# AISHE Conference 2009 Valuing Complexity: Celebrating Diverse Approaches to Teaching & Learning in Higher Education.

# UNLEASH THE POWER WITHIN

Authors: Aine Kenny (Community Education & Out-reach Education Worker), Maria McLoughlin (Community Education & Out-reach Education Worker), Michael Kenny (NUI Maynooth)

#### Abstract

There is an extensive body of research addressing dyslexia, the challenge of dyslexia in formal education, and corrective actions to enable a person with dyslexia to engage in mainstream learning. However, there is little commentary on the learning talents of people who think through the vision and creativity of the dyslexic.

This paper will explore the creative talents and potential of people with dyslexia. This paper suggests that dyslexics are one of a range of complex intelligence types needing to be engaged equally in the learning process. By engaging complex intelligence types more effectively in learning would indicate our Celebration of Diverse Approaches to Teaching & Learning in Higher Education

Education expressly has a mission in shaping community citizens. To be an active citizen is about developing the cognitive and social skills of participation in all aspects of our society. Yet learners with dyslexia often have negative experiences of education where they have to conform to a systematic method of teaching.

This paper will challenge the notion that dyslexics are a marginalised group who need help to engage in mainstream learning. It challenges the conference to realise that dyslexic learners and teachers are a resource of creativity that demonstrate 'another' diverse complexity in teaching and learning. Therefore this paper will suggest that the dyslexic needs to be valued as a teacher, or a learner, with an alternative mainstream approach that should be celebrated as a learning diversity particularly in higher education.

Two of the authors are diagnosed dyslexics working in Community Education and out-reach education work. They will present their case study of how they now celebrate their diverse approach to learning and they will propose to the conference the potential of those gifted with dyslexia.

#### **Table of Contents**

Introduction	. 2
Dyslexia	. 3
Two Kinds of Thinking: Verbal & Non Verbal	. 4
The Emotional Damage	. 5
An Alternative Perspective on Dyslexia – 'The Gift of Dyslexia'	. 6
Case Study: Creative Arts Group	. 6
Conclusion	. 7

#### Introduction

Usually when we hear the word dyslexia we think of writing, spelling and maths problems. Within literature there is an extensive body of research addressing dyslexia, dyslexia challenges in education, and corrective methods to enable a person with dyslexia engage in mainstream learning. It is important for conferences such as AISHE to address the learning needs of complex intelligence types such as dyslexics as educational professionals and local communities are increasingly concerned by the alarming increase in learning disabilities and behaviour problems within the education setting.

This paper sets out to define dyslexia according to the Irish Task Force on Dyslexia (2001) and list the principle learning difficulties associated with dyslexia. The paper will highlight the emotional price paid by the dyslexic learners, children and adults, as learning situations primary/secondary/further and higher institutions continue to significantly focus on 'rehabilitating' the dyslexic student.

This paper also noted that within literature there is limited commentary on learning talents of people who think through the vision and creativity of the dyslexic. We need to realise the dyslexic learners and teachers are a resource of creativity that demonstrate another 'complexity' in teaching and learning. There are many examples of people classed as dyslexics that have made valuable contribution to the learning and education environment. Some have tapped their mode of dyslexic thinking to be inventors, achievers and leaders. Some are reputed to be of genius quality. For examples see the following video <a href="http://www.youtube.com/watch?v=l\_qGJ9svUbM">http://www.youtube.com/watch?v=l\_qGJ9svUbM</a>, and <a href="http://www.youtube.com/watch?v=l\_qGJ9svUbM">http://www.youtube.com/watch?v=l\_qGJ9svUbM</a>, and <a href="http://www.youtube.com/watch?v=l\_qGJ9svUbM">http://www.youtube.com/watch?v=HDUfVCo6ito</a>. While one may say they became a genius in spite of their dyslexia another may say they became a genius but "because of it".

Ronald Davis, author of 'The Gift of Dyslexia'<sup>1</sup>, supports the latter view. Davis focuses on the often hidden natural talents of dyslexic individuals. He discusses creative and multi-sensory ways to support and encourage a dyslexic child or adult. He suggests ways to conquer the negative aspects of dyslexia and yet develop their creative abilities. The principal authors of this paper have experienced the negative aspects of dyslexia and seek to focus educators on the creative talents of dyslexic adults. For example, the authors are working on a <u>Creative Dyslexic Arts Initiative</u> to provide artistic workshops in a social setting from an 'alternative' perspective. The principal authors propose the need to further explore the dyslexic's creative mode of enquiry & thinking to accommodate inclusive academic learning and emotional development.

