

Building a Powerful Workshop

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Making Learning Effective

After reading this chapter, and when applying what you learn, you will be able to:

1. Explain the role of a facilitator.
2. Discuss the six adult learning principles.
3. Identify Gardner's eight multiple intelligences and describe ways to address them in training.
4. Describe the three learning modalities and how they affect information acquisition.
5. Select strategies to address each learning modality in a learning environment.
6. Determine accelerated and brain-based learning strategies to enhance your learning initiatives.

“Education is what remains after one has forgotten everything one learned in school.”

Albert Einstein

Identifying Your Role

Your role as a facilitator of knowledge exchange is to ensure that your learners “get it.” Anything less means that you failed to meet their learning needs. You can have all the knowledge in the world between your ears; however, if you cannot effectively communicate it in a way that allows your learners to “gain it, retain it, recognize and recall it, and use it,” they will likely leave the room feeling cheated. To ensure that there is a transfer of learning from you to them and ultimately to the workplace, you must act as a conduit. Your challenge is to make everything you do learner-centered, since your participants are your purpose for being there. Without your learners, you are not needed. To accomplish all this, actively engage learners from the beginning of the workshop and continue to do so at various points throughout the session. Give them information, let them experience and apply it, then review the information or concepts periodically. The key is to not only provide information, but also to tell learners how to apply it outside the classroom. Do not assume that they will “get it” on their own, as they might be distracted, confused by your approach or explanation, or simply may not understand a key point. Give examples, build in activities where they can discuss and process information (small group discussion, problem solving, role play, demonstrations, and

open-ended question forums) to draw them in and verify that they grasp your meaning.

A simple technique to help verify understanding is to build in interim reviews through which you can test recognition and comprehension of information. This strategy will be discussed later in the book, but is nothing more than quick, fun activities where key concepts presented to that point in the session are reviewed. You can accomplish this by the use of small group energizer activities that focus on key concepts. For example, games, word search, or crossword puzzles.

Adult Learning Principles

The ways that adults learn (andragogy) have been studied for over one hundred years in Europe; however, Malcolm Knowles is often credited with introducing the concept in the United States in the 1970s. Following that period, many people have debated the validity of Knowles' theory, while others have applauded the simplicity and logic of it. Knowles identified six core adult learning principles in his 1973 book *The Adult Learner: A Neglected Species*. In that publication, he described how the principles could be applied in any adult learning environment. The core principles are

1. *Adults have a need to know why they should learn something.* Since time is so precious in today's harried world, you must take the time at the beginning of your workshop to gain learner buy-in. You can do this through discussion of learning objectives that outline key outcomes that learners will take away and be able to

apply following the session. Another approach is to tell learners ways in which they can use the information. Remember, this may not be as obvious as you think to some people. For example, in describing these six core principles to a group of trainers in a train-the-trainer workshop, you could build in an activity in which learners work in small groups to discuss why each of these concepts is important and how they might be used in their own training sessions.

2. *Adults have a need to be self-directing.* Unlike children, adults have many life experiences that are used to make their own decisions. For this reason, they typically expect that they will have some degree of control over their life situations and be responsible for decisions they make. Use this concept to build problem-solving and decision-making activities into your workshop and to allow plenty of opportunity for participants to respond to and ask questions. For example, in your workshop, make sure that there is ample time for learners to work in small groups on topic-related issues. When forming groups, ask or assign group leaders to keep track of time, control group direction, and act as spokespersons during an activity debriefing at the end.

3. *Adults have a greater volume and different quality of life experience than children do.* Because of their life experiences, adult learners will bring new ideas, skills, and questions to your workshop environment. This can be a double-edged sword. On the positive side, you can tap into their previous knowledge and experience to add more meaning and real-world flavor to the content that you provide. Use learners as coaches, experts, leaders, and co-presenters at various points based on their

expertise level. On the negative side, some people may be more challenging or pessimistic about ideas that you present because of their previous learning and knowledge. You can counter the latter by being thoroughly prepared, having a sound understanding of how to deal with different participant behavior, and maintaining a non-defensive posture when questions do arise (see People Strategies for Trainers in the Resource section for additional ideas on the topic of handling difficult classroom situations). For example, to bring learners together and tap into their expertise, try doing an icebreaker activity at the beginning of the workshop in which learners exchange information and identify what they believe are their strengths and weaknesses related to the topic to be presented. Use this information to pair people in the session so that an exchange of ideas and coaching can occur. This allows more knowledgeable people to feel productive, valued, and important, while those needing information gain a new resource and possibly bond with other learners.

4. Adults become ready to learn in order to perform more effectively and satisfyingly when they experience a need to know or are able to do so. As the old adage goes, "Necessity is the mother of invention." When adults feels the pain of not being able to perform well enough in their jobs or they receive negative feedback on performance, they often rush (or are rushed) off to training to "fix" their deficits. Unfortunately, this approach often masks organizational issues that are causing the performance breakdown. Examples of this include poor supervision or management skills on the part of their bosses, policies that inhibit effective job performance, or an environment

that does not adequately prepare and support employees. Still, when such learners show up in your session, your task is to try to enhance their knowledge, skills, and attitude (KSA).

By focusing on this core adult learning principle, you can tap into their desire to learn. You can also engage them in the learning event to allow maximum transfer of knowledge. For example, you may have learners whose organization has shifted to a team environment and some employees are having trouble working effectively with others. They may attend your workshop on effective interpersonal communication or on team building that teaches roles and expectations and skills for building better work relationships.

5. *Adults enter a learning experience with a task-, problem-, or life-centered orientation to learning.* Children focus on learning knowledge in order to pass tests and graduate. Adults focus on gaining new knowledge, skills, and attitudes (KSAs) that will allow them to transfer what is learned back to a life situation immediately and resolve issues that they have. For example, if someone is working in an environment in which he or she interacts with many customers from the Hispanic community and does not speak the language, the person might attend a Spanish language workshop.

6. *Adults are motivated to learn by both extrinsic (external) and intrinsic (internal) motivators.* Researchers have developed many theories of motivation over the last century to try to explain how to deal with such motivators. For example, Abraham Maslow's Hierarchy of Needs theory, Frederick Herzberg's Two-Factor theory, and

Clayton Alderfer's Existence Relatedness Growth theory, any of which you can apply to a learning environment.

