

STRATEGIES FOR SUPPORTING STUDENTS WITH LEARNING DISABILITIES
IN GENERAL EDUCATION SETTING IN SAUDI ARABIA

by

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ABSTRACT

This project provides a background of teaching students with learning disabilities in the United States and Saudi Arabia. It also points out to the current special education services and programs for students with learning disabilities in both countries. In addition, this project explains the major types and characteristics of students with learning disabilities. Not only that, but it also presents some strategies that educators and parents could use with this type of students. Services and resources that are available for Saudi Arabia's students have been briefly explained in this research. Saudi Arabia keeps making improvements and changes in special education services. So, to improve special education services, educators, parents, and other professionals should consider the various suggestions that are available in this paper to develop their students' progress and assist them to be more successful. Changing the perspectives of some people toward special education, especially learning disabilities and inclusion, required additional research. They can be supportive of these students in a general education setting.

TABLE OF CONTENTS

CHAPTER		Page
1	INTRODUCTION.....	1
	Statement of Need.....	2
	Purpose of the Project.....	2
	Statement of the Project Goals.....	3
2	LITERATURE REVIEW.....	4
	Teaching Students with Learning Disabilities in USA.....	6
	Teaching Students with Disabilities in Saudi Arabia.....	14
	Conclusion.....	20
3	METHODOLOGY.....	22
	Phase 1.....	22
	Phase 2.....	23
	Phase 3.....	23
	Phase 4.....	24
4	HANDBOOK.....	25
5	CONCLUSION.....	44

LIST OF TABLES

Tables		Page
1	Characteristics of Students with Learning Disabilities.....	25
2	Services and Resources for Students with Learning Disabilities.....	29
3	Strategies for Students with Learning Disabilities	37

CHAPTER 1

INTRODUCTION

Learning disabilities (LD) affect the ability of the brain to acquire, analyze, and store information. With a learning disability, the response to and communication of information is affected. There are many types of learning disabilities as the term learning disability is an umbrella name given to number of learning disorders, not a sole disorder. Learning disability is different from other disabilities because people they affect are of average of intelligence (National Center for Learning Disabilities, 2013). However, those affected typically have problems acquiring skills that affect their performance and often struggle with performance at home, work, school and in their community. Learning disability affects people for their lifetimes; therefore, it is better to identify learning disabilities early in life to resolve the hurdles they present.

The major sign of LD is the difference between an individual's performance and his or her expected achievement. Learning disability affects each person in a different way, manifesting at different developmental stages. Learning disabilities can be mild or severe, and an individual can have more than one. According to the National Center for Learning Disabilities (NCLD, 2013), about a third of people with learning disabilities have Attention-Deficit/Hyperactivity Disorder (ADHD). Attention-Deficit/Hyperactivity

Disorder and LD are quite different though they share some features common to both. Problems with memory, concentration, and organization are features common to LD and ADHD. This confuses many people and makes them view individuals with LD as lazy. A deep analysis of concerns is the single way to confirm whether one has a learning disability or not. However, input from a wide range of people is required, including the affected person, for proper review (NCLD, 2013).

Statement of Need

Development of a handbook for teachers and parents about including students with learning disabilities in the general education setting in Saudi Arabia is necessary because looking at the research shows limited information. Saudi Arabia has published very little research on learning disabilities and they provide little assistance to students with learning disabilities. This project is important because Saudi Arabia provides limited training for parents and teachers who must deal with learning disabled students. Saudi Arabia has begun the process of integrating inclusion classrooms only in the elementary schools and has not put an emphasis on expanding inclusion classrooms into the middle and high schools.

The United States has a developed strategies and interventions that are used with students with learning disabilities. In addition, the US has developed national policies and procedures related to working with children in inclusive settings. The work that the US has done could be very helpful to the educational leaders in Saudi Arabia as they begin to develop policies and procedures.

Purpose of the Project

The purpose of the project is to develop a handbook for teachers and parents to

use when they are working with children who have learning disabilities in the general education setting in Saudi Arabia.

Statement of the Project Goals

This project will be completed in four phases:

Phase 1: Describe the characteristics and major difficulties that students with learning disabilities have in an instructional setting, including types of learning disabilities.

Phase 2: Identify services and resources available to help students with learning disabilities be successful.

Phase 3: Identify instructional strategies, adjustments and interventions that are needed for students with learning disabilities.

Phase 4: Compile and publish the information from phases 1-3 into a handbook that can be distributed to parents and other teachers.

CHAPTER 2

LITERATURE REVIEW

“About Learning Disability” (2013) defines LD as a reduction in intellectual abilities and difficulties with ordinary activities, which has a lifetime effect on a person. People with this condition learn and develop new skills slower than those without. They also find it difficult to understand information and cope with people around them.

Kemp, Smith, and Segal (2013) offer that LD is a generalized term for a number of learning disorders. Accordingly, LD is not an intelligence problem or motivational one because people with LD are equally intelligent as those without this disability. However, they visualize, understand or hear things in a different way. This affects how they learn new skills or information and how they use these skills and knowledge. The different types of LD involve difficulties with how one reads, reasons, writes, listens, speaks and performs math.

There are various types of learning disabilities in existence today. According to Kemp et al. (2013), LD is usually defined by their academic skill set. The most common relate to reading, arithmetic and writing. Dyslexia refers to a condition where one has problems in reading. Two types of LD fall under this category, basic and comprehension. In this condition, there are people who find it difficult to relate letters, sounds and words

and others who cannot get meanings of words. The former have a basic problem with reading and the latter have comprehension problems. One of the signs of dyslexia is having problems recognizing letters and words (University of Washington, 2004). Dyscalculia is a learning disability related to mathematics. Math has always been a challenge to many students. People with dyscalculia will have problems trying to memorize and organize numbers. They also have problems organizing, memorizing facts, and operation signs (Berch, 2013). Dysgraphia is a learning disability related to writing. It includes the actual writing activity and the mental part for comprehension and synthesis of information. People with basic dysgraphia have problems when it comes to formation of words and letters. Expressive dysgraphia, on the other hand, is where one has problems with organization of written ideas (Kemp et al., 2013). In addition, dysphasia or aphasia is a language learning disability. It involves problems relating to understanding and producing spoken language. People with dysphasia have difficulties telling a story and their speech is not fluent. They cannot clearly understand what words mean (“Types of Learning,” 2009).

