

## **Handout: Multiple intelligence theory**

For many years, educators recognize that individuals differ in the ways they find it easiest to learn, and we say that people have different learning styles. Howard Gardner, a psychologist at the Harvard School of Education, did pioneering work in applying emerging insights of brain science to learning styles.

Gardner started out being interested in assessment (i.e., testing). Most assessment in schools is done with paper-and-pencil tests, but Gardner started to question whether paper-and-pencil tests were always effective. For example, if you ran a baseball team and were trying to find the best pitcher for your team, would you give potential pitchers a paper-and-pencil test to find out how good they were—or would you ask them to pitch to your best batters? Similarly, if you were the conductor of a symphony orchestra and you needed a new flutist, would you give a paper-and-pencil test to potential flutists—or would you ask them to play a piece of music for you in an audition?

From asking these questions, Gardner began to grow interested in the different ways people learn. He began to review new research in brain physiology, and other research in how people learn. Gradually, he came to believe that there are at least eight “intelligences” that human beings can have—rather than one form of intelligence that is tested by the usual IQ tests.

According to Gardner, each of us can have a different mix of strengths among these eight intelligences. He called this “multiple intelligence theory.” It is important to remember that while an individual may be stronger or weaker in each of the eight intelligences, Gardner’s theory suggests that the strength or weakness is subject to change: that a person can improve in any given intelligence. This notion corresponds with recent findings in neuroscience that the brain is far more plastic than was once assumed.

### *Criticism of multiple intelligences*

Gardner’s theory has been widely criticized for lack of experimental evidence. Furthermore, brain science continues to advance quickly, and it is no longer clear that multiple intelligence theory has kept up with these advances.

These are valid criticisms, and multiple intelligence theory probably should be taken as serious science. Nevertheless, Gardner’s theory remains a useful model for teachers both to help understand how different people learn in different ways, and to change one’s teaching practice to better reach different kinds of learners.

### *How to use multiple intelligence theory*

The eight intelligences that Gardner believes he has identified are listed in the table on the next page. To the right of each intelligence are a brief description of that intelligence, an example of an expert who rates high in that intelligence, and some activities that educators can use to reach persons strong in that intelligence.

Here’s how can we use multiple intelligence theory in our teaching:

Most of us will be personally strong in two or three of the multiple intelligences. For example, Mark (not his real name), a volunteer Sunday school teacher, was an artist who had particularly strong spatial, linguistic, and interpersonal intelligences. Yet Mark was less strong in musical and bodily/kinesthetic intelligences. Not surprisingly, Mark did lots of art projects in Sunday school, and he also liked discussions and group activities. Multiple intelligence theory helped Mark understand that he tended to neglect musical and bodily/kinesthetic intelligences—yet there were children in his group with very strong bodily/kinesthetic and quite strong musical intelligences. He was then able to plan activities that would play to the strengths of those children. For the bodily/kinesthetic children, he planned building projects that involved manipulation, and he also planned active games that promoted cooperation—thus combining his strengths with the strengths of those children. He felt he was absolutely hopeless at music, so he made a point of inviting another adult to visit his group and sing some songs.

The net result for Mark was very positive. He came to realize that some of the behavior problems he was having were with the children who had strong bodily/kinesthetic and musical intelligences. When he helped them use their strengths in church school, they became much more involved and created fewer behavior problems.

Also, we Unitarian Universalists say we believe in the inherent worth and dignity of every person. Using multiple intelligence theory can be a way of valuing the unique strengths of each child or youth in your group—while at the same time encouraging all persons (including ourselves!) to expand their abilities in new directions.

**Table of multiple intelligences**

<i>Name of intelligence</i>	<i>Brief description of this intelligence</i>	<i>Experts who rate high in this intelligence</i>	<i>Activities to use in UU Sunday school</i>
Linguistic	“sensitivity to spoken and written languages, ability to learn languages, capacity to use language:	Lawyers, speakers, writers, poets	Tell stories, lead discussions, ask questions, give children opportunities to speak (in worship, in front of the class)
Logical/mathematical	“capacity to analyze problems logically, carry out mathematical operations, investigate issues scientifically”	Mathematicians, logicians, scientists	Use worksheets and puzzles, offer logical presentations of materials, count things, argue
Musical	“skill in the performance, composition, and appreciation of musical patterns”	Musicians	Sing songs, listen to music, compose songs and raps, play rhythm games
Bodily/kinesthetic	“the potential of using one’s whole body or parts of the body (like the hand or the mouth) to solve problems or fashion products”	Dancers, actors, athletes, craftspeople To some extent also: surgeons, mechanics, bench-top scientists	Play active games, use dance and creative motion, act out skits, manipulate or make objects
Spatial	“the potential to recognize and manipulate the patterns of space”	Navigators, pilots, sculptors, chess players, graphic artists, architects	Do art projects (e.g., make drawings), explore church buildings, make forts or hiding places, draw maps
Interpersonal	“a person’s capacity to understand the intentions, motivations, and desires of other people, and consequently to work effectively with others”	Salespeople, teachers, clinicians, religious leaders, political leaders, actors	Group problem-solving and initiatives, group games, diversity or anti-racism activities, worship services
Intrapersonal	“the capacity to understand one’s own self, to have an effective working model of oneself”	Religious leaders?	Meditation, worship services, silence, personal growth activities
Naturalist	capacity in “the recognition and classification of the numerous species — flora and fauna — of his or her environment”	Naturalists, biologists (esp. taxonomists), hunters, anglers, farmers, gardeners, cooks	Plant seeds or bulbs, cook starting with basic ingredients (i.e., not from packaged mixes), watch animals, go outdoors

*(The first three columns come from Intelligence Reframed: Multiple Intelligences for the 21st Century by Howard Gardner.)*