By better understanding the premise behind motivation theories, you will be better able to create a learning environment that addresses both intrinsic and extrinsic needs of your learners. One simple way to do this is to use small incentive prizes that relate to your session topic for volunteers, people who arrive and return from breaks on time, and those who accomplish certain tasks. Such rewards address extrinsic learner needs. You can end the session early or recognize individual performance through applause or appointment to specific leadership roles in order to provide for intrinsic needs. Even though rewards are often short-term motivators, if you use them in conjunction with other brain-based learning strategies, you can create an environment that is more conducive to learning. Just do not rely solely on rewards, props, and other "gimmicks" to support a lack of knowledge or poor delivery style. It will not work. You still have to excel in your role as facilitator and/or subject-matter expert (SME).

The key in selecting motivational strategies is to realize that what motivates one person does not motivate all. Use a variety of techniques and, if you realize that something is not working, switch to an alternate strategy immediately. Also consider who is in your audience and the topic of your workshop. For example, while smiley face toys and funny props would work well for a group of front-line employees in a workshop on customer service, it would probably not be a good idea to use them in a session on handling grief to friends and family of deceased people.

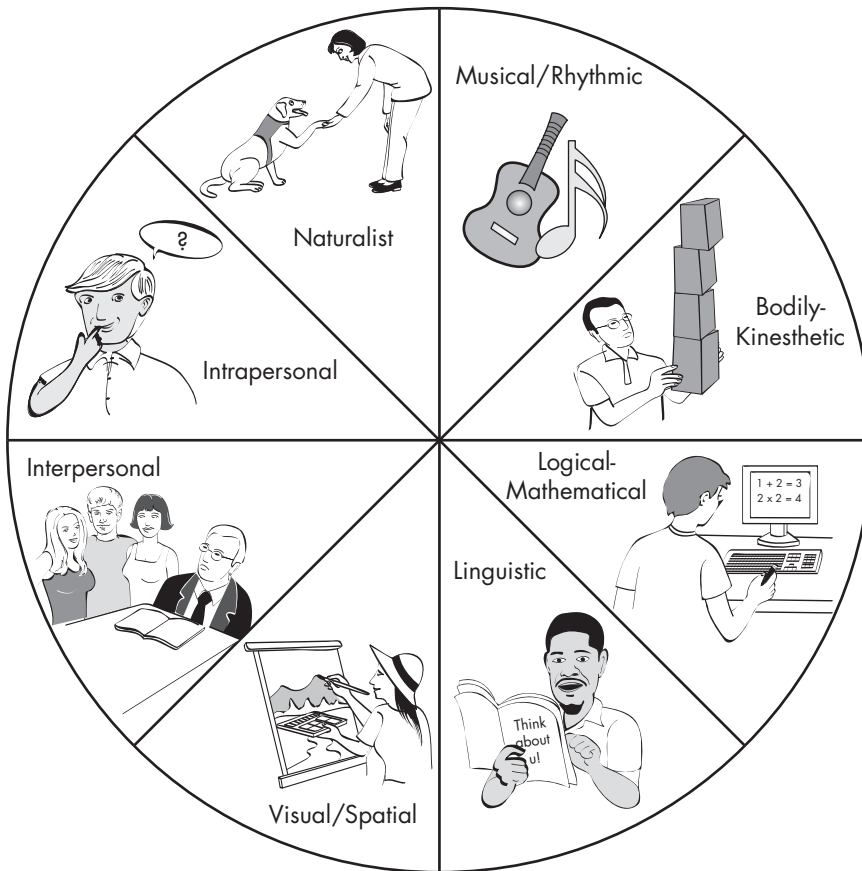


Strategy for Success

To ensure that you are addressing the core adult learning principles, make a list of all six and, as you design your workshop content, list each activity, strategy, and technique that you will use next to the principle to which they apply. Items may be listed beside more than one principle if they apply. When your program design is complete, you should have something listed next to each principle. If you do not, go back and modify accordingly. For example, you might use a problem-solving activity in which learners first identify their personal strengths and areas for improvement related to the challenge based on previous experience. This could apply to all six principles, depending on how you introduce the activity.

Multiple Intelligences

Since the release of Howard Gardner's groundbreaking research on multiple intelligences in 1983, he and other researchers have conducted numerous studies on the human brain's ability to learn in various ways. In his original study, Gardner proposed that people have seven intelligences. This is opposed to the standard intelligence quotient (IQ) test areas and verbal and performance sub-areas normally measured by more popular adult intelligence tests, such as the Wechsler Adult Intelligence Scale. He later revised his theory to add an eighth intelligence (naturalist) and continues to speculate about a possible ninth (existential). Research continues in the area of multiple intelligences. Many other people now believe that there are actually additional intelligences that will be identified in the future. By focusing on Gardner's eight areas, facilitators and trainers can enhance the learning opportunity for participants by offering something that will capture and hold the interest of all learners. To do this, workshop activities, content, and

Figure 1.1. Gardner's Eight Multiple Intelligences

materials should include elements that will address the eight intelligences shown in Figure 1.1.

1. Musical/Rhythmic Intelligence

This intelligence allows someone to create or compose music and to understand, interpret, and appreciate it. In your workshop, you can address this intelligence by engaging learners through the use of music before the

session, during breaks, and as background during small group activities. You can also have them work individually or as teams to create music-based songs or skits that tie to your session topic or event and are based on well-known music.



Strategy for Success

A way to create a sense of camaraderie and built to a creative and fun closing activity is to have learners work on their skits throughout the session as they obtain new information or learn additional concepts. They can then incorporate these into their team skit that they would perform at the end of the workshop. The skits could be videotaped and a copy given to each learner on CD-ROM following the session, along with a follow-up questionnaire about the workshop, completion certificate, or additional resource material. All of this would remind participants about and reinforce the workshop content.

2. Bodily-Kinesthetic Intelligence

A second intelligence gives learners the ability to solve problems or manipulate items using their own bodies or parts of the body. To tap this intelligence during learning events, use physical activity to engage brain neurons and help stimulate learning. You can do this through activities in which learners are actually creating a product, problem solving, being creative, or using learning skills like interpersonal communication and team building, or simply moving to get blood flowing to carry oxygen to energize the brain. You can accomplish the latter through Brain Gym activities that you will read about later in the book. Using such activities you can get learners up and moving in order to increase the energy levels during a program.