Teaching students with learning disabilities has gained prominence in educational systems of various countries of the world. Special education for students with learning disabilities varies from one country to another depending on government policies, educational requirements and policies, and cultural backgrounds. The backgrounds and cultural influence of learning among students with disabilities in Saudi Arabia and the USA differ. This makes the process of teaching children with disabilities different in the USA and Saudi Arabia. The purpose of this literature review is to provide the views of various scholarly studies and research as well as other sources regarding teaching

students with learning disabilities in the United States and Saudi Arabia. The history of special education or learning among students with disabilities in Saudi Arabia and the United States is discussed. Included are factors that affect programs and services for teaching students with disabilities in the two countries.

Teaching Students with Learning Disabilities in USA

Teaching students with learning disabilities originated from the US in the 1900s. During those early stages of special education in the USA, many dedicated education professionals taught students who were slow learners, deaf and/or blind in segregated classrooms. The segregated classrooms were located in either public school buildings or separate schools. It was necessary in those early times to establish the people who should indeed be segregated. Alfred Binet developed an individual test of intelligence to determine the students who were intellectually capable of attending regular schools and those who needed special education (Salem, 2013). This study which was initially started in France was revised and standardized in the US in 1916 by Lewis Terman of Stanford University (Cortiella, 2011). This test enabled professionals in education for students with disabilities to identify students who did not exhibit intellectual capability.

Between 1920 and 1960, several states permitted the establishment of classes to teach students with learning disabilities (Hardman, McDonnell, & Welch, 1998). However, public schools were highly selective because there were limited programs available for the high number of children with disabilities within that period. Services for children with mild emotional disorders were established in the 1930s. Separate classes were also provided for students with physical disabilities. During this period local and national level organizations were created and expanded for the entire population, and a

higher number of people and institutions participated in the debate to educate individuals with disabilities in public schools. President J.F. Kennedy made efforts to expose the needs of people with disabilities to the public (Hardman et al., 1998). He was then backed by civil rights movements which demanded the integration of minorities into society. This led to the establishment of the movement of integrated education of students with disabilities. The public and parent groups became increasingly active in enabling education for students with disabilities.

The law also supported the movement for education and integrated environment for people with disabilities. In *Brown vs. Board of Education* (1954), the Supreme Court made a decision in support of free education for students with disabilities in public schools. It was established that segregation based on race violated the principle of equal educational opportunity. Cortiella (2011) suggests that the case set a good basis for the understanding that every individual has a right to public education regardless of gender, race, or disability.

Following *Brown vs. Board of Education*, funding for special education programs and training increased. Price (2009) suggests that the Elementary and Secondary Education Act of 1965, which provided for funds to be set aside for public schools, was amended to set aside funds specifically for students with disabilities. Federal legislations passed in the 1970s also supported the integration of people with disabilities into society through equal education. The laws provided that children with disabilities should enjoy education in the least restrictive environment. In this case, “least restrictive environment” means that children with disabilities should be educated together with other students without disabilities to the highest possible extent. Section 504 of the Rehabilitation Act

1973 provides that any individual with a disability should not be denied any program or activity funded by the government, whether public or private (Alquraini, 2013). The Americans with Disabilities Act of 1990 provides additional requirements for compliance by institutions and school districts that do not benefit from federal aid.

By 1975, half of the entire population of disabled children were either educated inappropriately or completely excluded from the educational system. This changed when the Education for All Handicapped Children Act (PL94-142), currently known as Individuals with Disabilities Education Act (IDEA) was signed into law by President Ford in November 1975. Under IDEA, which is still operational, children with disabilities have the right to be taught individually through the Individual Education Program (IEP). The children are also required to get free and appropriate public education in the least restrictive environment. Education for All Handicapped Children Act was changed to IDEA in 1997. Forlin, Jobling, and Carroll (2001) suggest that IDEA shifted the focus of the law from access to public education to the provision of measureable and meaningful programs for every individual with a disability.

These legislations indicate that teaching students with disabilities is highly protected and supported by the law. IDEA defines the entire system of teaching students with disabilities (Olson & Platt, 2004). Supported by school and public participation, IDEA lays a foundation for an effective and appropriate system of education for children with disabilities. It encourages the measurability of the outcomes of special education in both private and public schools.

In the US, children with disabilities are taught objectively. The schools and other educational programs lay down measurable annual goals with regard to students with

disabilities (Olson & Platt, 2004). The relevant authorities, including teachers, are also engaged in regular assessment and measurement to determine the progress of students with disabilities. Teaching children with disabilities is not the responsibility of teachers alone; parents also participate in the development of their children's Individual Education Program. There is also an innovation of participation throughout the special education process. Teaching students with disabilities also involves mandatory reporting of goal progress to parents. In case a student with disabilities does not make sufficient progress towards the attainment of IEP goals, the plan is revised and changes in the teaching process are initiated (Test, Fowler, Wood, Brewer, & Eddy, 2005). This shows that teaching students with disabilities is a strategic process with good planning, progress monitoring, and change management. In all these activities, inclusion and participation are essential elements for the appropriateness and efficiency of the IEP.

Teaching students with disabilities also requires accountability in order to enhance student achievement in the special education system. Accountability is enhanced through increased participation in statewide assessments of progress by students with disabilities. In order to manage funds and resources intended for teaching students with disabilities, teachers have been encouraged to use research-based programming. Teachers of students with disabilities engage their students in statewide assessment in order to enhance accountability for students with disabilities (Hardman et al, 1998). Special education also involves hiring of highly qualified teachers, especially those who are specialized in special education. The main purpose of hiring highly qualified teachers and encouraging accountability in special education is to tighten the achievement gap for students with disabilities, especially those who are considered to be at high risk.

Students with disabilities are also taught in an integrative manner – they are brought together with other students without disabilities and given the opportunity to interact with them in both classroom work and extra-curriculum activities. IDEA also provides an alternative model of teaching students with disabilities (Alquraini, 2013). This includes Response to Intervention (RTI) which involves the provision of high-quality instruction and interventions based on the need of each student with disabilities. RTI also requires constant progress monitoring in order to enable teachers to make appropriate changes in instruction or goals. Furthermore, it entails the application of child response data to important decisions.

