Gyarmathy É. (2005) Double exceptionality. In: Special Educational Needs in Europe Teaching languages to learners with special needs. European Commission. DG EAC 2303 LOT 3.
http://europa.eu.int/comm/education/policies/lang/doc/special_en.pdf, pp 73-74

Numerous great creators failed or had serious difficulties in their school achievement. Many of them had some types of specific learning difficulties. Einstein could not speak until aged 3 years; he was a weak learner at school, yet he gained the Nobel Prize when he was 26. Leonardo da Vinci started to speak late as well, and Nietsche had similar difficulties. Anatole France could read early, but had difficulty passing his baccalaureate because of poor spelling. Picasso, Yeats, Flaubert and Agatha Christie all encountered great difficulties in reading. Benoit Mandelbrot the creator of fractal geometry could not count well. Wernher Von Braun, the 'father of rocketry', failed 9th grade algebra.

## Double exceptionality

There is a large unidentified population with double exceptionality. Gifted children with specific learning difficulties can cover their deficits by their high abilities. However their deficits cover their high abilities.

The fact that both specific learning difficulties and giftedness are even for themselves heterogeneous, and that in origin and appearance many kinds of populations are behind the definitions, makes identification more difficult. We can use identification methods that aim to find the typical, irregular information processes of the gifted persons with specific learning difficulties. Further references, and my own experiences, show that these children achieve at very different levels in their education, and have a specific learning style that may not be catered for so as to ensure educational success.

Poor verbal, sequential, analytic processes cause difficulties for gifted children with specific learning difficulties, though they are bright, when a visual, holistic, parallel approach is required. Verbal-sequential abilities are highly appreciated in our societies, starting at school. Education is based on this way of thinking. Those, who are different, not only suffer from their inability to 'fit in', but fail to acquire abilities and knowledge, such as command of language, which they need for later high achievements.

Results show that gifted children with specific learning difficulties in appropriate learning and testing situations can perform as well as their average peers. Most of their problems stem from their different information processing and learning style.

## Gifted education and verbal abilities

Theory and practice in gifted education have shifted from an emphasis primarily on general cognitive ability to an appreciation of the unique information afforded by sequential-verbal abilities.

Given what is known about the structure and organization of human abilities there appears to be at least one dimension of the cognitive spectrum missing in academic assessment and training which is parallel, holistic thinking. Abilities connected
to 'right hemisphere abilities' such as spatial visualization, understanding music, humour, emotions, imagination are typically not assessed appropriately.

Why have abilities of parallel information processing been neglected in working with intellectually talented students? This may stem from false beliefs that these abilities are more relevant to the "vocational trades" than to academic or professional endeavours, inasmuch as the latter tend to place a heavy emphasis on verbal competence. An alternative possibility, however, is that evidence of the differential and incremental validity of multiple abilities over and above verbal has been lacking. Tests measuring 'right hemisphere abilities' display limited usefulness for predicting traditional academic criteria, partly because most course grades and academic accomplishment assessments are saturated with content specifically indicative of reasoning with numbers and words. If students were required to operate more in complex physical science laboratories, architectural design studios, or in some of the creative arts, there is reason to suspect that measures of other abilities would contribute to predicting performance and add incremental validity to conjoint verbal and quantitative reasoning assessments.

Teaching foreign languages seems to be less problematic in gifted provision, because most programmes identify gifted children with verbal-sequential abilities. These pupils easily learn languages, even without any teaching. However those pupils with parallel-global-visual thinking, even if they are highly able, have more difficulties in acquiring languages.

## Treatment of specific learning difficulties

The syndrome of specific learning difficulties is considered a deficit, a kind of illness that has to be cured. However in most cases it is not true. According to our results specific learning difficulties stem from unusual information processing approaches. It is not something that has to be cured. It is a characteristic of the learner. The response needs to start from identification of the child's whole cognitive profile, abilities and information processing, and be based on the individual's characteristics.

Current approaches and methods used in the treatment of the children with specific learning difficulties are deficit-oriented. They focus on disabilities. This attitude causes low self-esteem and continuous anxiety. The monotonic drills to treat literacy deficits are hardly endurable for gifted persons. If by chance a child with high intelligence is identified as dyslexic, the pain that the treatment means can lead to extreme problem behaviour, and can hinder the development of a healthy personality.

In this way it is difficult to decide which is less harmful. If the child is identified as suffering from specific learning difficulties and pulled into a treatment described above, or if remains unidentified, and endures the continuous frustration of the everyday failures in the school, while not understanding that many far less bright peers can achieve so well.

For instance, some identified special educational need learners are encouraged not to learn foreign languages. This false alleviation leads to further frustration, low self-esteem and lack of important abilities.

The solution is in using appropriate methods to teach languages for those with special needs.

## Consequences

Not only those with high abilities and specific learning difficulties, need alternative teaching. Most of the underachievers are not underachievers, but under-served or mis-served because educational provision doesn't suit their rather parallel-holistic abilities. It is not only that, children should fit into education, but also that education should fit into children.

Learning languages is a built-in ability of human beings. Those with verbal deficits may need to make more effort, but those who can acquire a language; even with subdominant verbal-sequential information processing can learn foreign languages. The key is in the methodology.