Additionally, you can place toys or other props on tables and allow learners to manipulate them quietly throughout the session. This can help them address their kinesthetic need. A secondary advantage of such items is that when you see multiple people manipulating their toys or props, you have a non-verbal cue that it is time for a break or change of pace.

3. Logical-Mathematical Intelligence

This intelligence involves the ability to reason, calculate, think in a logical manner, and process information.

To address the need of people with this intelligence, use problem-solving and decision-making activities to engage learners individually or in groups. This allows them to build on previous knowledge or experience and taps into the core adult learning principles that you read about earlier. Many times, learners have the answers to their own workplace and life issues. They simply need structure and the chance to focus on those solutions. Building such activities into your workshop will provide them with such opportunities.

4. Linguistic Intelligence

The fourth intelligence relates to the ability to read, write, and communicate effectively in a variety of ways.

In order to engage learners with this type of intelligence, provide occasions in which learners have to read, analyze, discuss, and present their thoughts and ideas about issues posed in the session. You can also use tools such as word games, storytelling, rap songs, or journal writing. Use these types of techniques throughout your learning event.

Such activities offer opportunities for learners to network and share ideas while practicing interpersonal communication skills like listening, speaking, and reading non-verbal cues.

5. Visual/Spatial Intelligence

The ability to think in pictures and to visualize a conclusion or result is Gardner's fifth intelligence.

There are many ways to tap into this intelligence. You can build in visualization activities in which you play soft background music while learners close their eyes and visualize situations that you describe. The mental images that you encourage should tie directly to your learning objectives and can be followed by a summation in which you ask open-ended questions, such as who, what, when, how, and why. For example, following a period in which participants visualize themselves being successful in a specific situation, you might ask something like:

- ◆ "What knowledge or skills made you successful in your vision?"
- ◆ "In what ways did performing in that manner aid your success?"
- ◆ "What additional knowledge or skills could have improved the situation you envisioned?"

Such questions help learners focus in on key knowledge and skills that they can use in the future when they face similar situations to the one described in real life.

You can also address this intelligence by using jigsaw puzzles or images related to your session topic to assist learners in recognizing and understanding key concepts.

For example, you might make a jigsaw puzzle from a photo of a piece of equipment used on the job and allow people to work together within a specified time period to assemble it, then discuss its functions. You could also create a flip-chart page with session learning objectives and cut it into jigsaw pieces that you distribute as learners enter the room. Let participants work in small teams to assemble them as a way to introduce key session elements.

6. Interpersonal Intelligence

This intelligence is crucial for understanding others, their emotions, traits, and abilities, and how best to interact with people.

Team-building activities that allow learners to share information, solve problems, and make decisions all provide opportunity for learners to work together and exchange ideas and information. Such activities strengthen potential bonds among learners, help expand their resource network, and allow them to practice their communication skills. All of these can be beneficial to aid learners in improving relationships and becoming more proficient in working with others.

You can also use friendly competition such as timed events in which learners solve puzzles, answer questions, or accomplish a task in small groups. Give small session-related prizes to volunteers and winners in such events in order to add fun and address some of the motivational needs of learners.

7. Intrapersonal Intelligence

The seventh intelligence provides learners the ability to form accurate self-perceptions and use the knowledge

to function effectively throughout life. Many people have not had the opportunity think about their own strengths and areas for improvement related to their behavior, beliefs, skills, and other personal aspects that impact the way in which others perceive them.

Build in self-assessment activities that include the use of professional behavioral style instruments such as, the Personal Profile System (PPS) or Myers-Briggs Type Indicator (MBTI). These tools help learners identify key personality or behavioral styles. Through them, you can provide a chance for participants to identify personal factors, improve self-esteem, recognize how their characteristics affect relationships and their level of success, and get to know others better. The more learners know and understand themselves, the more likely it is that they will be able to understand others.

Another strategy that can help with this intelligence is to allow learners to journal thoughts or ideas and describe how they feel about certain issues or events.

8. Naturalistic Intelligence

Gardner's last intelligence involves the ability to observe, understand, and classify patterns in nature and to become more aware of one's natural environment.

People with this intelligence interact well with nature, in environments in which they grow and nurture things and animals. They learn best through gathering and analyzing items prominent in nature. Being outside and engaging in kinesthetic activities are motivators for such learners.

You can tap this intelligence of your learners by providing opportunities in which they explore their natural

environment. For example, you might hold a scavenger hunt for clues to a session-related situation or challenge that you present. Before the workshop begins, hide the clues in different areas of the room and outside in a garden atrium or patio area. Allow a timed period in which learners search for them individually or as a team. To do this, hide strips of flip-chart paper with the session learning objectives on them and allow learners to find them. Once learners find all the paper strips, ask finders to post them on a flip chart and read them aloud to others while you explain how each objective will be addressed in the session. You can reward people who find the objectives.

Additionally, have everyone give a round of applause for the group's effort in order to reward all learners. This avoids the perception that there will be losers in the workshop.

Another way to include everyone and provide rewards to them is to have those finding the strips reward other finders, then have them give their objectives to others who did not find one. These people come to the board to post and read the objectives. You can then reward those people also. Give anyone not involved to that point small prizes so that there are not losers.

You can also address this intelligence by placing plants in the room and providing plenty of natural light for the environment. You could also allow small groups of learners to assemble outside on a nice day to brainstorm a topic or issue.

Learning Modalities

Simply stated, learning modalities (styles) are differing approaches that people use to learn. Each adult learner is

unique and has one or more preferred sensory sources through which information is accessed based on age, experience, ability, gender, and a variety of other factors. These sensory preferences are often called “learning modalities” and involve receiving information through *auditory* (hearing), *visual* (seeing, mental imagery, spatial awareness), or *kinesthetic* (physically experiencing) means.

In any given hour of consciousness, the brain collects, analyzes, and stores thousands of bits of information. As part of this data assimilation and comprehension, your learners use their preferred learning modalities (senses) to gain input. Most people have a preferred primary, as well as a secondary sensory preference that they use most often. Because of this, you should consider these three primary ways that people access information or learn when designing your workshop.

It is important for you to recognize your own preferred style as well as be able to recognize others’ styles so that you can successfully facilitate learning and share information in a manner that is most effective. The reason for this is that, if you are not aware of your own preferences, you may unconsciously design and deliver information primarily in a format with which you are most comfortable. In such instances, you might ignore the learning needs of a portion of your learners and ultimately cause a breakdown in the learning cycle.

