SUPPORTING CHILDREN WITH DYSLEXIA INSIDE AND OUTSIDE THE CLASSROOM

A Project Presented to the Faculty of California State University, Stanislaus

In Partial Fulfillment of the Requirements for the Degree of Master of Arts in Education

By
Kylee Liu
May 2018
CERTIFICATION OF APPROVAL

SUPPORTING CHILDREN WITH DYSLEXIA INSIDE AND OUTSIDE THE CLASSROOM

by
Kylee Liu

Signed Certification of Approval page is on file with the University Library

__________________________________________  ____________________________
Dr. Karen Webster  
Assistant Professor of Special Education  Date

__________________________________________  ____________________________
Dr. Susan Neufeld  
Professor of Education  Date
DEDICATION

This project is dedicated to first my brother Colton, whose journey and various challenges with dyslexia inspired me when I was in the seventh grade to try to make a difference in this field. I would also like to dedicate this project to my parents, who fought for Colton to have the appropriate education, regardless of the challenges and push back that they received. Next, this is also dedicated to my grandparents, Charles and Linda Fisher, who have been a constant support and encouragement to me as I have pursued my passion. Finally, I am dedicating this to my husband, Matthew, who has been pushing me and encouraging me to continue with this project. He has supported my passion from the beginning and I could not be more grateful. Without these people this project may have never happened and I am so thankful for all of their love, support and prayers throughout this process.
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introduction to the Study</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>4</td>
</tr>
<tr>
<td>Significance of the Problem</td>
<td>6</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>6</td>
</tr>
<tr>
<td>Summary</td>
<td>7</td>
</tr>
<tr>
<td>II. Review of Literature</td>
<td>9</td>
</tr>
<tr>
<td>Early Identifiers</td>
<td>9</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>12</td>
</tr>
<tr>
<td>Parent Resources</td>
<td>20</td>
</tr>
<tr>
<td>Summary</td>
<td>23</td>
</tr>
<tr>
<td>III. Description of Project</td>
<td>25</td>
</tr>
<tr>
<td>Early Identifiers</td>
<td>26</td>
</tr>
<tr>
<td>Instructional Strategies for Students with Dyslexia</td>
<td>26</td>
</tr>
<tr>
<td>Resources for Parent</td>
<td>26</td>
</tr>
<tr>
<td>Summary</td>
<td>27</td>
</tr>
<tr>
<td>IV. Implementation</td>
<td>28</td>
</tr>
<tr>
<td>Parents, Teachers and Students</td>
<td>28</td>
</tr>
<tr>
<td>Summary</td>
<td>33</td>
</tr>
<tr>
<td>V. Conclusion</td>
<td>34</td>
</tr>
<tr>
<td>Recommendations</td>
<td>35</td>
</tr>
</tbody>
</table>
Summary .................................................................................................................. 35

References ............................................................................................................. 38

Appendices

A. A Guide for Supporting Students with Dyslexia Inside and Outside the Classroom .................................................................................................................. 43
ABSTRACT

The following document contains information on how to support students with dyslexia. Background information is provided to allow the reader to understand what dyslexia is and why it is important to provide specific supports for these children. There is a review of literature, which lays out some of the strategies that have been used to support students with dyslexia inside and outside the classroom. The project includes a handbook that was created for parents and teachers in order to support students inside and outside of the classroom.
CHAPTER I  
INTRODUCTION TO THE STUDY  

Background  

Education is a field that is in a continuous state of change. There are new research studies for more effective teaching methods; new technologies that can be implemented within the classroom to support student learning; new strategies to increase the student’s abilities to access the curriculum; and new ways to implement interventions for students with disabilities. Though there is a significant amount of change within education, early literacy instruction is an area that has had little adjustment.

Within the last twenty years, early literacy instruction has been focused on memorization of word families within the general education setting (Kent, Otaba, & Wanzek, 2012). Students that are considered at risk for disabilities such as dyslexia, require quality reading instruction to prevent a literacy gap as the continue their education (McNamara, Scissons, & Gutknecth, 2011). Code focused reading instruction is designed to teach students letter-word recognition, which emphasizes basic linguistics of the language. Students that are at risk for having disabilities, such as dyslexia, in literacy require a level of explicit instruction that code-focused teaching does achieve.

Students with the predisposition for the specific learning disability of dyslexia require explicit instruction to prevent further difficulties. The Individuals with Disabilities Education Act (IDEA) identified the implications of having effective,
quality general education instruction is preventative of future difficulties. Providing all students with early literacy instruction that is multi-sensory within the general education classroom can lead to a heightened achievement for students that are at risk for reading deficits, specifically students with dyslexia.

Dyslexia is a categorized under IDEA as a specific learning disability which is identified as a difficulty in a student’s ability to read. Students with dyslexia have an average to an above average IQ, but demonstrate a discrepancy in what they are able to produce. Dyslexia is a disability that is prevalent within society affecting approximately 20% of the general population (Foorman, Torgesen, & Wagner, 2007). Many students with this disability go undiagnosed because they are able to cope with the disability; however, they are unlikely to reach their full potential.