### Dyslexia

The Report of the Task Force on Dyslexia (2001) noted that dyslexia "... is manifested in a continuum of specific learning difficulties related to the acquisition of basic skills in reading, spelling and/or writing..." Dyslexia is defined as a learning difficulty in basic reading, writing and/or spelling. The perspective of this definition is 'loaded' with assumptions on the concept of what is 'difficulty' and that 'reading, spelling and/or writing', as we know them, are basic skills. The report goes on to note that "continuum of specific learning difficulties ..." are "...unexplained in relation to an individual's other abilities and educational experiences".

The authors offer a video on a web link to readers to communicate the way that dyslexics see the 'reading, spelling and/or writing' world that is presumed normal by conventionalists. See the following video http://www.youtube.com/watch?v=gwZLFTW4OGY.

Dyslexia can be described at a number of levels; neurological, cognitive and behavioural. Typically dyslexia is presented as being characterised by inefficient information processing. The Report of the Task Force on Dyslexia identifies difficulties in phonological processing, working memory, rapid naming and automaticity of basic skills as evidence of inefficient information processing. The report also noted that dyslexics may have difficulties in organisation, sequencing and motor skills.<sup>2</sup>

- The report goes on to say that arising from these learning difficulties from dyslexia:
- Occur across the lifespan ... in different ways at different ages;
- May co-exist with difficulties in ... numbers;
- Varies in severity depending on environmental factors;
- Occur in all socio-economic groups

<sup>1</sup> Davis Ronald D with Eldon M. Braun. 1994. The Gift of Dyslexia. Souvenir Press Ltd. ISBN: 0285634127

<sup>&</sup>lt;sup>2</sup> Taskforce on Dyslexia, 2001:31. Cited on the Dyslexia Association of Ireland's Website www.dyslexia .ie

• Can co-exist with other learning difficulties ...<sup>3</sup>

The taskforce suggests that the following indicators may also be noted in students with other learning difficulties.

- Reading slowly and without fluency, reading with many inaccuracies
- Misreads words or information
- Continues to experience serious spelling difficulties
- Has difficulty planning, sequencing and organising written text
- Has difficulty with written syntax or punctuation
- Has difficulty skimming, scanning and/or proof-reading written text
- Procrastinates and/or avoids reading and writing tasks
- Is slow in answering questions, especially open-ended ones
- Has poor planning and organisational skills
- Has poor time management skills
- Has more difficulty in language-based subjects than in non-language based subjects
- Lacks self-confidence and has a poor self-image<sup>4</sup>

The report noted that dyslexia "May be alleviated by appropriate intervention..." However any intervention seeking to convert the above negative indicators into acceptable ones needs to approach dyslexia with an understanding of modes of thinking.

### **Two Kinds of Thinking: Verbal & Non Verbal**

Verbal thought is linear in time and occurs at approximately the same speed as speech (150 words per minute). In other words the picture of the sentences meaning is evolving as they read. Non-verbal thought is evolutionary, meaning the picture grows as the thought proceeds and adds more concepts. It is a much faster process, often so fast the person is unaware of it. Therefore it can often be subliminal (below consciousness level). Non-verbal thinkers think with approximately thirty two (32) pictures per second. This means they have six to ten times more thoughts per second than a verbal thinker.

This might appear to be 'great' but there is a significant drawback to the speed at which a non verbal person thinks. For example the person may be unaware they are even thinking as the processes happens to fast. A stimulus has to be present longer than 1/25th of a second of us to be aware of it. This is referred to as cognisance. To cope dyslexics develop a continuum of learning 'crutches' during

<sup>&</sup>lt;sup>3</sup> Paraphrased from the Task Force on Dyslexia (2001:115)

the learning stage without even realising it. For example the alphabet song, the learner is not able to recite the alphabet without singing it out loud or replaying it mentally.

Each person uses both modes of thinking but they utilise one as their primary mode. A person with dyslexia predominantly uses a non-verbal mode of thinking. Reading a sentence using non-verbal conceptualisation will produce dyslexic symptoms. Dyslexics form mental pictures of concepts and ideas (picture making) with little or no internal monologue. In other words they do not hear what they are reading unless they are reading aloud.

Problems arise for non-verbal thinkers each time the picture making process is stopped. The person will experience a feeling of confusion and the picture being composed becomes incoherent. As this process continues the dyslexic person eventually reaches their 'threshold of confusion' and becomes disoriented. Disorientation means that their perception of symbols gets altered and becomes distorted. As a result reading and writing is very difficult or impossible. A person will often have to reread text several times before they feel they understand it. As a dyslexic person also has to concentrate intensely to read a short passage they become fatigued quickly.

A person with dyslexia is more environmentally aware and their attention is more widely spread around their environment than a verbal thinker. As the dyslexic mind works between four hundred and two thousand times faster than the mind of verbal thinker boredom accrues very quickly. As a result they shift their attention toward something that interests them or else begin to daydream.