Instead of sending students with disabilities to special education, the US system emphasizes preventing the occurrence of learning gaps and addressing academic and behavioral issues before they occur. The key issue in educating students with learning disabilities is the focus on results. In this regard, educational plans are designed to include research-based programming. IEP teams also write annual goals: these must be measurable, include mechanisms of monitoring progress, and initiating changes if progress is not realized. Salem (2013) suggests that the US system of teaching students with disabilities focuses less on procedural compliance and more on results.

The current system of learning among children with disabilities involves inclusive education whereby children with special needs are integrated into regular classrooms. It also entails a process of enabling an inclusive space for all learners regardless of their disabilities. As opposed to integration and special education approach, the current inclusion approach in the US educational system focuses on quality; it entails a change in the entire school environment to accommodate the needs of all students (Salem, 2013).

There are two school reforms that have been pursued: service provision and ethic of care and support. These reforms mainly address issues affecting children with disabilities in terms of school infrastructure and environment. Service provision targets meet the basic needs of all the children while ethic of care and support ensures that the school environment is safe and comfortable for all children.

Inclusive teaching among children with disabilities in the school system also focuses on building partnerships between schools and the community. In order to meet the needs of children with disabilities in a school system, teachers and other supporters of such children operate within a given policy and practice provided by IDEA and the school systems. Teachers engage in inter-sectoral teacher training to give them skills and knowledge to teach students with disabilities more effectively (Teigland, 2009). They also promote classroom management by ensuring that all activities are directed and controlled efficiently.

Some scholars have come up with arguments in support of the inclusive approach of teaching students with disabilities. Lujan and DiCarlo (2006) argue that inclusion is a rights-based approach which ensures that the right of children with disabilities to access education is upheld. This system enables children with disabilities to disassociate themselves with the situation of being “special education needs” children. Under the past system of special education where children with disabilities were taught separately, children would feel stigmatized. Inclusion enables them to realize that they can perform well in education just like other children without disabilities. Inclusion increases confidence and self-esteem among children with disabilities and reduces stigmatization, hence leading to improved performance by such children.

Teaching students with disabilities also involves the use of technology in providing services to such students as suggested by IDEA (Alquraini, 2013). In this case, students with disabilities are provided with assistive technology (AT) which is composed of both services and devices. This technology is important because it enables students with disabilities to learn, and the school administrations and teachers are able to meet the needs of every student with a disability in an IEP and transition plan. Alquraini (2013) suggests that the main aim of technology based and inclusive teaching for students with disabilities is to provide educational services in such a way that their unique needs are met. State personnel in the US allocate funds to professionals who teach children with disabilities so that they can use the funds to integrate technology effectively with teaching strategies. Alquraini (2013) also claims that technology in schools enables children with disabilities to access the general curriculum and to improve their teaching methods.

Alquraini (2013) also suggests that teachers who teach children with disabilities be provided with information and effective training by their states. IDEA empowers states to use funds to improve the quality of “special education needs” teachers. With integrated technology, skilled and well trained teachers are able to meet the needs of each student with a disability in their schools.

Alquraini (2013) argues that IDEA is the central element in teaching students with learning disabilities because it guides the entire process and procedure involved in teaching such children. IDEA enhances good quality of special education services for students with disabilities. Educational services required by IDEA for teaching students with learning disabilities include appropriate educational setting, transition services,

educational goals and results of students with learning disabilities, and intervention programs.

The effect of IDEA on the educational setting for students with disabilities is that an increased number of students is receiving education in a general setting and few of them are still taught in separate educational settings. In 2004-2005 academic year, students with disabilities who were taught in an inclusive setting amounted to 80% of the entire population of students with a disability (Alquraini, 2013). Students with disabilities who attend public schools in the United States have increased significantly due to the implementation of IDEA requirements across the entire educational system. Furthermore, IDEA has led to improved academic performance among students with disabilities. Research indicates that reading skills for elementary students with learning disabilities in inclusive educational settings improved by 31.7% and their mathematics skills improved by 23.9% in 2005-2006 (Alquraini, 2013).

Cook (2004) observes that the implementation of IDEA requirements in educational settings for students with disabilities also increases the participation of parents in activities that affect the education of their children. Therefore, it is clear that IDEA enhances improved quality of teaching students with disabilities.

The problem in teaching students with disabilities is that the level of assistive technology used to help such students is low. Cortiella (2011) suggests that only an estimation of 25% to 35% of students with disabilities is provided with assistive technology. States and the federal government still need to increase their assistance for children with disabilities in terms of assistive technology.

Teaching Students with Disabilities in Saudi Arabia

Although there is legislation in Saudi Arabia that enhances the rights of students with disabilities to receive appropriate special education services, teaching students in the country lacks the quality that the USA's educational setting for students with disabilities has achieved (Alquraini, 2013). This is caused by some of the various issues that affect the country's educational system.

Special education was introduced in Saudi Arabia in 1958 when a blind man named Sheikh Al-Ghanem learned how to use the Braille learning system to read and write from a blind friend from Iraq. The Saudi blind man introduced the Braille system to a few other Saudis who were attending regular public schools. For two years, the system was used privately, and it proved to be very useful for students with learning disabilities. One of the government schools started to use the Braille system at night so that blind students could attend their regular classes during the day and Braille instruction classes during the night. The government supported this system and offered space and materials to support blind students who were willing to use the Braille system (Alquraini, 2013). The system was so successful that the government decided to introduce special education in the Kingdom.

Saudi's Ministry of Education started the special education program in 1960. The challenge with the system at that time was that the educational system was mainly dominated by men. The first government-supported training institute for students with disabilities admitted male blind students. This institute was the Al-Noor Institute in Riyadh. Hallab (2011) argues that this institute formed a strong foundation for special

education, although it also exacerbated discrimination against girls and women in teaching students with disabilities.

In order to overcome the problem of gender discrimination, the first school for blind girls was initiated in 1964. Special education also expanded in the same year after the introduction of the first deaf school, the Al Amal Institute in Riyadh. Resources and facilities for blind students also expanded to five institutions. The first institute for students with mental disabilities, Al-Riaih Institute, was started in 1971 (Dukmak, 2010). The Department of Special Education in the Ministry of Education was upgraded in 1974 to General Directorate. Three units were initiated to spearhead the teaching of blind, mentally challenged, and deaf students. The three units were required to oversee the implementation of educational programs for each of the three groups of blind students.

