

## The RAVE! Seminars Teaching Methodology: Experience the “Joy of Learning” by Design

If you’ve ever participated in a RAVE! Seminars event, you know they are like no other. Along with quality programming and dynamic staff, the experience includes music, dancing, games, and a high level of energy from start to end—at times, it feels like a party. You might be inclined to think that this party-like atmosphere is only fun and games. But make no mistake . . . there is serious learning going on! In fact, the RAVE! experience is intentionally and thoughtfully designed based not only on the “art” of learning, but its science as well. This design results in maximum impact on participants’ learning, retention, and behavior.

RAVE! ascribes to the philosophy of Accelerated Learning, which, at its heart, “seeks to demechanize and rehumanize the learning process and make it a whole-body, whole-mind, whole-person experience.” [1] Dave Meier, professional trainer and founder of the Center for Accelerated Learning, succinctly captures the essence of Accelerated Learning in his seven guiding principles:

1. **Learning involves the whole mind and body.** The brain and body are inseparably connected; therefore, thinking, learning, and memory are distributed throughout both.
2. **Learning is creation, not consumption.** Learning happens when a learner integrates new knowledge and skill into his or her existing structure of self.
3. **Collaboration aids learning.** All good learning has a social base. We often learn more by interacting with peers than by any other means.
4. **Learning takes place on many levels simultaneously.** The brain is a parallel processor (not sequential) and thrives when it is challenged to do many things at once. Good learning uses all the receptors, senses and paths it can into a person’s total brain/body system.
5. **Learning comes from doing the work itself (with feedback).** The real and the concrete are far better teachers than the hypothetical and the abstract—provided there is time for total immersion, feedback, reflection, and reimmersion.
6. **Positive emotions greatly improve learning.** Feelings determine both the quality and quantity of one’s learning. Negative feelings inhibit learning; positive feelings accelerate it.
7. **The image brain absorbs information instantly and automatically.** The human nervous system is more of an image processor than a word processor. Translating verbal abstractions into concrete images makes the verbal abstractions faster to learn and easier to remember.

So what sets RAVE! apart from other companies and trainers that ascribe to the philosophy and principles of Accelerated Learning? It’s all in our approach which has four components:

- a. Learning Design Process
- b. Interactive Environment
- c. Dialogue vs. Monologue
- d. Staff Selection

### Learning Design Process

Every RAVE! session is designed with the same learning process in mind: Presentation, Example, Application, and Feedback (PEAF).

- **Presentation** – This is what is typically known as the lecture or presentation of new information. Except in our style of learning, the presentation of information is usually presented as the

*discovery* of information where the learner is immediately engaged. In a RAVE! seminar, presentation is an active rather than passive activity.

- **Example** – To demonstrate how the material of the presentation comes alive, the next step is to share real-life examples and anecdotes where the knowledge/skill has been applied.
- **Application** – In our world, this is the most important part. Learners practice applying the knowledge or skill just learned.
- **Feedback** – Learners have a chance to reflect and share about their experiences applying the knowledge/skill. They use others' feedback to more effectively apply the newfound knowledge/skill.

### Interactive Environment

All RAVE! events are conducted in environments that are optimal for learning. Before the first step of PEAFF takes place, we create an environment that increases the “stick” factor by tapping into learners’ positive emotions. Priscilla Vail, an expert on learning, describes *emotion* as the “on-off switch to learning.” According to Vail,

...when the switch is off, the system is dormant and only the potential for learning is available. When the switch is on, the pathway to learning is open. When the limbic system [middle structure of the brain] interprets sensory information and dispatches it to the cortex [higher center part of the brain] for processing, it sets the emotional tone of the information before it reaches the cortex. If the limbic system interprets the information as positive, it dispatches a message of purpose and excitement and directs our behavior toward a goal. When this happens, we become motivated to act; thinking and learning are enhanced. When the interpretation is negative, the switch is turned off and thinking and learning are stifled. [2]

Further, RAVE! incorporates a variety of delivery methods in our workshops and seminars 1) to appeal to different learning styles (auditory, visual, kinesthetic, and tactile) and 2) because empirical data show that multisensory training is most effective.

