Do not stop listening because the sender does not meet expectations. Listen to the words. Look for the message.**

- **Hold your fire. Do not get over-stimulated by the message. Do not react until the message is complete. Keep your emotions in check. Do not interrupt because you believe that what you have to say is more important or more correct. There will be time for you to react later. The speaker may surprise you and wind up saying what you want to say.**

- **Listen for ideas. Focus on the person's central ideas. Do not get bogged down in the details. Try to listen at a higher level. Listen for new knowledge or concepts.**

- **Be flexible. Vary the ways in which you attempt to remember the information. Concentrate on finding the best way to learn the information.**

- **Work at listening. Establish and maintain eye contact. Acknowledge understanding. Stay tuned-in.**

- **Resist distractions. Concentrate on the speaker. Tune out other things that may be going on. Turn off the things you can control, like the TV or the radio. Try not to do several things at the same time. Focus on the sender.**

- **Exercise your mind. Challenge yourself to listen totally. Try it for short time and then make it longer and longer. See if you can listen to an entire presentation without losing concentration.**

- **Keep your mind open. Communication efficiency drops to zero when we hear certain trigger words, such as communist, Democrat, or Republican. Everyone has words that evoke an emotional response. Effective listeners are aware of keeping their convictions and emotions in check.**

- **Capitalize on thought speed. Most of us talk at 120 words a minute. Our thinking speed is about 500 words a minute. That gives us a lot of spare time while a person is speaking to us. Poor listeners let their minds wander. Good listeners think about what is being said by anticipating the point, summarizing, weighing evidence, or looking for nonverbal clues.**

Conclusion

So now you know the parts of the listening process. You know there are various types of listening. You have read about barriers to effective listening and tips for overcoming those barriers. Use this information to improve your skills and become a better listener. Remember—improved listening involves work, but the results are well worth the effort.

Key Note Term

thought speed – the amount of time it takes for people to hear a thought and process it; typically considerably faster than speaking time.

Chapter 4

Lesson Review

Lesson Review

1. **Explain why listening is so important in learning.**

2. **Choose one type of response and discuss it.**

3. **How can critical listening help you with a friend or family member?**

4. **Define the term "thought speed."**

Conflict Resolution

Chapter 5

Lesson 1

Causes of Conflict

Key Terms

active listening
conflict
effective speaking
frustration
harassment
hostility
miscommunication
relationships
solutions
territorial
understanding

What You Will Learn to Do

- **Determine causes of conflict**

Linked Core Abilities

- **Do your share as a good citizen in your school, community, country, and the world**

Skills and Knowledge You Will Gain Along the Way

- **Recognize the impact of conflict on relationships**

- **Describe the four basic causes of conflict**

- **Analyze five different types of conflicts**

- **Use "I" statements to facilitate effective communication**

- **Define key words contained in this lesson**

Introduction

What does **conflict** mean to you? Is it frightening or exciting? Is it interesting or unpleasant? Do you typically avoid it, or are you more likely to confront it?

It is inevitable that you will encounter many different forms of conflict throughout your lifetime. To make appropriate decisions and gain confidence in resolving conflicts, you must be able to:

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- **Recognize potential conflict situations before they occur.**
- **Recognize the warning signs and the sequences of events that can fuel conflicts.**
- **Predict possible consequences and stay attuned to ways to stop the conflict from occurring (or escalating).**

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This lesson introduces basic guidelines to managing conflicts. You will learn about the causes of conflict, what you can do to prevent them, as well as the importance of maintaining good communication in these situations.

What Is Conflict and How Does It Affect Us?

Conflict can be defined as any situation where incompatible activities, feelings, or intentions occur together. It is an everyday occurrence at home, at school, on the job, or anywhere there are people with different beliefs, values and experiences.

If not carefully managed, conflict can escalate to violence and harm your personal **relationships**, creating wounds that will never heal. When conflict is avoided, and important issues are left unresolved, it may lead to resentment, creating a tense environment. However, if you take the necessary steps to resolve a conflict, you may find that "clearing the air" reduces tension and brings about an **understanding** that makes the relationship more open and honest in the future.

We most often find ourselves in conflict with those with whom we spend the most time: parents, friends, co-workers, teammates, and so on. You must learn to recognize that your long-term relationship with these people is more important than the result of any short-term conflict. Calmly discussing issues may often bring about a quick resolution or a realization that a problem doesn't actually exist.

Causes of Conflict

There are many ways in which conflicts can begin: misunderstandings, embarrassment, hurt pride, prejudice, and peer pressures are just a few. Most of the factors or situations that lead to conflict can be classified as resulting from:

Key Note Term

conflict – a clash between hostile or opposing elements, ideas, or forces; to show opposition.

Key Note Terms

relationships – a particular type of connection existing between people related to or having dealings with each other.

understanding – knowledge or ability to judge.