Students with dyslexia are considered to have mild/to moderate disabilities, which means that they are able to learn (Cowden, 2012). Cognitive strategies focus on teaching students how to acquire the knowledge they need in order to understand and master a skill. Strategies like this focus on using the students senses (sight, taste, touch, smell, sounds), and connecting the material to experiences. By implementing this type of strategy into a classroom, students with mild/moderate disabilities will have the opportunity to improve their reading skills and overcome some of their reading deficits (Cowden, 2012).

Students with dyslexia benefit from instruction that is explicit, systematic, multisensory and kinesthetic. This style of teaching is often found specifically within special education classrooms, though it is an effective teaching method for all
students. Teaching early literacy in a way that encompasses more students would be giving students a quality general education, which in turn would provide at risk students for disabilities the tools to cope effectively with an underlying deficit.

Early literacy instruction is the foundation of our education system. When children start kindergarten the first skills that they are taught have to do with literacy. For instance, student will begin learning the sounds of the letters of the alphabet. When students are initially introduced to the sounds of the letters, this method is called “Code-focused instruction” (Kent, et. al., 2012).

Students that are at risk or have the predisposition of a learning disability that affects their ability to learn how to read, such as dyslexia, benefit from instruction like that of code-focused. Students that are considered to be at risk for reading deficits need to be receiving ample opportunities to practice with print within the classroom; code-focused instruction allows students to be able to have increased practice opportunities with print during intervention times (Kent, et. al., 2012). Code-focused instruction is a beneficial approach for all students, if there are different methods of teaching being used in correspondence with the code-focused method.

Universal design is a technique that can be used to support students with the predisposition of dyslexia within the general education classroom when teaching early literacy skills. When approaching teaching early literacy to a group of diverse students, some who are at risk for struggling with dyslexia, it is important to recognize, “that dyslexia is a mechanical disability, not an intellectual one,” (Redford, 2017, 2), which means students should have the opportunity to be able to learn in an
environment that supports them through a flexible and systematic classroom (Redford, K. 2017). Universal design is a method that assures that though students maybe be entering the classroom with different level of ability, they all have an equal opportunity to be successful within the learning environment.

A significant group of students will benefit from both code focused instruction as well as using the technique of universal design; however, there are still the students who have reading disabilities or have the predisposition of dyslexia that will need additional support and be provided with strategic interventions (Allingham, B. H., Kirby, La Fave, Parilla, & Silvestri, 2008). Students that have dyslexia learn in a different way than the general population of students within the classroom. That means that students with dyslexia or who may have the predisposition, will need additional supports. Students with dyslexia benefit from explicit instruction that “involves perceiving the sound units in spoken words and knowing which spelling patterns are linked to them in which word,” (Juel, & Minden-Cupp, 2000), which is called the orthographic representation of words.

**Statement of the Problem**

Dyslexia is one of the most common specific learning disabilities (SLD), within our society; affecting approximately twenty percent of the general population (Hettleman, 2003). In our current education system 49% percent of students within special education fall into the category of specific learning disability. Dyslexia is one of the most prominent subcategories of the SLD classification. Students with dyslexia are students that have average or above average intelligence. The problem with our
current special education system, in regards to the specific learning disability of
dyslexia is that it is viewed as a disability, when in reality it is a learning difference
(Redford, 2017). Individuals with dyslexia are capable of learning and have the
ability to learn at the same rate as their peers, the only difference is the way that they
process the information. When students are beginning to learn early literacy skills, the
common expectation within classrooms is that teachers are using word families to
teach reading. This is an effective method for typically developing students; however,
students with the predisposition of a learning disability, such as dyslexia, will not
have the same access to the material as their non-disabled peers. In order to support
students with dyslexia, teachers and parents, need to be able to identify signs that
their students are struggling with literacy.

Kindergarten to third grade teachers often have 28 students within a classroom
and limited resources to support students that may be struggling. In order to best
support struggling students, there needs to be accessible resources to teachers and
parents to inform them on how to best support all of the children within their
classrooms. Providing a handbook that provides early signs of dyslexia, then teaching
strategies such as a multisensory method of teaching early literacy to help close the
achievement gap for students that are at risk for a learning disability such as dyslexia
(Hwee & Houghton, 2011), and then providing resources to parents, would allow for
teachers, and parents to support their students that may be struggling, early so they
are able to close their achievement gap from their peers.
Significance of the Project

The significance of this handbook is to provide teachers and parents with tools that will help them identify that their students may be struggling with dyslexia. By using this handbook in kindergarten to third grade, students will be able to meet early literacy benchmarks. The handbook provides a tool that is not currently available to teachers or parents to help identify students early enough that they will not fall behind academically. The handbook is designed to be easily interpreted and implemented so that it does not take a significant amount of time to prepare interventions within lessons already being implemented. This tool will also be something that can be used within a special education environment for additional support and as a resource for teachers with students who have been identified as having dyslexia.

Definition of Terms

*Code-Focus Instruction*: Instruction, which is designed to help students crack the code of reading and may include very basic skills such as letter sound knowledge or advanced skills; such as phonological awareness and phonics.

*Cognitive Strategies*: the process of acquiring knowledge and understanding through experience and the senses

*Dyslexia*: A learning disability characterized by difficulty in reading.

