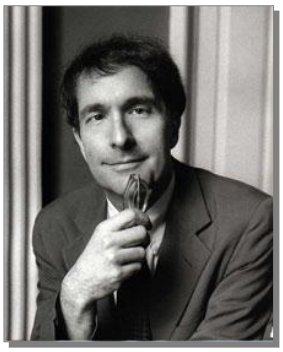
Howard Gardner's Theory of Multiple Intelligences



Many of us are familiar with three general categories in which people learn: visual learners, auditory learners, and kinesthetic learners. Beyond these three general categories, many theories of and approaches toward human potential have been developed. Among them is the theory of multiple intelligences, developed by Howard Gardner, Ph.D., Professor of Education at Harvard University.

Gardner's early work in psychology and later in human cognition and human potential led to the development of the initial six intelligences. Today there are nine intelligences and the possibility of others may eventually expand the list. These intelligences (or competencies) relate to a person's unique aptitude set of capabilities and ways they might prefer to demonstrate intellectual abilities.

Gardner's Multiple Intelligences

1. Verbal-linguistic intelligence (well-developed verbal skills and sensitivity to the sounds, meanings and rhythms of words)
2. Logical-mathematical intelligence (ability to think conceptually and abstractly, and capacity to discern logical and numerical patterns)
3. Spatial-visual intelligence (capacity to think in images and pictures, to visualize accurately and abstractly)
4. Bodily-kinesthetic intelligence (ability to control one's body movements and to handle objects skillfully)
5. Musical intelligences (ability to produce and appreciate rhythm, pitch and timber)
6. Interpersonal intelligence (capacity to detect and respond appropriately to the moods, motivations and desires of others)
7. Intrapersonal (capacity to be self-aware and in tune with inner feelings, values, beliefs and thinking processes)
8. Naturalist intelligence (ability to recognize and categorize plants, animals and other objects in nature)
9. Existential intelligence (sensitivity and capacity to tackle deep questions about human existence such as, What is the meaning of life? Why do we die? How did we get here?
   (*Source:* Thirteen ed online, 2004)

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Human Potential

Human potential can be tied to one's preferences to learning; thus, Gardner's focus on human potential lies in the fact that people have a unique blend of capabilities and skills (intelligences). This model can be used to understand "overall personality, preferences and strengths" (businessballs.com, n.d.). Gardner asserts that people who have an affinity toward one of the intelligences do so in concert with the other intelligences as "they develop skills and solve problems" (businessballs.com, 2009).

People have different strengths and intelligences. For example, students who are "interviewed" as a means to gain access to a course may be mis-labeled as being less than desirable because of inappropriate assessment (poorly written interview questions, bias toward a perceived "perfect student," and other narrow criteria). "In life, we need people who *collectively are good at different things.* A well-balanced world, and well-balanced organizations and teams, are *necessarily* comprised of people who possess different mixtures of intelligences. This gives that group a fuller collective capacity than a group of identical able specialists" (businessballs.com, 2009).

Gardner's multiple intelligences theory can be used for curriculum development, planning instruction, selection of course activities, and related assessment strategies. Instruction which is designed to help students develop their strengths can also trigger their confidence to develop areas in which they are not as strong. Students' multiple learning preferences can be addressed when instruction includes a range of meaningful and appropriate methods, activities, and assessments.

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Summary

In summary, integrate educational theories, teaching strategies, and other pedagogic tools in meaningful and useful ways to better address the needs of students. Gardner himself asserts that educators should not follow one specific theory or educational innovation when designing instruction but instead employ customized goals and values appropriate to their teaching and student needs. Addressing the multiple intelligences and potential of students can help instructors personalize their instruction and methods of assessment.

Gardner's Multiple Intelligences

Table 1 below highlights the primary seven intelligences with further details on their attributes. Refer to this chart as you prepare instruction, related activities, and assessments.

