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Cultural Variations in Ideas of Gifts and Talents With Special Regard to the Eastern and Western Worlds

Joan Freeman

In every culture, to reach an exceptionally high standard in any area every child needs the means to learn, which includes material to work with, focused challenging tuition, and encouragement to follow their stars. But in the promotion of gifts and talents, wide differences between cultural approaches and provision inevitably produce different outcomes (Freeman, 2005). Everywhere in the world, there are both barriers and encouragements to the development of gifted potential, such as the type of ability approved of, particularly what is considered suitable for each gender or status in society.

Arguments about precise definitions and the identification of the gifted and talented have been clashing for more than a century, and will doubtless continue. Gifted and talented individuals are not cast in the same mould, whether in terms of learning style, creativity, speed of development, personality or social behaviour. What they do have in common, though, is the potential to reach excellence in their fields. The gifted and talented are regarded here as those who either demonstrate exceptionally high-level performance, whether across a range of endeavours or a limited field, or have the potential for excellence.

Cultural Duality

Educational provision to promote gifts and talents is widely varied across cultures (Wallace & Eriksson, 2006), notably in the political struggle between élitism and egalitarianism. In researching my overview of world-wide provision for the gifted (Freeman, 1998), it became clear that there is a major cultural split in attitudes between western and eastern cultures towards the development of excellence seen in the relative importance given to genetics and environmental influences.

The Genetic View - Selects Few Children with High Potential

In western culture, genetic influences are implicitly accepted. Accordingly, to identify the gifted, children are compared with their age peers in terms of their relative position on a spectrum of abilities. Only a tiny percentage is selected as "gifted" for intervention, an approach I call 'diagnose and treat', that is, measure giftedness and prescribe for it. This procedure has been dominant in the USA since the early 1900s, though much less so in other parts of the West. As a result of this approach, the vast majority of children (perhaps 90%) who fail to make the cut, are seen, at least implicitly, as incapable of high-level achievement.

The Environmental View –Aims to Develop Potential

In eastern culture, every baby is seen as being born with similar potential. The main differences in achievements are their rates of development – which to some extent is within the power of each individual to fulfil through hard work. In Japan, for example, Matsumura (2007) explains, "However, Japan is unique in that despite its place as one of the most advanced countries in the world, gifted education does not officially exist. Instead, other opportunities exist for gifted students, giving gifted education a "virtual" existence" (Matsumura, 2015).

A cross-cultural investigation brought the researchers to the conclusion, in U.S. contexts, people tended to believe that only some people have the potential to become highly intelligent (Rattan, Savani & Naidu, 2012). In South Asian Indian contexts, they added, most people were seen as having the potential to become highly intelligent which provided "increased support for policies that distribute resources more equally across social groups".

This eastern approach based on opportunity and individual effort also assumes a high level of teacher expertise and commitment. However, the East does not have a monopoly on this outlook. A broad egalitarian approach works equally well in small and highly developed western countries such as in Scandinavia, notably Finland, a frequent top scorer in the regular Programme for International Scholastic Assessment - PISA – educational achievement comparisons (Sahlberg, 2012).

Yet, in spite of these two biases, in practice most cultures use a variety of overlapping methods to promote maximal achievement, and the gap is slowly narrowing. Even though the western genetic approach has been internationally dominant in terms of published research, there is also wide acceptance of the interaction with enviromental influences in the development of potential. There seems to be a trend, though, to move away from the fixed labelling as gifted by cut-off point towards a developmental approach which takes into account the mediation of the socio-cultural learning context, as described by Wertch (1998). This more democratic 'bottom-up' approach is more widely empowering, and much less wasteful of human endeavour.

For example, Tommis (2015, this volume) writes, "The paradox for Hong Kong is that it is caught with a western definition in an eastern culture with different expectations on how gifted students can be nurtured." But perhaps it is this interaction which acts like the grain of sand under the oyster's shell to produce the pearl. Is it the aim for all round excellence that brings Singapore so many times to the top of the PISA stakes - the encompassing investment in human capital that is making the Asian Tiger economies?