Exhibit 1.1 is provided to help you identify your own learning preferences. You can also use it to assess the preferences of your learners when needed. Before taking the assessment yourself, make blank copies of the survey to give to your learners in future learning events. This can help ensure that you are building training workshops that are truly effective and from which learners benefit most.

EXHIBIT 1.1. Learning Modalities Self-Assessment

Take a few minutes to read each of the statements below.

In the Preferred Behavior column, place a check (✓) in the space by statements that best describe your learning preference. Once you have selected applicable statements, follow the instructions at the end of the survey in order to determine your preferred style(s).

<i>Style Category</i>	<i>Preferred Behavior</i>
_____ 1.	_____ Like to touch or handle things when looking at them
_____ 2.	_____ Spell well
_____ 3.	_____ Like to listen to books on tape
_____ 4.	_____ Enjoy reading books
_____ 5.	_____ Verbal directions alone confuse me
_____ 6.	_____ Enjoy background music while working on a project or an activity
_____ 7.	_____ Would rather spend time discussing a topic than reading about it
_____ 8.	_____ Prefer the use of colors and colored paper on handouts
_____ 9.	_____ Enjoy writing
_____ 10.	_____ Often talk to myself
_____ 11.	_____ Enjoy working with my hands
_____ 12.	_____ Am a good athlete
_____ 13.	_____ Enjoy jigsaw puzzles
_____ 14.	_____ Have a lot of nervous energy (e.g., manipulating objects or change in pockets, tapping pencils, etc.)

(continued)

EXHIBIT 1.1. (Continued)

Style Category	Preferred Behavior
_____ 15.	_____ Remember jokes, stories, and conversations
_____ 16.	_____ Collect things
_____ 17.	_____ Comprehend information better if reading aloud
_____ 18.	_____ Can read maps well
_____ 19.	_____ Doodle or draw pictures
_____ 20.	_____ Use finger as pointer when reading
_____ 21.	_____ Like games, role plays, and simulation activities
_____ 22.	_____ Use rhymes and jingles to remember things
_____ 23.	_____ Get meaning from someone's body language and facial expressions
_____ 24.	_____ Good at locating things or places
_____ 25.	_____ Take many notes during a lecture
_____ 26.	_____ Interpret and understand graphs and diagrams well
_____ 27.	_____ Follow written instructions well
_____ 28.	_____ Talk rapidly and use hands to communicate
_____ 29.	_____ Like to take things apart and put them together
_____ 30.	_____ Enjoy talking to others on the telephone

TOTAL A _____ V _____ K _____

After rating all statements, go back and place an A (Auditory), V (Visual), or K (Kinesthetic) in the Style Category column before the appropriate statements, based on the following:

A = Numbers 3, 7, 9, 10, 15, 17, 20, 22, 26, and 30

V = Numbers 2, 4, 5, 8, 13, 18, 19, 23, 25, and 27

K = Numbers 1, 6, 11, 12, 14, 16, 21, 24, 28, and 29

Finally, count the number of check marks next to statements, by Style Categories, and put those totals by the appropriate letter on the **Total** line. For example, if the total number of checks next to statements labeled "A" was 5, you'd put a 5 next to the "A" on the **Total** line. Do likewise for totals next to "V" and "K."

The letter with the highest Total next to it is likely your primary learning modality or style, while the second-highest score indicates your backup or secondary preference. If you have equally rated styles, you likely shift between them, depending on the situation and learning function in which you are involved.

Source: R.W. Lucas, *The Creative Training Idea Book: Inspired Tips and Techniques for Engaging and Effective Learning*. New York: AMACOM, 2003. p. 17.



Strategy for Success

To demonstrate how you might address each learning modality in a workshop if you were conducting a workshop on that topic, here are some strategies that you could incorporate to address each preferred style:

Auditory—Have learners participate in a group activity in which they create and sing a rap song about the three different modalities.

Visual—Show a flip chart or PowerPoint slides of the three modalities listed, along with graphic images illustrating all three. For example, use an image of an ear for the auditory, an eye for the visual, and a hand touching something for the kinesthetic.

Kinesthetic—Have your learners form teams and demonstrate each type of intelligence in a small group activity. For example, the team assigned the auditory modality might act out a skit in which one learner is coaching another.

Identifying Auditory Learners

Using your voice, small group activities, sounds, and various audible mechanisms can enrich the learning environment for your auditory learners.

Learners who have a preference to the auditory modality typically:

- ◆ Enjoy participating in listening-based activities (e.g., discussions or lectures)
- ◆ Can often be easily distracted by other people and sounds around them
- ◆ Lose interest during visual demonstrations, especially ones that are detailed
- ◆ Uses self-talk when reviewing information, problem solving, or making decisions
- ◆ Read aloud (their lips move)
- ◆ Gain the most value from information gathered in verbal lectures or presentations, small group discussions, and in listening to audiotapes or other people
- ◆ Like listening to music while studying or working on a project
- ◆ Participate readily in small group discussions and activities
- ◆ Extract emotional meaning and intent from vocal nuances, such as rate of speech (words spoken per minute), inflection or pitch (high/low), voice tone, volume (loudness/softness), voice quality (pleasant/unpleasant), and articulation or enunciation of words

(clearly pronouncing words without cutting off endings or slurring)

- ◆ Tend to be more extroverted
- ◆ Are often able to recall conversations, jokes, and stories and to attribute them accurately to the person from whom they heard the information
- ◆ Benefit from learning activities involving verbal interaction. Math, spelling, writing, or complicated written tasks may be difficult.

In some instances, the language used by learners can help in identifying their preferred learning modality. Auditory learners might use statements such as:

- ◆ It's clear as a bell.
- ◆ I hear what you are saying.
- ◆ It sounds to me as if. . . .
- ◆ That sounds good to me.
- ◆ What you are saying is music to my ears.
- ◆ If I am hearing you correctly. . . .
- ◆ Sounds like a good idea. . . .
- ◆ That has a familiar ring to it.
- ◆ It sounds like you are saying. . . .

In order to enhance learning opportunities for your auditory learners, make sure to build in a number of activities in which there is verbal exchange in small and large groups. You can also incorporate a variety of aural stimulation, such as, instructor-led discussion, music, debates, panel discussions, role plays, interactive

CD-ROM, reading text aloud, use of tape recorders, or demonstrations involving verbal explanations.