#### The Emotional Damage

The principlal authors of this article have experienced being labeled by the indicators listed above and to varying degrees has affected their self esteem. According to Dr Lindsey Peer<sup>5</sup> dyslexic assessment is one of the most commonly missed areas of emotional development. When the indicators are negetive the dyslexic individual can forget or neglect the natural gifts and talents they possess. Instead they can spend all of their time and energy trying to 'correct' their difficulties in-order to behave and function like everyone else.

The authors challenge the notion that dyslexics are a marginalised group who need support to engage in mainstream learning. It is important to understand how dyslexic individuals learn academically and develop emotionally through a creative and multi-sensory approach, as do the majority of children. Dyslexia is a product of thought and a special way of reacting to the feeling of confusion.

<sup>&</sup>lt;sup>5</sup> Deputy CEO of the British Dyslexia Association until August 2003

## An Alternative Perspective on Dyslexia – 'The Gift of Dyslexia'

Dyslexic people are intuitive creative visual multi-dimensional thinkers who can excel at hands-on learning. While dyslexia is different for each person there are general characteristics/abilities all people with dyslexia share. A dyslexic person:

- Can utilise their brains ability to alter perceptions.
- Are highly aware of their environment
- Are more curious than the average person
- Think mainly in pictures instead of words
- Are highly intuitive and insightful
- Think and perceive using all their senses.
- Experience thought as reality
- Have vivid imaginations.

Einstein's theory of relativity came to him in a 'daydream' an example of multi dimensional thinking. Multi dimensional thinking is the ability of the thinker to experience the thoughts as if reality. This concept helps us understand how Leonardo de Vinci could have had a vision the helicopter 400 years before there was an engine that could even power one. Probably in Leonardo's day people thought his idea was crazy. Picture thinking, intuitive thought, multi-dimensional thought and curiosity results in the dyslexic's creativity been far larger. Problem arises within the education settings as a dyslexic person does not follow the linear model of verbal thought. Much of our education system is done on a conditioning level, for example the child is told to go through a series of steps to arrive at a solution. Dyslexia therefore should not be called a learning disability but a conditioning disability. A dyslexic person seeks to understand rather than simply learn, for example there is a difference between understanding and knowing how to ride a bike. When this same principle is applied to learning language, skills, maths they are unable to learn them. They need to own or actually experience the data in order to comprehend it.

### **Case Study: Creative Arts Group**

The founder of this project, diagnosed with dyslexia, currently works with unemployed adults; Her colleague also dyslexic is working in community education. Both believe that there is a need to celebrate diverse learning styles and their aim is to explore the potential of a community of practice, rather than correction, for dyslexic adults. They suggest that, "If people with dyslexia have achieved so much within an environment of struggle, how much more could they achieve if they were exposed to an environment that was confluent to their learning needs?"

Discussed above, dyslexia can be a unique talent rather than a disability if supported and nurtured under the right conditions. Informed by their experience, knowledge and beliefs they began to develop and implement a model to support adults with dyslexia in early 2009. The aim of this project is to put

in place structures, artistic tutors and funding arrangements for the provision of a creative arts group for dyslexic adults.

From the outset it was agreed that the project would focus on the member's talents rather than implementing corrective methods. This project is not established to provide information, workshops, or discussions on how to improve reading, writing or organisation skills but to provide a space where likeminded individuals can come together and learn creative activities in support of their method of learning. Just because a person is dyslexic does not mean that they are necessarily an exceptional artist or musician, etc. However, by creating a space where individuals can come and learn in a style that suits them within an environment that inspires creativity we believe will lead to a very positive and enriching experience.

The proposers have engaged in research and planning and have reviewed services presently available. Unfortunately there are no support groups looking at the unique talents of dyslexic adults. The proposers have made contact with a number of agencies and have received over-whelming support from a range of academic and creative art institutions. The feedback has highlighted the simplicity, yet unexplored potential of a project of this type.

At present a website is under construction and it is envisaged that it will be activated in September. Over the next few weeks information regarding the courses on offer including photography, drawing, and music lessons will be provided.

This project aims to provide a forum that will enhance dyslexics' sense of belonging and connection to the process of learning and creativity. It aims to offer support so that an individual's intellectual capability and skills are developed holistically. The learning environment (relationships, social environments, programmes, practice and policy) and links with the community (community organisations and artistic individuals and groups) will be given priority.

It is envisaged that by enhancing the learners' sense of connection to their artistic potential and by forming relationships with like minded individuals will bring about a rewarding learning experience both creatively and personally.

#### Conclusion

Dyslexia is a relatively misunderstood concept. There is much information about what dyslexia is and is not. This paper has sought to bring the practical lived experience of dyslexia to higher education audience. The paper has sought to present a positive, the possible, and the gift that is ' another way of learning'. This presentation and paper seeks to celebrate the possibility of the visual in creative learning and to open the door of discussion on how educators in higher learning can begin to more effectively harness this resource.