- **Varied perspectives on the situation**
- **Differing belief systems and values resulting from personal background and accumulated life experiences**
- **Differing objectives and interests**

If you recognize a potential conflict situation early, you may be able to prevent it from escalating into a dangerous fighting situation. By applying conflict management techniques, you will be able to reduce the levels of anger and **frustration**, which will make it easier to resolve the problem.

Types of Conflict and Their Warning Signs

To make good decisions and effectively manage conflict in your life, you must be able to recognize the warning signs of a potential conflict situation. Most types of conflicts belong to one of the five categories listed in the following list:

- **Relationship—conflicts that occur because of strong negative emotions, stereotypes, miscommunications, or repetitive negative behaviors. Harassment is a relationship conflict.**
- **Data—conflicts that occur because people are misinformed or lack information to make good decisions. If you are late to the drama club meeting because you thought it started at 2:00 pm, but it actually began at 1:00 pm, then you might find yourself in a data conflict.**
- **Interest—conflicts that result when one party believes that in order to satisfy his or her needs, the needs of an opponent must be sacrificed. A conflict over what you perceive to be an "unfair situation" would be an interest conflict. For example, if your whole soccer team had to run an extra five miles at practice because John, a teammate of yours, was late for the second time this week, you would have an interest conflict.**
- **Structural—conflicts that arise out of limited physical resources (including time), authority, geographic constraints, organizational changes, or other external forces. A territorial dispute is a structural kind of conflict. Similarly, if you are scheduled to begin work at your part time job at 3:00 p.m. on Wednesdays, but band practice is not over until 4:00 p.m., then you have a structural conflict.**
- **Value—when people attempt to force their own personal beliefs or values on others. For example, if a friend keeps asking you to help him cheat on his chemistry exam, you might have a value conflict on your hands. Another example of a value conflict would be the debate over capital punishment.**

Although there are many types of conflict that you may inevitably encounter, we are going to examine three common types of conflict that you may find at school, home or in your community: sexual harassment, other personal harassments (being picked on), and "unfair" situations. The following is a description of each of these kinds of conflict and some of the warning signs that accompany them.

Key Note Term

frustration – feelings of insecurity, discouragement, or dissatisfaction.

Key Note Terms

harassment – the act of annoying continually.

miscommunication – failure to communicate clearly.

Key Note Term

territorial – of or relating to the geographic area under a given jurisdiction.

Sexual Harassment

Four out of every five students say that they are sexually harassed often or occasionally. Sexual harassment is unwelcome behavior of a sexual nature that is both demeaning and wrong. These unwelcome behaviors are sexual advances, requests for sexual favors, and other physical, verbal, or visual conduct of a sexual nature.

Specifically, it includes: explicit sexual propositions; suggestive comments; sexually oriented kidding, teasing, or practical jokes; offensive or obscene language or gestures; displays of offensive or obscene printed visual material, and physical contact of a sexual nature. The most common form of sexual harassment, although oftentimes used unintentionally or subconsciously, is to address a person as "dear," "honey," "sweetheart," or some other "term of endearment."

Other Personal Harassments (Being Picked On)

Harassers use verbal, physical, or visual means to annoy or "pick on" someone, possibly because of their race, ancestry, national origin, religion, age, physical or mental disability, sex, or sexual orientation. Oftentimes, harassers like to pick on people who lack self-confidence by using derogatory remarks, slurs, jokes, cartoons, pictures, or certain gestures that demean, ridicule, or torment the individual.

Unfair Situations

"That's not fair!" is a cry that can represent every aspect of your life's development. It involves following rules regardless of whether you like them or not, reaching compromises with others, and respecting the rights of others. When someone makes a decision that may be fair for some, yet unfair for you and others, it is oftentimes hard to accept the answer to the questions, "From whose perspective was that decision made?" or "What criteria was used to make that decision?" Remember, fair does not mean equal.

Risk Factors for Violence

When scientists talk about preventing a disease such as cancer, they focus on eliminating those factors that put people at risk for the disease. The same reasoning has been applied to the study of violence. Violence-prevention experts have identified some specific risk factors for violence. Poverty, exposure to media violence or to family violence, the availability of weapons, drug abuse, and membership in gangs are all important risk factors for violence. Figure 5.1.1 shows a poverty-stricken area that could be ripe for violence. As you read about these risk factors, think about the ways each one might increase the likelihood of violence.

Poverty

Statistics show that violence rates are highest in poor urban communities where unemployment rates are high. The term "free-floating anger" is used to describe

the frustration and **hostility** that sometimes result when people feel unable to improve their lives. A lack of jobs, money, adequate food, health care, and respect from others all contribute to feelings of hopelessness and anger. When free-floating anger is already high, a minor event may trigger a person to react more violently than normal. It is important to emphasize, however, that most people who are poor do not demonstrate violent behaviors. The anger and frustration of poverty are just two of many risk factors for violence.

