

# The classroom to foster effective teaching education essay

[Education](#)



The level of teachers' educational attainment or qualification and experience is a combination of their pre-service training and additional qualifications they may have acquired in-service over a period of time. The quantity and quality of teachers' initial education is clearly important in shaping their work once they begin teaching in schools and should influence their further education and training requirements and other aspects of their development. For example, a low level of formal education or one of poor quality may increase teachers' need for professional development once they enter the profession. On the other hand, extensive formal education may spur greater interest in further education and training to further develop skills obtained during extensive formal education. (www. oecd. org) Several researchers and pedagogues have stated that effective teaching requires the use of social skills necessary to develop a positive teacher-student interaction (Berliner, 1976; Goodstein, 1984; Porter & Brophy, 1988; Taylor, 1980). A notable feature of current intelligence studies inclines to consider intelligence as individual and context specific rather than just associating to narrow academic accomplishment. Current perspectives have strongly challenged the conservative perspective regarding the characteristics and varieties of intelligence, by proposing that we must reconsider the nature of intelligence essentially. These views are based on reconsidering the fact that previous concepts of intelligence focused only on cognitive abilities, including linguistic ability and logical-mathematic ability but disregarded other abilities which were distinguished as worthy in the real world. Thus, the current intelligence concept has been expanded to include creativity, social ability, artistic ability, emotional comprehension and expression, morality, character

and motive in addition to the cognitive domain and it contains characteristics closely related to performance in the current world. Howard Gardner (1983) proposed a new view of intelligence that is rapidly being incorporated in school curricula (Brualdi, 1996). In his Theory of Multiple Intelligences, Gardner expanded the concept of intelligence to also include such areas as music, spacial relations, and interpersonal knowledge in addition to mathematical and linguistic ability. Gardner's (1983) theory of Multiple Intelligences (MI theory) has transformed some fundamental beliefs about teaching and learning. MI is defined as the ability to solve problems or fashion products that are of consequence in a particular cultural setting or community (Gardner, 1993). Currently, the field of intelligence assessment seems to be witnessing a paradigm shift, illustrated by the emergence of nontraditional theories of intelligence (Gardner, 1983; Sternberg, 1991), and the rise of alternative assessment methods, such as performance-based assessments (Maker, 1993; Plucker et al., 1996). While the traditional intelligence test is mainly limited to the linguistic and logic domains, the MI theory developed by Gardner includes intelligence categories such as musical, spatial, bodily-kinesthetic, interpersonal, intrapersonal and naturalistic investigation to explain the human mind. In short, Gardner broadened the range of intelligence to include competences in art and dance which were not considered as intelligence by the traditional psychometric approach. MI theory's basic principle that the human mind holds multiple intelligences in turn implies that each and every human being possesses the potential of developing these eight areas of intelligence. The essence of MI theory is independence and equality between each area of intelligence. An

example of this independence would be a genius who by far excels in one area while being definitely inferior in another. By claiming equality among the intelligences, MI theory places the same importance on bodily-kinesthetic intelligences as on linguistic or logical-mathematical intelligences, which were traditionally emphasized in IQ tests.

## **Using Multiple Intelligences in the Classroom to foster effective teaching and learning**

Traditional schooling heavily favors the verbal-linguistic and logical-mathematical intelligences. Gardner suggests a more balanced curriculum that incorporates the arts, self-awareness, communication, and physical education ([www. springhurst. org](http://www.springhurst.org))

Accepting Gardner's Theory of Multiple Intelligences has several implications for teachers in terms of classroom instruction. The theory outlines that all seven intelligences are required to productively operate in society. Teachers, therefore, must think of all intelligences as equally important ([discover-multiple-intelligences. com](http://discover-multiple-intelligences.com)). As stated earlier, this is in great contrast to conventional education systems which typically place a strong emphasis on the development and use of verbal and mathematical intelligences. Thus, the Theory of Multiple Intelligences implies that educators should recognize and teach to a broader range of talents and skills. Significantly, teachers are required to structure the presentation of material in a style which engages most or all of the intelligences. For example, when teaching about the Yaa Asantewaa war, a teacher can show students battle maps, play typical Ashanti war songs, organize a role play of the signing of the Declaration of war by the warrior queen mother, and have the students read a novel about life during that

period. This kind of presentation not only excites students about learning, but it also allows a teacher to reinforce the same material in a variety of ways. By activating a wide variety of intelligences, teaching in this manner can facilitate a deeper understanding of the subject material. Everyone is born possessing the seven intelligences. Nevertheless, all students will come into the classroom with different sets of developed intelligences. This means that each child or individual will have his own unique set of intellectual strengths and weaknesses (Brualdi, 1996). These sets determine how easy and difficult it is for a student to learn information when it is presented in a particular manner. This is commonly referred to as a learning style. Many learning styles can be found within one classroom. Therefore, it is impossible, as well as impractical, for a teacher to accommodate every lesson to all of the learning styles found within the classroom. Nevertheless the teacher can show students how to use their more developed intelligences to assist in the understanding of a subject which normally employs their weaker intelligences (Lazear, 1992). For example, the teacher can suggest that an especially musically intelligent child learn about the revolutionary war by making up a song about what happened.

