What is Experiential Education?



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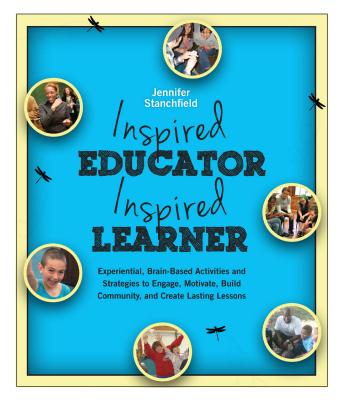
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The experiential approach to education and group work is based on the idea that optimal change and growth take place when people are actively (physically, socially, intellectually, emotionally) involved in their learning rather than just being receivers of information. This approach emphasizes that learners are shaped by their experiences and effective teaching involves meaningful experiences and interactions

with others in an environment that intentionally encourages collaboration, problem-solving, inquiry and reflection.

John Dewey, a prolific twentieth-century educator, psychologist and philosopher, is considered by many as the "father" of experiential education. Dewey felt that "modern education" was ignoring the commonsense observation dating back to early Western and Eastern philosophers (Plato, Socrates and Lao Tzu among others) that people learn most when they are actively involved in their learning and find the material attractive, engaging, and relevant to their real life. He emphasized that learners need to feel a sense of control and ownership over learning situations (Dewey, 1897, 1900, 1938; McDermott, 1981).

A tenet of experiential education is that in order for learning to truly occur, learners should be provided with opportunities to reflect on their educational experiences so they relate, connect,



and transfer to other learning and life experiences. In this approach learners should be encouraged to experiment and think independently with support and guidance from educators (Dewey, 1916, 1925).

These ideas put forward nearly a century ago are now being supported by scientific studies of the brain and how people learn. In the past few decades, brain-imaging technology has allowed neuroscientists to study the living brain and identify optimal conditions for learning. This has led to the emerging field of educational neuroscience and the promotion of brain-based teaching strategies.

Brain-based approaches emphasize many of the same principles of experiential education such as the value of creating novel and active learning situations and the importance of relevancy, and a sense of choice, control, and ownership in learning. Studies of the brain are showing that physical, emotional, and social involvement in learning increases engagement and retention (Medina, 2008; Willis, 2010). Like experiential educators, proponents of brain-based learning stress the importance of creating opportunities for reflection along with regular feedback so that lessons can be applied to real life and future learning.

