

5-2020

## The History of Learning Disabilities and The Hidden Stories of Students, Parents, and Teachers: How Traditional Classrooms Can Improve

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The History of Learning Disabilities and The Hidden Stories of Students, Parents, and Teachers:  
How Traditional Classrooms Can Improve

Gabriella Catania

Senior Capstone

Journalism & Media

Research Essay

Dr. Lee Ritscher

Division of Humanities and Communication

Spring 2020

## Dedication

I dedicate my Senior Capstone to my Mom, Dad, and Grandmother for their constant support and love that they showed during my time in school. Thank you for the endless encouragement through these years because of that I can now finally say that I am a first-generation college graduate! Thank you again for never letting me give up on my dreams.

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## Project Proposal

- I. **Name and Concentration:** Gabriella Catania, concentration in Humanities & Communication Studies.
- II. **Essay Title:** The history of students with learning disabilities in a classroom: how it has improved and what needs to be changed
- III. **Topic:**
  - A. **What:**
    1. This research paper will go in-depth in discovering what it was like for students with learning disabilities in a classroom before laws have been passed to protect students with disabilities. Also, it will show how students were treated back then and how they are treated currently. It will cover how classrooms have been improved. I will discuss the issues with the idea of the ‘one size fits all’ learning style and how it has a negative impact on a student’s learning experience.
  - B. **Why:**
    1. I chose this topic because I have my own learning disabilities, such as dyscalculia, ADHD, and have experienced struggles in a classroom environment and how I never gave up after being discouraged by teachers. Another reason why I chose this topic is that I am a tutor for children with severe learning disabilities, such as dyslexia.

### IV. Research Question(s):

What were classrooms for students with learning disabilities before laws were created and passed? When were laws created to protect students with learning disabilities? How has a classroom environment improved for students with disabilities? What still needs to be changed?

### V. Alignment with Common Theme:

The senior capstone theme for my section is Hidden Histories. My project will be delving deep into the history of students with learning disabilities. I will also be interviewing my grandmother, who is 86 years old, and ask her questions on what a classroom was like for those who learned differently. Many people are not aware of how difficult it was for a student with learning disabilities before laws and accommodations were passed. Many students have been left behind, ignored, and discouraged. I think that by doing this research and conducting an interview with my grandmother, I will be able to uncover the history that has not been told.

### Sources:

#### A. Primary

1. In my research paper, so far, I plan to use Sir Ken Robinson’s Changing Paradigm TedTalk, “The Banking’ Concept of Education” by Paulo Freire, Expressive Pedagogy: Practice/Theory, Theory/Practice” (Tate, Rupiper, and Schick.

#### B. Secondary

1. As my primary source, I will be interviewing multiple people, to hear about their perspective on what a classroom was like and how those with learning disabilities were treated. I will be interviewing a business owner in Monterey, California who has dyslexia, and discover what his school experience was like and how he has overcome his obstacles. Lastly, I will interview mothers of children with learning disabilities and a teacher at San Jose Middle School in Novato, California.
2. I think that it would be interesting to list all the different types of trades that students with disabilities can apply to and learn and become successful without feeling forced to go to college.

## **VI. Next Steps:**

In order to meet my project's expectations, I will need to meet each due date, plan a specific date for my interviews, and find my sources and create an annotated bibliography before I began writing my paper. I will be creating an outline to organize my main points and key ideas. I plan to complete my assignment a week before each due date to guarantee that I have time to edit it carefully.

## **VII. Timeline:**

### **A. Data Collection**

1. Completion: March 1, 2020

### **B. Annotated Bibliography**

1. First Draft completed: March 9, 2020
2. Second Draft Completed: April 6, 2020
3. Completion: April 17, 2020

### **C. Research Paper Outline**

1. Draft Completed: March 4, 2020
2. Completion: March 9, 2020

### **D. Final Draft Essay**

1. Draft Completed March 20, 2020
2. Completion: March 29, 2020

### **E. Second Draft Essay**

1. Draft Completed: April 8, 2020
2. Completion: April 17, 2020

### **F. Third Draft Essay (Final Draft)**

1. Draft Completed: May 4, 2020
2. Completion: May 11, 2020

### **G. Portfolio May 11, 2020**

H. Synthesis Essay, May 11, 2020

I. Poster

1. Draft Poster:

A. Mind map poster layout and design

1. April 1, 2020

B. Draft Poster

1. April 13, 2020

C. Teacher Approval: April 22, 2020

2. Finalize Poster

a. Send for printing, May 6, 2020

## The History of Learning Disabilities and The Hidden Stories of Students, Parents, and Teachers: How Traditional Classrooms Can Improve

A little third-grade girl struggled in her math class, and she was called over by her teacher to discuss her grade. Her teacher asked, “why did you do such a crummy job on your math test? Did you even try?” At that moment, for the very first time, that little third-grade girl felt that she wasn't smart enough. Fast forward to middle school when classmates would tell her, “what is the point of trying when you are going to fail anyway?” That little girl was now a freshman in high school. She was in World History class and unexpectedly got called on by her teacher. She nervously stumbled over her words to get an answer out. The teacher saw her struggle and said, “that answer was a bunch of bullshit” and moved on. Academic advisors told her that she was “checked out,” though, during her lunch breaks, she met with her science and math teacher for extra support on homework. Academic advisors suggested that she needs to “spend more time with her mother,” implying that she had problems at home even though her mom is her best friend. College came around, and this woman felt determined and excited to learn. A teacher called on her when her hand was not raised. She said, “I am not sure, let me look at my notes” she prayed the answer was in her notebook. The teacher embarrassed her and said, “do not look at your notes’.” The teacher then proceeded to teach her in front of the class and asked her more questions that she could not answer. Another college professor asked her, “can I use your paper to show the class what not to do?” Before she had time to answer, her paper was already on the projector with her name visible. That same professor responded to one of her questions by replying, “are you asleep or something?” It was at that moment that she felt like that little third-grade girl again, who felt that she was smart enough. A student disability advisor tried to medicate her with antidepressants and Adderall, but she said no, it was not her that was



depressed; it was her environment that she was causing her sadness. She withdrew from that college, and she was unsure about what would be next. Her dream of graduating college felt so far away. She received advice not to give up on school but just to change her direction. She enrolled in the California State University of Monterey Bay, where she is now in her final semester in college and knows that she is smart enough to accomplish any of her goals. That student who was constantly being belittled, humiliated, and misunderstood because of her learning disability was me. This research will differentiate between the various learning disabilities and their history. This research will also reveal how classrooms have improved and what needs to be changed in order to guarantee every student can receive an equal education.

Through the dark centuries before the 1700s, any individual who showed a difference in intellectual, physical, social, political, and religion was not accepted by society. Those with a learning disability experienced “abuse, condemnation, or destruction” (Winzer, 2014). Humans are judged by their behavior that ranges from normal behavior to abnormal behavior. “In any society, attitudes and values are fashioned by the prevailing culture, religion, government, and economic conditions. As societies change, so do their values. Classical Greece heaped honors on the philosopher and the teacher; Rome lauded the statesman, the orator, and the soldier. With the idle ages and later the renaissance, the craftsman and the artist assumed prominence and were highly valued. By the same token, the treatment of disabled people varied, as prevailing political, social, economic, and religious pressures changed” (Winzer, 2014). During the dark centuries, societies labeled those with learning differences as “disabled, different or deviant.” Some people in society even believed that those with a disability were possessed by an evil spirit. Members of society that had a disability were seen as being a danger to their community, so “they were shunned by all who did not wish to be defiled or corrupted, or who had any regard for the safety

of their own body and soul” (Winzer, 2014). After the fall of the Roman Empire, those who called themselves witch hunters would go after those with disabilities as they were considered a suspect. The witch hunts stopped during the Renaissance Era because there was more knowledge of those with disabilities, and there was an advancement with medicine. Unfortunately, those with learning disabilities were stripped of their fundamental civil rights, privileges, and were excluded by their church. Even philosophers viewed those with a learning disability as helpless and that there was no hope in improving their mental challenges.

