



Multiple Intelligences: Understanding the Many Ways We Learn

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Introduction

Not long ago I led a Bible study with a group of students in one of the courses at the theological seminary where I teach. The text was John 11, the story that describes the death and resurrection of Lazarus, brother of Martha and Mary. It is a powerful and challenging text in so many ways, but this day the students found it particularly difficult. After we read the text, I handed out blank sheets of paper, along with crayons and markers, and asked them to draw the story before discussing it.

At first, panic broke out: “What? You want us to color?” “Are you sure?” “I’m embarrassed by my drawing—are stick figures okay?” Our seminary students are bright, thoughtful people; they generally have done well in school, and they are thoroughly at home with languages (they learn Hebrew and Greek), and are gifted with words and talking and the art of writing. But with only a few exceptions, most of our students are not so confident when it comes to such a spatial art as drawing. “I haven’t held a crayon since I was eight.” “Do we have to show these?” “Are you going to grade them?”

So why would I do this? Why would I torture these students so? In short, I wanted them to appreciate, to feel even, that there is more than one kind of knowing. One of the most powerful ideas to come from educational psychology in the past couple of decades is the theory of *multiple intelligences*, best articulated and described by

Harvard professor Howard Gardner. The fundamental idea is that, despite the impression that IQ tests leave, there is no such thing as a single, measurable, generic intelligence that a person can simply apply in different directions or disciplines. Someone can be very gifted in one arena and not in another, despite good effort and intention. For example, Einstein could be a genius

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physicist and only a mediocre violin player. Picasso could be a brilliant painter and terrible in relationships. A child with autism could have difficulties with social cues or language even while being a gifted athlete or musician. Seminary students can thrive in languages and be afraid to pick up a crayon. In all, Gardner identifies eight relatively independent areas of intelligence, “eight kinds of smart,” as they are sometimes called.

After the markers and crayons were passed around, and the nervous laughter and anxious questions subsided, calm began to settle over the room. Students looked

at the passage again, checking for details and making artistic choices. All the conversations stopped and were replaced by the pops of markers being uncapped and the rubbing sounds of crayons over paper. The smells of these simple childhood instruments of art filled the air, and soon images began to emerge. Some looked as if they would be abstract and colorful, some semirepresentational, while others would be rougher, and shadowy.

In the theory of multiple intelligences, drawing is one example of *spatial* intelligence, and is the kind of intelligence at work in painting and sculpture and also in architecture and design. By contrast, these seminary students are more at home, and have been educated more thoroughly, in *linguistic* intelligence, the part of the mind that uses words to communicate, reflect, remember, tell stories, and explain. In fact, most schooling relies heavily upon linguistic intelligence for the bulk of teaching and learning—using words for assignments, projects, discussions, papers, and oral presentations, for example. So, if you are good with language, you are in a good position to be more successful in school generally, even if you cannot draw well. But the reverse is not as true. If you are good at drawing, for example, but not with words, school can be a rougher road.

The Eight Intelligences

Gardner has a strict set of criteria for what constitutes an intelligence.¹ Not just anything qualifies, and so far he has identified eight intelligences. They are:

1. Linguistic
2. Spatial
3. Logical-mathematical
4. Musical
5. Bodily-kinesthetic
6. Interpersonal
7. Intrapersonal
8. Naturalist

Along with linguistic intelligence, *logical-mathematical* intelligence is probably the most treasured and rewarded in schooling situations. What begins in early childhood as understanding the order of objects and events in the physical world potentially ends with an appreciation for more symbolic and abstract sorts of order and logic. For

example, if $x + y = z$, and $x = 0$, then $y = \underline{\hspace{1cm}}$. Or the game Scrabble is to linguistic intelligence as Sudoku is to intelligence?² Algebra, analogies, syllogisms, and logic problems are good examples of the use of this intelligence, and science and math in general are particularly dependent upon this form of intelligence.

Musical intelligence begins with sensitivity to various elements within music, such as pitch and melody, timbre and rhythm. But it may lead to mastery in a particular musical instrument, the ability to discern complex movements in compositions, or the capacity to compose music. For Gardner, an intelligence is not only something that can help us solve problems, it can also be used to create something valued—various artistic, literary, or imaginative works, for example. It raises the question about whether these intelligences could just as easily be called gifts or talents. Gardner agrees that they could, but at the same time, he points out that even if considered “talents,” there is still no reason to separate out logical or linguistic abilities with the name “intelligence” and not the others.