Resources for teaching students with disabilities expanded as new special education institutions were opened in various provinces depending on the needs of each province. By 1987, special education institutions had increased to 27 throughout the Kingdom of Saudi Arabia. Recently, the number increased to 54 (Alquraini, 2013). These institutions include 10 schools for the blind, 16 schools for the mentally disabled and 28 schools for students who are deaf.

The responsibility of protecting and promoting the rights of students with disabilities is shared by the Ministry of Education and the General Secretariat of Special Education (Dukmak, 2010). The Ministry of Education provides and oversees educational programs and curricula while the General Secretariat of Special Education initiates and directs technical and social programs required for students with learning disabilities. The Ministry of Education also participates in enhancing education for students with learning

disabilities by providing integrated medical and psychological counseling and treatment services. This is part of the overall rehabilitation programs of the Ministry of Education. Until the 1990s, there had been little focus on the quality of services delivered for students with learning disabilities (Hallab, 2011). After the 1990s and beyond, teaching students with disabilities improved significantly as service delivery was given special attention. Service delivery for students with disabilities has recently experienced qualitative and quantitative progress. Institutionalization is no longer considered an appropriate approach to provide education to children with disabilities, although it is still widely used in the Kingdom.

The most recent development in teaching students with developmental issues is the introduction or integration of special education programs into regular schools (Dukmak, 2010). Some of the special education programs in regular schools include specialized teachers and consultation, resource rooms, and self-contained classrooms. Previous institutions for students with learning disabilities are currently being transformed to carry out various functions such as in-service training, alternative service delivery for students with severe conditions, and provision of information and support centers.

From the above information about special education in Saudi Arabia, it is clear that teaching students with disabilities still faces some challenges. Alquraini (2013) argues that the special education services are still in the stage of development. In an attempt to improve special education services, the Special Education Department under the Ministry of Education, with the support of professionals from some universities,

reviewed the policies of IDEA regarding special education services. As a result, the Regulations of Special Education Programs and Institutes (RSEPI) was introduced in 2001 to regulate the teaching of students with disabilities in the Kingdom.

The Regulations of Special Education Programs and Institutes (RSEPI) adopted various factors from IDEA of the USA including the least restrictive environment, transition services, multi-disciplinary teams, IEPs, etc. RSEPI upholds the rights of students with disabilities to access free and appropriate education. Schools are required to educate students with disabilities in a setting of general education, considering other alternatives of special education services. RSEPI requires that various educational services should be implemented with disabled students in the real world (Dukmak, 2010). However, implementation of services in the real world faces several problems. Unlike the US where the provisions of IDEA are implemented successfully in the school educational system, Saudi Arabia has not been able to implement the provisions of its own RESPI successfully.

Alquraini (2013) argues that what is experienced in the real education system of Saudi Arabia with respect to students with disabilities is different from the regulations provided by RESPI. This is because implementation of the policies is hampered by several challenges. First, Saudi legislations lack effective safeguards to guarantee students with disabilities and their parents a high quality of educational services. The regulations do not provide clear indication of which department is responsible for implementation of RSEPI.

The Regulations of Special Education Programs and Institutes provide that students with disabilities should be educated in a general education setting. In reality,

teaching students with disabilities in Saudi Arabia takes place in different settings depending on the severity and nature of the disability. For example, students with cognitive disability, deafness and blindness are taught in special classrooms in public schools. Such students interact with other students in extra-curricular activities such as arts and sports. Students with severe disabilities also get their education in special schools which do not meet their individual needs (Dukmak, 2010). Furthermore, students with disabilities are taught using a special curriculum that is designed to suit each type of disability.

Alquraini (2013) observes that children with disabilities in Saudi Arabia do not get an opportunity to join further education after completing middle school. Those who get slim chances to proceed with education join vocational training centers which are also limited. RSEPI requires that teaching students with learning disabilities should entail providing educational services in a general education setting supported by a resource room teacher who gives individual instructions to the student. However, most students are still taught in either a special classroom in public schools or in special schools.

Regulations of special education also require relevant authorities to provide related services to students with disabilities (Murphy, Gray, Straja, & Bogert, 2004). Currently, related services such as transport, psychological services, and counseling are available in various schools. However, the educational system of Saudi Arabia still lacks some related services for students with disabilities, such as physical therapy, medical services, and speech and language therapy.

In terms of evaluation and assessment for students with learning disabilities, the assessment and evaluation procedures outlined in Saudi legislation are clear and detailed.

However, teaching students with disabilities is not evaluated or assessed adequately. Tools of assessment such as IQ tests and academic scales are not adapted to the cultural position of the Kingdom (Nuzhat, Salem, Quadri, & Al-Hamdan, 2011). Teachers and other professionals involved in teaching students with disabilities do not have the right approach to assess students in order to determine their unique special education needs. Special education teachers and school specialists attempt to assess students with disabilities, but there is no multidisciplinary team to do so. Therefore, it is difficult to address the special education needs of each student with a disability.

Neither regulations nor practice underscore technology as an important element in teaching students with disabilities. The schools in Saudi Arabia are not equipped with assistive technology services or devices to be integrated in effective teaching strategies (Alquraini, 2013). As a result, students with disabilities are not able to live independently or access the general education curriculum.

Al-Jadid (2013) suggests that the effectiveness of educational programs for children with disabilities on the children, families and the community at large is questionable and debatable. Al-Jadid (2013) questions the ability of such programs to change the attitude of members of the community towards people with disabilities. However, Al-Jadid (2013) appreciates the fact that special education services for students with disabilities has enabled them to obtain good quality education services for students in the least restrictive environment. Al-Jadid (2013) argues that despite these achievements, there is still a lot that needs to be done in order to improve the quality of educational services for students with disabilities.

Generally, the quality and level of educational services among children with disabilities are poor. This explains why it is very difficult to implement the regulations provided by the RSEPI which oversees the processes and procedures of teaching students with disabilities. Special education services do not have a proper manner of implementation because RSEPI does not offer proper explanations or approaches to key issues (Al-Eithan, Robert, & Al-Saeed, 2010). Furthermore, there is no proper system of accountability that may guide the implementation of RSEPI. Families of students with learning disabilities in Saudi are also not equipped with reliable information about the rights of their children to obtain a high quality of special education as highlighted by RSEPI.

Conclusion

From the above literature review, it is clear that educational services for children with disabilities in the USA is different in many ways from the educational services given to children with a disability in Saudi Arabia. However, there are also a few similarities between the educational services of the two countries' education for children with learning disabilities. Special education started much earlier in the USA than Saudi Arabia. Regulations that guide education for people with disabilities in the USA are provided by IDEA. Saudi Arabia adopted some regulations from the IDEA and included them in their regulatory body RSEPI.