There was a small improvement in the 16th and 17th centuries by philosophers who were attempting to educate those with learning disabilities. Those with disabilities were still not treated as a human being by the majority of society. It wasn't until the 16th century that special educators began to document their data of their students.

By the 18th century, learning disabilities began to be accepted, and special education became its own branch of education. The advances for those with learning disabilities “resulted in wide-ranging pedagogical experimentation, broadly based educational enterprises, the establishment of charitable foundations and state-administered schools, and the emergence of professional teachers” (Winzer, 2014).

In the 18th century, Britain and Europe began to acknowledge those with learning disabilities. France had an important role because that is where the Enlightenment era originated. During the end of the 18th century, there were massive changes that were made to benefit those with learning differences. The improvements that were made were the removal of social classes, the start of a just society, and each member of society was granted full access to human rights. During this time, teachers took ideas from *L'esprit Philosophique* and implemented the ideas from it into their teaching. “Enlightenment ideas were germane to the development of special

education; early special education had a sociopolitical base, conditioned especially by the philosophical views of Etienne Bonnot de Condillac, Diderot, and Rousseau” (Winzer, 2014). Unfortunately, the Greeks and Romans believed that the only members of society that qualified as having a learning disability were those who were deaf and blind or "insane." That meant that those individuals with dyslexia, dysgraphia, dyscalculia, ADHD, and aphasia/dysphasia were overlooked and did not receive any help.

Learning disabilities began to be studied in the 1800s. Dyslexia was the first disability that was studied by German neurologist Adolf Kussmaul. He defined it as “text blindness.” It wasn't until 1887 when Rudolph Berlin, a German physician, used the word “dyslexia” to define those with reading and writing difficulties. The term “dyslexia” was not used in the United States until 1930. The International Dyslexia Association (IDA) Research Committee and the National Institute of Child Health and Human development defined “dyslexia” in 2002. Their definition “describes dyslexia as a specific learning disability that is neurological in origin and characterized by difficulties with accurate and/or fluent word recognition and poor spelling” (Youman & Mather, 2013).

Dyslexia is a learning disability that affects a student's ability to read and write. Dyslexia can cause problems in students in detecting speech sounds and learning how they connect with letters and words. The IDA states that dyslexia is caused by a deficit in the phonological processing area.

In 1904 Attention Deficit Disorder (ADD) made its first appearance in *Lancet*, a well-respected British medical journal. *Lancet* published physician Heinrichs Hoffmann's poem titled “Fidgety Philip.” “Fidgety Philip” describes the symptoms of a child that has ADD:  
“Let me see if Philip can

Be a little gentleman;  
Let me see if he is able  
To sit still for once at the table.  
Thus, Papa bade Phil behave;  
And Mama looked very grave.  
But Fidgety Phil,  
He won't sit still;  
He wriggles,  
And giggles..."

This poem holds significance because it is the first time that ADD is mentioned by a medical doctor. Hoffmann later became the founder of the first mental hospital in Frankfurt, Germany.

The symptoms of ADD according to the Mayo Clinic are "impulsiveness, disorganization, and problems prioritizing, poor time management skills, problems focusing on a task, trouble multitasking, excessive activity or restlessness, poor planning, low frustration tolerance, frequent mood swings, problems following through and completing tasks." This can hinder a student's ability to learn in a classroom.

Attention Deficit Hyperactive Disorder (ADHD) is a form of ADD. A child that has been diagnosed with ADHD is not described as fidgety or constantly moving. Mayo Clinic defined this disorder as a "quieter presentation" of an attention deficit disorder. The symptoms of a student with ADHD are considered to be distracted easily, difficulty in paying attention, issues with memory, and problems with their executive functions. Executive functions are a person's

“Self-awareness, Inhibition, Non-verbal working memory, verbal working memory, Emotional self-regulation, Self-motivation, and Planning and problem-solving” (Barkley & Saline, 2019).

Dyscalculia was researched for the first time by Dr. Ladislav Kosc in 1974. In his findings, he discovered that dyscalculia is a disorder that occurs in the part of the brain that is used mainly for math. In Kosc's words, dyscalculia is “a structural disorder of mathematical abilities” (Singh, 2013). This disorder can be hereditary, or an individual can be born with it. In 1990, researchers performed an MRI to view the brain of an individual with dyscalculia. The results from the MRI show that this disorder affects more than just one part of the brain, which means that basic calculations can be extremely different.

Dr. David Geary, a graduate from the University of Missouri and also the publisher of *Children's Mathematical Development: Research and Practical Applications*, conducted further research into dyscalculia. Dr. Geary separated his research into three different groups: visual-spatial memory, semantic, and procedural. He discovered that "students with mathematical disabilities included all students that fell below the 35th percentile on the Woodcock-Johnson Mathematics reasoning test” (Singh, 2013).

In my personal experience as a student that has dyscalculia, being successful in school has been a challenge. Math was my least favorite class because I could not grasp formulas, numbers, and letters together, and shapes. Before I was tested, I could not understand why it felt that my brain would completely freeze and become stuck while trying to complete a math equation. I was enrolled in multiple math support classes, met with teachers during lunch to do homework with them, and then after school, I would meet with a tutor (which became costly). It was such a challenge to get through years of math classes and not understanding why it took so much effort just to pass a math class. When classmates called me “dumb” in middle school and

asked me why I even try? I began to believe them, and my self-esteem dropped immensely. I turned in every homework assignment, put in the extra time, but I still could not pass a math test.

In the 1890s, French neurologist Joseph Jules Dejerine began studying dysgraphia and its connection to dyslexia. Dejerine separated the two by defining dyslexia as difficulty in speech, and dysgraphia relating to the difficulty in writing. Symptoms of dysgraphia can be hand cramping, inconsistency in spacing words, uncompleted words or missing letters in words, and sometimes can have an abnormal body and writing posture while writing. This disability makes it difficult to think and write simultaneously. It is common for an individual to have both dyslexia and dysgraphia and was found to be related to brain lesions in different areas of the brain. Dejerine's results from his study were that “Patients with dyslexia without dysgraphia have been studied from a neuropathological rather than a neuropsychological point of view. This enterprise dates back to Dejerine (1892). These patients have typically shown lesions involving the left occipital lobe and splenium (e.g., Greenblatt, 1973; Ajax, Schenkenberg, & Kasteljanetz, 1977; Friedman & Albert, 1985)” (McCarthy & Warrington, 1990). Josef Gerstmann discovered agraphia, which is the condition where an individual lacks the complete ability to write related to dysfunctions of the certain areas of the brain.

Spatial dysgraphia another type of writing disability is defined as the “..omission/repetition of strokes and letters (Silveri et al., 1999), the inability to write on a straight horizontal line, excessive blank spaces between graphemes (Roeltgen, 2003), and a defective spatial organization (Rapcsak & Beeson, 2002)” (Marien & Manto, 2016). Students with spatial dysgraphia usually do not use their left-sided visuospatial, which results in only writing on the right side of the page.