> ### Key Note Term
>
> **hostility** – an unfriendly state or action.

Media Violence

From your first cartoon to the latest movie, music video, or video/computer game, you have learned that violence, excitement and entertainment go together. You can probably recall lines or scenes from action movies that show violence as a reasonable response in many situations. What these scenes do not show, however, are the real results of violence—pain, tragedy, remorse, and more.

Studies suggest that people's attitudes, especially those of young children, can be shaped by media violence. Because children have had little real-life experience, they may interpret what they see on television quite literally. Children who witness a lot of media violence may grow up with an exaggerated sense of the amount of violence in the world. They also may tend to overreact with violence when confronted with threatening situations in their own lives.

Recently much attention has been focused on the media's portrayal of violence towards women—especially in some kinds of music and music videos. The audience for these forms of entertainment is mostly teenagers and young adults. Some people suspect that these media portrayals are partly responsible for the rise in dating violence, rape, and other forms of violence towards women. Do you think this could be true?

Family Violence

Children learn by imitating the behavior of parents and other important people in their lives. It is not surprising, then, that children who grow up in violent

homes are more apt to use violence to solve their own problems. Violence may be the only problem-solving strategy that these children know.

How can children learn nonviolent methods for handling anger? The most effective way is to see such methods used by adults in solving their own problems and in disciplining their children. Parents need to discourage their children from fighting by suggesting alternative ways to resolve disagreements, too. Also, parents can impart antiviolence values by discouraging children from playing with certain toys or watching violent movies or television shows, and by sharing their own feelings about violence with their children.

Availability of Weapons

Do guns kill people, or do people kill people? This difficult question gets to the heart of a controversial issue—the relationship between weapons and violence.

Some people do not believe that the availability of weapons is an important risk factor for violence. They point to countries such as Switzerland, where guns are found in nearly every household. Still, homicide rates in Switzerland are very low. Other people, however, disagree. They point to comparisons like the one shown in Figure 5.1.2. This graph compares homicide rates in two cities that are similar in many respects except one—gun ownership is much more tightly regulated in Vancouver, British Columbia, than in Seattle, Washington. What does this graph suggest about the availability of guns?

Most people do agree that when weapons are used in fights, fights are more deadly. Yet the majority of people who purchase handguns in this country do so for protection. By having a gun, however, statistics show that these people are actually doubling their chances of being killed in a fight. What results is an unending cycle—high homicide rates lead to an increase in gun purchasing, which, in turn, leads to an increase in homicide rates. This then leads, once again, to more gun purchasing. Such a cycle may be difficult to break.

Figure 5.1.2: The homicide rates by each weapon in the two cities.

Weapons and Violence

Seattle   Vancouver

Source: *New England Journal of Medicine*, 1988
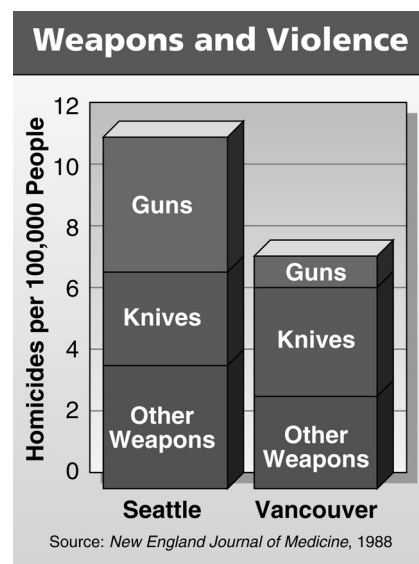
Social Studies Connection

Compared to other nations, the USA is a violent place. In 1995, the number of Americans that died from firearm wounds was 35,927. That's 2,306 MORE than were killed in the Korean War.

In 1996, the murder count for handguns was 106 in Canada, 30 in Great Britain, 15 in Japan, 2 in New Zealand, and 9,390 in the United States.

Drug Abuse

Would it surprise you to learn that 50 percent of all homicide victims have alcohol in their bloodstreams? Would you expect the statistics to be similarly high for assailants if they were known?

Although there is a correlation between violence and alcohol use, the reasons behind it are not entirely clear. Alcohol affects the brain, clouding a person's sense of judgment. A lack of judgment may lead a person to say or do things that he or she ordinarily would not. This behavior may lead to a fight. In other cases, however, alcohol is used more as an excuse or "to get up the nerve" to carry out preplanned acts of violence.

Drugs other than alcohol also are linked to violence. Similar to alcohol, illegal drugs such as crack cocaine can affect a person's judgment and behavior. In addition, people who are addicted to drugs may resort to robbery or other crimes to get money for drugs. Because many drugs are illegal and sold for a large profit, the people who sell drugs often carry weapons. Both of these facts add to the threat of violence.

Note

Drug and alcohol use will be covered in Let 2, Unit 4, Chapter 3, Lesson 1.

