Special Students

1. The role of early intervention as it applies to children at risk for reading problems

Dyslexia, also known as reading disorder, is a disorder characterized by reading below the expected level for their age (Siegel, 2006). Problems may include difficulties in spelling words, reading quickly, writing words, "sounding out" words in the head, pronouncing words when reading aloud and understanding what one reads (Hulme & Snowling, 2016). Dyslexia is diagnosed through a series of tests of memory, vision, spelling, and reading skills. It is separate from reading difficulties caused by hearing or vision problems or by insufficient teaching or opportunity to learn (Peterson & Pennington, 2012).

Most children who become poor readers experience early and continuing difficulties in learning how to accurately identify printed words. One of the most compelling findings from recent reading research is that children who get off to a poor start in reading rarely catch up. As several studies have now documented, the poor first-grade reader almost invariably continues to be a poor reader (Francis et al., 1996; Torgesen & Burgess, 1998). Treatment involves adjusting teaching methods to meet the person's needs. While not curing the underlying problem, it may decrease the degree or impact of symptoms.

The best solution to the problem of reading failure is to allocate resources for early identification and prevention. For many years, the importance of early identification and intervention for children with dyslexia has been stressed. Accordingly, much research has been directed towards establishing precursors of dyslexia in the preschool years in international studies of children at family risk of reading problems (e.g., Gallagher et al., 2000; Lyytinen et al., 2006). Although significant progress has been made in identifying cognitive skills that predict literacy outcomes on a group basis such as letter-sound knowledge and phoneme awareness (Muter et al., 2004), at the individual level, it is much harder to make accurate predictions (McBride-Chang et al., 2008).

The connections in a child's brain are most adaptable in the first three years of their life. These formative years are a crucial part of children's physical, cognitive, and behavioral development, which is why intervention is less effective after a child reaches the age of three (Centers for Disease Control and Prevention, 2021). Without aggressive, early intervention, children with dyslexia may be unable to overcome significant and persistent achievement gaps. By implementing effective reading programs in preschool and kindergarten, educators have better chances of closing the achievement gap and helping dyslexic students avoid negative outcomes such as lower high school graduation rates, higher levels of unemployment etc.

A paper by Snowling (2013) has attempted to demonstrate how an understanding of dyslexia can be used to ensure that children in our school systems who are at risk of dyslexia can be identified early before a sense of failure sets in. The emphasis has been on dyslexia as a dimensional disorder rather than a discrete diagnostic category. Finally, evidence showing that children with dyslexic difficulties can be helped by specific interventions underlines the need for timely action rather than waiting for diagnosis.

A preventive program should be focused on the children who are most in need of special instruction. The efficiency of the entire process will be improved if procedures are available to accurately target the right children very early in the process of reading instruction. Although timing issues with regard to preventive instruction have not been completely resolved by research (Torgesen, n.d.), we do know, for example, that instruction in phonological awareness during kindergarten can have a positive effect on reading growth after formal reading instruction begins in the first grade (Lundberg, Frost, & Peterson,

1988). Thus, researchers have proceeded on the assumption that it will be useful to identify high-risk children at some time during the kindergarten year so that preventive work may begin as early as possible.

Much researchers focus on some practical suggestions about procedures and tests that can be used to identify children for preventive reading or pre-reading instruction. Our goal should be to identify, during the first semester of kindergarten, the children most at risk to be in the bottom 10 percent in word reading ability by the beginning of second grade. As a practical matter, if schools desire to maximize their chances for early intervention with the most impaired children, they should provide this intervention to as many children as possible. This is less of a waste of resources than it might seem at first glance, because, although many of the falsely identified children receiving intervention may not be among the most seriously disabled readers, most of them are likely to be below-average readers (Torgesen & Burgess, 1998).

Given the widely varying range of children's preschool learning opportunities, many children may score low on early identification instruments in the first semester of kindergarten simply because they have not had the opportunity to learn the skills. However, if pre-reading skills are actively taught in kindergarten, some of these differences may be reduced by the beginning of the second semester of school. Thus, researchers would recommend that the screening procedures described here not be administered until the beginning of the second semester of kindergarten, at which time they will be much more efficient in identifying children who will require more intensive preventive instruction in phonemic awareness and other early reading skills. Early identification is crucial when it comes to helping children who are having trouble learning to read (Torgesen, n.d.). intervention is far less effective when administered after the third grade. Students at risk for reading disabilities who received intervention in the first and second grade made gains nearly twice that of children who didn't receive intervention until the third grade (Lovett et al., 2017). Furthermore, the reading outcomes for first graders who received intervention were even greater than that of their second-grade peers, further proving the importance of early detection of dyslexia.