Bodily-kinesthetic intelligence is what we see at work in athletes and dancers, for example, that is, the ability to use the body in productive ways (whether for entertainment, work, or play). This also includes using parts of the body—often the hands—so Gardner includes surgeons and craftspeople of all sorts as relying heavily upon this way of knowing. But an important point in multiple intelligence theory is that each intelligence has its own quality and character. They each feel different and express an awareness that cannot be known any other way. Gardner quotes the great dancer Martha Graham as saying, “If I could tell you what it is, I would not have danced it.”³ Describing the dance in words, or talking about catching a ball, or reciting the moves your hands make while knitting, are qualitatively different experiences than learning to get your body to do these activities.

Gardner sees two forms of *personal* intelligence (intra- and inter-) as very closely related, perhaps even two dimensions of one reality, like the foreground and background of a picture. *Intrapersonal* intelligence is ultimately about understanding oneself, from the inside out. This includes knowing your own desires and feelings, and using that knowledge to make everyday, as well as life, decisions. Psychologists, for example, are often trying to help people become more “self-smart.” *Interpersonal* intelligence, on the other hand, is keyed into other people—reading

their desires and intentions, for example, or understanding how whole groups of people behave. If psychology is more oriented to the intrapersonal, then sociology would be more oriented toward the interpersonal. But again, they are very closely related—much of our self-understanding is rooted in how others see us.

Finally, and most recently, Gardner has added *naturalist* intelligence to the list (originally he identified only the seven). Natural scientists, bird-watchers, farmers, or those who are good at hunting or fishing, for example, are relying heavily upon naturalist intelligence. They are able to see patterns and relationships in the natural environment, and can learn to recognize species and sounds and behavior patterns among plants and animals. Gardner identifies Rachel Carson and John James Audubon as classic examples of those gifted in naturalist intelligence.

An important point of multiple intelligences theory is that we all have some competence and potential in all the intelligences. (Only in rare cases, usually from stroke or brain trauma, does a person lose all ability, say in language or self-awareness.) Unlike personality tests that declare us

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this type of person or that, unlike much IQ testing that declares us smart or not along a number line, multiple intelligences theory claims we all have all of them.

We will, more often than not, be more gifted, from birth even, in some of them. And some of the intelligences will also have a greater chance to flourish, or not, in different homes, schools, and societies, depending upon what is valued and the opportunities available. For example, growing up as the son of a track coach in a family that deeply appreciated what Gardner would call bodily-kinesthetic intelligence, there was nothing more beautiful than a good handoff on a 440-relay team or the sheer act of throwing a discus. Between my home and the school athletic system at the time (that still emphasized physical education), there were plenty of avenues to engage bodily-kinesthetic intelligence. (Though, like drawing, you could not make it in school on gym or sports alone.)

Multiple Intelligences in Christian Education

After ten or fifteen minutes of drawing the Lazarus story, as dimensions and details began to fill the sheets, talk returned. We shared our images and thoughts with one another: why someone used purple here and green there, why this part of the scene is so dark, so blue, while another is so light, even empty. “Is that sun rising or setting in your drawing?” “Is Mary yelling in that thought bubble?” “Why are hands such a prominent theme?”

In everyday life and situations, we are often using and blending our intelligences in seamless ways. A good novel, for example, can use words to help us see a setting within the spatial landscape of our imaginations, stirring emotions or desires. Moving our bodies on a long walk, perhaps in the woods, can help us search our souls to make an important decision. Thinking through the logical order of ingredients and the timing of dishes in a meal helps us create a wonderful Thanksgiving meal for others. Singing a hymn, praying for others, hearing the Word, following a liturgical order, bending knees, bowing heads, passing the peace—all in the beautifully designed space of a sanctuary—we worship.

When it comes to educational settings, one of the important lessons to glean from multiple intelligences theory is to look for opportunities to enter a subject matter from multiple angles of knowing. This can help all of us appreciate and understand—whatever the subject matter—in more well-rounded ways. Or sometimes, for example, we simply have trouble “getting it” in one intelligence—say the logic or language that early church theologians used to describe the Trinity—but nonetheless feel a profound connection to the ancient doctrine when seeing an Ethiopian icon of the Trinity, or when singing “Holy, Holy, Holy.”