Membership in Gangs

The term *gang* describes a variety of groups, from criminal organizations to loose bands of rowdy teens. Generally, the term *gangs* refers to groups that are organized to control a specific neighborhood or "turf." Such gangs are called territorial gangs or "fighting" gangs because they will fight those who intrude on their turf. Most gangs sell drugs, and many have moved into the lucrative suburban and rural drug markets.

Although young people join gangs, about two-thirds of gang members are adults. They recruit poor students from troubled families. Often the recruits know of no other way, except gang membership, to gain a sense of belonging or community. Holding elaborate initiation ceremonies, wearing certain colors and jewelry, and using "secret" hand signs are some of the ways gang members

identify themselves. To join a gang, new members may undergo a beating, or gang leaders may order them to commit a crime, such as robbery, kidnapping, rape, or murder. Quitting a gang can be much more difficult than joining one.

Small, non-territorial gangs can form in any town. These groups may identify with a style of music or dress that sets them apart from their peers. Similar to all gangs, these groups isolate their members from the community.

Strategies for Resolving Conflicts

You have control over how you choose to deal with conflict. In some cases, the best course of action is to walk away, or do nothing at all. You may find it best to ignore the conflict if:

The issue or situation is unimportant or trivial to you.

You will probably not see the other person again.

The other person is just trying to provoke a fight.

The timing is wrong and a cooling-off period is needed.

Although choosing to walk away from a conflict may be difficult, doing so in these situations will demonstrate a great deal of maturity and self-control.

In other cases, however, it is best to confront the conflict. Avoiding the issue will not resolve it, and unresolved, lingering conflict can lead to resentment, hostility, and may even escalate to violence. In these situations, using a process to manage the conflict and establishing certain ground rules will help you to resolve the issues peacefully. The basic steps in managing conflict are:

Prepare yourself to deal with the conflict.

Find a mutually agreeable time and place.

Define the conflict.

Communicate an understanding.

Brainstorm to find alternate solutions.

Agree on the most workable solution.

Prepare to Deal with Conflict

We all experience emotions in reaction to conflict. These emotions can include nervousness, fear, embarrassment, anger, frustration, and anxiety. These are strong feelings that can propel you into inappropriate or destructive behavior. Take time to identify your feelings. If not acknowledged, these emotions will become a barrier to resolving the conflict.

We need to maintain emotional control to communicate in a calm, even tone. Screaming and name-calling will only serve to worsen the situation. Some tech-

niques that people use to remain calm and release tension in stressful situations include: deep breathing, vigorous exercise, counting to 10, pounding or yelling into a pillow, and talking to a friend.

Find a Mutually Agreeable Time and Place

Choose a place to discuss the conflict that is comfortable and non-threatening for both of you and where you can be alone. Some people may feel compelled to act in an aggressive way if they have an audience.

You should also make sure that you have chosen a time when you are both calm and ready to discuss the issues at hand.

Define the Conflict

Two of the most important skills that you need to develop in order to effectively manage conflict are: **effective speaking** (expressing your needs, feelings, and reasons) and **active listening**—in other words, your ability to send and receive clear messages. Each person involved in the conflict must communicate "their perspective or feelings on the situation," "what they want," and "why." Be sure to describe the conflict in clear, concrete terms, focusing on behaviors, feelings, consequences, and desired changes. Be specific and start your sentences with "I," not "You."

"I" messages are statements that tell how you feel. They are the most appropriate way to express your feelings in a calm and respectful manner. By using "I" messages, your communications do not take on a blaming or accusatory tone. "I" messages have three parts: to state a feeling, describe a specific behavior, and state how it affects you. An example of the parts of an "I" message include "I feel" (state feeling) when you (describe specific behavior) because (state how it affects you). For example, "I feel hurt when you tell someone something I told you in secret because I didn't want anyone else to know."

> **Note**
>
> More guidelines for conflict resolution using Winning Colors communication tools are described later in this chapter.

Communicate an Understanding

In addition to defining the conflict, each party must also feel that they have been heard and understood. This is where active listening comes into play. Request that the other person describe how the situation looks and feels from their perspective. Listen to really understand the other person's feelings and needs. Try to step back and imagine how you would feel if you were in the other person's shoes. Make sure that the other person knows that you are trying to understand his or her point of view. You may want to repeat back your understanding of what you have heard, or you could say something similar to, "I know this issue is important to you because . . ." Sometimes, however, you will find that it is necessary to *agree* to *disagree*.

Key Note Terms

effective speaking – expressing your needs, feelings, and reasons.

active listening – to go beyond comprehending literally to an empathetic understanding of the speaker.