## **Linguistic Intelligence**

This involves having a mastery of language. Thus, capacity to use words effectively, either orally or in writing. A well-developed linguistic intelligence shows itself in attention to word, syntax and style ([www. earthrenewal. org](http://www.earthrenewal.org)). Students with a high degree of linguistic intelligence think in words, learn by listening, reading and verbalizing. They enjoy writing, reading, telling stories,

poetry, books, records, tapes, etc. They learn best by saying, hearing and seeing words ([www. earthrenewal. org](http://www.earthrenewal.org)).

## **Spatial intelligence**

Spatial intelligence is often relied upon by designers, architects, sculptors, engineers, etc. ([www. earthrenewal. org](http://www.earthrenewal.org)). Thus, the ability to comprehend shapes and images in three dimensions. It is also the " more abstract intelligence of a chess master, a battlefield commander or a theoretical physicist", as well as the familiar ability to recognize objects, faces and details ([www. earthrenewal. org](http://www.earthrenewal.org)). A sharp distinction can be seen between visual acuity and spatial ability. For example, a blind person may feel and identify a shape with ease, but be unable to see it. Males typically score more highly than females in this category of intelligence (Gardner, 1993).

## **Musical Intelligence**

This encompasses the capability to recognize and compose musical pitches, tones, and rhythms. Musical ability functions according to Gardner like an intelligence (Gardner, 2000). What composers call logical musical thinking; thinking involving both left and right hemispheres. This is the capacity to perceive, compose, discriminate, transform and express musical forms (rhythm, pitch, harmony, timbre, etc.). People with musical intelligence love music. They appreciate rhythm and composition. They are gifted with the ability to compose, sing and/or play instrument(s). Able to recognize sounds, tones and rhythm, they have a " good ear" for music. They learn best through lectures and often use rhythm and music as a way to memorize things ([www. mypersonality. info](http://www.mypersonality.info)).

## **Logical/Mathematical Intelligence**

The ability to mentally process logical problems and mathematical equations. People with Logical intelligence are abstract thinkers and are attracted to logic and reasoning. They are good at investigation and scientific processes (Campbell, et al., 1999). They learn best by logic. Examples of such reasoning might include a mathematician working through the implications of a theorem or a reader unraveling a mystery story. According to Gardner, the most successful application of logical-mathematical intelligence is the scientific method as applied for example, in the work of Newton, Einstein and other great scientists. Logical /mathematical intelligence often does not require verbal articulation. However, mathematicians, for example, must be able to not only reason precisely, but also write down their proofs with precision. Piaget stages of mental development- from handling objects, thinking concretely about objects and then understanding formal abstract relations and operations- document the growth of this intelligence in children.

## **Bodily-Kinesthetic Intelligence**

This is the expertise in using one's body to express ideas and feelings as well as the facility to handle objects skillfully. Bodily-Kinesthetic intelligence involves the control of movement to exhibit fine motor control and characteristics such as grace, balance and agility (Seitz, 1992). It involves a natural sense of how one's body should act and react in a demanding physical situation, including a sense of timing, a clear sense of goal and the ability to train responses so they become " automatic". Often dancers and

actors will talk about a "feeling in their bodies"- an intelligence unto itself yet integrated with one's entire being.

## **Interpersonal Intelligence**

This is the ability to perceive and make distinctions in the moods, intentions, motivations and feelings of other people. The ability to interact with others, understand them and interpret their behavior. Interpersonal intelligence and intrapersonal intelligence are "inextricably" interconnected since true self-knowledge requires sensitivity to others and vice versa. According to Goleman (2006), social intelligence is demonstrated through our ability to receive signals from others, accurately decode this information, and use this information to interact in an effective manner. Although these skills also have been referred to as "interpersonal intelligence," the ability to understand and influence other people's behavior (Gardner 1983, 1993), and "practical intelligence," the ability to solve personal problems and manage others (Sternberg & Wagner, 1986), many researchers have concluded that social intelligence is an understanding and command of social skills necessary to manage personal relationships effectively (Jones & Day, 1997; Kihlstrom & Cantor, 2000; Thorndike, 1920; Wong, Day, Maxwell, & Meara, 1995). Thus, because "social intelligence shows itself abundantly in the nursery, on the playground, in barracks and factories and salesrooms . . . [an] accurate measure would need to be constructed [based] on a genuine situation with real persons" (Thorndike, 1920, pp. 228, 231). Interpersonal and intrapersonal intelligences are often found strongly developed in politicians, religious leaders, therapists, shamans, etc.

