What is Brain-Based Learning?
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Brain-based or brain-compatible (active) learning theory focuses on creating an opportunity in which attainment and retention of information is maximized. This concept incorporates the latest research on the brain 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 styles to ensure that format and program delivery are effective.

According to the brain-based theory, learning is an active process in which challenges, ambiguity and creativity are used and encouraged through use of accelerated learning strategies (Actively engaging 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 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. These connections are strengthened by the use of analogies, simulations, metaphors, jokes, stories, examples and various interactive techniques.

In brain-based learning environments, material and instruction must be learner-centered and delivered in a manner that is fun, meaningful and personally enriching. It must also provide 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.

One way to ensure you are adequately addressing true learner needs when creating program content it to take the time to do an advance assessment 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 weeks before scheduled training. You can also conduct face-to-face or telephone interviews, hold focus groups involving those who will be attending and/or their supervisors, or by 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 program content.

If advance assessment is not possible, post closed-ended questions (e.g. "How much experience do you have in _____" or "How many times have you ____") written on flip chart paper and related to program content on the training room wall. 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 pass out 3X5 cards or blank paper and have them respond to questions that are either collected or discussed in small groups and then offered to 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 the concepts discussed in this article. To get started on learning more about brain-based learning, type in the term on the Internet and do a search. It will result in a wealth of valuable resources that can lead to more effective learning experiences.

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