



www.eq-bg.com

Games and adventures for the little and not so little

On 19th November, EQ played host to a surprisingly large group representing Ruse's educational community. The venue was our new office in Dobrudzha Street which was being used as we intend to continue using it - as a welcoming, informal meeting place for presentations, training and discussions.

We meet with our "Educational Resource Group" fairly regularly - an activity that is coordinated by Svetla Mejri who greeted the audience on this occasion and introduced the speakers - David and Galina Bisset - who intended to talk about "games and adventures". This is how we refer to an extensive repertoire that has developed over the years - myriad ways of working with children in group contexts. We have published a book on the subject which was also presented on 21st November by David, Galya, their daughter, Annie and Elena Petkova to an audience from the educational and social services communities in Razgrad at an event hosted by the director and staff of the city library.

None of the activities described in the publication is particularly startling or groundbreaking. We are not advocating an EQ Model in the sphere of informal or experiential education that lends itself to the production of a manual and training material for the sake of providing expertise of defining a methodical approach. Quite the contrary.....

The neuroscientist, Howard Gardner, tells us that the human brain is the result of over 2 million years of evolutionary development and its size and sophistication is commensurate with the way we interact with the world which is more diverse and multifaceted than other animals that we consider "less intelligent". The brain has evolved because of the growing number of uses we put it to or, to be more specific, styles of processing information to arrive at *meaning*.

Sharks and polar bears have intelligence profiles that are appropriate to their natural habitats and the habits they demonstrate within those environments just as they have physical attributes that are functional in those habitats and supportive of the behaviours.

In this sense, intelligence is *relative* not absolute. To hunt seals in the Arctic, a human will wear insulated clothing, ride a jet ski, carry a weapon and call on his



understanding of seal behaviour - improvisations that allow him to perform a task that a polar bear is more naturally equipped for. A western technophile employed by a world-renowned magazine can devise ways of navigating and staying alive in the Australian outback but an aborigine can do the same without the equipment and scientific understanding. In terms of functionalism - getting the job done in the given environments - polar bear, Inuit seal hunter, aborigine on walkabout and photo-journalist for *National Geographic* can all employ effective or "intelligent" strategies. The more sophisticated of those strategies consume more natural resources and have a higher impact on the eco-systems in the two geographical regions.

A wise man once said that simplicity is the ultimate sophistication and, following his own example, he failed to mention the roles played by personal characteristics and resources available in any given situation. This includes working memory - the brain's scribble pad - where multiple pieces of information can be actively held and manipulated. Active memory has limited capacity that can be defined both in terms of how much information can be held there and how long it can be held for. Working memory is a theoretical concept that is believed to be linked to learning and the ability to pay attention.

The working memory of the Inuit would have higher capacity than that of the polar bear. Additionally, the Inuit would be capable of metacognition, the type of self-awareness that allows humans to be aware of their own ability to think which impacts markedly on the way we toy with information in our working memory. A killer whale that surfaced to watch the antics of the creatures on the ice-pack is thought to have metacognitive ability as does a chimpanzee (as you might have expected). However, their brains look entirely different and this confuses neuroscientists.

Intelligence can be used to improve working memory - there are strategies available. Some prefer visualization while others go for word association. This brings us back to Howard Gardner and his theory of multiple intelligences.

According to Gardner, we should not talk of intelligence (singular). Rather, we should recognize that humans possess multiple intelligences. (It is reasonable to suggest that this is also true for killer whales and polar bears.)

His theory of multiple intelligences emerged in 1983 and it has been significantly refined over the last 30 years. Having originally defined 7 types of intelligence, he added an 8th and there may be grounds for defining a 9th.

Gardner draws attention to the fact that academic success is largely dependent on the possession and application of two particular types of intelligence - mathematical / logical and linguistic. The eminent educationalist, Sir Ken Robinson, attributes this narrow focus to the emergence of state-sponsored education in the



19th century and the application of an industrial paradigm. Education has fulfilled the utilitarian purpose of preparing people to take up employment roles and Robinson acknowledges the historical differentiation between blue collar and white collar employment. While blue collar jobs are not necessarily unskilled they traditionally demanded a lower level of academic attainment than those in the white collar sector inhabited by senior managers, university dons and other practitioners of complex thinking communicated verbally and advanced deductive reasoning.