Literature has shown that teaching students with disabilities in the US and Saudi Arabia is guided by the purpose to provide free and appropriate educational services for children with disabilities. Most of the contents of the IDEA and RSEPI are similar. They have guidelines on the provision of individual education plan (IEP), related services,

transition services, etc. The two regulatory bodies also require educational institutions to provide the least restrictive environments for children with disabilities. The differences between teaching students with disabilities in the USA and Saudi Arabia are seen in terms of the implementation of the regulations provided by IDEA and RSEPI. The quality of educational services in the USA is higher than the quality of educational services in Saudi Arabia. The system of education in the USA is an inclusive system whereby students with disabilities are taught along with regular children in order to enable them to interact. On the other hand, students with learning disabilities in Saudi Arabia are taught in separate classrooms in public schools or in special schools. Literature has shown that the USA's approach to teaching students with learning disabilities is more inclusive than the Saudi's approach.

CHAPTER 3

METHODOLOGY

This chapter will provide the methodology that will be used to complete each phase of the project.

This project will be completed in four phases:

Phase 1: Describe the characteristics and major difficulties that students with learning disabilities have in an instructional setting, including types of learning disabilities.

In order to complete this phase, extensive review of the research was conducted into the characteristics and difficulties learning disabled students have in the classroom. There are many scholarly articles published on this content and many were reviewed carefully in order to develop a comprehensive list of characteristics and difficulties students' experience. There are also many professional organizations in the United States that are conducting research into this important topic. For example, the National Center for Learning Disabilities (NCLD) team envisions a society in which every individual possesses the academic, social and emotional skills needed to succeed in school, at work and in life. They have published a great deal of information regarding the types of

disabilities and offer suggestions to parents and teachers that can be helpful in the creation of this project.

Phase 2: Identify services and resources available to help students with learning disabilities be successful.

In order to complete this phase of the project, research was conducted on the types of organizations and services that are available in the USA for students with learning disabilities. Professional organizations, such as the Learning Disabilities Association of America (LDA), have provided support to people with learning disabilities, their parents, teachers and other professionals with cutting edge information on learning disabilities, practical solutions, and a comprehensive network of resources. These services make LDA the leading resource for information on learning disabilities. In addition, many school districts publish lists of services and resources for their parents and teachers. Research of these published documents was done when completing this phase of the project.

Phase 3: Identify instructional strategies, adjustments and interventions that are needed for students with learning disabilities.

In order to complete Phase 3 of the project, extensive research was conducted into research-based strategies, adjustment and interventions needed for students with learning disabilities. There are many scholarly articles on this topic that were reviewed and reported their results. In addition, The National Dissemination Center for Children with Disabilities (NICHCY) provides an extensive set of tools for teaching students with learning disabilities. Their research was used to complete this phase of the project. In addition, many states in the US have compiled excellent resources for their special

education teachers and parents. State department resources were explored and gleaned for the best practices to be included in the handbook.

Phase 4: Compile and publish the information from phases 1-3 into a handbook that can be distributed to parents and other teachers.

Once Phases 1-3 were completed, the results were made into a handbook. The handbook contains three sections. Section 1 identifies the major learning issues and characteristics of students with learning disabilities that need to be addressed; Section 2 contains resources and services available to help students with learning disabilities be successful; and Section 3 contains effective instructional adjustments and interventions that are needed for students with learning disabilities that address the issues in Phase 1 of the project.

CHAPTER 4

HANDBOOK

Manual for Supporting Students with Learning Disabilities in General Education Settings in Saudi Arabia

This project is designed as a handbook for parents and teachers in Saudi Arabia to support students with learning disabilities in general education settings. The handbook provides them with helpful information about various types of learning disabilities. In addition, the handbook gives support to people with learning disabilities, their parents, and teachers with cutting edge information on learning disabilities, practical solutions, and a comprehensive network of resources and services. It also includes strategies and interventions that are used with these students.

Phase 1: Describe the characteristics and major difficulties that students with learning disabilities have in an instructional setting, including types of learning disabilities.

Table 1

Characteristics of Students with Learning Disabilities

In this table, I have included the characteristics of students with learning disabilities. They include things like reading difficulties, math difficulties, and written

expression skills. Not only that, but this table also includes the students' with learning disabilities oral language difficulties and their fine motor skills characteristics. Moreover, I gave a brief description of the major difficulties of each one of these characteristics.

Characteristics of Students with Learning Disabilities	Major Difficulties
<ul style="list-style-type: none"> • Reading Difficulties (Dyslexia) 	<ul style="list-style-type: none"> - Comprehension. - Word attack. - Difficulty recognizing high frequency words. - Poor spelling. - Poor decoding skills. - Extreme difficulty understanding words or grammar. - Lack of language skills: - Understand how the sounds of speech are represented in letters. - Apply the information in decoding words. - Have adequate vocabulary and language abilities to connect what they are reading to their knowledge. - Inability to break words into their component sounds. - Poor reading fluency. - Slow rate of reading.

<ul style="list-style-type: none"> • Math Difficulties (Dyscalculia) 	<ul style="list-style-type: none"> - Difficulty identifying important ideas in context. • Lack of the basic calculation abilities. • Difficulty reading or comprehending word problems. • Difficulty comparing things. • Poor understanding of math concepts. • Difficulty finding out a way to solve a math problem. • Difficulty with time concepts. • Problems with learning math vocabulary. • Reversal of the numbers. • Difficulty using basic facts within more complex calculations. • Inability to measure things.
<ul style="list-style-type: none"> • Written Expression Skills (Dysgraphia) 	<ul style="list-style-type: none"> • Poor handwriting. • Inability to arrange written information and ideas. • Persistent spelling errors. • Trouble with punctuation, spacing, and capitals.

	<p>them.</p> <ul style="list-style-type: none"> • Unable to move around without bumping into things. • Problems with learning how to walk and jump. • Unable to control his or her balance when he or she is moving about. • Having difficulties in some activities that need good hand-eye coordination. • Trouble drawing with crayons or even pencils. • Difficulty learning how to tie shoes.
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Phase 2: Identify services and resources available to help students with learning disabilities be successful.