The creative *zeitgeist*, a sort of cultural encouragement, is also effective for the flowering of talent. Examples include the Renaissance in Italy in the 16th century, the Victorian era in Britain in the 19th century and 20th century Paris. Right now, according to Lang Lang the Chinese pianist, there is "a Chinese culture of success", which is clearly bearing fruit (Lang, 2014). It does, though, involve parents' willingness to provide sometimes extreme support.

Identifying the Gifted and Talented

Each method of choosing the gifted picks up a somewhat different group of children with different consequences for their self-concepts and education. Scholarly children will be different from athletes, and the creatively talented are often more difficult to identify and accommodate. Criteria vary through high marks in school, innovation, solving paper-and-pencil puzzles for an IQ club such as Mensa, competitive athletics or gaining entry to a gifted summer programme.

In western culture, special education for the development of skills and talents is usually limited to a selected élite. But by whatever the criteria of selection, there will inevitably be individuals whose potential contributions remain undeveloped or who must find other routes to fulfilment –maybe in areas which have not yet been discovered. Generally, gifts and talents in children are identified by precocity, and in adults through creative productions based on many years of dedication. Precocity, though, is not a reliable predictor of adult success. For example, not one of the subjects in Terman's studies of 856 boy and 672 girl "geniuses" in California actually became an adult genius. There were, however, considerable flaws of procedure in this work, notably in sampling, for example, "no private, parochial (religious) or Chinese schools" (Holahan & Sears, 1995, p. 11).

Cultural values can negatively affect the identification of bright youngsters who do not fit accepted expectations. They may not speak the local language well or think in different ways. Percentages of children identified as gifted also vary greatly in different cultures. Estimations of secondary teachers were compared with 400 secondary teachers in Germany, 400 in the USA and 159 in Indonesia (Dahme, 1996). The German teachers estimated 3.5% of children as gifted, the Americans averaged 6.4% and the Indonesians 17.4%.

Checklists of the supposed characteristics of gifted children are always culturally influenced. For example, a child asking a lot of questions can be seen as gifted, attention-seeking or disrespectful. It is also claimed that the emotional development of highly gifted children is likely to be warped, so they should be treated differently from 'average' gifted children (Gross, 2004). Yet, scientific research evidence shows the gifted to be at least as well balanced as any others (Freeman, 2010; Martin, Burns, & Schonlau, 2010; Neihart, Reis, Robinson, & Moon, 2002; Richards, Encel, & Shute, 2003). Indeed, if extreme giftedness and emotional problems are inherently linked, it should be apparent across all cultures - which it is not.

Internationally, 89% of all teachers were found to use further enrichment for their gifted learners to provide breadth in learning beyond the normal curriculum (Freeman, Raffan, & Warwick, 2010). The Children's Palaces in China, for example, practice what appears to be a highly successful means of identification by provision with primary school children. This approach relies on the children's own motivation and interest for its success (Shi & Zha, 2000). The children are not tested for entry by aptitude, but those who attend for years can reach excellence in their chosen field (Dai, Steenbergen-Hu, & Yang 2015).

Teachers' subjective judgment was found to be the most frequent route for identification of the gifted, reported by 80% of respondents. Their personal attitudes towards the idea of gifts varied from refusing to identify any to overestimating a youngster who is good at, say, math for their overall abilities. Tests, whether nationally normed or not, such as for general intelligence (55%), were also used and allied with school achievement (63%). So, manifest achievement was used as a much stronger criterion than potential. Inevitability this approach will miss apparent underachievers of all kinds, in particular the disadvantaged and the twice exceptional. Identification not only depends on what is culturally accepted, but also the facilities available for teaching (Banks & McGee Banks, 2010; Balchin, Hymer, & Mathews, 2008).

Even within one country, such as across the states of the USA, percentages of the child population identified as gifted by teachers vary between 5% and 10% (OERI, 1993), though teachers are reliable, in that they will continue to pick the same kind of children. Parental choice is even more beset by cultural stereotypes, often meaning that two boys are chosen for every girl: a strangely stable gender proportion all over the world.

Family attitudes are a microcosm within wider cultural values and have a considerable effect on achievement. For example, Berry (1990) found that Jews were very over-represented as Nobel Laureates, in certain subjects by a factor of 50. As 75% of them came from lower socio-economic backgrounds, it could not have been due to privilege, but rather their potential along with cultural influence of the family's drive for success (Zuckerman, 1983).