So, as an educational example, when studying a biblical text, perhaps take the time to draw it first, and then talk about it. Perhaps there are images from the world of art already available on the Internet—or try searching for the text musically. What hymns, if any, are drawn from the text, or what popular music? Ask any musicians for their insights: What key is the music in and why? What

is the bass line or the rhythm communicating? What music expresses grief for you? These as well as the other intelligences help create more avenues into the text.

In the case of our scholarly trained seminary class, we certainly began to incorporate other, more traditional tools of interpretation—considering the thoughts of commentators here and the meaning of the Greek there, history, theology, and more. But the point is that these reflections stirred around in the same pot as their hand-colored images:

“Is that a big heart you put everybody in? Or maybe it’s a teardrop?” “What does that say about God’s love?” “Jesus wept—I think it was out of friendship.” “It says Jesus was ‘disturbed’—the Greek meaning is more like deeply agitated.” “I think he knows he’s going to be rejected and die soon himself.” “Maybe the text is saying God suffers with us.”

“I love the way in your drawing you have all the people taking the bindings off from Lazarus—the whole community.” “Yeah, isn’t that what the church is about.” “First they intercede, Mary, Martha, the disciples are pleading with Jesus. We need intercessors, especially when we can’t do it ourselves, when we are all bound up.”

“Is that Jesus or Lazarus, I’m having trouble telling?” “I never thought about it before, but the whole story foreshadows the death and resurrection of Jesus. Maybe that’s why it’s in the lectionary now right before Holy Week.”

“You know, I think the passage is about hope—even in the face of death.” “Yeah. Hope, and life—Jesus said I am the life after all.”

With the last comment, heads nodded around the room. Someone, in a flash of inspiration, even pulled out a notebook from another class and began quoting the philosopher Paul Ricoeur: “Hope means the ‘superabundance of meaning,’” she said. “Hope means the superabundance of meaning,” she repeated, “as opposed to the abundance of senselessness, of failure, and of destruction.” And with that thought we all got quiet again thinking about hope and meaning in relation to Lazarus.

One of the students—with a beautiful voice—began humming, then sang out, “Ohhh Mary don’t you weep no more, Ohhh Mary don’t you weep no more.” She promised to send, after class, an Internet link of Bruce Springsteen singing this classic gospel piece. “You’ll love it,” she promised.

In all, it was an afternoon of talk and thoughts, images and colors, all drawing hope from the Word of God. As I left the classroom, I began to feel that, in an educational kind of way, I had gotten a taste of the superabundance of meaning from the class as they drew Lazarus back to life. I have never hesitated, since, to ask people—child or adult, seminary trained or not—to give drawing a try.

Trying Different Ways

When teachers ask students to try something different, there will be anxiety. Expect it. And of course, too much unease can be overwhelming and destroy the good things and fine ways people have always learned. Good teachers look to draw upon the strengths of students, of classes, of tradition, of the intelligences at work in them all, for education. Even so, there may be ways to breathe some new life into old ways, and I am suggesting that engaging multiple intelligences can be one of those ways.

Not all intelligences will be engaged with all subjects or all people; that is not the point. Some subjects lend themselves better to certain ways of learning than others. But simply being aware of, and giving a little thought to, ways in which some of the more neglected intelligences could be given some attention in educational ministry settings could be worthwhile.

In addition to using music and art, John 11, for example, could be approached more intentionally through the personal intelligences by noticing the emotional quality of the text: What strong feelings are at work in people in the passage? What feelings does the text evoke in you? Are there times in your own life that you have felt like Mary, Martha, the disciples, Jesus, or even Lazarus? What role did/do others play in bringing you to life? What are the different points of view at work in the story, and what difference do they make? Would the impact of the story be different if it were told in a different cultural setting?

In addition to such questions, various methods can be employed that draw upon the personal intelligences: ask people to work in small groups; give time alone to think about or journal thoughts; provide a chance to role-play, or debate. Invite parents to guess how their own children would understand or draw the story.