Table 2

Services and Resources for Students with Learning Disabilities

In this table, I have included various services and resources for students with learning difficulties. Organizations and agencies specializing in disabilities such as council for exceptional children, learning disabilities association of America, national association of special education teachers, and national center on educational outcomes are examples of these services and resources. This table also includes a brief description of each of these services. In addition, I have provided useful websites like NCLD, LD online, and learning ally and the main important things that each one of these websites has that could assist kids with learning disabilities. The last resource I have included in

this table is some books with a brief description of what is in them. Learning about learning disabilities, learning difficulties from near, and learning disabilities are examples of those books.

Service/ Resource	Description
<ul style="list-style-type: none"> • <i>Organizations and Agencies Specializing in Disabilities/</i> <ul style="list-style-type: none"> ○ Council for Exceptional Children (CEC): Division of Learning Disabilities (DLD). <p>http://teachingld.org/</p>	<ul style="list-style-type: none"> • It is an international professional organization consisting of teachers, psychologists, clinicians, administrators, higher education professionals, parents, and other. • It helps individuals with dyslexia, their families and the communities that support them. • It provides the following: • Journals. <ul style="list-style-type: none"> - The Learning Disabilities Research & Practice journal such as “The effects of strategic note taking on the recall and comprehension of lecture information for high school students with learning disabilities.” - Teaching exceptional children. - Council for Exceptional Children (CEC) journals online. • Conferences.

<ul style="list-style-type: none">○ Learning Disabilities Association of America (LDA). http://ldaamerica.org/	<ul style="list-style-type: none">• They provide support and resources for parents, teachers, adults, and professionals.• Support for parents, teachers, adults, and professionals/<ul style="list-style-type: none">- Learning the basics about LD and ADHD section.- Resources support which includes articles and various useful information to help professionals give advises to the parents of children with LDs and adults with LD.- Assessment and evaluation section which assist parents answer their questions on assessment and evaluation.- Early intervention section which includes the evaluation and treatment provided to families and their kids.- Technology support which searches the helpful new technologies for students with LD.- Pre-K thru High School section that
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<p>○ National Association of</p>	<p>provides specific information related to the different stages of a child’s school years.</p> <ul style="list-style-type: none"> - Special Education Services support that assists parents to know specific information related to the special education process. <ul style="list-style-type: none"> ● Resources for parents, teachers, adults, and professionals <ul style="list-style-type: none"> - Life success for children with learning disabilities: A parent guide. - A parent’s guide to response-to-intervention (RTI). - Teaching our youngest: A guide for preschool teachers and child care and family providers. - NCLB and IDEA: What parents of students with disabilities need to know and do. - Tools for student success. <ul style="list-style-type: none"> ● NASET provide the following: ● Handouts of parent teacher conference.
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<p>Special Education Teachers (NASET). http://www.naset.org/naset.0.html</p> <p>○ National Center on Educational Outcomes (NCEO) . http://www.cehd.umn.edu/NCEO/</p> <ul style="list-style-type: none"> ● Websites <ul style="list-style-type: none"> ○ National Center 	<ul style="list-style-type: none"> ● Using the master curriculum to help develop a whole curriculum or an individual IEP. ● Special education forms, tables, checklists, and procedures. ● LD report which focus on the information on causes, characteristics, assessment, and some teaching strategies. ● It includes the following: <ul style="list-style-type: none"> ● Topics for ELLs with disabilities. ● Accommodations. ● Reporting. ● Standards. ● Accountability. ● Accommodations for students with disabilities which come into various ways <ul style="list-style-type: none"> - Equipment and material. - Presentation. - Response. - Timing/Scheduling. ● It is a website that includes information about:
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<p>for Learning Disabilities (NCLD). http://www.ld.org/</p>	<ul style="list-style-type: none"> • Research reports on strategies and instruction. • Summaries of political activity. • Types of LDs. • E-books. • Back-to-school for parents of students with LD. http://www.ld.org/learning-disability-resources/ebooks-guides-toolkits/parent-toolkit-back-to-school-for-parents-of-students-with-ld • Determining appropriate assessment accommodations for students with disabilities. http://www.ld.org/learning-disability-resources/ebooks-guides-toolkits/determining-appropriate-assessment-accommodations-for-students-with-disabilities • IEP basics for parents of students with LD. http://www.ld.org/learning-disability-resources/ebooks-guides-toolkits/parent-toolkit-ieps-for-students-with-learning-disabilities • IEP meeting planner.
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<p>○ LD Online http://www.ldonline.org/kids</p>	<p>http://www.ld.org/learning-disability-resources/ebooks-guides-toolkits/IEP-meeting-planner</p> <ul style="list-style-type: none"> • It is a resource for parents and educators on students with LDs and ADHD which has the following sections: <ul style="list-style-type: none"> • Educational videos. • Learning tools. • Art galleries. • Glossaries. • The kids' area. • Personal stories from students who learn differently. • Asking questions. • Lists of books for children with learning disabilities or ADHD. • Advices for talking to teachers and administrators. • Suggest books by questions or interest area. • It takes care of dyslexic students who have difficulty keeping up with the pace of many
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<ul style="list-style-type: none"> ○ Learning Ally https://www.learningally.org/ • Books: <ul style="list-style-type: none"> ○ Learning about Learning Disabilities by Wong and Butler ○ Rethinking Learning Disabilities: Understanding 	<p>reading assignments.</p> <ul style="list-style-type: none"> • It offers the following: <ul style="list-style-type: none"> • More than 100 books in the public domain. • Audiobooks for dyslexic learners. • More than thousands of books in popular titles. • It includes the following information: <ul style="list-style-type: none"> • Learning disabilities and memory. • Assessment and interventions for English language learners with learning disabilities. • Improving outcomes for adolescents with learning disabilities. • Instructional intervention for students with mathematics learning disabilities. • It contains the following: <ul style="list-style-type: none"> • The dilemma: What is a learning disability? • Learning-disabled children grown up. • A developmental science perspective on learning disabilities. • An adequate achiever with learning problems. • Beyond “reading problem”
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<p>Children Who Struggle in School by Deborah P. Waber</p> <ul style="list-style-type: none"> ○ Learning Disabilities: From Identification to Intervention by Fletcher, Lyon, Fuchs, & Barnes 	<ul style="list-style-type: none"> • A learning disability is a developmental problem. • A lifespan perspective on learning disabilities. • It includes the following: <ul style="list-style-type: none"> • History of learning disabilities. • Classification, definition, and identification of learning disabilities. • Assessment of learning disabilities. • Reading disabilities. • Mathematics disabilities. • Written expression disabilities.
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Phase 3: Identify instructional strategies, adjustments and interventions that are needed for students with learning disabilities.