Identifying Visual Learners

By providing a variety of visual stimulus in your workshop environment, you will better engage learners who use their eyes to gather data and information.

Learners who have a preference to the visual modality typically:

- ◆ Gain understanding from stimuli received through their eyes and envisioned in their minds
- ◆ Memorize by seeing pictures, diagrams, or lists
- ◆ Sit in a location where their view is unobstructed, for example, in the front of the room, on an aisle, or at the end of a table
- ◆ Extract interpersonal message meaning by observing a person's body language, facial expressions, gestures, and dress
- ◆ Read directions thoroughly (often multiple times) and then match them to pictures or drawings before they begin working on projects
- ◆ Are prone to daydreaming or imagining during verbal activities or lectures
- ◆ Are often introspective, shy, quiet, or reserved
- ◆ Comprehend more by reading something rather than having someone else read to them or verbally communicate information
- ◆ Visualize concepts of theory and content received through patterns or pictures in their mind

- ◆ Doodle or draw images during lectures or when listening for extended periods
- ◆ Are often good spellers
- ◆ Learn best from visual stimulus (e.g., slides, transparencies, handouts, flip charts, posters, or videos)
- ◆ Take numerous notes to reinforce what they experience and for reference later
- ◆ Have a subconscious, emotional reaction to color and light
- ◆ Often have trouble following verbal instructions or directions

In some instances, the language used by learners can help in identifying their preferred learning modality. Visual learners might use statements such as:

- ◆ I see what you are saying.
- ◆ I get the picture.
- ◆ I believe I see what you mean.
- ◆ The picture is clear to me.
- ◆ I see your point.
- ◆ I have a good picture of the situation now.
- ◆ As I see it. . . .
- ◆ That conjures up images for me.
- ◆ I can see light at the end of the tunnel.

In order to enhance learning opportunities for your visual learners, make sure to build in a number of activities and materials that are rich in color and images and that

appeal to the visual sense. You can also incorporate a variety of visually stimuli through learning aids, for example, flip charts, posters, video, handouts, and slides.

Identifying Kinesthetic Learners

To help ensure that you have addressed the needs of your kinesthetic participants, design programs and activities in which movement is a regular part of the learning. Have people move to other locations in order to participate in activities at various points during your workshop.

Encourage activities in which learners have to handle things, interact, or physically move. For example, use stretching or cross-lateral activities to stimulate the brain. Additionally, have actual items available for touching or exploration when possible. When this is not possible, use mockups or models that look like the real object, simulators, or other substitutes for reality.

Using activity, you can engage learners who have a preference for more active learning and who grasp concepts best when they are part of the learning experience.

Learners who have a preference to the kinesthetic modality typically:

- ◆ Gather information and gain maximum understanding by being involved in an activity or by performing a task
- ◆ Gesture and make physical contact with others while talking
- ◆ Learn best through explaining, exploring, manipulating, and assembling or disassembling ideas or objects
- ◆ Ignore directions and simply jump right in to an assignment or project in order to try to gain understanding

- ◆ Have body parts in motion while listening, studying, or taking a test, for example, tapping a pencil or their feet
- ◆ Do not like to read or work on research-based assignments
- ◆ Become bored of fidgety during lectures or periods of inactivity
- ◆ Appear disorganized
- ◆ Have trouble memorizing lists or details
- ◆ Extract meaning and comprehension through touching, doing, and interacting with others or items
- ◆ Prefer physical face-to-face input
- ◆ Exhibit extroverted and outgoing behavior
- ◆ Enjoy activity but often leave a mess when working on projects
- ◆ Are mentally stimulated by movement (their own and others')
- ◆ Enjoy hands-on problem-solving activities
- ◆ Use strong gesturing and enthusiastic vocal quality in conjunction with interpersonal communication

In some instances, the language used by learners can help in identifying their preferred learning modality.

Kinesthetic learners might use statements such as:

- ◆ I'm moved by what you said.
- ◆ Let's roll our sleeves up and get started.
- ◆ I think I have a handle on what you mean.

- ◆ I can't quite grasp your point.
- ◆ It feels right to me.
- ◆ Let's pick the problem apart and see what we are dealing with.
- ◆ Let's jump in and get started.
- ◆ It feels to me as if. . . .
- ◆ Actions speak louder than words.
- ◆ Let me handle this.
- ◆ I've got a grip on what you are saying.
- ◆ Let's do it!

Addressing Learning Modalities

Once you have identified the learning modalities of your participants, there are many strategies available to address them. For the best possible outcome, plan a variety of approaches to learning. Build in segments in which all participants are involved, then break out and conduct small group discussions, partnering activities, and opportunities for individuals to work alone periodically.

Use the indicators that you read about above to help identify the learning modalities of your participants in order to help decide what approaches to take in delivering information. Once you have done so, think of ways to address the needs of all learners. When trying to decide modalities based on some of the elements indicated, look for several combined signals (clusters), rather than just taking one indicator as being definitive of modality preference. Also keep in mind that each learner

is a unique combination of experiences, needs, and learning modality preferences. For that reason, the behaviors you read about are simply common indicators of preference. You should not view them as absolutes. Always ask participants for their input or needs, rather than assume.

The following are some tools for effectively addressing the different learning modalities that you will encounter in your workshops.

Strategies for Engaging Visual Learners

Animation. If you use multimedia presentations, include animation. For example, you can download animated clip art at www.microsoft.com to enhance your written messages on your PowerPoint slides. Just make sure that the graphics tie to the concepts in your text so that they reinforce rather than detract from your meaning.

Color Code Key Concepts. This idea ties into the concept of using color to stimulate the brain, as you will read later. Include brightly colored papers (for handouts), assorted colored markers, and posters with content that ties to the session topic and previous concepts that learners have experienced. When selecting colors to use on flip charts and slides, it is best to limit the number of colors to one for the title line and no more than two alternating colors for lines of text. Follow the same color scheme on all similar visuals. This allows learners to anticipate upcoming colors mentally and limits possible “surprises” or distractions that might take their focus from what you are saying. It also allows them to form mental images to connect content while providing reinforcement of key program elements.

Demonstrations. To illustrate a process or concept before learners attempt to replicate it, give a demonstration with an actual item or a model of the item to the group. This allows them to see operational functions and potential applications, and encourages them to ask questions.