One study comparing auditory-visual and visual training for perceptual learning revealed a substantial advantage of audio-visual training [3]. Based on their findings, the researchers proposed that multisensory training enhances “learning both within a session and across days,” meaning that multisensory training can accomplish the same objectives as unisensory training more effectively and in less time. Complementary results were found in a study of auditory recognition: Voice recognition improved when paired with a sensory redundant visual stimulus [4].

Shams and Seitz (2008) note that

...the human brain has evolved to learn and operate in natural environments in which behavior is often guided by information integrated across multiple sensory modalities. Multisensory interactions are ubiquitous in the nervous system and occur at early stages of perceptual processing. Therefore, unisensory-training protocols used for skill acquisition in adults can provide unnatural settings and do not tap into multisensory learning mechanisms that

have evolved to produce optimal behavior in the naturally multisensory environment. [5] In short, when it comes to learning, the brain more effectively processes information from multiple sensory modalities compared to a single sensory stimulus. This phenomenon is supported by dual coding theory (DCT), which posits that human cognition consists of two subsystems (verbal and non-verbal/imagery) that process information simultaneously [6]. Studies have shown practices based on DCT to be beneficial to memory, which is the basis of knowledge and thought [7].

RAVE! not only incorporates multisensory stimuli in training sessions; we also use music and movement throughout our events. During breaks or transition times, it's not unusual to see a RAVE! team member leading a group of participants in a line dance. During social and networking activities, it's commonplace to hear music in the background or strategically timed as part of an activity (e.g., played at pre-specified times during an ice breaker). And RAVE! strongly encourages game play as often as possible and when appropriate. As with multisensory training, this is all by design.

Hetland and Winner (2004) conducted a meta-analysis of 36 experiments relevant to the famous study by Rauscher *et al.* (1993) that examined the effect of listening to Mozart on spatial reasoning [8]. The analysis did not reveal causation, but the researchers determined that there is a relationship between musical and spatial reasoning. The relationship between musical and spatial-temporal reasoning (moving, flipping, and turning objects mentally in sequential order) is particularly significant. Beyond this relationship, listening to music generally has a positive effect on a person's mental and emotional state.

A study by Blood and Zatorre (2001) showed that the brain structures that respond to euphoria-inducing stimuli, such as food, sex, and drugs of choice, also respond to music of choice [9]. They concluded that "although music may not be imperative for survival of the human species, it may indeed be of significant benefit to our mental and physical well-being." Findings by Stratton and Zalanowski (2003) support this conclusion. They found that students felt more positive emotions after listening to music, and if they already had positive emotions, those feelings were intensified [10]. As neuroscientist Daniel Levitin noted, "music activates the same parts of the brain and causes the same neurochemical cocktail as a lot of other pleasurable activities . . . Serotonin and dopamine are both involved" [11].

Regarding the bouts of dancing that occur at RAVE! events, in the simplest terms, dancing increases breathing and heart rate so that more blood flows to the brain, thereby, oxygenating the brain, which helps us to "clear our heads" [12]. Because the dancing is non-strenuous, muscles don't take up extra oxygen and glucose as they do with vigorous exercise. So after putting the brain to work processing all of the information provided in RAVE!'s multisensory workshops, what better way to reward it than to give it a fresh burst of oxygen?

### Dialogue vs. Monologue

Along with involvement at a multisensory level, RAVE! sets the expectation that learners will actively engage in critical analysis, problem-solving, collaboration, discovery, and dialogue. We are not concerned with how much a participant retains from rote memorization in a non-contextual fashion. We are concerned with further developing learners' practical knowledge and skills that can be applied in the real world. We are also invested in empowering learners to learn from and teach one another and to create their own learning experiences. These objectives cannot be accomplished if learners are passive

consumers. This is precisely why at a RAVE! seminar or workshop you will be just as likely to see participants leading discussions and activities as the facilitator.

#### Staff Selection

RAVE! realizes that the art of learning has just as much to do with the instructor as the learner. Our team is comprised of professionals from varied career backgrounds including, among others, the corporate world, the nonprofit sector, academia, the television and film industry, and government. Each individual brings a unique set of talents and knowledge to the RAVE! team, which enhances all members' training repertoire and knowledge base. However, what every RAVE! member owns, individually and collectively, is excellent facilitation skills, and equally important, the finesse and intuition to successfully manage the learning experience. While the former quality can be learned with the appropriate aptitude, the latter two are more nuanced and not so easily attained.