Brainstorm to Find Alternate Solutions

To resolve a conflict, both of you must identify possible **solutions**. When identify-
ing potential solutions to the conflict, it is important to remain positive and be
open to compromise. Remember that the conflict is a problem for both of you to
solve together, not a battle to be won. You should take turns offering alternative
solutions, examining the consequences of each solution. Be creative and focus on
solutions rather than past blame. Do not be judgmental of the other person's ideas.

Agree on the Most Workable Solution

To reach an agreement on a solution, you both need to be committed to resolv-
ing the conflict. The conflict ends when both parties reach an agreement that
meets everyone's needs, and is fair to both of you.

Putting It All Together

Use Table 5.1.1 as an aid to help you remember the steps for effectively manag-
ing conflict in your life.

If you cannot reach an agreement, the conflict may need to be resolved through
mediation or arbitration (these topics will be discussed in Lesson 3).

Table 5.1.1: Phrases to help manage conflict	
I want . . .	-You both have the conflict. You must work together to solve it constructively and respectfully.
I feel . . .	-You both have feelings. You must express them to resolve the conflict. Keeping anger, frustration, hurt, fear, or sadness inside only makes the conflict more difficult to resolve.
My reasons are . . .	-You both have reasons for wanting what you want and feeling as you do. Ask for each other's reasons and ensure you understand them. Recall that at times you must agree to disagree.
My understanding of you is . . .	-You both have viewpoints. To resolve the conflict constructively, you must see the conflict from both sides.
Maybe we should try . . .	-You both need to come up with wise agree-ments that make both people happy.
Let's choose and shake!	-You both must select the agreement that seems fair. You should not agree on a solution that leaves one party happy and the other unhappy.

Communication Skills

Although **miscommunication** can lead to conflict, good communication is the key to settling problems peacefully.

Language is extremely powerful. If you have ever heard the phrase "those are fighting words," you know that there are some words that can escalate a conflict, and others that can be used to diffuse one. An example of some fighting words includes never, always, unless, can't, won't, don't, should, and shouldn't. Like-wise, good communication is blocked when either party blames, insults, puts the other down, interrupts, or makes threats or excuses. On the other hand, words that can be used to de-escalate a conflict include: maybe, perhaps, some-times, what if, seems like, I feel, I think, and I wonder. Try to use these words when facing a conflict situation.

Non-verbal communication, or body language, also has a tremendous impact on those who observe and interpret it. It can encourage or discourage a fight. When trying to resolve a conflict, be sure to maintain eye contact, and use a tone of voice that is sincere and not intimidating or sarcastic. You should also keep your legs and arms uncrossed, and your fists unclenched.

Successful conflict resolution and negotiation depends on the use of positive communication skills.

Key Note Term

miscommunication – failure to communi-cate clearly.

Conclusion

Conflict is a natural part of life. It can be positive or negative depending on how you choose to manage it. By recognizing potential conflicts and their warning signs, and using conflict management strategies to help you make appropriate decisions, you will have confidence and be better prepared to deal with conflict in the future.

Chapter 5

Lesson Review

1. **Do you feel that media violence has affected you? Why? Why not?**
2. **List the six basic steps to resolving conflict.**
3. **Explain how good communications skills might help you in a conflict situation.**
4. **Define the terms "conflict" and "territorial."**

Lesson Review

Lesson 2

Conflict Resolution Techniques

Key Terms

apologize
compromise
mediation
negotiation
resolution

What You Will Learn to Do

● **Apply conflict resolution techniques**

Linked Core Abilities

● **Do your share as a good citizen in your school, community, country, and the world**

Skills and Knowledge You Will Gain Along the Way

● **Apply awareness of differences in behavior preferences (Winning Colors®) to conflict situations and resolution**

● **Evaluate the steps to managing conflict**

● **Assess personal conflict management skills**

● **Recognize different hot buttons and the behavior style they indicate**

● **Evaluate the pros and cons of alternatives to determine potential solutions to conflict**

● **Define key words contained in this lesson**

Chapter 5

Introduction

The success or failure of any conflict **resolution** depends on the attitudes and behaviors of the people involved in the conflict. The skills that promote positive and non-violent conflict resolution include:

- **Awareness of others**
- **Awareness of the distinctions between self and others**
- **Listening skills**
- **Compromise**
- **Ability to express one's own thoughts and feelings**
- **Ability to respond to the feelings of others**

These are skills that you need to develop throughout your life. Although conflict is inevitable, you have control over your own response to the situation, and your actions can either diffuse or escalate the conflict. Remember that reacting defensively or judgmentally can trigger the same response in others.

Winning Colors® and Conflict Resolution

Effective communication skills are a key factor in the conflict resolution process. Sometimes to resolve a conflict, you need to go beyond your own comfort zone of preferred behaviors to facilitate good communications with the other party.

