Have you ever wondered why your repeated instructions to Jacob seem to go in one ear and out the other? Or perhaps you’ve pondered how Brittany can put together a complex puzzle in a matter of hours – while it would take most of the children in your classroom days to complete it.

The answers lie in the different ways in which each of us (child or adult) learns best. Dr. Howard Gardner’s Theory of Multiple Intelligence proposes that there are eight different forms of intelligence. According to Dr. Gardner, traditional education and culture place a greater emphasis on linguistic and logical-mathematical intelligence. Children who do not fit into this traditional model are often labeled “learning disabled” or underachievers. The Theory of Multiple Intelligence challenges the conventional idea of teaching and suggests presenting classroom materials that allow for effective learning by each student.

“How are students ‘smart’ in different ways?” “How can teachers use multiple intelligences in the classroom?” This article will strive to answer these questions, and conclude by listing different classroom activities for each style of learning.

The Eight Different Types of Intelligence

The following are descriptions of Dr. Gardner’s eight types of intelligence.

- **Linguistic intelligence** – These types of learners have highly developed auditory skills and often become eloquent speakers later in life. They think in terms of words rather than pictures. They learn by listening, speaking, writing, and discussing. Students who enjoy telling stories, and who quickly learn foreign languages, exhibit linguistic intelligence. This type is also referred to as being **word smart**.

- **Logical-mathematical intelligence** – These types of learners have the ability to use reason, logic, and numbers to make connections between pieces of information. They learn by problem solving and working with abstract concepts to figure out relationships between given information. Students who can figure out mathematical calculations, and who enjoy finding patterns in shapes and numbers, demonstrate logical-mathematical intelligence. This type is also referred to as being **logic smart**.

- **Spatial intelligence** – These types of learners have the ability to vividly see things in three-dimensions and patterns. They learn by sculpting, drawing, building, and looking at maps and charts. Students who understand and can create visual images, such as charts, diagrams, or maps, reveal spatial intelligence. This style is also known as being **picture smart**.

- **Musical intelligence** – These types of learners are musically inclined and tend to think in terms of sounds, rhythms, and patterns. They learn by singing, playing instruments, creating songs, and learning rhymes. Students who sing well, enjoy making rhythmic sounds, and can distinguish between notes, are displaying musical intelligence. This type is also referred to as being **music smart**.

- **Intrapersonal intelligence** – These types of learners are able to self-reflect and understand their relationships with others, as well as their own strengths and weaknesses. People with intrapersonal intelligence often prefer to work alone. Students who have an awareness of their emotions, and who are thoughtful when making decisions, are demonstrating intrapersonal intelligence. (Emotional intelligence and self-smart are other terms for this form of learning.)

- **Bodily-kinesthetic intelligence** – These types of learners express themselves through movement. They learn by using their body, interacting with the space around them, and playing physical games. Students strong in bodily-kinesthetic abilities show good coordination and gross motor skills – and/or the fine motor skills involved in making models or sculptures. This style is also referred to as being **body smart**.

- **Interpersonal intelligence** – These types of learners have the ability to relate to and understand other people. They are able to sense the intentions and motivations of others. They learn by listening, talking, and participating in interactive games. Students demonstrate this intelligence when they work well with others, and show thoughtfulness and sensitivity toward friends. This type of intelligence is also known as being **people smart**.

- **Naturalist intelligence** – These types of learners are able to recognize, categorize, and draw upon certain
features of the environment. They learn by studying environments, being outdoors, and working with animals. Students who enjoy studying the world around them display strength in this intelligence. This style is also defined as being nature smart.

Assessing Intelligences
Observation plays an important role in understanding children’s intelligence profiles. The following are some recommendations for teachers in developing better understanding of their individual students, and the different ways in which they learn:

- What choices do students make when they are given options?
- What roles do they play when working or playing together?
- How do they handle unanticipated problems?
- What captures their attention? When do they lose interest?
- What problem-solving strategies do they present?
- How do they communicate their ideas, understandings, and feelings?
- What does their physical behavior suggest?