*Early Literacy*: What children know about reading and writing before they actually read or write.
Explicit: Stated clearly and in thorough detail, leaving no room for confusion or doubt.

Kinesthetic: A tactile learning is a learning style in which learning takes place by the students carrying out physical activities, rather than listening to a lecture or watching demonstrations.

Letter-Word Recognition: The ability of a reader to recognize written words correctly and virtually effortlessly.

Multisensory: Learning that involves two or more of the senses within the same activity.

Phonemic Awareness: Students are able to hear, identify and manipulate letter sounds.

Predisposition: A likelihood to suffer from a particular condition, hold a particular attitude, or act in a particular way.

Systematic: done is a manner that is a fixed plan or system, the method of teaching is methodical and predictable.

Summary

Dyslexia is a specific learning disability that affects about twenty percent of the population. There is a problem in our current education system where early literacy skills are not being taught in a way that all students are able to understand them. This chapter provided a thorough overview a project that would provide a
resource to teachers and parents that would support their student in learning those specific skills. The project is a handbook that is designed to equip teachers and parents with early identifiers of dyslexia, strategies for intervention, and resources for parents to allow them to support their child at home. There is a need to teach all students early literacy skills within the general education classroom with effective and quality instruction in a way that all students may access the curriculum. This project will specifically target the achievement gap in early literacy using interventions and teaching techniques that are designed to effectively teach students with dyslexia. Chapter II will present a review of the literature related to the topic of this project.
CHAPTER II

REVIEW OF LITERATURE

The purpose of this review is to determine the most effective way to teach students with learning disabilities or reading disabilities (i.e., dyslexia) how to read. Dyslexia has a significant range of individual differences within the disorder, which is why determining reading strategies for struggling students is critical (Carroll, Solity, & Shapiro, 2015). Dyslexia begins within the neural system of the brain, which is where the processing deficit occurs. Dyslexia is a learning disability that is often oversimplified and needs to be recognized so that students do meet the desired reading proficiency, (Nicolson, Fawcett, Brooks, & Needle, 2010). This review will present different early literacy teaching methods to support students, specifically those with dyslexia. Additionally, helpful information for general education teachers, special education teachers, administration and parents of students struggling with literacy development will be included. In this chapter, there will be a representation of multisensory, kinesthetic, and metacognitive strategies for teaching students to read and develop comprehension skills.

Early Identifiers of Dyslexia

Risk Factors

Identifying children with the predisposition of dyslexia, allows for there to be interventions put into place prior to them falling significantly behind in their language development. There are a few identifiers that parents along with educators should be
aware of, in identifying students that may have dyslexia. Some of the risk factors that can be identified in students with dyslexia are: family history, premature birth, fetal exposure to drugs or alcohol, Attention Deficit Hyperactivity Disorder (ADHD) and other neurological deficits. There are also possible signs that can help in the early identification of students with dyslexia such as: language or speech problems, difficulty with rhymes, difficulty with learning the names of letters, trouble connecting letter to their sounds (phonemic awareness), difficulty sounding out words (segmenting), difficulty with sight word recognition (decoding), slow reading (fluency), and poor spelling (Aladwani, & Al Shaye, 2012). Having knowledge of these identifiers and risk factors for students with dyslexia allows for teachers and parents to monitor and be active in supporting their students particular needs when it comes to their education.

**Familial Factor**

Children are considered at high risk of dyslexia when they have family have the disability, they demonstrate poor language in preschool (phonemic awareness) or when they demonstrate both factors, (Thompson, Hulme, Nash, Gooch, Hayiou, Snowling, 2015). For instance, if a child has a parent that has dyslexia, their risk is four times higher than a child who does not have a parent with dyslexia (Snowling & Melby-Lervag, 2016). This information is important for parents to understand, so that if their child begins to demonstrate difficulties in their early literacy development, they will be able to communicate their concerns to their child’s educator. Not only can this benefit parents, but teachers will be better equipped to support their students
if they have an understanding of why students in their classroom are not meeting the early literacy standard.

**Identification in Schools**

Students that are at risk for having dyslexia can potentially be identified as early as kindergarten; however identification at this early stage is less likely because of the significant amount of factors that play a role in a child's success during the first year of their education (Foorman, Torgesen, & Wagner, 2007). Dyslexia is a learning disability that generally affects students in their ability to process language and their literacy skills. In order to identify students early in their education, it is critical to monitor their literacy development. For students that have the predisposition for dyslexia, they will have deficits in acquiring phonemic awareness, letter/sound correspondence, and learning to decode print using phonemic decoding strategies (Foorman, Torgesen, & Wagner, 2007). When a student is demonstrating difficulties in these areas, their likelihood of having dyslexia is heightened when there are additional factors that come into play such as: they have a well developed vocabulary; come from a home that provided a print-rich pre-school experience; and, have a parent that demonstrates reading deficits (Foorman, Torgesen, & Wagner, 2007).

Students that are having difficulty with their literacy development, may be dyslexic, if they also demonstrate a limited response to reading interventions. Providing students with intensive reading instruction will allow for the majority of typically developing students to understand and maintain the information provided. This type of instruction when used with students that have inherent phonological
processing deficits would respond much more slowly, making them easier to identify within the classroom as having dyslexia (Foorman, Torgesen, & Wagner, 2007).