A 15-year Chinese study of 115 extremely high-IQ children by Zha (1985), showed strong family influence, both in achievement and emotional development. By the age of three, many children could recognize 2000 Chinese characters, and at four, many could not only read well, but also wrote compositions and poems. However, these 'hothoused' children were found to be lacking in easy social relationships, and the parents had to be given lessons in how to help their children with some social life.

For 35 years, I examined and followed a sample of 70 British children identified as gifted by their parents, each child matched for age and gender with two comparison children (n= 210) (Freeman, 2013). Across the decades, it became clear that family expectations had strongly affected individual life paths. In general (but not always), those with an exceptionally high IQ, say within the top 1%, did much better than those with merely a very high score, say within the top 10%.

Many studies have shown gender to exert the strongest single effect on high level achievement (Freeman, 2005). For example, when girls start school in America, they are identified in equal proportions as boys for gifted programs; however, as they get older, there is a striking dip in the proportion of girls (Winner, 1996). Asian American girls, though, do not show this developmental pattern; they score more highly than non-Asian girls on Scholastic Assessment Tests or SAT (used for college entrance).

Yet, in a growing number of other countries in both West and East, girls at school are achieving higher examination grades than boys in *all* subjects (Freeman, 2004). This is steadily spreading at the university level, though the change is seriously slow in the world of business and public affairs. Looking at mathematics and natural sciences, an international review of

research on gender differences among the gifted failed to find any reliable evidence that girls are inherently less able than boys (Heller & Ziegler, 1996). They pointed out that even on present tests of spatial abilities on which boys do better, we could expect twice as many male engineering graduates as female, whereas in fact there are 30 times as many.

Cultural Influences on Education for the Gifted and Talented

It is not always the availability of resources which affects provision for the gifted and talented, but rather social and political attitudes. In the egalitarian countries of Scandinavia, for example, it is not politically correct to provide differently for individuals (Persson, 2014). In the Far East and the former Soviet Union, though, high-level achievement is encouraged as valuable to the society rather than just the individual and so differentiation is provided in education. But, as always, there is overlap in these attitudes and provision across cultures.

For example, in a comparison of school climate in the USA and China, researchers found that although class sizes in China were considerably larger, the pupils reached much higher academic levels as well as being less disruptive and aggressive (Yan, Bear, Chen, Blank, Zhang & Huang, 2013). They concluded that this was due to significant cultural differences in pupils' perceptions of the school climate, notably towards authority, academic and social values, self- and peer-regulation and teachers' classroom management. As Vygotsky first pointed out in the 1920s, understanding the cultural context of learning is vital (Vygotsky, 1978).

Unfortunately, using scientific evidence as a basis for any educational action is not customary in any part of the world. Nor, for that matter, is all published research explicit about its context and culture; results are often given as though they were universal and transferable. In fact, research on gifted education is widely varied in quality. Typically, it is concerned with small samples of children who are not compared with matched others. Although generalizations from apparently successful educational schemes are common, it is hard to know how well they might be transposed to other cultures (Freeman, 2002). For example, an American-style summer camp for the gifted set up in England (2002-2007) was so unsuitable and unsuccessful that its generous government funding was withdrawn (National Academy for Gifted and Talented Youth. Teacher Training Resource Bank, http://www.ttrb.ac.uk/viewarticle2.aspx?contentId=15183, retrieved 17 May 2010.)

In most classrooms the teacher is expected to encourage pupil compliance to improve knowledge and skills. Too much conformity, though, can put creative questioning at risk, particularly for high flyers in pressured schooling (Freeman, 2010; Ng, 2001; Sternberg & Lubart, 1995). In fact, internationally, teachers do not normally regard creativity as an aspect of giftedness (Freeman, Raffan, & Warwick, 2010). But, according to Albert Einstein, creative thinking is part of normal every-day thinking so there is no apparent reason why it cannot be further developed through teaching.

