

Reading into the Occurrence of Dyslexia

Defining dyslexia is an intricate task. The complexity of delineating the unique characteristics of this learning disability in varied interdisciplinary perspectives involves drawing a demarcation line between the dyslexic and the non-dyslexic slow readers as well as dyslexia and the other forms of learning disabilities. As a result, “these eclectic definitions often mix assumptively different models of disability, having contrary, and sometimes contradictory, assumptions.” (Inouye and Sorenson. 1985: 298) Despite this indefinite and investigational nature, these are landmarks toward understanding the disposition and resolve of dyslexia.

A clear articulation of the meaning of dyslexia is “Severe difficulty in learning to read, particularly as it relates to decoding and spelling.” (Vaughn, Bos, and Schumm. 2007: 69) Elucidating the definition further by employing Adams’ (1990) model on how proficient readers develop their ability, dyslexia has its discrepancies in one or more of the interfaces involving processors from print to speech and vice-versa. In terms of the “orthographic processor,” which relates what is seen to print [spelling], the dyslexic is unable to recognize words that are usually encountered. In the sense of “phonological processor,” which connects what is heard to print [speech sounds both in reading quietly and aloud], the dyslexic is incapable of linking the sound of letters or phonemes to read or spell correctly. As with the “meaning processor” that associates a meaning to a specific word [i.e. linking affixes to know words], the dyslexic is inept at recognizing spelling patterns to get acquainted with a word such as the use of the prefix “re” for redo, replay, rerun, etc. At the phase known as the “context processor,” which is the application of the meaning in different situations [text response], the dyslexic is incompetent at spelling the appropriate word for a given condition as in using the words want and went interchangeably. (qtd. in Broomfield and Combley. 2003: 8-9) Moreover, comprehension is affected only at the

level of “decoding and recognizing printed words” since “poor decoders with good listening comprehension” are “considered dyslexic.” (Catts and Kamhi (1999) qtd. in Kamhi 2005:203)

At this juncture, it appears that dyslexia encompasses the typical slow readers in the classroom. There are, however, significant differences between the two circumstances. The non-dyslexic slow readers may suffer from physical afflictions such as stuttering, visual impairment, or auditory deficit. They may also have an intellectual deficit that is signified by low Intelligence Quotient (IQ) and emotional or behavioral issues that may be illustrated by anxiety or indifference. In addition to these, there are environmental factors that caused them to read poorly, which may emanate from inadequate resources for learning or ineffective instruction. These reasons make non-dyslexics into slow readers. Thus, “It is important to remember that not all individuals who have problems in reading are dyslexic.” (Smith and Sensebaugh. 1992: par. 6) In contrast, individuals with dyslexia suffer from a neurological glitch that render them incapacitated to read. Siegel and Smythe (2004) confirm, “Dyslexia is a difficulty in the acquisition of literacy skills that is neurological in origin.” (Reid and Fawcett. 2004:135) Extending it further, Crichely (1970) defines it as follows:

“A disorder manifested by difficulty in learning to read despite conventional instruction, adequate intelligence, and socio-cultural opportunity. It is dependent upon fundamental cognitive disabilities which are frequently of constitutional origin.” (qtd. in Inouye and Sorenson. 1985:298)

Besides the extrinsic and observable similarities of dyslexia with non-dyslexic slow readers, dyslexia has shared characteristics with other learning disabilities as well. Attention Deficit Hyperactivity Disorder (ADHD) and Specific Language Impairment (SLI) are a couple of these learning disabilities. The former exhibits problems in paying attention and controlling

impulsivity but has mutual qualities with dyslexia in struggling with “memory,” “following instructions,” “organization,” and “consistency.” The latter manifests impediments in “language comprehension” and “sentence formation” except, it has commonalities with dyslexia in the aspect of difficulties in “memory,” “following instructions,” “planning and organization,” and “phonological awareness.” Consequently, dyslexia can also occur along with these disabilities, which meant that there are existing conditions identified as dyslexia/ADHD co-occurrence or dyslexia/SLI co-occurrence. This indicates that the incidence of dyslexia may increase the likelihood of having the other types of learning disabilities. (Deponio. 2004:326-330)

Knowing the attributes of dyslexia brings to mind the points of view from varied fields of study. At this instance, the neurological and genetic considerations are taken into account.