For the students that are demonstrating difficulties in their ability to process language and are struggling to further develop their reading skills, there are assessments that teachers can administer that can provide clarity in specific areas of weaknesses. The Dynamic Indicator of Basic Early Literacy Skills (DIBELS), is an assessment used to identify students as early as kindergarten who are struggling in the development of phonemic awareness, letter knowledge, and phonemic decoding (Foorman, Torgesen, & Wagner, 2007).

By using the information collected from observation, and assessment results, students can be identified within the schools as early as kindergarten. The early identification of students would provide for the learning gap to be minimized, and students that may not have been identified before would allows for students to reach higher academic success. The early identification of students would also minimize the depletion of a students self-esteem within the school environment, allowing them to want to maximize their own potential.

**Instructional Strategies**

**Code Focused Early Literacy Instruction**

Teaching students to read is the first step in their education. Children come into their kindergarten classroom with minimal skills and a brain that is read to absorb any information that is going to be fed to them. Though most children have this commonality, every child is equipped differently for their learning experience. A
classroom is full of students with a wide range of abilities, so it is critical that reading instruction is designed to benefit as many students as possible. Code-Focused early literacy instruction is an approach that allows a wide range of students to access the material by presenting “oral language skills beyond phonology, including vocabulary knowledge and grammatical skills, which are significant predictors of individual difference is reading comprehension,” (Hulme, et. al., 2015, PG). When students are given the basic skills of reading, teachers are able to assess and determine where the error is and provide adequate error correction to prevent further difficulties.

Code-focused instruction starts with the basics of phonemic awareness and progresses phonetically. Teaching reading using phonics instruction, will promote student awareness of words and the sequence of the sounds in those words, (Juel, C., & Minden-Cupp, C., 2000).

Students with dyslexia work best in a systematic method of teaching; code-focused instruction provides that when it is implementing the method of phonics within its instruction. Code-focused instruction provides students with linguistic reason behind the English language. This method of instruction is not focused on memorization of material but rather on a deep understand of the language and how it works.

Woolley (2011) provided an explanation of the way that the skill of reading has been accepted as being understood by explaining that reading has been accepted as a language based skill and word recognition depends on all the aspects of language. For instance, in order for a student to understand a text they must have
phonological and lexical knowledge of the language while they are reading in order to demonstrate a clear comprehension of what they are reading. Not only must they have phonological and lexical knowledge, but that also encompasses a syntactic, morphemic and semantic understanding of language (Wolley, 2011). Reading is a skill that requires a systematic approach for or students that have disabilities such as dyslexia. When students that are considered at-risk, a successful method in reading instruction is often embedded within a literacy curriculum that focuses on word-level, text-reading and writing exercises. In doing it this way teachers are ensuring that students are putting their new phonics knowledge and strategies into practice, (Griffiths, & Stuart, 2011). There is a fundamental requirement to return early literacy instruction the fundamentals of the English language.

**Multi-Sensory Instruction**

Multi-sensory instruction is designed to have teachers assist students in the understanding the connection of the material by using visual, auditory and kinesthetic language simultaneously (Henry, 1998). Students with dyslexia have difficulties in the way that they process information. Some students may have a deficits in visual processing, while others may have a deficit in auditory processing; therefore by creating a learning environment with multiple facets of learning available to the students, they will be able to access the material in one of the modes in which it is being presented.

The method of universal design in teaching reading, is the idea that the majority of students within the classroom will be able to understand the concept that
is being taught in one of the approaches being presented. Universal design is simply allowing all students to have the same access to the material that is being presented (Heir, T. 2009).

When students are beginning to read, and they move into learning how to comprehend the material that they read, even at the kindergarten level, it is important to allow students multiple avenues to reach success in comprehension. A method used by Joy Moss (2005) when teaching students basic comprehension skill is called “Reading-Thinking”. In the strategy there are thirteen different methods that would support students in reading which correlates with the universal design method, and the following are the five key components:

**Activating and using prior knowledge.** One of the first steps in this method is to activate the students prior knowledge. The reason that this is important for students with dyslexia is because if they are able to bring relevant and personal connections to the text while reading they will gain more meaning from what they read than those who do not use this tool (Moss, 2005).

**Making predictions.** Another critical element of this process is for students to think about what will happen next in the story by making predictions. By doing this students are practicing and developing an anticipatory attitude while reading a text which engages them into the material. As students are making their predictions about the text they are using their prior knowledge and personal experiences, which provides them with a deeper level of connection and understanding as the text unfolds and reveals new information (Moss, 2005).
**Summarizing, analyzing and synthesizing.** Following making predictions, students need to be able to recall and recount the major content of the text that they have read by summarizing in order to check for their understanding of the material. In order to be successful in this process students must be able to combine important ideas and information from the text in order to effectively retell what they have read. As students are summarizing the text they are engaged in an analysis of what they read by determining the basic elements of the story (Moss, 2005).

**Generating questions.** Questioning while reading is a strategy that supports the comprehension of a text for students. While they are generating their questions, students are actively engaged in analyzing the important elements of the text. The question that students generate will often aide in their predictions of the text (Moss, 2005).