As discussed in Chapter 1, Winning Colors® is an assessment tool that is used to classify behaviors into four dominant categories:

- **Planners. Planners are quiet, and introspective. They like to be correct and are very detail oriented. They have excellent listening skills. They are calm, cool, and collected on the outside. They are likely to hide their feelings.**
- **Builders. Builders are natural leaders. They are up front with people, expressing themselves openly and directly. They like rules, law, order, and direction, and do not hesitate to tell others what they should do. Builders are typically punctual, dependable, and loyal.**
- **Relaters. Relaters are very social. They want to be liked and they love to talk. Relaters share their ideas and feelings readily. They work well in teams and need to be shown appreciation.**
- **Adventurers. Adventurers are action oriented. They are bored unless there is fun, excitement, and things are moving. They live in the present. They are flexible and thrive on spontaneity, and do not like structure.**

Key Note Term

resolution – to resolve a situation or issue.

Using an assessment tool such as Winning Colors® will not only help you evaluate your own behavioral strengths and weaknesses, it will also give you valuable insights into the behavioral characteristics of the people you interact with on a daily basis. Surely no one is going to walk up to you and say, "My name is Bob and I'm an Adventurer," so you will have to listen carefully, and observe clues in the other person's body language and speech patterns.

With insight and awareness, you will be able to adapt your communication skills and behavior to be able to negotiate a peaceful solution to a conflict.

Hot Buttons

By observing and identifying the behavioral characteristics and tendencies in others, you can determine how to best communicate with them to resolve a conflict. For example, some people respond better to facts and figures; others are more concerned with feelings and emotions. "Hot buttons" are strategies that you can use to communicate in a way in which the other person is more likely to hear you, understand you, and respond positively. In other words, it is important that both persons involved in a conflict "speak the same language." To illustrate this metaphor, imagine trying to negotiate a settlement if you were speaking English and the other party was speaking Chinese. You would not get very far.

When you are speaking to someone who exhibits planner behaviors, you succeed by using planner "hot buttons." The same is true if you want to communicate successfully with those who most clearly exhibit builder, relater, and adventurer behaviors.

Hot buttons for planners include the following.

- **Take a serious approach.**
- **Show interest; be patient, calm, and collected.**
- **Give ample warning before confronting them with a conflict.**
- **Supply details and allow more time for decisions.**
- **Try not to impose time constraints.**
- **Respond in terms of causes rather than exterior effects.**
- **Be prepared for interior understanding rather than exterior caring.**
- **Show that you are competent and striving to understand the subject.**
- **Be a good listener and sounding board.**
- **Avoid silly talk and babbling.**
- **Respond with new and innovative ideas.**

Hot buttons for builders include the following.

- **Take a bottom-line approach.**
- **Explain directions step-by-step.**
- **Let them know what is expected of them.**
- **Do not repeat unless requested to do so.**
- **Be concise and clear in your speech.**
- **Know the hierarchy of command and give it proper deference.**
- **Look for law, order, and routine.**
- **Make sure your actions deliver results.**
- **Be prepared.**

Hot buttons for relaters include the following.

- **Take a friendly approach.**
- **Talk in a personal way and volunteer to help out.**
- **Show genuine concern, smile, and be kind.**
- **Respect their feelings by not imposing your feelings on them.**
- **Show personal appreciation.**
- **Give them opportunity to express themselves.**
- **Validate their emotions and feelings.**

Hot buttons for adventurers include the following.

- **Take a light-hearted/fun/action approach.**
- **Move it; be an action-centered person.**
- **Keep the discussion in the here and now.**
- **Be willing to change and be flexible.**
- **Show you are competitive and a winner.**
- **The more spontaneous you are, the more you will be appreciated.**
- **Have an easy-come-easy-go manner with good humor to win you points.**
- **Give immediate results or feedback whenever possible.**
- **Avoid theoretic explanations.**
- **Create result-oriented action plans consistent with common goals.**

Evaluating Consequences

Your response to a conflict should not be a "knee-jerk" reaction, but rather a carefully considered response. It is important to think through the consequences of your behaviors before you act on them. If you act hastily or in anger, your behavior may add fuel to the fire and conflict could escalate to violence.

Guide for Reading

Focus on these questions as you read this lesson.
- What should always be a person's first concern in any conflict?
- What strategies are important for resolving conflicts peacefully?

SKILLS
- Analyzing risks and benefits

One method of analyzing a response to a conflict is to list three or more alternative solutions at the top of a sheet of paper; then record all of the positive and negative consequences of each option. This forces you to take the time to brainstorm and predict all the possible outcomes you could expect. The result will be a more reasonable and well-thought-out response.

Your goal should be to agree on a non-violent solution in which both party's needs are met. Remember—if the conflict is over something trivial, or if you will not have contact with the person again, you could choose to ignore the conflict or to **apologize** to settle it peacefully.

Key Note Term

apologize – to make an apology or express regret for a wrong.

Preventing Fights

Suppose that, after reading this chapter so far, you have concluded that fighting does not solve problems. You may now be wondering what peaceful alternatives exist. You also may doubt whether it is really possible to pursue peaceful solutions if the other person wants to fight.