Table 3

Strategies for Students with Learning Disabilities

In this table, I have included various strategies for students with learning disabilities. T-chair, word window reading guide, and assistive technology devices such as computer-based instruction and augmentative and alternative communication are types of the strategies that I have talked about and have given a brief description. Moreover, I

have provided various games and pointed to each one of them in a brief description hoping that these strategies could help students with learning disabilities such as snake and ladders for dyslexia, video games like fast for word, and some iPad apps. Computer programs are other helpful strategies for students with learning disabilities, MobyMax and Ticket to Read, for instance.

Strategies	Description
<ul style="list-style-type: none"> • T-chair • Word Window Reading Guide • Assistive Technology Devices 	<ul style="list-style-type: none"> • It is designed in the shape of a ” T ” • It helps ADHD children learn to focus and balance. • It forces them to focus on balancing in the chair. • It is a simple sentence window that helps students focus their attention on the sentences words they are reading. • It helps improve students’ reading comprehension. • It can block out unwanted word and make it easier to focus. • Software to help students with learning difficulties in math, reading, writing, and

<ul style="list-style-type: none"> ➤ Computer-Based Instruction ➤ Augmentative and Alternative Communication • Graphic Organizers • Games ➤ Snakes and Ladders for 	<p>others.</p> <ul style="list-style-type: none"> • It is communication methods that assist writing or speaking for individuals who have difficulty to comprehend spoken or written language. • They provide students with a general overview of information, show patterns, highlight main ideas, and organize supporting facts. • They help students understand the relationships between ideas. • The following games work on helping kids overcome learning disabilities in interactive and fun ways. • These games also assist teachers teach math concepts to kids with dyslexia. - It is a game that is based on the regular snakes and ladders with having fewer numbers.
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<p style="text-align: center;">Dyslexia</p> <p>➤ Video Games such as “Fast ForWord”</p> <p>➤ iPad Apps</p>	<ul style="list-style-type: none"> - Prepare a board with numbers from 1 to 25 or 50 depending on the numbers the child is familiar with. - Have large squares, fewer snakes, and ladders. - Teacher needs to ensure that the snakes and ladders have different colors than the color that used for writing the numbers. - Make the board by using markers on thick card. - Choose some dice and start playing. • The American Psychological Association figures out that some of video games tech-based activities can really assist kids with learning disabilities. - Fast ForWord is a video program for students with dyslexia which helps them build their skills such as using grammar and the ability to figure the differences between sounds. - The iPad apps help students with learning disabilities improve and promote their communication skills and develop social
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<ul style="list-style-type: none"> ○ What Rhymes? ○ Read2Me ○ Aurify ● Computer Programs <ul style="list-style-type: none"> ○ Ticket to Read ○ MobyMax 	<p>abilities.</p> <ul style="list-style-type: none"> - It is a tool that encourages reading comprehension for visual and auditory students. - Read2Me is another iPad app that helps weaker readers by importing a text file and read it aloud to them. - Aurify app is a challenging and rewarding audio game for students with learning disabilities. - It is an online reading program. - It assists students improve and develop their reading skills at school or home. - It enhances students to be active readers. - Students have to work independently on fluency, vocabulary, phonics, and comprehension. - It is teacher tools system. - It creates a unique individualized education plan for each student.
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	<ul style="list-style-type: none"> - It discovers and fixes missing skills to assist students overcome learning disabilities and pass the grade level. - It saves the special education teachers' time by its automatic IEP reporting characteristic.
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Phase 4: Compile and publish the information from phases 1-3 into a handbook that can be distributed to parents and other teachers.

The previous sections are the handbook that would be distributed to parents and teachers in Saudi Arabia. All the materials included should be able to help teachers and parents help their children in improving their academic progress, become aware of learning disabilities, and overcome the difficulties that teachers and students face. My plan is to distribute the handbook when I return to Saudi Arabia by going to doctors' offices, schools, and learning disabilities' centers. I have my uncle who teaches disabled children, so I believe he will assist me more in sensitizing society about learning disabilities and distribute and publish what I wrote. Furthermore, he will work with boys and I will be working with girls. Part of my plan is to discuss with doctors, professors, and teachers and explain to them what I saw and found out in the United States schools. They could improve children's performance by using the strategies that I found. I will also support them with the various services and resources that are available to help students with learning disabilities be successful. Also, when I have the chance to work in the resource room, I will use my experience that I learned from being in the direct teaching field in the United States to help my students and my co-workers enhance their

knowledge. So, the handbook with its content will assist and support students with learning disabilities in the general education settings.

CHAPTER 5

CONCLUSION

There is a lack of resources and special education is just beginning in Saudi Arabia, it is important to have materials out there for parents and teachers to help children with learning disabilities as the government continues to work on resources. Providing the students with assistive technology services is really important to develop their performance and helping them overcome their disabilities. Also, the lack of some related services for students with disabilities, such as physical therapy, medical services, and speech and language therapy, must be taken into consideration by teachers and others. Publishing books, having games, and creating some organizations that take care of learning disabilities will assist teachers to do their work to the fullest and make dealing with this type of student much easier and more flexible. In addition, lack of training among public school teachers about students with disabilities may have its impact on those students who need much more attention.

LIMITATIONS

This project has limitations as any other project. One of its limitations is that parents may not be able to access the materials very well. They will face difficulty to start new ideas and deal with new materials. They may need to ask for assistance from

teachers, which may require a great deal of time. Not finding many resources that are written in Arabic is another possible limitation of this project. They will face difficulty finding the helpful information in Arabic because most of those resources are written in English. Furthermore, they have to do various searches to find the appropriate, useful resources to them in Arabic. In addition to that, translating the handbook into Arabic so that it can be used by parents and teachers in Saudi Arabia is also a clear limitation because translating can take some time. It is necessary to have a strong translator who knows the English language very well. All the sources, resources, and information that have been written in this paper are in English. In fact, it will be easy to have a translator rather than translating the entire handbook into Arabic.