**Monitoring comprehension.** Students that do not struggle with dyslexia are able to identify when they understand a text and they know when it does not make sense. Students with dyslexia are often times so focused on the decoding of the language they will forget to monitor their own comprehension as they are reading. In order to develop their comprehension abilities, they need to be able to identify the cause of their lack of comprehension in the text. For example, are they not understanding due to an unfamiliar word or, was a piece of the text not clear or confusing. Once the student understands the source of their problem they will need the tools to fix it. For instance, they can look a word up, reread a passage, or search for a detail that they feel is missing (Moss, 2005). By encouraging students to monitor
their own comprehension, students with dyslexia will be able to self monitor and become more successful readers.

**Engaging in metacognition.** As teachers begin to focus instruction on the mental process of reading, students begin to develop and understanding and awareness of their personal thought processes as they read independently. Metacognition, is the mental recognition of the reading process; and when reader can take control of the way that they are processing a text they can determine what strategies they need to use in order to be as successful as they can while reading.

In a study by Guthrie, Wigfield and VonSecker (2010), the results demonstrated that classroom contexts can be constructed to encourage and motivate positive outcomes for students. The study also suggests that using multiple outlets to reach students provides them with either intrinsic or extrinsic motivation, which provides more opportunity for students to have an interest in the material being presented; specifically reading material. The goal of universal design is to do just that, and in some way, reach a student’s level of understanding. With this approach to developing early comprehension skills, students will have access the material being presented in a multitude of facets.

**Explicit and Systematic Instruction (Focus on Deshler for this section?)**

Even with the use of code-focused instruction and universal design in early literacy instruction, there will be students that will continue to struggle with being able to grasp the concept of reading written language. When beginning reading instruction Kent and his colleagues noted in a review of kindergarten instructional
materials, that if students are taught a reading skill, they need the opportunity to practice that skill in text, (Kent et. al, 2012). This statement is critical to understand in that oftentimes students are presented with the concept in class but not given the opportunity to practice. In order to prevent students with the predisposition of dyslexia or those that have a reading difficulty, “the key to transforming (these) students from struggling to competent learners is to put in place programs that are grounded in sound learning theory and embody the features described as ‘laser like focus’ teaching and learning,” (Catts, Deshler, Hock, 2006).

In Deshler’s (2006), article, Enhancing Outcomes for Struggling adolescent Readers, he lays out a continuum of literacy instruction. This instruction method leads itself to be a system of explicit intervention for struggling students. Due to the fact that the needs of students struggling with literacy can be vastly diverse, it is critical that the literacy program offers instruction that can be presented at different levels of intensity, are comprehensive and well organized.

According to Deshler, “some students benefit when teachers use graphic organizers to help them master critical subject matter content; others need learning strategies embedded in content material, explicit strategy instruction, or instruction in basic skills or even the basic language elements that are the foundation of literacy competence,” (Deshler, 2006, PG).

This continuum of literacy instruction would be beneficial for students struggling with dyslexia for a variety of reason. One reason in particular is that students with dyslexia are not all the same and their needs are vastly different. The
continuum presents levels of intervention to support students at every stage of development. Students with dyslexia also benefit from explicit and systematic instruction, which is included in this intervention strategy. Each level of instruction provides student with the opportunity to develop their skills in a way that they will be able to repeat themselves.

Desheler’s (2006) method consists of five levels for literacy instruction. Each of the levels provides explicit and systematic instruction that benefits students with dyslexia. The focus of the continuum is that teachers provide the best possible instruction for all students in their classroom. Dehsher recognizes that there are varying ability levels within a general education classroom, so it is important that, as a teacher, the literacy instruction is providing strategies for understanding that are embedded within the instruction for first time learning. After whole group instruction is provided students would be given opportunities for more intensive instruction on supporting strategies, or intervention in a smaller setting, (ie., small group instruction). This provides opportunities for students that are struggling to be given additional support to ensure that any learning gaps are filled. If there are still students that are struggling with material, Desheler suggests that there would be a need for intensive basic skill instruction that focuses on the foundational skills of literacy. The last piece of this continuum would be addressing students that have a significant literacy deficit that would require therapeutic intervention. When addressing a language deficit, there are several pieces of instruction that need to be involved in order for the instruction to be beneficial for the student.
This method of instruction itself, allows for the affirmation of the need of some students to receive more intensive, systematic, explicit instruction of content, strategies, and skills and that there are critical roles that teacher hold in the instruction of early literacy, (Deshler, 2005).

When looking at how to give instruction to students with dyslexia, versus a typically developing student, is to look at the way in which the instruction is presented. Students with dyslexia benefit from instruction that provides multiple faucets for them to learn. By allowing students to learn the same material in different ways, they are able to make connections that may have been missing for them when it was first presented. Dyslexic students also benefit from instruction that is systematic and explicit. This means that the instruction methodical and clearly stated when it is presented. When presenting material in this way using multisensory instruction keeps the students engaged and interested in what is being presented. Students with dyslexia, tend to have a higher response when the instruction being given is presented in these types of manners.