## **Intrapersonal Intelligence**

People with intrapersonal intelligence are adept at looking inward and figuring out their own feelings, motivations and goals. They are introspective and seek understanding. They are intuitive and typically introverted (Stoehr & Fogarty, 2007). They learn best independently. The cognitive ability to understand our self- access to one's own feeling life, the capacity to discriminate feelings, to find symbols for them and to draw upon them to guide one's own life. Again, intrapersonal is closely related to interpersonal intelligence since both are required to fully develop self-knowledge and sensitivity to others. Self-esteem, self-enhancement and strength of character are all associated with intrapersonal intelligence and the ability to use this intelligence to solve life problems (Gardner, 2000). Interpersonal and intrapersonal learners are actually closely intertwined. Intrapersonal learners understand themselves well and are therefore able to relate well with others. Activities like mock trials, imaginary dialogues, role plays, small group discussions, letter writing, interviews and service learning all develop both the intrapersonal and interpersonal intelligences (Raulinajtys, 2011). Intrapersonal learners may also be motivated by the option to study their family's history. Learning about their ancestors can help intrapersonal learners reflect upon their own place in the world. Activities like timelines, family trees and family histories are effective options (www. ehow. com). Schools have often sought to help students develop a sense of accomplishment and self-confidence. Gardner's Theory of Multiple Intelligences provides a theoretical foundation for recognizing the different abilities and talents of students. This theory acknowledges that

while all students may not be verbally or mathematically gifted, children may have an expertise in other areas, such as music, spatial relations, or interpersonal knowledge. Approaching and assessing learning in this manner allows a wider range of students to successfully participate in classroom learning. With an understanding of Gardner's theory of multiple intelligences, teachers, school administrators, and parents can better understand the learners in their midst. They can allow students to safely explore and learn in many ways, and they can help students direct their own learning. Adults can help students understand and appreciate their strengths, and identify real-world activities that will stimulate more learning (www. educationworld.com).

### **Using Dale's Cone of Experience in the Classroom to enhance effective teaching**

Dale's Cone of Experience is a model that incorporates several theories related to instructional design and learning processes. During the 1960s, Edgar Dale theorized that learners retain more information by what they "do" as opposed to what is "heard", "read" or "observed" (Chuntao, 2011). His research led to the development of the Cone of Experience. Today, this "learning by doing" has become known as "experiential learning" or "action learning". He said "The cone device is a visual metaphor of learning experiences, in which the various types of audio-visual materials are arranged in the order of increasing abstractness as one proceeds from direct experiences" (Dale, (1969). The cone is based on the relationships of various educational experiences to reality (real life) the bottom level of the cone, "direct purposeful experiences," represents reality or the closest things to

real, everyday life. The opportunity for a learner to use a variety or several senses (sight, smell, hearing, touching, movement) is considered in the cone. Direct experience allows us to use all senses. The more sensory channels possible in interacting with a resource, a better chance that many students can learn from it. Actually, use of the Cone may lead to an enhancement of subject matter presentations. Indeed, the Cone may help us to choose the instructional materials that are most appropriate for the particular topic we wish to teach. The Cone can help us to understand the relationships between media and the messages they convey. It suggests, in fact, that various instructional materials differ in the degree of sensory experience they are able to provide. Our selection of instructional materials, therefore, will depend on the amount of sensory experience we wish to provide for a particular topic or lesson. The Cone can help us "place" a teaching method; it can help us select the way of communicating most suited to the experience we wish to convey (Betrus & Januszewski, 2002). In conclusion, our understanding of the Cone of Experience, moreover, will remind us of a fundamental principle for our teaching: We do not use any one medium of communication in isolation. Rather, we use many instructional materials to help the student conceptualize his experience so that he can deal with it effectively (Isaac, 1997). The Cone suggests that concept development can proceed from experiences with any specific instructional material. It often follows, then, that the more numerous and varied the media we employ, the richer and more secure will be the concepts we develop (Betrus & Januszewski, 2002). Well-chosen instructional materials of various kinds can provide a variety of experiences that enhance the learning of a given subject

for any student at any given point in his continuing development. It can therefore be concluded that, Dale's Cone of Experience is visual model, a pictorial device that may help us to think critically about the ways in which concepts are developed. Indeed, we may now be able to apply our ideas about the relationships of interesting, meaningful experiences and abstract, highly symbolic representations.