

## What kinds of intelligence are there?

In my first year as a newly graduated teacher, some forty years ago, I had a Year 9 (M3) student (let's say his name was Bill), who stood out right from the beginning of the year as noticeably weaker at his studies than his classmates. I taught English and Social Studies and very soon became aware of his inability to read or write at anywhere near the level expected of a 14 year-old. So Bill joined my special English class as well, where he could get some extra assistance. Quite quickly, therefore, I had classified Bill in my own mind as intellectually limited – an unintelligent student who was destined for simple work, perhaps work in which he could use his impressive physical attributes. Bill was a big, strong boy, but slow of speech, shy and lacking in social skills. I did not expect to see any great achievements coming from Bill.

In the second term of the year, the boys started their football competitions – between houses and different schools. Bill was in my house and in the house football team. I can still remember my amazement when I first saw Bill playing football. This slow-witted, slow-moving

youth had been transformed. As a footballer he displayed the speed, anticipation, co-ordination and ball skills of an accomplished athlete. He seemed to be a different boy and I wondered how he could be so capable on the football field and yet so dull-witted in the classroom.

Of course, there were various reasons why Bill was poor at school, but these had no effect on him when he was on the field. It was obvious to all that Bill had strong physical-motor skills. I didn't realize at the time, though, but would say now that what I saw as *skills* in fact constituted a form of *intelligence*.

Adopting the terminology used by Professor Howard Gardner of Harvard University, we can see that Bill had high *bodily/kinesthetic* intelligence, but limited (or perhaps impeded for some reason) *verbal/linguistic* intelligence. But how is it that a boy could be both intelligent and unintelligent? The answer lies in the fact that we all have more than one form of intelligence. We have *multiple intelligences (MI)*.

In 1979 Howard Gardner, a cognitive psychologist, was researching the relationship between the brain and cognitive development with the purpose of describing and explaining different human capacities, or faculties. For some reason he can't actually remember, he decided to call these capacities "intelligences". Now, the idea of "intelligence" was already well known and intelligence had been measured by IQ (intelligence quotient) tests for many years. However, intelligence as an "innate" quality (that is, something that exists prior to and apart from learning or acquisition) was generally understood as something necessary to academic success. Hence IQ tests measured verbal/linguistic, logical/mathematical and visual/spatial abilities. In most cases, these were tests that could be and were done on paper.

Gardner said that he had no argument with IQ testing, especially as better tests were being developed that were sensitive to cultural background, gender and social class. However, it was clear that some abilities, such as Bill's superior capacity to "read" the play, anticipate, move into position and perform advanced ball skills in a football game, were more than a simple ability to perform a task.

They amounted to a form of intelligence. Hence, Gardner proposed that, in any community, multiple intelligences (MI) were likely to be present, and that any individual was likely to be stronger in some of these and weaker in others. Bill was a good example of *bodily/kinaesthetic* intelligence – the intelligence governing physical strength and the ability to move the body (or body parts) effectively to achieve a purpose (e.g. to pass a ball accurately, to express oneself through dance, to produce craft items, etc.). He may have been strong in other intelligences, too – visual, naturalist, etc., but he certainly did not have high verbal/linguistic intelligence. That was unfortunate for Bill, as this form of intelligence is highly valued and necessary for success in school.

Gardner has identified eight intelligences, with another (*Existential*) still under discussion. The 8 intelligences are as follows:

1. Verbal/Linguistic

- Ability in writing, reading, storytelling, word puzzles, etc.

2. Logical/Mathematical

- Ability to see patterns, categories and relationships; good at arithmetic problems, strategy games and, perhaps, experiment.

### 3. Bodily/Kinesthetic

- People with B/K intelligence are often athletic, dancers or good at crafts.

### 4. Visual/Spatial

- Ability to think in images and pictures; may be good at doing mazes or jigsaw puzzles, or spend free time drawing or using *Legó*.

### 5. Musical/Rhythmic

- The ability to experience and interpret the world as music and rhythm. M/R people often sing or tap out a rhythm to themselves. They hear sounds that others may miss.

### 6. Interpersonal

- Ability to communicate well and understand others' feelings and motives. These people are often leaders.

### 7. Intrapersonal

- People with high intrapersonal intelligence may be shy. However, they are very aware of their own feelings and are self-motivated.

### 8. Naturalist

- High awareness of the natural world; the ability to identify natural phenomena, to discriminate between different kinds and to classify them systematically.

There is not enough space for this article to give more examples of the kinds of intelligence listed above.

However, I am sure that readers can think of people, perhaps their children or family members, who are strong in some of these areas.