In the 1800s, dysphasia and aphasia were being studied in adults that were having problems comprehending and communicating. Neurologists discovered that these adults have brain lesions, which is one of the causes of dysphasia and aphasia. Fast forward to 1920, Samuel Orton, a neurologist, suggested that in children who can't read, it was because the left hemisphere of their brain had not fully developed. Orton was the first to raise awareness that "the heterogeneity of learning disabilities as disorders that could specifically affect reading, writing, speech, comprehension, or motor skills." Dysphasia is a learning disability that affects language and communication. A student with dysphasia may experience difficulty in organizing their thoughts and putting them into words to communicate with someone. The signs of a student with a language disorder lack the ability to comprehend, repeat what another person has said, and is unable to retell a story. Oftentimes they are unable to understand the meaning of words. Students that have this learning disability can have reading and writing impairments as well. Dysphasia and aphasia show the same symptoms in an individual. The difference between the two is that Asphasia is more severe, meaning that an individual loses complete ability to speak and comprehend. Dysphasia affects a person's speech and comprehension abilities moderately. Dysphasia occurs after a person has had a stroke, head injury, or brain tumors. It is reported that strokes are the most common cause of dysphasia. The reason that strokes damage the area in the brain that controls comprehension and language is that "During a stroke, a blockage or breakage in the blood vessels of the brain deprives the cells of the blood, and consequently oxygen. When brain cells are deprived of oxygen for too long, they may die" (Ashworth & Saunders, 1985).

The rarer conditions of dysphasia are Broca's dysphasia and Transcortical dysphasia. Broca's dysphasia is when there has been damage to the Broca area of the brain. When there is damage to this part of the brain, it can cause severe speech problems that fully prevents

individuals from speaking and forming words. They are able to understand what others are saying but cannot communicate. Transcortical dysphasia affects the nerve fibers that carry information to the language part of the brain. This affects facial expressions, tone of voice, and emotions. Dr. Orton and speech therapist Anne Gillingham said, “devised intervention programs for children with reading difficulties, variants of which are still in use<sup>13</sup> and undergoing evaluation as to their efficacy” (Barnes & Fuchs, 2008).

Auditory processing disorder is a learning disability that affects the ability to interpret what is being said. Auditory processing disorder is considered a learning disability because it affects reading and writing. This disability can cause challenges in analyzing and understanding what an individual is hearing. It is important to understand that this disability has nothing to do with an individual's ears and their hearing, but it is about how information is processed by the brain. Auditory Processing Disorder can also cause difficulty in their speech and language. A student with this disability struggles with understanding lessons and directions of assignments. Students with this disability can benefit from their teacher rewording assignments or lessons for them to be able to fully understand what is being taught. As a student myself, I have auditory processing disorder, and it has had an impact on my learning. I noticed that I often processed and interpreted directions completely different from what the teacher had asked us to do, which has caused lower grades on assignments in the past. I have found that it has been helpful to ask teachers for clarification on assignments before proceeding.

Visual processing disorder is a learning disability that affects the ability to process information that has been perceived through the eyes. This learning disability affects visual perception, missing differences in shapes, skipping words and lines, reversing letters and words, and difficulty with eye-hand coordination. Similarly, to auditory processing disorder, it is when



there is difficulty receiving the information that is processed by the brain. Students that struggle with visual processing disorder can benefit from teachers simplifying directions by speaking slowly. Minimizing distractions can also help those who struggle with this learning disability.

Individuals with Disabilities Education Act (IDEA) was originally called the Education for All Handicapped Children Act that was passed in 1975. IDEA protected children throughout elementary up until age 21. Its purpose is to guarantee “early intervention services” starting early as age three and offers special education for older children that attend a public school, including charter schools.

In order for a student to receive the services provided by IDEA, they must have a disability that falls under the 13 disabilities that are listed in the IDEA. It is important to note that even if a student does have one of the 13 disabilities, it does not automatically guarantee that they are eligible. In order for a student to guarantee their eligibility, they must prove that their disability is affecting their learning and, as a result, receiving overall poor grades on tests and homework. If, for some reason, the school and parents cannot come up with a solution to covering the child's needs, then the IDEA has made available “options for resolving the dispute.”

The process of receiving IDEA services begins with a parent requesting an evaluation. If the school notices that the child is struggling and might have a disability that is interfering with their success, they can conduct an evaluation. The evaluation will show which disability that child has and also it will determine what accommodations, services, and support that student will need in their academics. After a student has completed their evaluation, the school will hold what is called an “eligibility meeting” to determine if the child is eligible for special education. If the student has qualified to receive IDEA services, then a parent or guardian will team up with the school and create an Individualized Education Program (IEP). In addition, once a child qualifies

and is approved for IDEA services, they are also guaranteed the right to a free and appropriate public education (FAPE). An example that Dr. Andrew M.I. Lee provided that on how FAPE works is that it “can allow a child with reading issues might be taught with a multisensory reading program.” FAPE requires schools to provide the services that the child needs in order to succeed.

Students who attend private schools have the option to move their child to a public school that can provide the full special education services, or the child can stay at their private school and receive equitable services. Equitable services aid students with learning disabilities and are paid for by public funds. This funding is specifically saved for students with learning disabilities who attend private schools. Equitable services do not guarantee that the student will receive all the free services that they need to succeed because funding is limited. Students have a higher chance of receiving more services if they go to a public school. Teachers at a private school might recommend that the student transfers to a public school because they can provide a full range of services that will benefit that student with learning disabilities.

Americans with Disabilities Act (ADA) is a federal civil rights law. It protects those with disabilities by making discrimination illegal at school, work, and in any public space. ADA protects anyone who has a mental or physical disability that causes any restrictions in their daily life activities. Life activities can be defined as speaking, learning, reading, communicating, or eating. ADA is considered broad because it covers people who are required to use a wheelchair, those with anxiety and depression, food allergies, HIV, and diabetes. ADA states that people with a learning disability do not have to let their employer know unless they are requesting for help and guidance. ADA also protects those who participate in educational activities that have private groups in charge, such as trade schools, and at SAT testing centers.

The No Child Left Behind Act (NCLB) was passed in 2001. NCLB was in effect from 2002 to 2015. In 2015, NCLB was replaced by an updated version that is known as the Elementary Secondary Education Act (ESEA). The NCLB law protected students who experience poverty, students who are minorities, students receiving IDEA services, and those who are limited in speaking English or do not know any English. The main goal of NCLB was to guarantee that every student receives equal education regardless of socioeconomic status or race. The history of ESSA began in 1965 when it was signed by President Lyndon Baines Johnson and became a civil rights law. The ESSA was then passed on December 10, 2015 and signed by former President Obama.

A few laws that ESSA guarantees to help the success of students are:

“Advances equity by upholding critical protections for America's disadvantaged and high-need students, Requires—for the first time—that all students in America be taught to high academic standards that will prepare them to succeed in college and careers, and ensures that vital information is provided to educators, families, students, and communities through annual statewide assessments that measure students' progress toward those high standards” (U.S. Department of Education). ESSA will provide information to students, teachers, families through statewide assessments that will occur annually that assess a student's progress. ESSA will ensure that there is accountability in maintaining expectations for “lower-performing” schools that have students who are not progressing, and schools that have low graduation rates.

Learning disabilities are an internal battle that the rest of the world can be blinded to. A learning disability can often go unacknowledged because there are no outwards signs that show. Many students do not show signs that they are struggling with a learning disability. Those with learning disabilities are misunderstood and have an invisible disability, unlike those that show

clear signs such as an individual that uses a wheelchair. In many cases, teachers label students as lazy or faking a learning disability because they don't want to do the work. Some teachers also discourage students by believing that they are not smart enough to succeed in their current classwork or to go to college. It is essential for teachers to have proper training and an understanding of how to approach students with documented learning disabilities. It is also important that teachers keep an eye out for students that are noticeably struggling and to notify their parents. It is important that each teacher understands how to accommodate students that have a learning disability in order to guarantee that their students who struggle will receive an equal opportunity as their nondisabled classmates to move forward in their academic career. Students that show signs of a learning disability are required to be tested by a psychologist that is trained to give psycho-educational assessments.