Principles of Experiential Education and Brain-Based Learning Tenets

Experiential Education Principles*	Educational Neuroscience Research
Experiential education is active, involving learners emotionally, socially, intellectually and physically as participants in learning experiences rather than just receivers of information.	 When learners actively explore a subject, talk about it, practice it, and create meaning from it, stronger and more numerous neural "pathways" to information are formed for storing and recalling this information. When multiple senses are used, more regions of the brain that store information are activated and the more interconnections are made, allowing content to be something we learn rather than memorize). We are social and emotional beings. Processing centers in the brain that decide what we pay attention to and store for long-term memory are impacted by our emotional response. Studies show that people who are active outperform those who are less active in problem solving, long-term memory, and reasoning. When physical movement is incorporated into learning situations, attention and retention increase. (Medina, 2008; Aamodt & Wang, 2011; Willis, 2010a)
An atmosphere of fun and novelty opens doors to learning. People learn best when engaged in solving novel, challenging problems that inspire creativity, questions, experimenting, and collaboration.	 Novelty, challenge, and playful collaborative approaches stimulate attention and increase engagement. The brain's sensory intake filter—the reticular activating system (RAS) through which all sensory input must pass—is particularly receptive to novelty and change associated with pleasure and to sensory input about things that arouse curiosity. Actively engaging multiple senses (i.e., touching, seeing, exploring, talking about experiences, writing and drawing, using metaphor) stimulates different memory systems in separate brain areas, increasing long term memory. (Willis, 2006, 2012)
Relevancy and meaning are key to learning. Learners need to understand the purpose behind the lessons and feel that the material has intrinsic value and relates to real-life, present and future interests.	 In order for information to make it through the limbic "filtering" system and form synaptic connections, it needs to be relevant, engaging, and important to success or fun! Novel, relevant stimuli draw attention. From the time we are babies, we pay attention to information that is useful for survival and disregard most of the rest. When a learner finds something intrinsically rewarding, they are more likely to engage in it and practice it. This enhances emotional connection to material and long-term memory. (Willis, 2010a, 2011a, 2013; Aamodt & Wang, 2011)
Choice and control is imperative. Learners need to feel they have the ability to make choices about their experience, take responsibility for themselves, and have a say in the direction of their learning.	 When stress is high and learners don't feel they have choices and control in a situation, the amygdala diverts information to the limbic system where primal reactions such as fight or flight or disengagement take over, blocking useful memory storage and meaningful connection making. Neurotransmitters associated with pleasurable learning situations contribute to an increase in dopamine and norepinephrine. (Willis, 2010a; Aamodt & Wang, 2011)
Learners must reflect on experience in order to learn. Reflection involves thoughtful time connecting the experience to other lessons and real life situations. Insight is the result of reflective thinking.	 Brains search for meaning to successfully encode new information into memory. Reflection promotes what neuroscientists call relational memory and patterning in the hippocampus. When learners see relationships between previous experiences, neural connections increase and long-term memory storage and retrieval are enhanced. Personal meaning makes the material more memorable. (Willis, 2013)
Learners thrive when they are in an environment where they feel fully valued, respected, supported and safe.	 Information can be "hung up" by the reticular activating system or RAS when participants don't feel safe and supported (Willis, 2010a). Automatic (involuntary) fear responses take over when a person is asked to perform before they are ready, resulting in a "fight or flight" response. In these situations, learners often check out (or, in some cases, act out) focusing on their feeling of panic or stress instead of the lesson (Willis, 2013). Pleasurable experiences, including play and positive social/emotional connection, can increase dopamine response increasing focus, memory and motivation (Willis, 2010a). Challenge and reward in the right amounts increase engagement (Willis, 2010b, 2011a).

Principles of Experiential Education and Brain-Based Learning Tenets (continued)

Experiential Education Principles*	Educational Neuroscience Research
Experiences should be carefully chosen to meet the differing needs and personalities of learners. This requires creativity, flexibility, and intention from the teacher/facilitator.	 Just as there are variations in the rest of our physical selves, our brains are physically different (Medina, 2008). Educators can effectively plan lessons using various methods of instruction, reflection and practice by getting to know and attending to the progress of individuals within the group. Differentiation doesn't mean an individual lesson for each person—it means taking individual differences into account (Tomlinson, 2013).
Sequence or scaffold lessons so they can be built upon. As John Dewey (1916) stated, "Growth through experience must create conditions for future learning."	 "Learning promotes learning." People learn best through incremental achievable challenges based on the learner's ability—with ongoing feedback from their teacher and their peers (Willis, 2010). When people practice and build their competence step-by-step with ongoing feedback they become more confident about the learning process, more comfortable with their learning environment, and more able to take on new challenges (Willis, 2010b).
More is learned through exploring and struggling than by being provided the answers. Balance spontaneous learning with guidance and role modeling. The educator initiates learning by structuring appropriate experiences—the student takes it from there.	 We learn through practice, reflecting on experiences and practicing again. Dendrites change in size and number throughout life in response to experience and practice! This ability to change through the growth and support of the connecting cells (dendrites) between neurons is called neuroplasticity. When we feel intrinsically rewarded by an experience through mastery, feedback, and a sense of competency, dopamine is released. (Willis, 2013)

^{*} This list of principles is my effort to summarize the tenets of experiential education philosophy based on my studies of John Dewey, Alfred North Whitehead, and Lev Vygotsy as well as my experience in the field. © 2014, Jennifer Stanchfield/Wood N Barnes Publishing, *Inspired Educator, Inspired Learner* (www.woodnbarnes.com).

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Fore more information on experiential approaches to teaching and group facilitation visit the Inspired Educator Blog at www.experientialtools.com or contact Jennifer Stanchfield at jen@experientialtools.com.