Logical-mathematical intelligence might invite another kind of look at the passage. What is the logical progression of the story? What disrupts the logic or reverses

ordinary progressions? Are there other biblical stories that seem to follow the same logic? How many times is the word “life” used in the Gospel of John, or “death” or “weep”? How is the chronology of this Gospel the same or different from the order of the other Gospels? What is Mary’s logic about the situation? What is the relationship between belief and life, if any, in the text? Questions and reflections oriented to the logic at work in a subject (whether this Bible passage, a spiritual practice such as prayer, or a theological idea like resurrection), or those that quantify aspects of it, are questions and reflections that primarily engage logical-mathematical intelligence.

In Christian education generally, naturalist intelligence would be particularly relevant to anything occurring out of doors, for example in retreats and camp experiences. But it also invites the possibility of incorporating an outside component into any particular class session. Do we read or hear a biblical text any differently when under the sky or in a garden? If not the Lazarus story, what about the creation story of Genesis? Or Psalm 8, or any other text referring to the world God has made? What would we notice about “trees planted by streams of water” (Psalm 1) if we were actually standing near a stream or a tree or both?

But even indoors, in classrooms, it is possible to draw connections to the created order through photos and films, sound recordings, or even our memories and imaginations. Fundamentally, the naturalist within us notices the interconnected nature of creation, feels the wonder of life, and is attuned to the rhythms of the universe of which we are a part. In light of John 11 (as well as all the Gospels), we could ask: What connections might there be between creation and resurrection? What does the passage imply about the rhythms of life and death?

When it comes to bodily-kinesthetic intelligence, attention is focused upon how our bodies know and move and express, or not. The body of Lazarus is at the very heart of this story—its death and decay, its binding and stench, its release and healing. The whole story moves from death of the body to life. To face our bodies is to face our mortality on the one hand, but it is also to embrace the hope we find through faith that brings life even to our bound-up bodies. Faith is dead if not embodied, if not living through the works of our hands. And our educational ways could also look for more opportunities to unbind our bodies for the sake of learning: tak-

ing contemplative walks or acting out biblical stories; bending our knees to pray or moving our feet to dance; using our hands to help others, even as we listen to their stories and learn together.

The point is that different intelligences invite different kinds of questions and explorations. Each of these intelligences has its own character, its own way of knowing life and contributing to the superabundance of meaning. When they move around one another and draw upon each other for strength and wisdom, good things tend to happen. To paraphrase the apostle Paul in Romans, we could say that all *intelligences* work together for good for those who love God.

To Life

In my own teaching, I have found that expanding my understanding of knowing and broadening students’ engagement with multiple intelligences has been well worth the effort. Offering alternative or multiple doorways into a subject has been particularly helpful for people with developmental disabilities who may be challenged in one form of knowing or another, for intergenerational settings (in congregations and families alike) where students may be of vastly different ages and abilities, and for the opportunity to learn from others who may or may not have a seminary education or be comfortable with words. In various ways they have all been able to help me to better love, dance, think, feel, and walk in faith.

For More Information

Two of the most important works by Howard Gardner, outlining the theory, are:

Frames of Mind: The Theory of Multiple Intelligences, 10th ed. (New York: Basic Books, 1993, 2004).

Intelligence Reframed: Multiple Intelligences for the 21st Century (New York: Basic Books, 1999).

Two very helpful books oriented to classroom teaching are:

Thomas Armstrong, *Multiple Intelligences in the Classroom*, 2nd ed. (Alexandria, VA: Association for Supervision & Curriculum Development, 2000).

Linda Campbell, Bruce Campbell, and Dee Dickinson, *Teaching and Learning through Multiple Intelligences*, 3rd ed. (Boston: Allyn & Bacon, 2004).

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Endnotes

1. For a good summary of the criteria see Gardner's *Intelligence Reframed* (New York: Basic Books, 1999), chap. 3. Briefly they are potential for isolation (by brain damage) and the existence of prodigies in the intelligence; a deep history in humanity as

a species and a distinct developmental history in individuals; a core set of unique operations and the ability to encode the intelligence through symbols; and support from psychological tasks and testing.

2. $y = z$; logical-mathematical intelligence.

3. From Howard Gardner's *Frames of Mind*, (New York: Basic Books, 1983), 224. Gardner references the remark from Martha Graham, *The Notebooks of Martha Graham* (New York: Harcourt Brace Jovanovich, 1973).