The results of these tests examine the student's ability to receive, retain, comprehend, and communicate information. These tests are necessary so that a student is able to receive the appropriate accommodations. *Mathematics for the Learning Disabled Child in the Regular Classroom* by Carol J. Sears explained that students with dyscalculia have a greater chance of also having "auditory memory, visual-motor coordination or perception of spatial relationships" (Sears, 1986). Sears exposes that, unfortunately, those with only disabilities in math do not receive the same support as those with dyslexia, for example. Sadly, many assessments rely only on reading assessment scores while disregarding dyscalculia.

Colleges require students with a learning disability to enroll with their institute's student disability resource center that provides accommodations. The student must take immediate action in contacting the student disability resource center to guarantee before their semester begins, they will receive the support that they need. Their job is to verify that students are qualified for

accommodations. As a college student that has registered with the Student Disability Resource office (SDR), I have felt an immense amount of support and protection. Before each semester begins, I meet with an SDR advisor that goes through my classes with me and verifies that the accommodations I need are up to date. After the meeting, in an email, I receive a list of my courses and the professor's name and my accommodations. It is required that each teacher signs with their initial, confirming that they understand that I have a learning disability and that they will provide the accommodations that are listed. This protects a student from a teacher saying that they were unaware their student needed accommodations and defends that student in case a situation like that arises. After a student receives their signature, they are to bring it back to the SDR office, and it is then placed in their file showing proof that their teachers have all agreed in providing the support that is needed for that student.

Students that wish to take their education further after receiving their bachelor's degree to enroll in law school will be able to register with a disability's office. Law students that struggle with learning disabilities are given accommodations after Congress passed a law in 1990 that allowed students to receive a wide range of accommodations. A survey shows that "eighty law schools during the 1994-95 academic year determined that 54 percent of the requests for examination accommodations were due to learning" (Adams, 1998).

There are programs that are offered by K-12 schools intended to protect and support students with learning disabilities. A 504 Plan provides accommodations that students with learning disabilities need to succeed. A 504 plan is essential for a student with learning disabilities because it prevents discrimination occurring. Another important aspect of the 504 Plan is that it is covered in the Rehabilitation Act under Section 504. The Rehabilitation Act (Rehab Act) was signed in 1973. The Rehab Act "prohibits discrimination on the basis of

disability in programs conducted by federal agencies, in programs receiving federal financial assistance, in federal employment and in the employment practices of federal contractors” (Employer Assistance and Resource Network on Disability Inclusion). The Rehab Act protects those with disabilities by providing reasonable accommodations to ensure that they can perform their work. The Rehab Act has four different sections, including Section 501,503,504, and 508. This civil rights law protects students and gives them their rights. The Understood Team explained in their article that “Accommodations don't change *what* kids learn, just *how* they learn it. The goal is to remove barriers and give kids access to learning”. The 504 Plan includes accommodations that allow a change in a student's environment, which can allow them to take a test in a quieter room with fewer distractions. A 504 Pan can allow changes to instruction to be made, and a student is able to receive an outline of a lesson to understand it more clearly.

In order for a student to receive a 504 Plan, the school must take a close look at the student's grades, test scores, and feedback from their teachers. Another way a student can receive a 504 program is by a doctor that has diagnosed the student with a learning disability. Families or schools can request a 504 Plan by contacting the 504-coordinator located in the school's district. After a request has been completed in writing, the school can then move forward in organizing a meeting and decide if the child qualifies for extra support.

An IEP is similar to a 504 program with a few differences. An IEP is covered by the Individuals with Disabilities Education Act (IDEA), which is a federal law protecting students with learning disabilities.

There are two requirements for a student to be eligible for an IEP. First, the student must have one or more of the 13 disabilities that are found in the IDEA. Secondly, the student's

disability must interfere with the child's ability to learn. A student's disability requires them to receive specialized instruction.

Families have the right to ask the school district to pay for their child to complete an independent educational evaluation (IEE). The IEE will be proctored by an expert outside of the child's school. Even if the district doesn't believe the child needs to receive an IEE, it is not their decision to decide. Parents also have the option to pay for an expert without contacting the school's district, but it will be up to the parents to pay.

There are stricter laws on who will be present when an IEP is created. An IEP team includes the child's parent or guardian, one of the child's teachers, a special education teacher, a school psychologist that will be able to read the outcome of the evaluation, and a district representative. In an IEP, there will be learning goals and the accommodations that the school is required to give the student. An IEP is responsible for recording how a child is doing academically, track the child's progress, the accommodations and extended school year support if needed, the timing of each service the child receives, if there need to be any changes in the child's learning environment, modifications to the curriculum, how the child will take tests, and how the child will be involved classes and out of class activities.

Grace Cosentino is a teacher at San Jose Middle School in Novato, California. She teaches 6<sup>th</sup>- grade Science and 7th-grade AVID. She graduated from Sonoma State University (SSU) and completed her teaching credentials through SSU as well. Cosentino touched on the issue of equity that she has seen in her classroom and the issues she has experienced with students that don't speak English.

Cosentino is involved in the school's annual meetings that review students' 504 and IEP learning plans. She sees how various different factors can affect a child's learning. She explained

that there are kids that have only one parent go to work, and the other one is home or kids with parents that have some sort of socioeconomic advantage along with being white and middle class can all affect the student. She discussed how students with high socioeconomics could do quite well in school because their parents can afford private tutors, and their parents can help them with their homework when they get home from school. She stated that “A lot of my kids in my demographics are Latinos that have the same learning disability, but their parents are working two jobs or more.” She has one or two students that are in a classroom in the United States for the first time. She explained that some teachers argue that it is not their responsibility to make sure they understand English. She said, “it is our responsibility. They are here if we want a better society, we need to educate our people, and they are our people”.

Cosentino did receive special education training during her credentials program at SSU. She still thinks that it would be helpful to learn some practices on what would help students with learning disabilities while similarly including them with their peers. It is important that students with learning disabilities are not excluded because it is essential for kids to be around their classmates and can learn from one another. Cosentino discussed that it would be helpful if students with disabilities could be with someone who is trained to help them learn and teach them what kind of learner they are for their future.

In regard to what needs to be changed in a traditional classroom, Cosentino thinks that smaller classroom sizes would help immensely. All her students, learning disabilities, or those without would benefit from a smaller class size. Cosentino suggests that if classes continue to remain large that a teacher's assistant must be present. It is important to understand that "every kid is different. Public education is not catered to an individual. It catered to the majority"



(Cosentino, 2020). Her hope for the educational system is that every student will truly have an equal opportunity to succeed and flourish in their academics.

Since the beginning of the education system and currently, our schools still follow traditional classrooms that are based on patriarchal values. Every country is reforming public education and trying to educate children to have a cultural identity. The current education system was conceived and structured for a different age in the culture of the enlightenment economy during the industrial revolutions. Education is modeled on the Industrialization Era, and we currently see this in schools. Schools are organized on factory lines by the ringing bells, separate facilities, and separate subjects. Children are put through the system by age group in the assumption that their age is the most important thing that kids have in common. Kids the same age are completely different from one another in a learning environment. Some kids can focus and study better in smaller groups than larger; some kids prefer to work on their own.