Flash Cards. Have learners create flash cards (small strips of cardboard or poster board) with images or key concepts written on them. You can use these in a small group activity, as a review of material, or in a presentation that groups give to others to reinforce verbal messages while adding visual stimulus. Use various colors of poster board to add additional visual enhancement. You can put masking tape on the back to post them to a wall or flip chart or small magnetic strips to attach them to a metal writing surface.

Graphics. You can also add simple, colorful cartoon characters, graphics, and caricatures to handouts, flip charts, and other visual aids to add a splash of color. When using these items, be conservative rather than adding too many images. You should not cause visual distractions or draw attention from your written message.

Mind Maps. Use mind maps (graphic displays of key concepts that branch out from a central idea) to visually indicate the flow and connection of key session components. You can draw these on a handout or writing surface, project them on a slide or on a transparency. Have learners create their own mind maps as they take notes from a lecture or discussion in order to help cement the concepts in their minds.

Note-Taking. Have learners fill in the blank spaces in workbooks with key concepts that you cover or take notes on handouts provided to them at the beginning of the session.

Paint Mental Pictures. Offer quotes, stories, analogies, and examples that are relative to points made in the session in order to help generate mental images of a key concept or theme. This allows learners to relate to previous experiences and thereby better grasp and retain what was said.

Photographs. Use photos of actual items or that illustrate a concept that you are trying to convey. For example, a picture can help a viewer extract emotional messages from the photo subject's facial cues.

Tables/Charts. Organize lists, key concepts, models, or other information into a table or chart format and either display it on a slide or flip-chart page or give handouts of it to learners.

Video Clips. Show a brief portion of a popular movie in which concepts related to the workshop topic are illustrated; then follow that with an activity in which learners discuss what they saw.

Visualization Activities. Include activities in which you ask participants to close their eyes and envision how certain situations might appear if they applied content discussed in the session. You can also play classical, new age, or other slow tempo music to help the auditory learners. For example, in a workshop on interpersonal communication, have learners imagine how customer service would improve if they applied effective listening skills learned during the program. Ask a series of questions to stimulate their thinking while they have their eyes closed. After a designated period, stop the music, and have them open their eyes and discuss their ideas in small groups to exchange thoughts. Ask learners to capture their thoughts on flip charts for large group discussion and action.



Strategy for Success

To appeal to your visual learners, prepare a series of flip-chart pages with quotes (similar to the ones at the beginning of each chapter of this book) by famous people. Include cartoons or other graphic images and use an assortment of marker colors. Make sure that the quotes tie to your workshop content.

Strategies for Engaging Auditory Learners

Audiotapes or CDs. Use recorded music and recorded information segments from authorities on your topic to reinforce what you have shared or to make a key point and add more depth.

Guest Speakers. Bring in an outside “expert” to share views, ideas, and information that can support and supplement what you have offered while adding additional content to the workshop. This is especially helpful if the person is well-known.

Lecture. Lectures are relatively easy to prepare and deliver and can be used to provide large amounts of information in a short period. They can be effective for providing policy and procedure or regulatory information, for example, if you are covering policies, laws, or safety standards. Even in those cases, try to build in short, interactive questioning and small group discussion to help learners better internalize the information that you give them.

Lectures are often referred to as “information dumps.” While they are one of the oldest means of relaying information to learners, they are also probably one of the least effective when used exclusively. This is because researchers have found that the brain processes

information best through multiple senses and in a variety of ways. To capitalize on this research, use lectures sparingly and supplement them with interactive strategies that engage your learners.

Mnemonic Devices. Use memory aids called mnemonics to help people gain, retain, and recall information later. Either you can provide these aids or have learners create their own. Examples of mnemonic devices include:

- ◆ *Acronyms*, which are words formed from the first letters of words. For example, many students in the United States memorize and recall the names of the U.S. Great Lakes with the acronym HOMES (Huron, Ontario, Michigan, Erie, and Superior).
- ◆ *Rhymes*. Rhymes are familiar to most learners and tap into a person's musical intelligence area. For example, A traditional mariner's rhyme for weather forecasting reminds sailors that "Red sky in the morning, sailor take warning; red sky at night, sailor's delight."
- ◆ *Acrostics*. By stringing together a series of names, items, or terms, you form an acrostic. The first or last letter of these words together makes a sentence or represents a group of well-known items or names. For example, the following acrostic was used to teach children the nine planets (before recent discoveries that brought Pluto into contention): My (Mercury) Very (Venus) Educated (Earth) Mother (Mars) Just (Jupiter) Sent (Saturn) Us (Uranus) Nine (Neptune) Pizzas (Pluto).

Oral Instructions. Give instructions orally, but also provide a visual copy (e.g., slide, transparency, writing surface, or handout) so that learners can refer back to them if needed. This aids your visual learners and ties into the

brain-based learning concept of repetition that you will read about later.

Storytelling. This is an ancient technique for sharing information. It is still effective today for engaging listeners and changing the pace of the workshop. You can tell your own stories and share real-world examples related to the session topic, or you can elicit stories from your learners.

Rhythmic Sounds. Build group activities which rhythmic sounds and instruments (e.g. drums, cymbals, sound sticks, and others) into your learning events. These exercises can act as an energizer in which learners create a song around key session topics. This taps into Musical Intelligence identified by Howard Gardner and into brain-based learning research that suggests that sound and music helps stimulate the brain.

Small Group Discussions. Have learners periodically form random small groups to discuss key session concepts, problem solve, make decisions, and practice skills learned.

Word Association. Use activities in which learners use word association to review key session concepts. These might be in the form of an opening icebreaker or an interim review activity.



Strategy for Success

To appeal to your auditory learners, incorporate a variety of noisemakers and sounds, (whistles, gongs, bells, and music) into your workshop design. For example, you can integrate sounds that are heard each time you transition from one slide to the next in PowerPoint.

Strategies for Engaging Kinesthetic Learners

Discussions. Get kinesthetic learners more involved in the learning process by forming small groups and having everyone participate in discussions throughout your workshop. You can have people physically relocate to other areas of the room in order to incorporate physical movement.

Energizer Activities. There are hundreds of books and articles available that provide games and other activities that can be used to gain and hold learner attention and to re-energize them when they have been in a workshop for a while and need a quick mental break. Use such activities periodically, but make sure that you select ones that tie to your session content and teach or reinforce key concepts. Doing that potentially prevents learners from viewing the activities as a frivolous waste of time.