2. <u>The concepts of working memory for a student with memory problems</u>

Working Memory, which is often used synonymously with short-term memory, is a cognitive system with a limited capacity that can hold information temporarily (Miyake & Shah, 1999). It is the ability to hold information in mind while performing complex tasks. Working memory is important for reasoning and the guidance of decision-making and behavior (Diamond, 2013).

Since students with attention deficit disorder (ADD or ADHD) and learning disabilities often have problems with short-term memory, it is important to reduce the amount of routine information they must remember. Keeping their memory free for the key part of the task in front of them is essential (Dendy, 2021).

In a large-scale screening study, one in ten children in mainstream classrooms were identified with working memory deficits. The majority of them performed very poorly in academic achievements, independent of their IQ (Alloway et al., 2009). A student with working memory difficulties needs

strategies in order to keep on learning. Below is listed three strategies for supporting students with working memory difficulties.

- Put homework assignments in writing: Write each assignment on the blackboard in the same place every day, so that students know where to find it. Kids with ADHD may not be listening or paying attention when we give them oral instructions and we can't rely on them to always remember instructions. We may reduce elements that can interfere with their working memory.
- Make checklists: One way to reduce memory demands is to provide the class with a list of the steps required to complete an assignment. We may break the information into smaller instructional units and reduce the volume of work. The instructions should be brief.
- Present concepts in a variety of forms: We may present concepts in a variety of different ways, using visual aids that allow encoding, including graphic organizers. We can let them play visual and auditory memory games for visual support. We should repeat information in a variety of ways, making connections to other concepts and visual supports. Moreover, incorporating relevant subject matter using meaningful examples is also a good idea.

3. My role as the principal of a gifted student

All students have gifts, but some students are especially advanced in one or more areas such as math, language, music or art. When I become a teacher of the gifted and talented, I should perform an essential task because this is the education of many of tomorrow's leaders, inventors and teachers.

As a gifted education teacher, I will have responsibilities much like other elementary and secondary teachers; however, my duties will include a number of specialized tasks.

I should offer advanced placement programs to students entering regular college courses. Professors who teach in these programs should have taken special coursework that equips them to handle these students in a school setting. The needs of gifted students are no different than their peers. Magda will require clear and careful instruction and evaluation just like any other student. But in many other ways, the needs of gifted learner are completely unique. It is essential that gifted education teachers understand both how their students are different and how they are the same.

The gifted child should be allowed accommodation in a regular classroom. She should also be able to group with students of advanced abilities and part-time assignment to special classes. This might include advanced classes or pullout programs that take gifted students out of class for a designated period each week so that they can receive enriched instruction with other gifted students.

I will make sure to provide her accelerated instruction and supplementary learning tools that she can pursue at her own direction. Options in this category include early entrance to a grade level, grade skipping, and dual-credit courses. If possible, I will bring other educators into the classroom to expand learning opportunities for her and promote extracurricular activities with an intellectual focus.

I will arrange specialized programs because In addition to separate classrooms and learning opportunities, many gifted students benefit from specialized learning opportunities. These could include field trips, hands-on experiences or topical classroom guests.

I will provide teacher training and educate them about the opportunities and difficulties associated with exceptional talents. I will direct the teachers to plan challenging lessons and assignments so bright students can work at their ability level. I will make sure they develop and learn innovative methods for teaching gifted and talented students. I will ask them to assist the gifted student in the college and career selection process as well.

I will assist the teachers in designing a curriculum that addresses the cognitive, physical, emotional and social needs of the gifted student. I will permit her to take on individual projects based on her own interests. I will allow her to work ahead at her own pace, and stress learning skills like researching and questioning rather than rote memorization and regurgitation.

I will also diversify teaching staff because teachers who come from different backgrounds contribute to a broader recognition and understanding of the abilities of diverse student populations (School of Education, 2021).

Students from marginalized groups face challenges that other students do not. If education leaders do not take steps to mitigate differences in opportunity, schools will continue to overlook gifted students from marginalized groups.

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