**Parent Resources**

**Homework Support**

Students with dyslexia need to have appropriate education within the classroom but also adequate support in the home with parents. The role of a parent in the education of a child with dyslexia is just as important as the student’s teacher. Students that have struggled with dyslexia for any amount of time will likely experience some amount of anxiety towards their education (Shaw, 2017). There is a
constant neurobiological hurdle for children that are struggling with dyslexia as they are working towards learning how to read; for that reason, it is crucial to have a strong system of support between home and school in order for them to overcome the struggles that they face regularly at school (Shaw, 2017).

When working with students on homework there are some strategies parents can use to better support their student. Working together with the student can create an environment that will set them up for success. Parents can create a space where they can learn to problem solve with their child, which allows for their to be planning and modeling involved in the learning that is taking place (Shaw, 2017). Parents can request supplemental materials to be sent home to help their child be successful on different writing assignments. For example, requesting a graphic organizer can allow for the student to be able to have a visual map of the assignment to guide them in their thinking. Another method would be to have the student read aloud their sentences or paragraphs while they are typing it. By going through this process, students are beginning to self-monitor and edit as they are writing (Shaw, 2017). A key part in being able to support a student who is struggling with dyslexia at home, is to support them in their organization of an assignment, and breaking it down into chunks that are manageable and not overwhelming. An example of organizing and chunking an assignment could be using a highlighter on a math assignment, and once the student reaches the highlighted question they get to take a break (Shaw, 2017). In doing these simple strategies at home, parents are engaged in their child’s learning.
and providing them with additional support as well as strategies that they can implement on their own.

**Social/Emotional Support**

When a child is struggling with a learning disability like dyslexia, there is a social and emotional aspect that is negatively impacted as well. Student often demonstrate a lower self-esteem due to their disability. Dyslexia is often described as a hidden disability, which means that from a physical perspective, the symptoms of the disability are invisible. Students who have dyslexia often will hide the fact that they are struggling because they do not want to be looked at differently amongst their peers.

A study done in the Netherlands (Singer, 2008), analyzed how children with dyslexia cope with their academic failures. The study was conducted by interviewing students and asking them questions related to how they coped with failing grades. When students were asked about how they reacted to negative markings on an assignments, 59% of students reacted by pretending that nothing serious had happened, (Singer, 2008). Students with dyslexia often try to hide their failures due to their frustration with putting in a significant amount of effort and then still getting the same result.

While the students were being interviewed, when parents were mentioned, they provoked the a positive response from the students. Based off of the answers provided by the students, “parents proved the most important source of support,” of
the children being interviewed (Singer, 2008). The students being interviewed recalled moments when they had significant failures, but parents were able to establish and rebuild their self-esteem by encouraging them and supporting them through the failure.

Summary

The research discussed in this literature review covers three main ideas: Early Identifiers for Dyslexia, Instructional Strategies, and Parent Resources. Throughout the literature there is a common thread in each of these areas.

When looking at the early identifiers of dyslexia, there is a strong emphasis on the familial connection to the likelihood of a child having the disability. Dyslexia is a disability that can be passed down genetically from parent to child. If a child has a parent with dyslexia, their risk is four times higher than the general population of students.

The collected research also indicates a pattern in the area of instructional strategies for students with dyslexia. Each of the discussed methods for instruction, (code-focused, multisensory and systematic and explicit), they discussed the importance early literacy development. These three teaching strategies, are methods that are designed to provide students that are struggling with these skills opportunities to be successful within the general education environment first. This is important to note because, students with dyslexia typically have average IQ’s, meaning that they are capable of learning alongside their peers.
The third area that was discussed was specifically for parents and how to support their student with dyslexia. A key idea that came up throughout the research was that students that struggle with dyslexia, often have social/emotional problems as well. This can range from anxiety, to depression, to self-esteem in general. The literature provides parents with different tools that they can implement in the home to support their child with disabilities, and strategies that are easily implemented; whether that is with homework help or when supporting their child with their perceived failures.

Though there is a significant amount of information available about the topic of dyslexia, there is a lack of easily accessible and applicable material for parents and educators. In Chapter III there will be a discussion of a handbook that is designed to provide easily accessible information for teachers and parents in the areas of, Early Identifiers for Dyslexia, Instructional Strategies, and Parent Resources.
CHAPTER III

DESCRIPTION OF THE PROJECT

The purpose of this project is to provide teachers with information on how to identify early signs of dyslexia in their student in order to provide proper interventions and supports to ensure that they are successful within the least restrictive environment. There will be a list and description of early signs of dyslexia, a section of early literacy teaching methods, and a section of interventions that are more intensive. The handbook will also be a tool for parents to use to support their child in their literacy development.

This project is intended to be used as a method to support struggling readers that may demonstrate early identifiers of dyslexia. There are three pieces to the project: Early identifiers for dyslexia, teaching methods for struggling readers and interventions for students with dyslexia. Early identifiers for dyslexia will lay out some of the most common signs that students may be struggling with a learning disability such as dyslexia. There are multiple warning signs that can be identified. In this section, they will be listed, with a description and method to test the identifier. The next section, Teaching Methods for Struggling Readers, will be methods to do whole class instruction keeping in mind the students that are having more difficulty with their early literacy skills. The last section, Interventions for Students with Dyslexia, will provide educators with toolbox of different ways to intervene and provide explicit and systematic instruction for students that are struggling.
Early Identifiers for Dyslexia

This section is primarily for educators or parents that feel that a student or child is struggling with early literacy skills. The goal of this section is to provide educators and parents with easily identified and assessed deficits, to determine if there may be a reading deficit manifesting for the child. Focusing on the early indicators of dyslexia provides insight for the teacher to be able to effectively address and intervene, to ensure that the student may not fall significantly behind their peers in their literacy skills. This section will also benefit parents, in that parents are given a tool that will help them advocate for their child within the classroom.