Games. Fun and novelty are two elements of brain-based learning. Build in opportunities for learners to play. After all, adults are just kids with big bodies. They learn behaviors as children and repeat them as adults. Since many of their early learning experiences involved playing games, allow them to revisit those fun times and gain new knowledge or reinforce what they know. You can modify popular board and dice games or create your own to share key concepts or to allow learners to practice knowledge and skills learned.

In-Basket Activities. Develop activities in which you give a stack of items (e.g., memos, forms, letters, and other materials) that would often show up in a workplace in-box to learners. Give a specified period for them to sort through materials and make decisions on any action they need to take on each item. This is a great activity for

teaching and reinforcing workplace skills like time management, problem solving, decision making, delegation, and resource management. You can use them in sessions for supervisors and managers or other decision-makers.

Note-Taking. The simple act of note-taking requires focus and mental and physical exertion on the part of learners. Encourage everyone to take notes so that they customize handout materials to their needs and that they capture key ideas that they can refer to later.

Plays or Acting Out Skits. Include interactive strategies such as these to actively engage learners, to allow them to practice skills, and to help them teach others in the group. Such events can often be memorable and help reinforce learning while introducing a bit of fun into your workshop.

Problem Solving. Form small groups and allow learners to work collectively toward solving real-world issues that they can associate with their own workplace and lives. They can then transfer their solutions to their own situations.

Props. Use a variety of props that tie to your theme or that you can use to grab and hold attention during various portions of your program. For example, you might use masks, Groucho Marx glasses/nose, hats, wands or other magic items, movie clapboards, or jumbo playing cards (see Creative Presentation Resources in the Resources section at the end of this book). These types of items tie to concepts of brain-based learning related to adding novelty and fun to aid processing of information by the brain.

Role Play. Have learners assume various roles in hypothetical situations in order to practice skills and use knowledge gained in the workshop. This can be a sound learning strategy if you appropriately explain expectations, objectives, and roles up-front, monitor the interaction, and effectively debrief at the end to allow learners to explain their perceptions of what occurred and what they learned from the activity. An important element is to make the scenarios as realistic as possible without drawing attention to a specific workplace issue or person whom people in the room would recognize.

Simulations. Use activities that you design around real-world situations. These can teach important moral and value lessons as well as help people gain knowledge and skills that they can transfer to their own environments. One such simulation, created in the mid-1960s, is known as SimSoc (Simulated Society). Participants in leadership and other programs form groups, but are not told which sector of society they represent. Throughout an all-day event, they must accomplish tasks that result in rewards and penalties while the rules keep changing or are adapted (to simulate real-life occurrences). At the end-of-day debriefing, the facilitator asks participants to share their experiences and their emotions. The latter can be quite dramatic based on whether people found themselves in the upper class, middle class, or lower class of society during the day.

Stretching. You can use simple stretching exercises during periods in which learner energy level seems to be dropping to re-engage and stimulate them. These can be as simple as having everyone stand behind chairs for support while you walk learners through some low-stress

movements. For example, have learners touch their left index fingers to their noses, then have them touch their right index fingers to their noses. Have them raise their left feet and pat their heels with their right hands five times. Have them continue doing similar tasks using different body parts for a minute or so. Such activities can cause learners to think about the instructions and become more physically involved. In doing so, they increase the blood flow that carries oxygen to the brain and refreshes it, making them more alert. When doing such activities, always tell learners to participate to their level of comfort. Give the group to permission modify any exercise or movement so that you do not embarrass someone who might have a disability, injury, or limited mobility.



Strategy for Success

To appeal to your kinesthetic learners, place colorful, soft, manipulative toys on learner tables for them to play quietly with as they listen. Examples of manipulatives include foam squeeze toys in various shapes, stress balls (latex filled with sand or powder), Puffer balls (aid filled latex balls), Koosh[®] balls, mini Hobeman Spheres[®], Silly Putty[®], or PlayFoam[®] (see Creative Presentation Resources in the Resources section).

Accelerated Learning

Accelerated learning was developed in the 1970s and is based on research by a professor of psychiatry and psychotherapy from Bulgaria, Dr. Georgi Lozanov. In his early programs, Lozanov taught a foreign language though the use of visual arts, classical music, and

activities. He called his methodology “Suggestology” (based on the theory that suggestions affect learning outcomes). Through his strategies, students were able to retain from 100 to 1,000 vocabulary words a day with a 98 percent or better retention rate.

According to Lozanov, his approach to learning simply supplements the way that the brain naturally learns and retains information and allows people to learn more efficiently and effectively. He believed that, by emulating a more natural learning process, the learning of his students was accelerated, thus allowing better comprehension and retention of information and skills learned. It is this basis that lead to the evolution of accelerated learning, as many trainers and educators know it. (See International Alliance for Learning [IAL] in the Resources section.)

In an accelerated learning environment, the facilitator helps create a positive environment for learning by focusing on positive feedback and avoiding negative reinforcement. There are multiple opportunities provided for learners to grasp information individually and in groups in order for them to capitalize on their full learning potential and minimize and limit beliefs that they may have related to their ability to learn or master knowledge or skills. The three elements that will determine success are the facilitator, the environment, and the learning process design.

Typically, an accelerated learning environment includes such things as:

- ◆ A facilitator who addresses the individual needs of learners

- ◆ An environment that is aesthetically pleasing, interaction-rich, and appealing to all learners
- ◆ An atmosphere in which learners are physically and emotionally safe and can experiment and grow
- ◆ Colorful peripherals on the walls
- ◆ Classical (baroque) or upbeat music tied to the session theme or activities
- ◆ Learners working collaboratively in groups while playing board, memory, or other games
- ◆ Individuals and groups using their creativity to put together collages, skits, and musical songs tied to the session topic
- ◆ Opportunities for learners to integrate the learning into their real world, to reflect on the learning and its relevance to them, and to celebrate success
- ◆ Techniques and activities that involve different learning styles
- ◆ A multitude of other whole-brain strategies that engage learners throughout the event

Brain-Based Learning

Brain-based or brain-compatible (active) learning theory focuses on creating an opportunity in which attainment and retention of information are maximized. This concept incorporates the latest research on how the brain learns best and encourages application of findings to training and educational learning environments.