Public education needs to change their production line mentality because these kids each have a different way of thinking. In the traditional classroom, a student is seen as intelligent or unintelligent. Many students with learning disabilities are seen as incapable because of this certain view of the mind that traditional learning has taught us. Many children with a learning disability are medicated by their psychologists or pediatrician. Although medication can be helpful in some cases, many of the times, students just need to be taught the material in a specialized way that makes sense to their brains. Learning is not a “one size fits all” concept. Sir Ken Robinson said, “kids are being medicated routinely as when we had our tonsils taken out.” Students are being medicated to focus and calm down; instead, teachers need to be waking them up, keeping them interested by teaching in an effective way. Medication such as Adderall or Ritalin shuts off a student's sense, which causes an anesthetic learning experience. In a

traditional classroom, the teacher appears superior to students, which causes intimidation, no class discussions, and no collaboration among learners. Sir Ken Robinson shared a study on divergent thinking that was performed on preschoolers. The question that they asked was, “How many uses can you think of for a paperclip?” The purpose of this test was to see all the possible answers, not just one. All of the preschoolers tested at the genius level because they were able to discover many ways and lots of possible answers. Five years later, they were tested again, and their scores dropped. Another five years later, the children were tested again when they were in middle school. The scores were low and showed that their skills detracted because, in school, we are taught that there is only one answer.

Giovanna Pennisi, a mother of a child who struggled with learning disabilities, shared that, “In order to improve our educational system for all students, it is vital that our state government makes education a priority. Quality education should be made available to all, not just those who can afford it. The government needs to provide better funding for schools. Teachers should be paid a fair wage that would attract highly motivated educators. Lower classroom numbers are a must”. Pennisi believes that more teacher assistants should be hired, and parents of children with special needs should not be made to pay for teaching assistants in the classroom. As a mother, she felt that she was unable to provide for her daughter’s needs. She feels that the Public-School System school did not give her daughter the proper opportunity to learn. Her daughter struggled with her studies throughout elementary school and high school. Schools did not have the funding to maintain a staff able to adequately support children with learning disabilities within their system. Teachers at her school usually had 25-30 children per classroom. Their workload and qualifications couldn't provide the assistance and help she needed to support her. Mainstream teachers were also not given the

training required to handle special needs. Pennisi revealed that “In addition, students in the Resource Program were labeled “the dumb kids” by their peers. Naturally, this had a long-lasting effect on her self-image. Like most children with similar learning disabilities and circumstances she essentially fell between the cracks and became a victim of the educational system”. Fortunately, her daughter went out into the world, she discovered she was both smart and capable. She struggled but gradually found herself highly valued as an employee in a position of trust and responsibility. She became a good wife and mother, and later with restored confidence, her daughter returned to school and became an exceptional preschool teacher.

As a student, we are taught to go to school, graduate, and attend college. We are never taught different routes that we can take. It is important that students are introduced to different trades in high school and learn about trade schools after high school. Many students have talents outside of school and need to be able to learn how to put them to work. John Ruccello, the owner of John Ruccello Electric, is a resident in Monterey County. He attended Chartwell for elementary and middle school and completed high school at Carmel High School. Chartwell is a private K-12 school located in Seaside, California that focuses on empowering kids with learning disabilities. Ruccello said that Chartwell strengthened his skills and prepared him for when he transitioned to a public high school. Ruccello has dyslexia and explained what his experience was like going through the schooling system. Teachers at Chartwell and having a tutor helped him learn how to read, write, and spell. He recalled feeling fearful of going to class because of his learning disability. Part of his learning disability is that he struggles with reading and writing, he said, “It was difficult, I did not like being in a class because I was afraid that a teacher would call on me or ask me to read out loud.” Oftentimes Ruccello would pretend to be sick to leave school early to avoid the anxiety induced classroom setting. Fortunately, Carmel High School

provided programs that helped, such as placing him into smaller classroom sizes. Rucello found his passion for electrical work when he started working with his cousin during summer breaks. He knew what he was great at, he practiced for years, and despite his learning disabilities, he is now the owner of his own company. His message for students with learning disabilities is to not give up when life gets tough and to follow your dreams regardless of any type of disability.

Your child is lazy; they have problems at home; they did not try hard enough; they are checked out; they are disconnected. Those are the phrases that Nella Catania heard with her three children that grew up struggling with learning disabilities. She recalled watching her children spend hours a night studying with a tutor, and studying on their own, just to receive a failing test score. Catania reflects back on the years her children were in school and believes that the educational system needs improvement for those with learning disabilities. She thinks that students with learning disabilities need to be taught and take tests in a different format. An example she used was that tests should be distributed verbally and rephrased in a different way to those with testing accommodations. The questions on a test can look like another language, and it is incredibly frustrating because if it were worded differently, that child would be able to interpret it and answer correctly. She recalled teachers becoming impatient with her children when they were struggling and not understanding the material. Catania wants to see a change in the educational system and believes "every child does not fall into one box" every student is different, and each learning disability is separate. They should not put all students with disabilities in one classroom; they need to separate students based on disability. She wants teachers to understand that if a child is struggling with a learning disability, they need to be more sensitive. For example, an act of being more sensitive is not to call on them when their hand is not raised and placing them on the spot. Children experience major anxiety when they are called

on and do not know the answer, and in elementary and high school kids often time think that it is funny to make fun of those who are different. A teacher at Chartwell school discussed Catania's son's learning disability. Her son is dyslexic and has an auditory and visual disorder. The teacher told her if you want to know how your son feels in a classroom, “close your eyes and plug your ears. That is what it is like when your son is trying to learn.”

Catania said that private schools need to change immensely to accommodate those with learning disabilities because they do not offer much support. Public schools did provide more programs and resources, but she still experienced some teachers that were not willing to accommodate. She recalled that when her children failed tests, they were belittled and treated as if they did not put in any effort in studying. Teachers have the power to build a student up or break them down. Catania believes that if her child failed a test and the teacher took the time to talk to them instead of telling them “you did really bad,” it would have made such a difference for them emotionally. Teachers have the ability to ease their students and work with them to succeed. Her children would fail their tests after studying, they would come home sad, and believe that they should just give up and not try anymore. Catania stated that “every brain is wired totally differently; not every child works well on medication like my children.” After high school, students with learning disabilities need more options so they can feel that they can move out of their hometown and have the same opportunity as every other kid. Students with learning disabilities have many gifts and talents that cannot be seen in a traditional classroom. Some students are very hands-on, and that is where they thrive. Trade schools are mostly offered online and don't really offer in-person classes. A change that can be helpful to those with learning disabilities is a high school that is specifically designed as a trade school. This can allow students with learning indifferences to find a job and feel confident about themselves. They will still have

general education but also learn about taxes, creating invoices, paying bills, and how to run their own company. The traditional education system needs to understand that not every student was designed to become a doctor or an accountant. Students can graduate from one of these trade schools ready to go out in the world feeling confident and ready to succeed. Students without support or education after high school sometimes become lost, misunderstood, and forgotten. These kids slip through the cracks, and it can lead to using drugs, alcoholism, living on the streets, or suicidal. Schools need to improve by providing different routes for students to take. Students need to be steered away from their struggles and bring them to where they can succeed and discover their hidden gifts and talents.

The education system needs to move against conformity and standardization. Each student deserves to learn the same material, regardless of their disability. They need to have programs or help during class for specialized assistance to make sure they are on track. By moving in the opposite direction of the mentality of a standardized curriculum, we can achieve change in the education paradigm. Testing and diagnosing children with learning disabilities should be the responsibility of the state. Quality specialized schools for children with special needs and disabilities should be available without cost to parents. Concurrently we need a culture or society that more fully respects and values its members regardless of their differences and abilities. Education is a right mandated by law, and children are truly the future of this country and our most valuable resource. Our society must strive to cultivate an environment that respects and values all its members and gives them the opportunity to thrive, grow, and fully become responsible contributing citizens regardless of their differences and capabilities.

