

Are Thai children becoming less intelligent?

Six months ago there was much concern in the media about warnings from the Ministry of Health that children in Thailand were becoming less intelligent than children in other countries. The *Bangkok Post* (19 July 2006) reported that the average IQ score for Thai children (13-18) was most recently measured at 87. The international average score, the report said, is 90-110.

I must admit to being confused by these figures and wonder how they are derived. I'm not an expert, but to my understanding, the average score of any statistically valid sample on any validly constructed IQ test should be 90-110. If the average score is lower or higher, one must question either the validity of the test or the validity of the sample. After all, if a valid sample of any population scores higher or lower than the mean of 90-110, what is that telling us – that the tested population is particularly bright (or dull), or that the particular test suits (or does not suit) that kind of population? Either way, is it actually measuring their intelligence or something else, such as their health or their socio-economic development? And, if

so, are we talking about “intelligence” or something broader, more susceptible to environmental influences than the term “intelligence quotient” (IQ) would suggest?

There were many complaints in the latter part of the last century that IQ tests discriminated in favour of certain students (socio-economically advantaged and from dominant ethnic groups) and against students from poor homes and minority backgrounds. In more recent years tests have been devised that probably overcome the main complaints of cultural bias. Indeed, in Western countries, East and South Asian students generally perform better than their European peers on tests of this kind though the tests have been devised by Western academic research institutes. However, there really does appear to be confusion over what is being measured and what the scores mean. Are they really telling us much of value? After all, we know that the ability to score highly on tests of verbal knowledge, logical reasoning and spatial-mathematical sequencing does not necessarily mean that the test-taker will be much good in a crisis or able to locate and repair a fault in your car.

The question of what is being measured, and how, is discussed in an article on the net found at <http://www.fourmilab.ch/documents/IQ/1950-2050/> . The article discusses research plotting average IQ scores across the world (based on actual results and calculated estimates) from 1950-2050. It finds that

1. Mean population IQ scores correlate more strongly with economic development as measured by gross domestic product (GDP) per capita and long term economic growth than any other single factor, and
2. If population IQ and wealth remain constant, the average IQ of the world should fall over time.

So, if Thai children's IQ is falling, this is consistent with a general decline around the world. However, as Thailand's GDP per capita increases, average IQ should increase correspondingly. I'm not suggesting that the data or the assumptions are faultless, but they are interesting, and readers can refer to the article for themselves.

At present, wealthy countries such as Australia (average IQ 100), Finland (100), Japan (99), the UK (99), Belgium (98) and the US (97) are scoring well, but poorer countries

are scoring very poorly. The global average for 2000 was 89.20 and is expected to decline to 87.81 by 2025. In 2000, Thailand's score was 96.03, considerably higher than the 87 cited by the Health Ministry. Whose figures does one believe?

Another weakness in the measurement of intelligence by IQ test scores is that it is generally acknowledged that scores of IQ test takers improve as they take more tests. Hence, populations in which IQ tests are frequent get higher scores over time (about 3 points per decade, though it may have flattened out in advanced countries). Calculating backwards, therefore, from a current mean of 100 one would arrive at an average IQ in our grandparents' time of about 80, which today would indicate limited intellectual capacity. However, we know that in most cases our grandparents are far from intellectually weak. If the finding that scores on tests have improved is applied to the intellectual output of a century ago, one would expect that, at that time, very few works of art, architecture or literature would have been produced and almost no scientific breakthroughs. But we know that is not the case.

So is the world getting smarter or dumber? It appears from the data to be both, as countries become more or less developed. All that can be said, therefore, is that IQ is a relative and shifting concept. A valid IQ test for Belgium would not be valid for Bourkina Faso. Somalians would struggle with a test designed for South Africans. One could not even apply an IQ test for Thai students to Lao students because, although they are linguistically and, in some ways, culturally similar, the level of development of these two countries varies too greatly.

So, are Thai students becoming less intelligent? I doubt it. They may be getting better at some things and losing some other skills, but that is a broader understanding of intelligence than IQ measures. We would be better to ask ourselves: What do Thai children need to know and be able to do in order to be happy individuals, responsible family members and productive citizens? These questions can then drive our curriculum and school planning in the directions they need to go.

People who are happy, responsible and productive are those who draw on a range of abilities and are able to

apply their best talents to careers for which they are most suited. Many schools recognize and develop these abilities as *Multiple Intelligences*, following the classification of Dr Howard Gardner. The next article in this series will discuss multiple intelligences (MI) as a more useful way of describing intelligence and consider research findings on the relationship between bilingualism and intelligence.