A key to the successful application of brain-based learning theory precepts is for everyone involved in the learning process (program designers, managers, trainers/educators, and learners) to first understand how the brain functions. They must then identify personal strengths and areas for improvement related to the theory concepts and modify their approach to learning accordingly. They must also consciously focus on learner needs and learning modalities to ensure that format and program delivery are effective.

According to the brain-based theory, learning is an active process. Challenges, ambiguity, and creativity are incorporated and encouraged by using accelerated learning strategies. Facilitators actively engage participants in their own learning. Participants are prompted to think outside the box related to examining information and issues. Problem solving, questioning, ongoing interaction, and feedback are important elements in the absorption process, and they are used freely. Learners are also provided with many opportunities to make associations with knowledge and skills that they already possess while forming new patterns and making additional connections. The use of analogies, simulations, metaphors, jokes, stories, examples, and various interactive techniques strengthen connections to workshop content.

In brain-based learning environments, materials and instruction must be learner-centered and delivered in a manner that is fun, meaningful, and personally enriching. There must also be opportunities for participants to have time to process what they experience in order for them to make mental connections and master content. In doing so, learners can increase personal comprehension and better grasp meaning and potential opportunities for application.



Strategy for Success

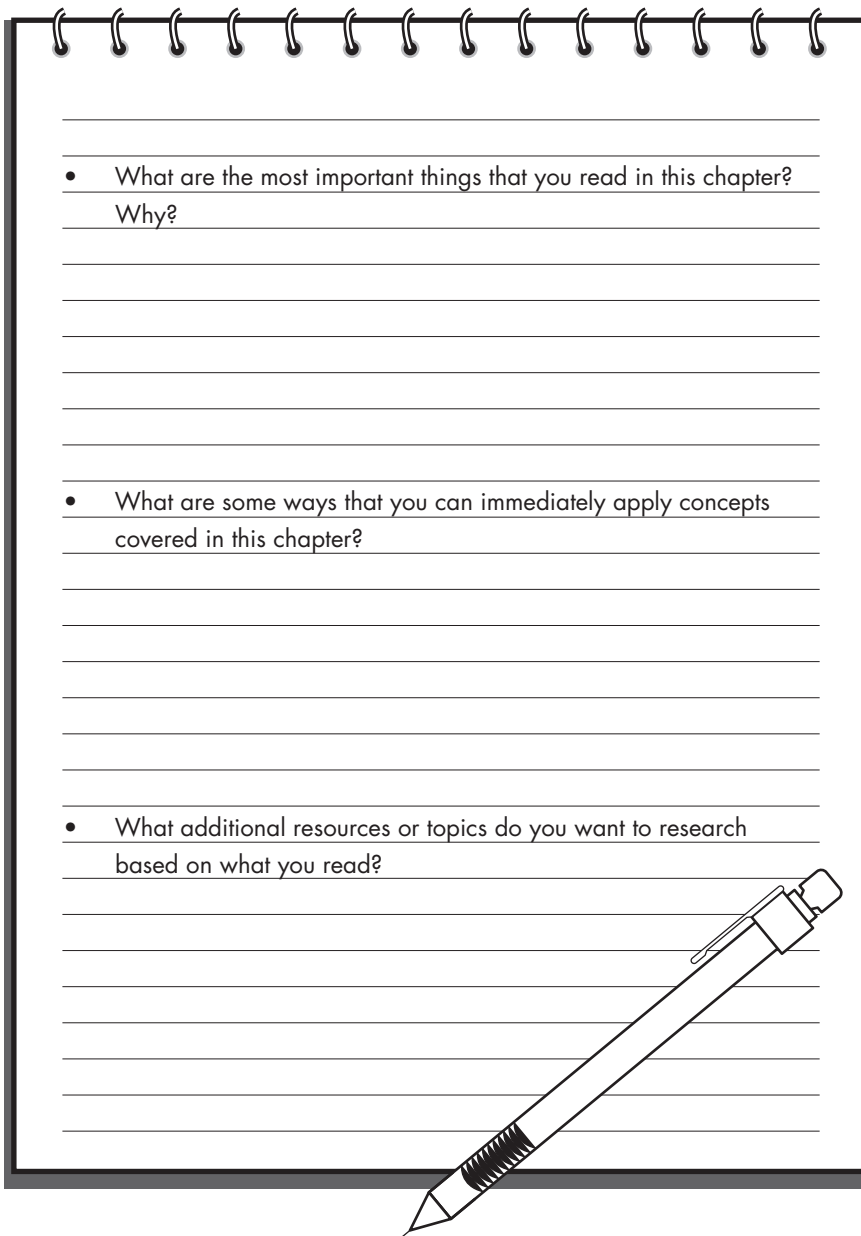
One way to ensure that you are adequately addressing true learner needs when creating program content is to take the time to do an advance analysis of what participants already know related to your intended session topic(s). You can accomplish this by mailing a questionnaire to participants and their supervisors a couple of weeks before scheduled training.

If you are an internal trainer or consultant, you can also conduct face-to-face or telephone interviews, hold focus groups involving those who will be attending and/or their supervisors, or make visits to work sites to observe on-the-job behavior of participants related to the program topic. Take the information gained into account as you design your workshop content.

If advance analysis is not possible, post closed-ended questions written on flip-chart paper and related to program content on the training room wall. Examples of such questions include, "How much experience do you have in ____?" or "How many times have you ____?" Have participants respond to the questions as they enter the room. Then tabulate and incorporate their responses into your session content, if possible. You can also hand out 3-by-5 cards or blank paper. Have learners either respond to questions and collect answers or discuss them in small groups. Following collection of responses, you can share them with the entire class.

Brain-based learning offers many opportunities for enhanced learning and retention of information and skills if used properly. There are many books and articles on the market that address brain-based learning concepts (see Resources section). You will learn more about brain-based learning throughout this book. You can also get started on learning more about the topic by searching the Internet. That will result in a wealth of valuable resources that can lead to the creation of more effective learning experiences for your learners. A number of additional resources and references can be found at the end of this book and by visiting the author's website (www.robertwlucas.com).

Personalizing What You Have Learned



A spiral-bound notebook with three writing prompts and a pencil. The notebook is open to a page with horizontal lines. The prompts are:

- What are the most important things that you read in this chapter?
Why?
- What are some ways that you can immediately apply concepts covered in this chapter?
- What additional resources or topics do you want to research based on what you read?

A pencil is drawn at the bottom right of the page, pointing towards the bottom left.