Instructional Strategies for Students with Dyslexia

In this section, educators will find whole group teaching methods that reach students that may be struggling with reading deficits. Early literacy skills typically developed between kindergarten to third grade. In order to support our students with reading deficits, there needs to be effective teaching demonstrated within the classroom. There will be two different methods described to be effective uses of whole group instruction to support students with reading deficits: Code-focused instruction and Universal Design.

Resources for Parents

This portion of the handbook will be specifically for parents. Parents of children with disabilities, often are not given the needed resources in order to properly advocate for their child or provide supports at home. In this section of the handbook parents will be able to find strategies that they can use at home to support
their student with literacy development, along with strategies that they can teach their child when it comes to encouraging a positive self-esteem. Parents will also be equipped with suggestions to bring to the school about how to best support their child.

Summary

Based on Chapters I and II, this handbook was created to meet the needs of students who are struggling to meet the standard for early literacy skills. This handbook is designed to provide educators and parents with a tool to support their student or child in gaining early literacy skills, to prevent them from falling behind their peers. Each section is designed to be able to easily understood and integrated smoothly into the general education setting or in the home environment.
CHAPTER IV

IMPLEMENTATION

The handbook that is going to be implemented is titled, “A Guide to Support Students with Dyslexia, Inside and Outside of the Classroom”. The handbook covers specific areas that teachers and parents need to know about in order to best support students that are struggling with dyslexia. Often times teachers can become overwhelmed with the varying abilities within their classroom and are not equipped with the tools they need in order to best support every student. Parents can become frustrated with the constant fight that they have with their child regarding their grades or homework because they don’t understand what is going on with their child. The focus of this project is to provide a tool and resource for both parents and teachers so that they are capable of supporting their struggling students or child.

Parents, Teachers, and Students

The Handbook and Parents

While developing this handbook, it was important to keep the parents of children with dyslexia in mind. Parents often get left out of the equation when it comes to providing information and support to for a student that is struggling due to them having dyslexia. There are several aspects that parents need to understand about the disability that often go undisclosed. The first section of the handbook is a simplified explanation and definition of what dyslexia is. By providing this simple definition, parents are then able to see their child through a different lense. They
begin to understand that, no, their child is not trying to do poorly in school; and no, their child does care about getting their homework done.

Along with a definition of dyslexia there is also a section that explain in simple terms, what is going on in the brain of the child. This section of the handbook allows for parents to get an idea of how their child’s brain is working. It explains that though there is a deficit, there is also an area of great strength in there as well. By providing the science behind what is going on with their child, parents will be able to understand why their child is doing what they are doing. Parents will be able to understand the frustration that their child is feeling while they are taking in all of this information at a high pace, but then feeling as though there is a piece of gum stuck in one of the gears that allows them to process the information that they are taking in.

The third piece that is provided for parents in the handbook is a section on resources. In this section there are tools that parents can use at home to help their child with the homework that they are bringing home. There are strategies and activities that will allow for parents to not only be involved in their child’s homework, but they will be able to make a difference in the learning that is taking place.

In this handbook, “A Guide to Support Students with Dyslexia, Inside and Outside of the Classroom”, parents will find that it is a easy to read resource that provides background information on what dyslexia is, as well as tips to use at home. Parents often need something that they can quickly flip through to find an answer their question or problem, and that is the benefit of this handbook. Parents will be
able to use this resource to provide additional practice on key concepts that are being taught to their child based on their age.

Prior to giving the activities that parents can do with their child, there is a brief description about what is expected from the students in the classroom at different ages. This allows for parents to have a better understanding as to why the suggested activities would be beneficial to their child. The activities that are given do not require any training, or specific background knowledge. They were selected because they are easily accessible and used in a home environment with parents and their children.

By providing this resource to parents, there is going an understanding provided that was not available before. Parents want to see their child succeed, but can become overwhelmed with not knowing how to best support them. This handbook gives parents the benefit of having a resource that is easily understood, and applied at home, in order to see their child succeed within the classroom.

The Handbook and Teachers

Teachers have a difficult job. They are working on developing small humans into competent, successful, contributing parts of society. In the classroom there can be up to 35 students with a vast range of abilities, and it is the teachers job to prepare them for the next phase of their lives. While teachers do what they can, students with dyslexia often fall between the cracks; not because they go unnoticed, but because of the lack of training and resources general education teachers receive when it comes to supporting students with different needs. The goal of the handbook for teachers, is
that it will provide a quick and easy way for them to provide support to the students in their classrooms that are struggling due to having dyslexia.

Similarly to the parents, teachers also need a simplified definition of dyslexia and how it is affecting their students. Teachers know what the general idea of dyslexia is, but having a clear picture of how it is affecting the students provides them with the ability to not just understand by visualize what is happening in the brain of a child struggling with this disability. In order for teachers to be able to support a child effectively there needs to be an understanding of what is happening in the brain of that child.