The hallmark of a RAVE! Seminars event is our experiential approach, grounded in the philosophy and principles of Accelerated Learning. We take learning very seriously, but believe that the old adage, "No pain, no gain," has no place in the learning environment. RAVE! strives to make learning a joyful experience that keeps learners coming back for more.

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## References

1. Meier, D. (2000) *The Accelerated Learning Handbook: A Creative Guide to Designing and Delivering Faster, More Effective Training Programs*. McGraw-Hill.
2. Vail, P.L., referenced by Lawson, C. (2002) The Connections Between Emotions and Learning. *Center for Development and Learning*.  
([http://www.cdl.org/resource-library/articles/connect\\_emotions.php?type=author&id=17](http://www.cdl.org/resource-library/articles/connect_emotions.php?type=author&id=17))
3. Seitz, A.R. *et al.* (2006) Sound facilitates visual learning. *Current Biology*. 16, 1422-1427
4. von Kriegstein, K. and Giraud, A.L. (2006) Implicit multisensory associations influence voice recognition. *PLoS Biology*. 4, e326
5. Shams, L. and Seitz, A.R. (2008) Benefits of multisensory learning. *Trends in Cognitive Sciences*. 11, 411-417
6. Paivio, A. (2006) Dual coding theory and education. Draft chapter for the conference on Pathways to Literacy Achievement for High Poverty Children. University of Michigan School of Education.
7. Paivio, A. (2006) *Mind and its evolution: A dual coding theoretical interpretation*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
8. Hetland, L. and Winner, E. (2004) *Handbook on Research and Policy in Art Education*. National Art Education Association.
9. Blood, A.J. and Zatorre, R.J. (2001) Intensely pleasurable responses to music correlate with activity in brain regions implicated in reward and emotion. *Proceedings of the National Academy of Sciences*. 20, 11818-11823
10. Stratton, V.N. and Zalanowski, A.H. (2003) Daily music listening habits in college students: Related moods and activities. *Psychology and Education*. 1, 1-8
11. Dottinga, R. (2006) Music makes your brain happy. *Wired*.  
(<http://www.wired.com/medtech/health/news/2006/08/71631>)
12. The Franklin Institute Online. (2004) The Human Brain: Improve Your Brain. *Resources for Science Learning*. (<http://www.fi.edu/learn/brain/exercise.html#physicalexercise>)
13. Meier, D. (2000) *The Accelerated Learning Handbook: A Creative Guide to Designing and Delivering Faster, More Effective Training Programs*. McGraw-Hill.
14. Vail, P.L., referenced by Lawson, C. (2002) The Connections Between Emotions and Learning. *Center for Development and Learning*.  
([http://www.cdl.org/resource-library/articles/connect\\_emotions.php?type=author&id=17](http://www.cdl.org/resource-library/articles/connect_emotions.php?type=author&id=17))
15. Seitz, A.R. *et al.* (2006) Sound facilitates visual learning. *Current Biology*. 16, 1422-1427
16. von Kriegstein, K. and Giraud, A.L. (2006) Implicit multisensory associations influence voice recognition. *PLoS Biology*. 4, e326
17. Shams, L. and Seitz, A.R. (2008) Benefits of multisensory learning. *Trends in Cognitive Sciences*. 11, 411-417
18. Paivio, A. (2006) Dual coding theory and education. Draft chapter for the conference on Pathways to Literacy Achievement for High Poverty Children. University of Michigan School of Education.
19. Paivio, A. (2006) *Mind and its evolution: A dual coding theoretical interpretation*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

20. Hetland, L. and Winner, E. (2004) *Handbook on Research and Policy in Art Education*. National Art Education Association.
21. Blood, A.J. and Zatorre, R.J. (2001) Intensely pleasurable responses to music correlate with activity in brain regions implicated in reward and emotion. *Proceedings of the National Academy of Sciences*. 20, 11818-11823
22. Stratton, V.N. and Zalanowski, A.H. (2003) Daily music listening habits in college students: Related moods and activities. *Psychology and Education*. 1, 1-8
23. Dottinga, R. (2006) Music makes your brain happy. *Wired*. (<http://www.wired.com/medtech/health/news/2006/08/71631>)
24. The Franklin Institute Online. (2004) The Human Brain: Improve Your Brain. *Resources for Science Learning*. (<http://www.fi.edu/learn/brain/exercise.html#physicalexercise>)