Many commentators draw attention to the contemporary phenomenon of credential inflation under which an increasing number of jobs that previously demanded no specialist certification or university degrees now demand such credentials. Blue collar work has become credentialized. Additionally, there is growing acknowledgement of a pink collar sector that is personal service oriented and includes those professions in which women tend to dominate (nursing, social work, etc.).

There may be a need to choose another colour (yellow?) to attribute to the significant growth of a sector that focuses on communication - the media, sales and marketing and entertainment. The pink collar and yellow collar sectors both have their own academic criteria. What about agriculture and forestry (green collar)? We could go further. Nowadays, the blue and white dichotomy is used more in the context of defining social classes as opposed to meaningfully classifying types of employment.

It is arguable that the instrumentalist, job-filling tendency has led western education systems to recognize diversity only in terms of functional employment. The continuing levels of routinization and standardization in classroom methods and means of academic assessment have failed to acknowledge diversity within the actual student population. Additionally, education serves the modern technocratic cult of specialization or even micro-specialization which has led to the deconstruction of larger areas of study and employment and the devaluation of the status of the polymath.

The above reference to the diversity of the job market helps demonstrate that the other types of intelligence - musical, visual / spatial, intrapersonal, interpersonal, kinesthetic (body and movement), naturalistic and, perhaps, even existential (the ability to contemplate and grasp spiritual and religious ideals) can be used functionally while working to earn a living. However, Gardner and his supporters argue that they are not adequately acknowledged within state education systems. He refers to two important ideas - Individuation and Pluralization.



Individuation: There is no rational basis for teaching and assessing individuals in an identical way because those individuals have different intelligence profiles defined in terms of the 9 types of intelligence. This literally means that their brains use their various physical components differently. Same hardware in the same configuration but different processing capacity. Additionally, there is no interrelation among the different types of intelligence - they do not operate in groups. Recognizing the fact that an individual shows acute musical intelligence does not enable you to make assumptions about the rest of his / her intelligence profile.

Pluralization: Important ideas, topics, theories and skills ought to be taught in more than one way and - while being assessed - students should be able to communicate their understanding in more than one way.

The development of Multiple Intelligence Theory has created great debate about what it means to be "intellectually gifted" and a growing tendency to move away from idea that giftedness can be empirically measured on the basis of IQ. Some differentiate between intellectual giftedness and artistic giftedness. Others recognize that some individuals are gifted in specific academic disciplines (eg mathematics) while others can demonstrate exceptional ability in a number of disciplines. Both intellectually and artistically gifted individuals can demonstrate lower than average competence in certain disciplines. Indeed, those who employ the theory of multiple intelligences each associated with a particular part of the brain, draw attention to the fact that exceptional endowment in a particular type of intelligence (or types), is sometimes accompanied by marked deficiencies in other types of intelligence.

It is illuminating to consider the relationship between giftedness and Asperger's Syndrome. Those who suffer from this specific type of autism can frequently be academically or artistically gifted. This creates diagnostic difficulty. Many gifted children (and, indeed, adults) *who do not have the syndrome* have eccentric behavioural traits suggestive of Asperger's that is characterized by deficiencies in social communication, interaction and imagination.

When thinking about intelligence, we need to remain aware of the relationship between exceptional ability and disability and the potential for them to co-exist within the same brain.

David's presentation on the 19th November, made reference to the fictional geniuses Sherlock Holmes (currently played by Jonny Lee Miller in the American crime series 'Elementary') and Dr. Gregory House (played by Hugh Laurie). An exploration of their eccentricities enabled him to graphically illustrate the above point. Both characters represent "flawed genius".



Joseph Renzulli, a professor of educational psychology does not apply the term gifted to individuals. Rather, he refers to the ability to demonstrate gifted behaviour involving three clusters of human characteristics

1. above average ability
2. high levels of commitment to tasks
3. high levels of creativity

Gifted behaviour depends on the possession of these traits and their application towards any potentially valuable area of human performance. Renzulli argues that capable individuals do not tend to receive the appropriate range of educational opportunities within a standardized system.

Where does learning disability or intellectual impairment fit into the picture? Intellectual impairment is a component of several conditions known to have genetic causes (Down's Syndrome, for instance.) Gardner talks about the potential impact of brain damage on an individual's intelligence profile and believes that brain trauma (through accident or illness) can alter an individual's intelligence profile and that this alteration can be highly specific (not something you would describe sweepingly as intellectual impairment).