## Annotated Bibliography

Academic Accommodations for Students with Learning Disabilities. (n.d.). Retrieved from <https://www.washington.edu/doit/academic-accommodations-students-learning-disabilities>.

Academic Accommodations for Students with Learning Disabilities covers the process of receiving accommodations. It goes over learning disabilities and functionality, universal design, accommodations, classroom accommodations, and examination accommodations. In my paper I used this source to learn about the process of how a learning disability is diagnosed by a trained psychologist who can read the results from a psycho-educational test. This source lists the different types of learning disabilities that can impact a student's learning. It is explained what makes a student eligible for accommodations and the different types of accommodations that are provided for each student depending on their disability.

Adams, S. (1998). Leveling the Floor: Classroom Accommodations for Law Students with Disabilities. *Journal of Legal Education*, 48(2), 273-296. Retrieved May 3, 2020, from [www.jstor.org/stable/42893554](http://www.jstor.org/stable/42893554)

Susan Johanne Adams researched accommodations for students with disabilities who wish to pursue their dreams of studying law. She shares the history of Education for All Handicapped Children that was passed by Congress that paved the way for more protecting laws to be approved. This source shows that there has been an improvement in supporting those with various types of disabilities. This source is important because it shows that law schools are taking the steps in creating a safe and less intimidating classroom. Adams explains the Rehabilitation Act, anti-discrimination laws, and the

Disabilities Act that all empower students. These different acts also teach educators and employers about the different types of learning disabilities.

ADHD - The Evolution of a Disorder | PBS - Medicating Kids | FRONTLINE. (n.d.). Retrieved from <https://www.pbs.org/wgbh/pages/frontline/shows/medicating/adhd/evolution.html>.

*The Evolution of a Disorder* has helped me find information on the history of ADD and when it was first acknowledged. In my paper I will be explaining how the first published account of ADD was written as a poem that was found in a medical journal. This poem was written in 1904 and it is called *The Story of Fidgety Philip*. It was published by physician Heinrich's Hoffmann. The poem describes a boy that is experiencing all of the symptoms of ADD such as constant movement, and the struggle of sitting still that causes being in a classroom to be extremely difficult. ADD has an impact on a student's learning significantly because of how it disrupts a student's focus.

Adult attention-deficit/hyperactivity disorder (ADHD). (2019, June 22). Retrieved from <http://www.mayoclinic.org/diseases-conditions/adult-adhd/symptoms-causes/syc-20350878>.

Adult Attention-Deficit/Hyperactivity Disorder is an article by the Mayo Clinic that gives an overview, symptoms, typical behaviors, and when to see a doctor. In my paper I am going to be using the symptoms that are seen with ADHD. I will be explaining why this is considered a learning disability and how it affects a student's success in a classroom. I will use this source to help explain how ADHD differs from ADD by listing the differences between the disorders. Although these disorders are different, they both can cause a student to experience difficulty in the focusing and retaining information.



Barkley, R., Saline, S., ADHD Editorial Board, & ADHD Editorial Board. (n.d.). Your Child's 7 Executive Functions - and How to Boost Them. Retrieved from <http://www.additudemag.com/slideshows/boost-executive-function/>.

Your Child's 7 Executive Functions and How to Boost Them article explains how children and adults with attention deficit hyperactivity disorder or Attention deficit disorder struggle with their 7 core executive functions. In my paper I will be listing the seven core executive functions. This article explains how a child can gain more control over their symptoms of ADHD and ADD by enforcing accountability, writing down notes to strengthen memory, make time external, offer motivational rewards, hands on learning, allow your child to refuel by taking breaks, practice speaking encouraging words, exercise, sugar in moderation, and show compassion.

Bhandari, S. (2018, November 01). Dysgraphia: Signs, Diagnosis, Treatment. Retrieved from <http://www.webmd.com/add-adhd/childhood-adhd/dysgraphia-facts#1>.

*What Is Dysgraphia? What Should I Do If My Child Has It?* This article lists the causes, symptoms, diagnosis, treatment, and how a parent can help their child that is struggling. In my paper I will use their definition of dysgraphia and how it can negatively impact a child's learning. Dysgraphia is caused by a problem in the nervous system that affects motor skills. In my paper I am going to be explaining the symptoms that are in this article. It is also explaining what specialists will be observing to determine if your child has dysgraphia such as hand and body position, pencil grip, and posture.

Catania, N. (2020, April 1). Personal interview.

Nella Catania is a resident in Monterey and also my mother. I chose to interview her because all three of her kids (including myself) have a learning disability. I wanted to hear her side and perspective of the education system and how they can improve for students with learning disabilities. It was valuable information that can't be found in a textbook. Her experience reveals issues that are found in private schools and public schools. Catania highlights how every student's brain is wired differently, and every student does not learn the same way. She also explained how important and beneficial it would be for students to have the option to attend a trade school instead of a traditional high school that doesn't work for every student. Catania emphasizes how teachers have the power to build a student up or break a student down, and she has witnessed both.

Cosentino, G. (2020, April 3). Personal interview.

Grace Cosentino is a teacher at San Jose middle school in Novato, California. She teaches 6th-grade science and 7th-grade AVID. In my paper, I will be discussing the issues Cosentino experienced with equity and students who do not speak English. She explains how her school uses 504 and IEP programs for students with learning disabilities. Cosentino also covers socio-economic disadvantage and how they can affect a student with a learning disability, such as not having a tutor after school for extra help. She emphasized that it is essential that students with learning disabilities are not excluded because it is necessary for kids to learn from one another and to learn social skills. Cosentino believes that smaller class sizes would help students with learning disabilities receive the one on one help that they need. Additionally, she explains that if a teacher does have a large classroom that a teacher's assistant should be mandatory in order for

students to receive any extra help that they need to understand the material they are learning.

“Dysgraphia. (n.d.). Retrieved from <https://www.sciencedirect.com/topics/medicine-and-dentistry/dysgraphia>.

Cerebellum and Writing is a chapter from a book called *The Linguistic Cerebellum* by Peter Marien and Mario Manto. In this chapter they explain dysgraphia and spatial dysgraphia. I will be using their definition of spatial dysgraphia. I will be including this quote in the definition “omission/repetition of strokes and letters (Silveri et al., 1999), the inability to write on a straight horizontal line, excessive blank spaces between graphemes (Roeltgen, 2003), and a defective spatial organization (Rapcsak & Beeson, 2002)”. I will be explaining how spatial dysgraphia affects the brain and why it causes a student to find it challenging to write in a straight line. I will also be using a chapter from Science Direct called *Classical Neurological Syndromes* from the book *Cognitive Neuropsychology* by Rosaleen McCarthy and Elizabeth Warrington. It explains why it is common that students with dyslexia sometimes have dysgraphia as well.

Dysphasia. (n.d.). Retrieved from <https://www.sciencedirect.com/topics/neuroscience/dysphasia>

I am using a chapter called *Rehabilitation from the book Management of Neurological Disorders (Second Edition)* by Bryan Ashworth MD, FRCP, Michael Saunders MB, FRCP. This chapter explains how dysphasia occurs after a person has had a stroke, head injury, or brain tumors. It is reported that strokes are the most common cause of dysphasia. In my paper I will be using the reason that strokes damage the area in the brain that controls comprehension and language is because “During a stroke, a blockage or

breakage in the blood vessels of the brain deprives the cells of blood, and consequently oxygen. When brain cells are deprived of oxygen for too long, they may die.