Although it is certainly not always easy to avoid fighting, it can be done. This lesson offers some strategies for seeking peaceful solutions to conflicts. As you read these strategies, you may come up with ways to adapt them to particular situations or personalities. You may also come up with strategies of your own that you can share with friends, siblings, and others that you care about.

Recognizing a Conflict Early

When people who know each other fight, there is usually a history of events that led to the fight. Events such as name-calling or rumor-spreading may go on for a day, a week, or more before a fight breaks out. By recognizing that a potential fight situation is building, you may be able to prevent it. The earlier you deal with problems, the lower the levels of anger, and the easier it can be to resolve the problem.

Learning to Ignore Some Conflicts

Not all conflicts require that you respond. In some situations it may be smartest to walk away and do nothing at all. You may decide it is best to ignore a situation if

- **it is unlikely you will ever see the person again**
- **the person or situation is not very important to you**
- **the conflict is based on rumors that may not be true**
- **the conflict is over something trivial or silly**
- **the person is just trying to make you angry so you will fight and get into trouble**

Some people think that ignoring a conflict is a sign of cowardice. Actually it is a sign of maturity and self-control to walk away from some situations. Fighting out of pride or to "save face" may instead be an act of cowardice. As shown in Figure 5.2.1, walking away is one option.
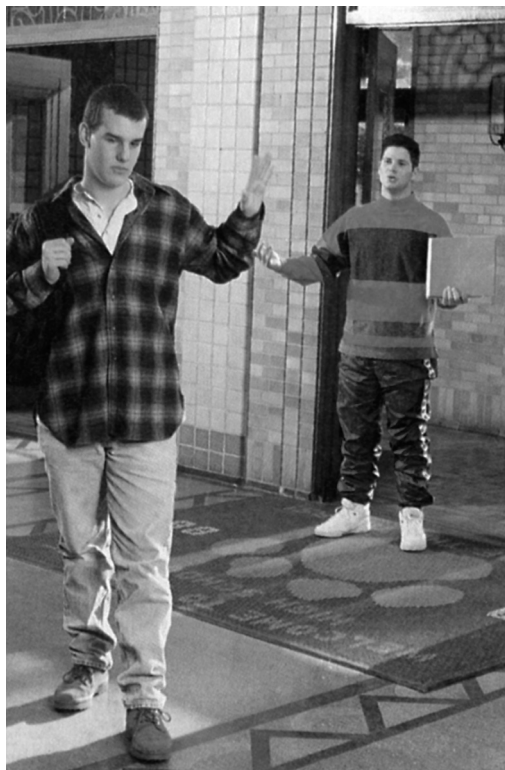
Figure 5.2.1: When a conflict is over something unimportant, it may be best to simply walk away.

Souce: Ken Karp

In deciding how to deal with any conflict, your safety should always be your first concern. If you think that a person might be more angered if you ignore the situation, you need to proceed carefully. It is important to trust your judgment and be prepared to try a new tactic if your first choice does not diffuse the situation.

Confronting a Person Wisely

In some cases it may not be advisable or even possible to ignore a conflict. The person may be someone with whom you are in frequent contact, or the issue may be too important to ignore. In these cases you may decide to confront the person, as shown in Figure 5.2.2. The way in which you handle the confrontation, however, is critical to its success. The steps described here can help you resolve things peacefully.

Choose the Time and Place Carefully

It is always best to confront a person when the two of you are alone. If friends are present, the person may think you are intentionally trying to embarrass him or her in front of them. The person may feel pressured to start a fight to avoid embarrassment. Choosing a time when the person is alone and when both of you are calm can help avoid a fight.

It is also important to avoid a confrontation when a person has been using alcohol or other drugs. Alcohol and other drugs impair judgment and may increase the likelihood of fighting. Never use alcohol or other drugs yourself. If you suspect the other person is under the influence of drugs, postpone your discussion until another time.

Stay Calm

Although it can be difficult to remain calm when you are upset, it is important for keeping peace. Try to keep your voice low and calm. By avoiding screaming or name-calling, you can remain in control of the situation.

Figure 5.2.2: When confronting a person about a problem, find the steps you can take to negotiate a peaceful solution.

Source: Bob Daemmrich/Stock Boston

Analyzing Risks and Benefits

You have just gotten a seat on a crowded subway when the person seated next to you lights up a cigarette. When you point out the **No Smoking** sign, the person replies, "Too bad. If you don't like it, move!" Make a list of the potential risks and benefits of confronting the person again. What would you do?

Everybody has his or her own technique for keeping calm under pressure. Some people find it helpful to rehearse the confrontation beforehand with an uninvolved person. Other people use deep breathing or count to 20 when they feel their tempers beginning to rise. Despite all your efforts, however, you may find yourself unable to keep calm and control your temper. If that happens, it may be best to try to postpone your discussion until a later time.