Adapted from businessballs.com (2009)

Table 1

LINGUISTIC Intelligence			
Learning style and preferences	**Description**	**Roles**	**Tasks, activities and assessments**
Words and language	– written and spoken words – interpretation and explanation of ideas and information via language – understands relationship between communication and meaning	– copywriters – editors – historians – journalists – lawyers – linguists – poets – PR and media consultants – speakers – teachers professors – trainers – translators – TV and radio presenters – voice-over artists – writer	– edit a peer's paper – give an oral presentation – list the strengths and weaknesses of a product – write a eulogy – write directions to accompany a map

LOGICAL-MATHEMATICAL Intelligence			
Learning style and preferences	**Description**	**Roles**	**Tasks, activities and assessments**
Logic and numbers	– analyze problems – detecting patterns – perform mathematical calculations – scientific reasoning and deduction – understands relationship between cause and effect toward a tangible outcome or result	– analysts – arbitrators – bankers – certified public accountants – computer programmers accountants – engineers – insurance brokers negotiators – researchers – scientists – statisticians – traders	– analyze how a computer works – assess the value of a business or a proposition – create a process – devise a strategy to achieve an aim – perform a mental mathematical calculation, create a process to measure something

MUSICAL Intelligence			
Learning style and preferences	**Description**	**Roles**	**Tasks, activities and assessments**
Music, sound, rhythm	– awareness, appreciation and use of sound – recognition of tonal and rhythmic patterns – understands relationship between sound and feeling	– acoustic engineers – composers – DJs – entertainers – environment and noise analysts – music producers – musical instrument repair specialists – musical performers – singers – voice coaches	– coach someone to play a musical instrument – compose media jingles – identify music for malls and retail stores – lead a choir – perform a musical piece – review a musical play – whistle a tune

BODILY KINESTHETIC Intelligence			
Learning style and preferences	**Description**	**Roles**	**Tasks, activities and assessments**
Body movement control	– eye and body coordination – manual dexterity – physical agility and balance	– anthropologists – athletes – biologists – dancers – geologists – instrumentalists – nurses – physical education teachers – physical therapists – physicians actors – sign-language interpreters	– arrange workplace furniture – demonstrate a sports technique – design a window display – interpret a speech using American sign language – prepare samples for magnification and testing – put together a piece of modular furniture – ride a horse – stack books on a shelf

SPACIAL-VISUAL Intelligence			
Learning style and preferences	**Description**	**Roles**	**Tasks, activities and assessments**
Spatial-visual Images and space	– interpretation and creation of visual images, pictorial imagination and expression – understands relationships between images and meanings and between space and effect	– architects – artists – cartographers – city-planners – engineers – graphic designers – inventors – landscape architects – photographers – sculptors	– compose a photograph – create an organizational logo – design a building – design a historic costume – design a landscape – interpret a painting – organize a storage room – pack an automobile trunk – paint a landscape

INTERPERSONAL Intelligence			
Learning style and preferences	**Description**	**Roles**	**Tasks, activities and assessments**
Other people's feelings	– ability to relate to others – interpretation of behavior and communications – understands the relationship between people and their situations, including other people	– advertising professionals – care givers – coaches and mentors – counselors – educators – health providers – HR professional – mediators – politicians – psychologists – sales-people – teachers – therapists – trainers	– affect the feelings of others in a planned way – coach or council another person – demonstrate feelings though body language – interpret moods from facial expressions – mentor a new faculty member

INTRAPERSONAL Intelligence			
Learning style and preferences	**Description**	**Roles**	**Tasks, activities and assessments**
Self-awareness	– one's own needs for and reaction to change, ability to deal with change in the workplace – one's relationship to others and the world – personal cognizance – personal objectivity – the capability to understand oneself	– one who is self-aware and involved in the process of changing personal thoughts, beliefs, and behavior in relation to their situation – other people, their purpose and aims	– consider and decide one's own aims and personal changes required to achieve them (not necessarily reveal this to others) – consider and decide one's own position in relation to the Emotional Intelligence Model

References

businessballs.com (2009). *Howard Gardner's multiple intelligences.* http://www.businessballs.com/howardgardnermultipleintelligences.htm.

Thirteen ed online (2004). *Tapping into multiple intelligences.* http://www.thirteen.org/edonline/concept2class/mi/index.html

Selected Resources

Armstrong, T. (2010). *Multiple intelligences.* http://www.thomasarmstrong.com/multiple_intelligences.htm

Howard Gardner. (2010). *Multiple intelligences.* http://www.howardgardner.com/MI/mi.html