Every Student Succeeds Act (ESSA). (n.d.). Retrieved from

<https://webcache.googleusercontent.com/search?q=cache:jUYX7DlGOnMJ:https://www.ed.gov/essa?src=rn+&cd=1&hl=en&ct=clnk&gl=us&client=safari.>

In this article by the U.S. Department of Education it defines Every Student Succeeds Act (ESSA). In my paper I will be covering the various laws that protect students with learning disabilities in and outside of a classroom and will include the ESSA Act in this section. In my paper I will be using the information from this article about how in 2015, NCLB Act was replaced by an updated version that is known as Elementary Secondary Education Act (ESEA). I will be using the history of the ESSA act that is provided in this article for my paper. This source will help me understand how ESSA provides aid to students with disability and how it works.

Freire, P. “The Banking Concept of Education.” Retrieved from

[puente2014.pbworks.com/w/file/attach/87465079/freire\\_banking\\_concept.pdf](https://puente2014.pbworks.com/w/file/attach/87465079/freire_banking_concept.pdf).

The banking concept of education assumes that each student is designed the same and learns the same way. The banking concept describes teachers who don't engage with students and follow a plan without allowing students to be creative and to express their ideas and thoughts even if they aren't right in the answer book. The banking concept is defined as an “oppressive” way of teaching, and students are required to sit, listen, and prevent students from thinking outside of the box and bounce ideas off of each other. Teachers and students have the capability of teaching each other. The banking concept

will be useful in my research because it is a perfect example of how the “one size” fits all learning styles is destructive.

Learning Disorder. (n.d.). Retrieved from <https://www.sciencedirect.com/topics/medicine-and-dentistry/learning-disorder>

I will be using a chapter called Learning Disorder from the book Developmental-Behavioral Pediatrics by Arcia A. Barnes and Lynn S. Fuchs. This chapter covers the historical overview on learning disabilities. This chapter explains dysphasia and the causes of this learning disability. In my paper I will be using the information on which doctor discovered dysphasia and when it was discovered. I am going to use the quote by Samuel Orton that was the first one to raise awareness that “the heterogeneity of learning disabilities as disorders that could specifically affect reading, writing, speech, comprehension, or motor skills.”

Mody, M., & Silliman, E. R. (2008). *Brain, behavior, and learning in language and reading disorders*. Guilford Press.

In this chapter of *Brain, Behavior, and Learning in Language and Reading Disorders*, Virginia W. Berninger defines the learning disability titled dysgraphia. She defines and differentiates dysgraphia, dyslexia, and language learning. This chapter reflects back, on 17 years of disabled writing, and treatment of those that struggle with written language. Her research explains that there are written language disabilities, writing and reading, and reading disabilities that are only word reading. Some students struggle with word reading and word comprehension. This chapter will be useful because it explains that dysgraphia can appear in many different forms, not just one. In the third part of this chapter, it covers

how dysgraphia, dyslexia, and language learning are all completely different disabilities and how they each require separate accommodations.

Pennisi, G. (2020 April 7). Phone interview.

Giovanna Pennisi is a resident of Monterey, California. She shared her experience of being a parent of a child with a learning disability and what it was like for her daughter in school. Pennisi explained that it was not an easy road and did not feel that she received the proper resources to help her daughter. In my paper I will explaining what she thinks needs to be changed in the education system in order with students with learning disabilities to receive a fair and equal education. I will be using a few quotes from her that share her beliefs on what needs to be improved and how the government needs to provide better funding to allow student to have access to extra support. I will be including how her daughter has overcome the obstacles in her life that was caused by her learning disability.

Robinson, K. (n.d.). Changing education paradigms. Retrieved from

[http://www.ted.com/talks/sir\\_ken\\_robinson\\_changing\\_education\\_paradigms/reading-list](http://www.ted.com/talks/sir_ken_robinson_changing_education_paradigms/reading-list)

Sir Ken Robinson started his *TedTalk* with how “the current system was designed and conceived for a different age in the intellectual culture of enlightenment.” Children are facing the epidemic of ADHD. Children are being diagnosed with learning disabilities, and the only solution is to medicate. Children are learning by being medicated; instead, Sir Ken explains that we need to understand that each child is unique. Some are better in small groups, individual works, even different times of day work better for some kids. Education has become conformity and standardization. The paradigm needs to change because each child has a different way of processing, interpreting, and thinking. I have

been diagnosed with ADHD, and I chose not to take medication but instead teach myself other ways to understand my schoolwork and go around my obstacles in learning. We each have our strengths and weaknesses, and teachers need to be aware of the different available teaching styles.

Ruccello, J. (2020, April 5). Phone interview.

John Ruccello is a resident of Monterey, who is the owner of John Ruccello Electric. I interview John because he has dyslexia. In my paper, I will discuss his experience attending school with a learning disability and learned what should be changed in a traditional classroom. Ruccello explained his anxiety that he felt when being in a classroom because he struggled with reading, writing, and spelling. Chartwell is a private K-12 school located in Marina, California, that focuses on empowering kids with learning disabilities. Ruccello said that Chartwell strengthened his skills and prepared him for when he transitioned to a public high school. He explains that Carmel high school provided programs that helped him feel more comfortable. Despite his struggle in school, he followed his dreams and is now a successful business owner.

Russo, A., Russo, A., & Dodson, W. (n.d.). ADD vs. ADHD Symptoms: What's the Difference?

Retrieved from <http://www.additudemag.com/add-adhd-symptoms-difference/>.

*ADD vs. ADHD Symptoms: What's the Difference?* Is an article written by Allison Russo that defines Attention Deficit Disorder, Common Symptoms, defined Attention Deficit Hyperactivity Disorder, explains what's the difference between ADD and ADHD. In my paper I will use their definitions of each ADD and ADHD to explain the two disorders and how it can interfere with a student's learning. In my paper I will be listing the

symptoms that are provided in this article such as poor working memory, inattention, distractibility, and poor executive function. I will use the reasons provided on what the differences are between ADD and ADHD.

Sears, C. (1986). Mathematics for the Learning Disabled Child in the Regular Classroom. *The Arithmetic Teacher*, 33(5), 5-11. Retrieved May 3, 2020, from [www.jstor.org/stable/41194135](http://www.jstor.org/stable/41194135) *Mathematics for the Learning Disabled Child in the Regular Classroom* by Carol J.

Sears explains the learning disability in mathematics. This journal defines dyscalculia and describes how those with dyscalculia have other underlying learning disabilities. Those with dyscalculia have a higher chance of also having “auditory memory, visual-motor coordination or perception of spatial relationships” (Sears, 1986). This journal exposes that, unfortunately, those with only disabilities in math do not receive the same support as those with dyslexia for an example. Sadly, many assessments rely only on reading assessment scores while disregarding dyscalculia. The purpose of this article is to help teachers understand that those with dyscalculia need special attention as well and suggests techniques for teachers to use in the classroom to assist these types of learners. This journal is essential because I have dyscalculia and have had negative experiences in a classroom from teachers who did not understand that disability. Shockingly teachers I have had in elementary, middle, and high school have labeled me as “lazy,” “checked out,” or “not taking it seriously” because of my low scores in math.

Singh, M. (2019, March 13). History of Dyscalculia. Retrieved from <http://numberdyslexia.com/history-of-dyscalculia/>.