Wide-ranging recent evidence indicates that specific high-level education within subject areas is by far the most effective in promoting excellence, rather than general enrichment without identified goals (Subotnik, Olszewski-Kubilius, & Worrell, 2011). This can be home schooling, summer schools or a specialist boarding school such as for sport. It can be a few hours a week

within an institute of higher education or a day experience in industry, etc. Mentors, too, come into this category. Selected gifted and talented children who take part in special summer and weekend schools, often describe their pleasure at meeting and relaxing with others of their own kind. However, it is reasonable to suppose that bright motivated youngsters in an exciting atmosphere of learning, would indeed learn more. There has never been a direct comparison of programs for the gifted, either cross-culturally or even within one country (Freeman, 1998).

The cheapest and easiest form of special school provision is to move a bright child up a class or more above his/her age-group, namely grade-skipping or acceleration in various forms. The Beilin-Blank Center, USA, is one of the most prominent advocates for acceleration in the field (Colangelo, Assouline, & Gross, 2004). This move is, however, strongly resisted by teachers and parents there and elsewhere. Julian Stanley (in Bock and Acrill, 1993, p. 136) claimed that in the United States, a gifted mathematician could accomplish a whole year's school course in three weeks! There are indeed times when it may be the only option, but in order for the acceleration to be successful, special care needs to be exercised to prevent potential problems that have been found in some cases.

Yet, the argument between acceleration and enrichment is beginning to be seen as simplistic. The two are not mutually exclusive; an open approach to provision incorporates elements of both. In practice, acceleration varies across East and West. In countries where the basic standard of education is lower there seems to be a greater need to provide extra help for those with the most promise; to 'rescue' the brightest children by special provision or acceleration.

In some countries, such as Spain and the Scandinavian countries, acceleration is not permitted. Others, such as Singapore (a frequent PISA winner), only allow it in special circumstances. It is rare in Russia, although there are no prohibitions against it. In China, a school may take a child of any age into any stage of education, as long as the child has passed the examinations for that level. Indeed, at several technical universities in China, five-year (and later four-year) courses were set up for mathematically or scientifically precocious children from across the country, taking children as young as 11 (see Dai, Steenbergen-Hu, & Yang, this volume). Visiting one of the universities in 1995, my impression was of a high-powered boarding school for boys. The senior tutor there described how the children are well tolerated by the older students, but do not mingle much with them; also that about 15% of the class were introverts and unable to speak their minds. However, there have been policy changes since then, early entrants being older.

Some gifts or talents, notably in music and the performing arts, do seem to call for special full-time education so that children can immerse themselves more deeply than in a normal school – and so move on more quickly within their discipline. They are to be found in every culture. In many countries there are highly selective private schools for which children are chosen by achievement tests, interviews, parental wealth or position. However, the 2012 PISA review of 37 participating countries found that although students who attend private schools are richer, after accounting for their socio-economic background there was no performance difference (Schleicher, 2014).

If children appear to do well from a gifted program, we do not yet know whether it is due to the extra attention, to only parts of the scheme, or how well the effects last. We do know, though, that research on the effects of practice, notably of more than 10,000 hours, will produce a form of expertise (Ericsson, 2014). Yet, whether that acquired expertise is the same as talent in terms of inspiration, creativity and world acclaim is questionable. Could any child taken at random really be a Mozart or a Lang Lang?

Internationally, in every move to improve the recognition and education of the most able children, there is so often a flow of negative feeling from different sources arguing that there is no need for such provision. The contention is usually between raising excellence and improving equity in education. Yet these are not conflicting policy objectives. As the PISA results of 2012 showed, of the 13 countries that had significantly improved their mathematics performance since 2003, three also showed improvements in equity in education, and nine of the others improved their performance while maintaining an already high level of equity (Schleicher, 2014).

Some high-performing countries in PISA 2012, like Estonia and Finland, also show only small variations in student scores, proving that high performance is possible for all students. Equally important since their first participations in PISA, France, Hong Kong-China, Italy, Japan, Korea, Luxembourg, Macao-China, Poland, Portugal and the Russian Federation have been able to increase the share of top performers in mathematics, reading or science. This shows that education systems can pursue and promote academic excellence whether they perform at or above the PISA average (e.g. Japan, Korea) or below (e.g. Italy, Portugal, the Russian Federation).

Cultural Effects on the Psychology of Reaching Excellence

Bright western children who are rejected via a cut-off point for advanced educational courses will have encountered a barrier to their first steps on the road to excellence. Others, though, who see the way open for them if they are prepared to work hard, are more likely to have a positive attitude. Dweck (2006) has found that it takes an open mind on the part of students and teachers to allow individual potential to develop creatively.