It is now recognized that those who are academically challenged and who cannot be expected to thrive in a conventional academic environment can, nevertheless, possess significant talents. A proponent of multiple intelligence theory would express this idea differently. The fact that someone has less than average levels of those intelligences that help them deal with the core curriculum has absolutely no bearing on their overall intelligence profile. The above analysis of giftedness would suggest that gifted children can find conventional schooling exceptionally challenging (or experience "learning difficulty") for largely the same reasons as those with learning disability. Schooling fails to individuate. Methods of teaching and assessing are not pluralized.

The "games and adventures" to which we refer in the title of the new book refer to the ways we work with children in group contexts. This work has educational and therapeutic purposes.

Does reference to "games and adventures" sound facile in the context of education and therapy? We mostly work with children who have been classified as being at risk. Trauma has featured in their lives at some time. Indeed, their lives may continue to be traumatic. Most have some degree of learning difficulty and some are outright learning disabled. Some have problems with temperament. We often encounter emergent personality disorders. Their behaviour can be challenging.

So, games and adventures? Yes, myriad activities undertaken in the spirit of play - a pluralized repertoire. We may discover talents among our young charges that



represent bases for building self-esteem while adventure promotes self-sufficiency, courage and resilience. Group adventures promote collaboration and consideration for others.

Montessori education entails the use of materials and learning scenarios that allow students to self-correct and to determine for themselves whether or not they have the right answer. This is an adventurous process that involves testing accumulated knowledge and working memory against prevailing circumstances much of which are challenging and unfamiliar. Importantly, there is no prescribed method.

Our games and adventures encourage creativity. This is possible because creativity isn't a personal attribute as is often imagined. Rather, it's a style of behaviour - a way of operating. It involves the provision of space - people need time to act creatively and a place in which to do it. The space should be conducive to play. It should also be a space in which the de-motivating force of judgementalism is discouraged. Stimulating companionship can assist as can humour. The interplay between the neurotransmitters serotonin and dopamine during periods of laughter provokes expansive and lateral thinking both of which young, academically challenged children are perfectly capable of. Adults are frequently bound by step-by-step logic, formulae and conventional approaches that are deemed acceptable. This is especially true in the workplace. Children don't self-monitor or censor their own ideas in the way that adults do.

Tina Seelig from Harvard University talks about "habitats for creativity".

David introduced the audiences in Ruse and Razgrad to Annie and Pipi - teenagers who act as group leaders and "animators" in the fullest sense of the word and help create such habitats. They play a pivotal role in the running of summer camps and event organization. We work with other young volunteers who we encourage to embrace philanthropy and social entrepreneurship. We talk about this work most frequently when voicing our dedication to youth activism and the ethos of child participation. However, there is another side to working with teenagers from which we benefit significantly - access to irreverent, madcap creativity. On our website we quote Jacob Bronowski -

"It is important that students bring a certain ragamuffin, barefoot irreverence to their studies; they are not here to worship what is known, but to question it."

Equilibrium values "ragamuffin, barefoot irreverence". It is an essential part of childhood and an appealing characteristic in any adult as is pleasure in games and adventures.

Ken Robinson talks of being "in the element" which is his personal interpretation of Mihaly Csikszentmihalyi's idea of the state of flow - total immersion in an activity



that entails highly energized focus and provides profound enjoyment. Tasks undertaken while in this state can lead to productive outcomes. Robinson defines creativity as the process of having original ideas that have value ("applied imagination"). You can be imaginative all day long without actually doing anything. Therefore, you are not creative.

Children are highly imaginative. Games and adventures provide the requisite structure for creativity. EQ does not set out in an attempt to induce a state of flow among the children we work with. That would be a fool's errand. However, a pluralized approach increases the potential for this to happen irrespective of the intellectual capacity of the children. A child who loves to dance can become totally engaged in that activity and oblivious to the others in a group. This is a key moment as is the occurrence of clusters of youngsters within a larger group differentiated by their high animation and giggling or, the opposite, collective silence. The chosen activity has revealed "fascination hot-spots". Creativity will ensue and - bingo - children will reveal their intelligences allowing us to effectively individuate in the future.