Negotiate a Solution

There are skills for effective communication and **negotiation**. Skills such as using "I" messages, assertiveness, and seeing the other person's point of view are important for resolving conflicts peacefully. Making statements such as, "I get upset when . . ." or "I know this issue is important to both of us . . ." can open the lines of communication without putting the other person on the defensive. Showing an understanding of the other person's feelings can also help keep emotions under control. Some other strategies that may be useful in negotiating a peaceful solution include:

- **Do the unexpected. If, instead of being hostile, you are friendly, confident, and caring, the other person may relax his or her guard. Try to make the situation seem as if it is not serious enough to fight about. The person may agree and decide to work with you to resolve things.**

- **Provide the person with a way out. Sometimes fighting breaks out simply because people see no other way to resolve things without losing pride. To avoid fighting, present the person with compromise solutions that you both can live with. By saying something like, "Let's try this for a week and see how it goes," you give the person an easy way out.**

- **Be willing to apologize. In some situations, be willing to say "I'm sorry" or "I didn't mean to embarrass you." Apologizing does not mean that you were wrong or that you are a coward. Instead, a sincere apology can be the quickest way to diffuse a fight.**

Helping Others Avoid Fights

When you are not personally involved in a conflict, you can still play an important role in preventing fights. You have learned how friends and acquaintances can put pressure on people to fight. These same people, however, could instead play a key role in preventing fights.

Key Note Terms

compromise – a settlement of differences reached by mutual concessions.

negotiation – discussion or conference that is aimed at bringing about a settlement.

Mediation

A growing number of schools today are training students in the skill of **mediation**. Mediation is a process for resolving conflicts that involves a neutral third party. As is true for all people involved in a conflict, mediators need to think about their own safety first. Mediators should never get involved in heated conflicts that have the potential for turning violent at any moment.

Your Role as an Onlooker

How can friends and acquaintances help reduce the pressure that others feel to fight? Friends can use their influence in many positive ways. A person can show disapproval of fighting by

- **ignoring people when they talk badly about others**
- **refusing to spread rumors or to relay threats or insults to others**
- **staying away from potential fight scenes**
- **showing respect for people who can apologize to others, ignore insults, and otherwise avoid fights**

People who advise friends to ignore someone's insults or not to hold grudges do their friends a very important service. They help keep their friends safe from the potential of deadly violence.

Getting Help When You Need It

Controlling anger and avoiding potentially violent situations are not skills that can be learned overnight. They are, however, skills that can be mastered.

If you are not satisfied with the way you now deal with anger, many people can help you. Parents, teachers, coaches, school counselors, and members of the clergy are just some of the people you can turn to for help. If these people cannot help you themselves, they may be able to refer you to trained counselors who can. By asking for help, you take an important first step toward gaining control over your behavior and your future.

Another time when it is important to ask for help is when a friend reveals plans of violence to you. Such plans should always be taken seriously, especially if your friend talks about using a weapon. Although it is never easy to break a friend's confidence, it is critical for you to share your friend's plans with a trusted adult. Doing so is a true act of caring. It shows that you care too much to let your friend be lost to violence.

Key Note Term

mediation – working with opposing sides to resolve a dispute or bring about a settlement; a process in which conflicts are resolved with the help of a neutral third party.

Focus on Issues: How Can Schools Be Kept Safe?

Jonesboro, Paducah . . .

Littleton, Conyers . . .

The list of schools that have experienced terror in their hallways seems to grow each year.

Surprisingly, however, school violence is actually declining. There are fewer homicides, fewer assaults, and fewer students carrying weapons into class. What has increased is a kind of random violence that seems more intent on the act of killing rather than a desire to injure a specific person. It may be the ultimate mark of isolation that these murderers cannot even identify an actual enemy.

The struggle against random violence has led to a variety of ideas:

- metal detectors, see-through backpacks, and security guards to reduce the number of weapons
- checklists and social workers to identify and help "at risk" teens
- school uniforms to help end cliques and isolation that so many students feel
- more school activities to involve students
- a reduction in the violence of music, movies, and video and computer games

What do you think should be done to keep schools safe from violence? Explain.

Conclusion

Effective communications are essential to successful conflict resolution and negotiation. Sometimes we misinterpret what others say, or vice versa; however, if we practice self-awareness, and seek to understand others, we will be much more successful in maintaining healthy relationships. Understanding your own communications style, being able to appreciate others, and adjusting accordingly, will enable you to resolve conflicts successfully.

Chapter 5

Lesson Review

1. **Using your Winning Color, explain how you would find a solution to conflict.**

2. **Explain how evaluating consequences should be important before responding to a situation.**

3. **Why is it important to choose the time and place to confront a friend or family member about a problem?**

4. **Who would you go to if you could not manage anger on your own? Why would you choose that person?**

Lesson Review