Theorists have contrasted “the notion of the autonomous independent self, which is widespread in the West, with the notion of the relational, interdependent self of the East” (Kitayama & Duffy, 2004, p. 56). These modes influence cognitive processes, notably perception in terms of attention and interpretation and the expression of individuality. Perceptual channelling is learned very early in life, and where the social order is authoritarian it can make it very difficult to keep minds open. Tightly controlled perception affects all learning and is more difficult to adjust as the years go by.

Pupils can function and develop optimally if they are helped to identify their own ways of learning, which include strategies of planning, monitoring, evaluation and the choice of what to learn. This self-regulation (metacognition) implies being able to prepare and supervise one's own knowledge acquisition and to stay concentrated and motivated. The more able an individual the more self-regulation will be needed for high achievement: the less able an individual the more teacher regulation is needed (Span, 1995).

When teachers help pupils to reflect on their own learning and thinking activities they are increasing their pupils' self-regulation. For a young child, it may be just the simple question – what have you learned today? – which helps them to recognise what they are doing. The sharing of the control of learning between teachers and pupils, improving pupils' learning to learn should be a major outcome of the school experience, especially for the highly able.

In Japan, all primary school children are regarded as similar in potential so that differences in their achievement are due both to their hard work as well as the teacher's competence. Flynn (1991) concluded that the culture of determined hard work is probably responsible for so many Asian-American (usually meaning Pacific Rim) youngsters' greater school successes than their higher IQ classmates. In fact, Hess and Azuma's (1991) in-depth research showed that American children needed much more help and praise than Japanese children in their motivation to learn. The potential long-term rewards for the diligence of these young children are in their choice of secondary school, providing access to university, followed by a good career – and a good pension. Ericsson (2014) from his many years of experimental work into the effects of practice, would probably agree.

Continuing his cross-cultural work, Flynn has observed an increasing change in the way bright children think and learn called the 'Flynn Effect' (Flynn, 2012). It is measurable in the rise of children's intelligence of about three IQ points a decade which he suggests is probably due to more intellectually demanding work, greater use of information technology and smaller families.

In Europe, this increase has been highest at 20 points per generation, notably in Belgium, Holland and Israel, and lowest, at 10 points per generation, in Denmark and Sweden where scores were already high. Although the data are limited, it seems that the increase in IQ is accelerating. In Holland, for example, scores went up most strikingly over 8 points for the most recently measured period, 1972 to 1982. We have no comparative data for the Far East. If such changes in measured intelligence are, as Flynn says, due to different cultural approaches and access to learning facilities, it must alter the international understanding and identification of children seen as gifted and talented.

All youngsters proficient in IT, he suggests, are now progressively more competent at manipulating abstract concepts such as hypotheses, analogies and categories. It is not so much that their basic natural intelligence is going up; the big changes are in the way it is developing and being used. His discoveries indicate the need for a serious change of educational direction for the brightest students, aiming to develop acumen and deep thinking rather than dates in history – skills rather than content. This would bring about big changes in the world beyond school. Cultures which are alert and able to promote this new mode of gifted intelligence are significantly advantaged over those who have yet to recognize it.

Around the world, over a third of people concerned with gifts and talents, both students and educators, frequently use online as well as other forms of learning and collaboration (Freeman, Raffan, & Warwick, 2010). The enormous educational potential of social networking techniques are only beginning to be exploited in schools. But access to virtual learning

opportunities is strongly linked to economic factors which would need significant investment in the poorest countries to provide a more even spread.

Nicholas Carr (2010), who won a Pulitzer Prize in 2011 for his considerable research into electronic communication, said that although we enjoy the web's bounties, it may also be at the cost of deep thinking. Yet it can also be argued that quickie postings such as Tweeting can focus the mind as well as providing a platform for sharing and growing creative ideas.

As the shift to electronic tools is probably increasingly changing the development of perception, reasoning and creative endeavour, those who do not have access to them will function intellectually differently from those who do. This change could even alter the familiar bell-shaped curve of IQ measurement so that intelligence tests will have to be changed to accommodate the new ways. When we know more about its effects on the hearts and minds of our children, we will also know better how to manage and profit from it.

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