Getting Started
Address one (or both) of the following small-group activities. In one, take turns asking children to discuss a task that they recently finished. (Examples might include building a construction toy, tying their shoes, planning what picture to draw, or figuring out where the blocks are stored in the toy room when it was time to pick them up.) Using age-appropriate language, ask the children questions similar to the following:

- What abilities did you use to accomplish this task? (For instance, a child who quickly learned how to tie his/her shoes demonstrated bodily-kinesthetic intelligence.)
- What parts of the task were more difficult? Which were easier?
- Did you get better at any part of the task by the time you were done?

In the other exercise, ask students to complete the following sentence: I am intelligent because I can _______________.
- How easy or difficult was it for students to finish this sentence?
- How did they define “intelligence”? The same? Differently?

These “fact-finding” observations and activities are only listed as examples. You may wish to try a different lesson to learn more about your children’s intelligences.

Building on Children’s Strengths
As mentioned, teachers can identify individual differences through careful observation and activities that reveal strengths, preferences, and abilities. Once these differences are identified, instruction can provide supports for students who learn in different ways.

For example:

- Students who are interested in art can be given the choice of first illustrating an idea or topic and then composing a short story.
- The student who seems particularly strong in spatial thinking can be given the opportunity to work with manipulatives to explore math concepts.
- The student who demonstrates strong interpersonal skills can be called on to lead a group investigation.

However, teachers should be careful to avoid “pigeon-holing” children – in other words, labeling students forever as “X” types of learners. All individuals possess certain combinations of the various intelligences, and they can apply them differently in different contexts. Teachers and parents may look for specialized strengths in individuals and use them to assist learning, but attaching a permanent label can discourage future success in areas that are “weak” at present. Everyone has potential in all of the intelligences, and it’s important to understand that children’s intelligences grow and change over time. In other words, a child is likely to possess each intelligence, but the manner in which they develop will differ from person to person.

Developing Infants/Toddlers’ Intelligences
The following are some ideas to develop infants and toddlers’ intelligences that can be used in the classroom and at home:

- Language/Linguistics: Tell stories, and build vocabularies by playing with words.
- Logic/Mathematics: Invite children to count and play with numbers.
- Visual/Spatial: Draw something on a piece of paper. Share pictures and other visuals. Let the young child play with colors.
- Music/Rhythm: Sing a song, play music, and introduce kids to various sounds and music.
- Body Movement/Kinesthetic: Touch and describe various body parts, and invite children to play with toys and blocks.
- Naturalist: Take children outside to look at trees and plants, or visit zoos or parks.
- Interpersonal: Let infants or toddlers interact with another young child.
- Intrapersonal: Encourage toddlers to have some “alone time.”

Developing the Intelligences of Older Children
The following are ideas to develop the intelligences of preschool (mainly) but also school-age children that can be used in the classroom and at home. (You may need to “tweak” an activity slightly depending on the child’s age.)

Language/Linguistics
- Encourage a love of reading. Start by introducing preschoolers to fairy tales, simple poems, and kids’ stories. School-age children should be
invited to read kids’ magazines, novels, comics, and simple encyclopedias.

- Inspire kids to write. Support writing activities by having papers, pens, pencils, markers, and crayons on hand to write or scribble at any time.

Logic/Mathematics
- Provide mathematical instruments and other tools. Let kids explore with rulers, compasses, scales, and measuring glasses. Every tool needs logical understanding in order to use it. Push kids to learn using various tools.
- Introduce computers. The young children in your care probably already like to press keyboard buttons or play video games. School-age kids can be taught to surf websites or learn simple word-processing programs, both of which can build their logical understanding.

Visual/Spatial
- Provide arts and crafts supplies. Most kids have a lot of fun creating things from papers, crayons, scissors, and glue.
- Offer painting supplies. Teach children how to paint by using their fingers – and then progress to using watercolors, acrylics, and oil paints.
- Use software. You can also teach youngsters to make illustrations with computers.