REFERENCES

- About learning disability (2013). In *Mencap*. Retrieved from <http://www.mencap.org.uk/all-about-learning-disability/about-learning-disability>
- Al-Eithan, M.H., Robert A.A., & Al-Saeed A.H. (2010). Mood problems of mothers with disabled children in Saudi Arabia: A preliminary prospective study. *Saudi Med J*, 31, 1161-1165
- Al-Jadid, M.S. (2013). Disability in Saudi Arabia. *Saudi Medical Journal*, 34(5), 453-460.
- Alquraini, T. (2013). Legislative rules for students with disabilities in the United States and Saudi Arabia: A comparative study. *International Interdisciplinary Journal of Education*, 2(6), 601-614.
- 40 Amazing iPad apps for children with learning disabilities (2011). In *Disability Network*. Retrieved from <http://disabilitynetwork.org/technology/40-amazing-ipad-apps-for-the-learning-disabled/#.VCJmdRaLV-3>
- Assistive technology devices (2014). In *PBS*. Retrieved from <http://www.pbs.org/parents/education/learning-disabilities/strategies-for-learning-disabilities/assistive-technology-devices/>
- Berch, D. B. (2013). Math LD: Identifying basic number processing difficulties. In *National Center for Learning Disabilities*. Retrieved from

<http://www.ncld.org/types-learning-disabilities/dyscalculia/math-ld-identify-basic-number-processing-difficulties>

- Cook, B. G. (2004). Inclusive teacher' attitudes toward their students with disabilities: A replication and extension. *The Elementary School Journal*, 104(4), 307-332
- Cortiella, C. (2011). *The state of learning disabilities*. New York, NY: National Center for Learning Disabilities.
- Dominica, S. (2012, September 11). Math games to help students with dyslexia. In *Bright Hub Education*. Retrieved from <http://www.brighthouseeducation.com/special-ed-learning-disorders/80969-game-ideas-for-students-with-dyslexia>
- Dukmak, S. (2010). Research section: Classroom interaction in regular and special education middle primary classrooms in the United Arab Emirates. *British Journal of Special Education*, 37(1), 39-48.
- Educational programs (2014). In *Dowagiac Schools*. Retrieved from http://www.dowagiacschools.org/Schools/SisterLakes/parent_resources/educational_programs
- Forlin, C., Jobling, A., & Carroll, A. (2001). Preservice teachers' discomfort levels toward people with disabilities. *The Journal of International Special Needs Education*, 4, 32-38.
- Kemp, G., Smith, S., & Segal, J. (2013, December). Learning disabilities & disorders. In *Helpguide*. Retrieved from http://www.helpguide.org/mental/learning_disabilities.htm
- Hallab, D. (2011). Teaching special education in Saudi: A Lebanese woman's perspective. In *Peace X Peace*. Retrieved from <http://www.peacexpeace.org/2011/11/teaching->

special-education-in-saudi-a-lebanese-womans-perspective/

Hardman, M. L., McDonnell, J., & Welch, M. (1998). Special education in an era of school reform. Washington, DC: Federal Resource Center.

Learning disabilities characteristics (2014). In *MSJC*. Retrieved from <http://www.msjc.edu/LearningSkillsProgram/Pages/Learning-Disabilities-Characteristics.aspx>

Loop, E. (2014, February 14). Games for kids with learning disabilities. In *LIVESTRONG*. Retrieved from <http://www.livestrong.com/article/214918-games-for-kids-with-learning-disabilities/>

Lujan, H., & DiCarlo, S. (2006). Too much teaching, not enough learning: What is the solution? *Adv Physiol Educ.* 30(1), 17-22.

Murphy, R., Gray, S., Straja, S., & Bogert, M. (2004). Students learning preferences and teaching implications. *J Dent Educ.*, 68(8), 859-866.

National Center for Learning Disabilities (NCLD). (2013). What are learning disabilities? In *National Center for Learning Disabilities*. Retrieved from <http://www.nclld.org/types-learning-disabilities/what-is-ld/what-are-learning-disabilities>

National Center for Learning Disabilities (NCLD). (2014). Common warning signs of dyspraxia. In *National Center for Learning Disabilities*. Retrieved from <http://nclld.org/types-learning-disabilities/dyspraxia/common-warning-signs-of-dyspraxia-in-children-pre-k-to-grade-2>

Nuzhat, A., Salem, R.O., Quadri, M.S.S, & Al-Hamdan, N. (2011). Learning style

- preferences of medical students: A single-institute experience from Saudi Arabia. *International Journal of Medical Education*, 2, 70-73
- Olson, J. L., & Platt, J. M. (2004). Teaching children and adolescents with special needs (4th ed.). Englewood Cliffs, NJ: Merrill.
- Price, A. (2009). Best practices in teaching students with learning disabilities. Calgary, AB: Calgary Learning Center.
- Rosenberg, M. S., Westling, D. L., & McLeskey, J. (2010, July 20). Primary characteristics of students with learning disabilities. In *Education*. Retrieved from <http://www.education.com/reference/article/primary-characteristics-students/>
- Salem, A. A. (2013). The impact of teaching academic education course of children with special needs in the ordinary schools on students' attitudes toward inclusion of disabled children. *Journal of Education and Learning*, 2(2), 112-125.
- Teigland, C. (2009). What inclusive education means for overall student achievement. *The Connections of Association of Person with Severe Handicaps*, 35(3), 12-14.
- Test, D.W., Fowler, C.H., Wood, W.M., Brewer, D.M., & Eddy, S. (2005). A conceptual framework of self-advocacy for students with disabilities. *Remedial and Special Education*, 26(1), 43-54.
- Ticket to read (2014). In *SJUSD*. Retrieved from <http://www.sjUSD.org/simonds/programs/software-in-lab/ticket-to-read/22997>
- Types of learning disabilities (2009). In *Understandingspecialeducation.com*. Retrieved from <http://www.understandingspecialeducation.com/types-of-learning-disabilities.html>

University of Washington. (2004). Learning disabilities. In *University of Washington*.

Retrieved from [http://www.washington.edu/doi/Faculty/Strategies/](http://www.washington.edu/doi/Faculty/Strategies/Disability/LD/)

[Disability/LD/](http://www.washington.edu/doi/Faculty/Strategies/Disability/LD/)

Wren, C. (2014). College students with learning disabilities. In *Pepperdin* .

Retrieved September 23, 2014, from

<http://www.pepperdine.edu/disabilityservices/students/ldcharacter.htm>