*History of Dyscalculia* by Manpreet Singh provides the history of dyscalculia and a definition of this learning disability. This article explains who discovered this disability and includes the definition of dyscalculia. In my paper I will be using the definition that was discovered by Dr. Ladislav Kosc in 1974. I will be explaining how dyscalculia affects more than one part of the brain and can be separated into three different categories that was discovered by Dr. David Geary. In my paper I will also be explaining that dyscalculia can be hereditary.

Team, U. (2020, April 23). What Is a 504 Plan? Retrieved from

<http://www.understood.org/en/school-learning/special-services/504-plan/what-is-a-504-plan>

This article is written by the Understood Team and explains in detail what the 504 plan provides for students with learning disabilities. It explains the 504 and IEPs are different, what the process is for a student to receive a 504 plan, and what qualifies them to be eligible for accommodations. This article also stated the legal rights that are under the 504 Plans. In my paper I will be going into detail on what types of accommodations students will receive if they have a 504 Plan. I plan to use the quote "Accommodations don't change *what* kids learn, just *how* they learn it. The goal is to remove barriers and give kids access to learning". I feel like it is important to understand that students with learning disabilities deserve to learn the same material and have the same education as their peers, but having it be taught to them in a different way can really help them succeed.

Winzer, M. A. (2014). *The History of Special Education from Isolation to Integration*. Gallaudet University Press.

I am using the book called *The History of Special Education: From Isolation to Integration* by Margret Winzer. This source gives useful information that explains the history of disabilities. In my paper I will begin by stating that it started in the dark centuries before the 1700s. This article explains how any individual who showed a difference in intellectual, physical, social, political and religion was not accented by society. Those with a learning disability experienced “abuse, condemnation, or destruction.” Humans are judged by their behavior that ranges from normal behavior to abnormal behavior. It presents examples of the discrimination that those with learning disabilities experienced such as society believing that they were possessed by evil. I will explain how it slowly improved in the 16<sup>th</sup> and 17<sup>th</sup> century and how by the 18<sup>th</sup> century learning disabilities began to be accepted and special education became its own branch of education.

Visual and Auditory Processing Disorders. (n.d.). Retrieved from

<http://www.ldonline.org/article/6390/>

Visual and Auditory Processing Disorders is written by the National Center for Learning Disabilities (NCLD). This article defines visual processing disorder, common areas of difficulty, visual discrimination, visual closure, object recognition ( Visual Agnosia).

This article also defines auditory processing disorder. From this article I will be incorporating the definitions that were provided by NCLD and examples of how this can cause a student to struggle in their classroom. I will be including what changes teachers can make to improve the learning environment for a student with auditory or visual

disorder. I will be explaining how these learning disabilities affect a student's ability to process information and affect their visual perception.

Youman, M., & Mather, N. (2013). Dyslexia laws in the USA. *Annals of Dyslexia*, 63(2), 133-153. Retrieved May 3, 2020, from [www.jstor.org/stable/23758574](http://www.jstor.org/stable/23758574)

The author, Nancy Mather, examines the different states in the USA and their laws protecting those who are diagnosed with dyslexia. Many states have acknowledged that this learning disability must have accommodations. The regulations allow those with dyslexia to have equal access to students, and it protects them from mistreatment. This source exposes how a majority of states still has not created laws. This source will be helpful to see how students are protected and also what states are lacking laws that give dyslexic students' rights and protection. This article reviews current dyslexia laws and how to initiate laws in states that have not created laws yet.

## Final Synthesis

Senior Capstone is a time for students to end their college careers by demonstrating their work as an HCOM major. In this section of capstone, we learned together as a class, we collaborated in discussions, communicated respectfully, constructed our projects independently, and given the opportunity to display all of our hard work and skills we have learned throughout our college career.

In class, we were able to participate in discussions and readings to expand our minds. Each of our perspectives was shared through our thoughts in-class discussion and small group work. In the seminar part of the class, we discussed tough issues with readings that went in-depth in studies of social justice, race, and ethnicity, and gender studies. In class, each group would analyze a different chapter of reading and form thoughts and questions for the class. Through this process, I was able to dive deeper into a chapter and discover a perspective that I was not aware of prior. Reading and sharing was a great way for each student to voice their opinion and gave us the chance to work collaboratively. Through seminars and the development of our senior projects, we were able to learn and share hidden histories.

The capstone theme for this section is “Hidden Histories.” The theme of this course is significant because it exposes the stories that occur that individuals most likely will not find in a textbook. My eyes were opened to the fact that there is a vast amount of information and stories we do not learn about in school because it does not meet the traditional learning standards that are set. An example of this is that when we are younger and learn about Native Americans, we are only being taught one side of the story. We do not learn about the terror and tragedy that this group of people faced, and their story is not shared. I took this time to choose a topic that I felt

passionate about, and that has had an impact on myself personally to share issues with the education system. I wanted to choose a topic that is not found in a textbook or taught in class.

My research paper covers the history of learning disabilities and the stories told by students, parents, and teachers. Throughout my life, I have struggled with learning disabilities, but what truly inspired me to write on this topic was because of my Service-Learning course in the fall of 2019. My service-learning hours were completed at Monterey Bay Education Center and it turned into a job that I work at currently. It has been an experience that encouraged me to write about the challenges that students face in their academics. Monterey Bay Education Center is a specialized center for students k-12 that face mild to severe learning disabilities. The owner of this center is a strong and kind woman that advocates for students with learning disabilities and will not let one of her students ever fall through the cracks of the education system. This was an eye-opening experience that allowed me to learn about the different types of disabilities that make completing schoolwork incredibly difficult. Each of these students at the center is unique, intelligent, and hardworking. This center allows students to gain confidence, socialize with their peers, and receive one on one class time with a teacher. There have been challenging times learning different teaching styles for each of my students. However, it has been extraordinary to see that this center completely understands that each child does not fit into one box and deserves a specialized learning plan that prepares them for success in the future.

My research paper focuses on the stories that are told by mothers, a teacher, and a student that have experienced learning disabilities and provided their input on what needs to be improved in the educational system. My paper not only shares personal stories through separate interviews, but it gives a detailed description of each learning disability and its history. Additionally, my paper gives a timeline of learning disability from the dark centuries before the 1700s up until

current times. The traditional classroom has many flaws that are revealed throughout my paper and provide ideas that can lead to equal and fair education for students with learning disabilities. My topic aligns with the course theme because of how it shares the struggles that students, teachers, and parents experience, which cannot be found in a textbook. Each story in my paper exposes their truth and hardships that they encountered, and I hope that it can raise awareness and bring change to the traditional education system.

I feel that I have met the published criteria and standards for assessment for my research paper. This essay has demonstrated my ability to conduct a research essay by exploring different scholarly sources, presenting my communication skills through multiple interviews, and writing skills. I have met each deadline that was created by Professor Lee for the project proposal, the peer review for our rough drafts, and the Resume. My research paper includes scholarly journals and books that were found through the CSUMB online library and books that explain the learning disabilities through the science of how the brain works. The scholarly journals and books are also used in displaying the history of learning disabilities. Each section provides a source to support claims throughout the essay and is cited through APA style.

I believe that my paper contributes to the course's theme because I described a significant issue, demonstrated various points of view, and raised critical questions. This paper not only told my story, but it made me realize that I was not alone. Through the research, hearing the different stories, I began to understand that students are suffering from the education system and the "one-size-fits-all" mentality. I hope that this paper can raise awareness of the challenges that students with learning disabilities experience in a classroom and that improvement can be created to guarantee each student feels comfortable, confident, and is receiving the same education as their peers. My hope for the future is that students with learning disabilities can enter a classroom

without feeling anxiety and can feel confident knowing that they are provided the tools they need and encouragement to flourish not only in their academics but in the world.