Music/Rhythm
- Get out a music player. Studies show that kids who listen to a composer, such as Mozart, for 10 minutes a day will enhance not only their musical intelligence, but also their spatial intelligence.
- Play instruments. Similarly, research demonstrates that playing with musical instruments not only increases children’s musical intelligence, but it can also develop other parts of the brain.
- Try karaoke. Engage your kids in various songs that they can sing along with.

Body Movement/Kinesthetic
- Play “dress-up.” Develop kids’ imaginations by pretending to be actors who wear costumes and makeup.
- Engage in sports and other games. Sports and games help to develop hand-eye coordination and motor skills. Physical activities also play a role in the development of the cerebellum – the part of the brain that controls some motor functions and memories, concentration, perception, spatial awareness, and language.
- Encourage other activities. Develop children’s light motor skills with activities such as drawing, cutting, or others that involve using their hands.

Naturalist
- Go fishing – sort of. If your classroom has an aquarium, encourage kids to study the fish. What kind are they? What color are they? Practice caution if allowing them to touch the fish. Another possibility is to go outside and watch fish swimming in a pond or stream.
- Play with animals. Pets are perhaps the best way for children to interact with animals. Kids will learn habits, characteristics, and different personalities of animals. Of course, you will want to instruct them how to approach animals safely.
- Plant a garden. Gardens with vegetables, flowers or other plants can be a wonderful learning adventure for children. Depending on the time of year, you could also teach them how to grow plants in pots indoors.
- Introduce observational tools. Teaching kids how to look through a telescope, microscope, or measuring glass will open the door to a wealth of analyzing opportunities.

Intrapersonal/Interpersonal
- Appreciate kids’ privacy. Sometimes children need some time alone without interaction or other outside disturbance. They just want to “listen to their mind.” Ask parents if there is a place for the child to do so at home or consider if there’s one in the preschool setting.
- Encourage hobbies. Support kids in their hobbies. Regardless of whether it involves music, drawing, or something else, doing so will develop both inter- and intrapersonal intelligence.
- Provide a study area. Many children need a place away from other kids to study, write in a diary or do other “quiet stuff.”

Summary
What does it mean to be “smart”? In many cases, intelligence tests measure how well a child can read and write, or how quickly he/she can work with numbers. However, as illustrated in this article, there are many different forms of intelligence. Multiple intelligence theory suggests that not only do people have differing interests and abilities, but that it is useful for learners to develop a range of abilities in addition to those required for reading, writing, and math.

In fact, these other intelligences – spatial, musical, interpersonal, intrapersonal, and bodily-kinesthetic – often create useful paths into developing literacy and quantitative skills, as well as playing valuable roles in their own right. This view of intelligence is quite different from the traditional definition. Finally, cognitive abilities are not “fixed,” they change and develop over time.

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Learning Objectives
What does it mean to be “smart”? Do we know, or do we just think we do? The objectives of this training are twofold: 1) explain the eight different ways that children learn; 2) suggest ways for building on those strengths.

Agenda/Outline
I) The eight different types of intelligence:
   a) Linguistic
   b) Logical-mathematical
   c) Spatial
   d) Musical
   e) Intrapersonal
   f) Bodily-kinesthetic
   g) Interpersonal
   h) Naturalist
II) Assessing intelligences (observing ways that children learn)
III) Getting started (going one step further; using small-group activities to help determine ways that children learn)
IV) Building on children’s strengths (examples described)
V) Developing infants/toddlers’ intelligence (using the eight different intelligences, this section presents ideas that can be used in the classroom and at home)
VI) Developing the intelligences of older children (using the eight different intelligences, this section offers ideas that can be used in the classroom and at home)
VII) Summary

School Readiness Considerations
As this training explains, there are many different forms of intelligence. Therefore, this training builds school success by demonstrating that the ways in which children learn are much broader than many teachers and parents may realize – thus showing how applying multiple intelligences promotes greater learning for all children.