Neurologically, there are three parts of the brain that affect reading. These are “the left inferior frontal gyrus, the left parieto-temporal area and the left occipito-temporal area.” These sections work concurrently to perform certain functions of the processors mentioned in the second paragraph of this paper. In the left inferior frontal gyrus, labeled as the “phoneme producer,” the phonographic processor is put into operation. The left parieto-temporal area, known as the “word analyzer”, has the meaning processor functioning. It is where words are broken down “into syllables and phonemes” and then, relating them to their sounds. Meanwhile, the left occipito-temporal area, identified as the “automatic detector,” is similar to an inventory. A “permanent repertoire” is created to help “readers recognize familiar words on sight”: the orthographic processor. With dyslexia, the malfunction emanates from the difficulty of getting through the “word analyzer” and the “automatic detector” sectors. Hence, the dyslexic overcompensates via the “phoneme producer” but never really gets the meaning from the

phonemes. This makes it hard for them to remember certain words as if they have never seen them before. (Gorman. 2003:5)

Contrary to common misconception, dyslexia is neither an indication of idleness nor a characteristic of stupidity. It is a biological phenomenon. Since this is the case, it is inevitable to look into its genetic predisposition. The studies made on identical twins and fraternal twins who shared similar environmental influences illustrate this connection. The identical twins have exactly the same genes while the fraternal twins share only half of their genes. In view of this fact, if one of the identical twins has a reading disability, the other also has the gene that causes it. On the other hand, if a twin in the fraternal pair has a reading issue, the propensity of the other twin inheriting the gene that triggers the problem is 50% less. Thus, based on the recognized twin researches by Stevenson et. al (1987) and DeFries et al. (1987) as explained in Stein's article, "50% of reading disability is due to inherited genetic influences..." and the gene defect may be found in "5 to 10 genes..." which have to function in unison to create the dilemmas (qtd. in Reid and Fawcett. 2004:81)

Facing the Issues of Dyslexia in the Classroom

According to Shaywitz (qtd. in Gorman. 2003:7), there are positive indications that dyslexia can be undone especially if intervention takes place early on: while they are still young. There are in fact "cases of recovered, compensated, or even prevented dyslexia." Each situation is treated on an individual basis. (Van der Leij. 2004:49) Therefore, it is worthy to note, the accommodations rendered to every dyslexic should reflect unique instructions.

A general approach called "bottom-up" involves a systematic technique, which begins at the phase of the printed text and gradually increasing in scope towards the meaning of the entire text. The methods of "look-and-say" and the "phonics approach" are types under this category.

The previous form entails improving “the ability to learn and recognize whole words by their visual appearance.” There is a progression in increasing sight vocabulary, which can include the use of “flash cards, reading games, and activities” either during or before reading a specific book. The subsequent type encompasses the teaching on the “knowledge of letter sounds.” It employs successive stages from “letter-sound correspondences,” to blending and segmentation of simple, easy-to-learn letter combinations to encourage self-confidence and independent reading based on familiarity. (Broomfield and Combley. 2003:32-33)

Another common approach is named “top-down.” The reader commences with the entire text, “looking for meaning based on contextual clues and” steadily moving on to the part of the printed words on a page. Although this system is more concerned on enhancing the context processor, which is the comprehension level, it particularly relates to dyslexia in terms of the benefits of shared reading. The collaborative nature of the reading between the dyslexic and the adult mentor helps the dyslexic remember sounds corresponding to words via meanings taken from circumstances surrounding the words. It is, thus, pertinent to implement this scheme by drawing “attention to the alphabetic code” as books are shared with the learners. Phonological adeptness is a necessity for the dyslexics. (p. 34)

A more specific mode that caters specifically to dyslexia is incorporating “multisensory” stimulation. This will bolster what Adams (1994) terms as “automaticity” in which reading and writing becomes as effortless as taking a walk. It is gathering information and establishing meaning from the information through the senses. The primary goal is to permanently connect the visual print through the sense of sight, the auditory sounds the words create via the sense of hearing, the tactile quality in writing by way of the sense of touch and associate them into a meaningful whole. Bringing into play all parts of the human body activates neurons in different

parts of the brain; keeping it stimulated and dynamic. (pp. 36-38) Activities such as reading and writing poetry, incorporating music and rhythm, chorale reading as well as playing games with sound-letter correspondence will not just stir the senses but motivate the reader.

While committing to memory all the processes discussed in this literature, it is important to integrate Swanson and Deshler's (2003) recommended accommodations for the dyslexic in the classroom. The focal points of the matter are controlling the difficulty of the tasks, encouraging cooperative learning in small groups, and integrating direct instruction as one-on-one and cognitive strategies as "metacognition". (Vaughn, Bos, and Schumm. 2007:74) It is also vital that there are "a lot of practice and repetition," both in guided exercises and independent drills. (Gorman. 2003:6) Not to dismiss, appreciation for progress in the form of rewards and recognitions are great motivational tools.

On the part of the students with dyslexia, Gorman (2003) stated that they "have to put many more hours into their course work than naturally skilled readers." (p.7) In other words, they need consistent perseverance. They must find confidence from every success, whether great or modest, to make headway. There should be diligence to complete the assigned tasks and strong motivation to achieve. Finally, the student must be armed with positive disposition because this outlook perceives obstacles as milestones.

Conclusion

The studies on the definition, causes, and treatments of dyslexia render an overall aura of optimism in overcoming it. The perception is constructive as it eliminated the negative connotations of laziness and stupidity. Moreover, the accommodations in the classroom are customized depending on the continuum of dyslexia. For the student, the means of success is the choice of attitude. The teacher and the student in the classroom are always a work in progress.

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