The next section that is designed for teachers, is the chapter on “Early Identifiers.” Kindergarten through third grade is a critical part in the development of early literacy skills in children. When students are struggling with these skills, this portion of the handbook will provide identifiers for teachers to be looking for in order to provide the support that is needed for that student.

A key section that is targeted towards teachers is the section of “Instructional Strategies.” Within this section, there are teaching methods that can be used in a whole class setting, small group intervention setting and in a one-on-one intervention setting. Teachers will find activities that can be used in order to provide students with a multi-sensory learning experience along with explicit and systematic instruction techniques that they can try to implement within their classrooms. By providing students with multiple facets for learning, teachers are setting their students up for success.
In the handbook, there are multisensory strategies that can be used to provide instruction for all students within a classroom. Along with multisensory strategies, there is a guide of how to ensure that instruction that is being given is systematic and explicit. This type of instruction allows for students to receive new concepts in familiar ways so they know what to expect during in class.

When working in a classroom full of students of all ability levels, it can become overwhelming to try and find teaching methods that benefit all of the students within the classroom. In order to support teachers, this handbook provides teaching methods that have been proven to be successful when working with students not only with dyslexia, but all students. The handbook will allow teachers to have something that is easy to read that will support students that are struggling with early literacy.

**The Handbook and Students**

Students are the focus of the handbook in its entirety. Though students may not be the ones that are reading it and implementing the strategies that are within it, they are the ones that are going to be reaping the benefits. Students with dyslexia are often misunderstood as being lazy or unmotivated, when in reality they have a neurological difference in their brain that is causing them to struggle. By providing teachers and parents with the needed information to best support students with dyslexia their could be a huge affect on the students academic achievement as well as their social and emotional well being.
Students are the focus of this handbook. Children with dyslexia are often misunderstood or go under served because their disability is not visible for teachers. These students are socially typically developing students, possibly with some attention deficits, but not students who physically look as though they need additional support. With the implementation of this handbook, students with dyslexia will benefit from early literacy instruction that they can grasp and understand. The support will be coming not only from inside the classroom but also from at home activities with their parents.

Summary

In this chapter the discussion was focused on the way that the handbook, “A Guide to Supporting Students with Dyslexia, Inside and Outside the Classroom,” would be implemented. The stakeholders for this project include: parents, teachers and students. There was an explanation of how the handbook would affect each of the targeted stakeholders and how it would be of benefit to them. In the following chapter, there will be a description of the purpose of the handbook, “A Guide to Supporting Students with Dyslexia, Inside and Outside the Classroom”.
CHAPTER V

CONCLUSION

The goal of this project was to expose the gaps that were in the research of supporting students with dyslexia inside and outside of the classroom. While conducting the research it became evident that there was a significant lack of information coming from studies done in the United States. With this realization it has become evident that there a real need for a deeper understanding for supporting students with dyslexia in the states.

Throughout the research, there were studies that had been conducted; however their findings were often inconclusive strictly due to the fact that they had not been replicated. Studies have been done on multi-sensory instruction for students with dyslexia as well as code-focused instruction, but because they have not been replicated, there is limited information on whether the approaches would be effective amongst a larger group of students.

Dyslexia is a field that has recently become a topic of greater interest in the United States. California has recently adopted the “Dyslexia Guidelines for California” in 2017 (CDE). This brings hope to a disability that has often been overlooked by many within the field of education.

Recommendations

In order to expand the field research for dyslexia, there needs to be studies that are conducted, and the replicated, within the United States. Since this disability is
becoming recognized at a greater rate than it has in the past, there is a large window of opportunity to create a program that will benefit students with dyslexia, a close the achievement gap for those with the disability.

Dyslexia is a learning deficit, generally, among individuals with average intelligence. With that being said, the achievement of students with dyslexia should not be far off from typically developing students. Creating programs within our public school system to support students with dyslexia from the time that they enter kindergarten would prevent a vast amount of struggles, academic and emotional, for these students.

The methods that have been suggested to support students with dyslexia are methods that would be inclusive and beneficial to all students within the classroom. Multisensory and code-focused instruction are designed to be taught explicitly and systematically which will allow students that naturally struggle with early literacy skills to stay on track with their typically developing peers.

Summary

This project provides information on how to support students with dyslexia. Background information was provided to allow the reader to understand what dyslexia is and why it is important to provide specific supports for these children. There is a review of literature, which lays out the some of the strategies that have been used to support students with dyslexia inside and outside the classroom demonstrated that there was a gap in the research that requires. The project includes a
handbook that was created for parents and teachers in order support students inside and outside of the classroom.
REFERENCES
REFERENCES


doi:10.1177/0022219407311040


doi:10.1111/jcpp.12488


APPENDIX
APPENDIX

A GUIDE FOR SUPPORTING STUDENTS WITH DYSLEXIA INSIDE AND OUTSIDE THE CLASSROOM

This handbook is designed to support teachers, and parents with developing the early literacy skills of students struggling with dyslexia. The following link will lead to a PDF file that is available for download and use.

https://goo.gl/jjgPHF