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The purpose of this study was to determine effective instructional tools that teachers can utilize to help plan instruction so that nonverbal students with multiple disabilities can acquire literacy skills in the classroom. One student, Trinity, who is nonverbal and has been diagnosed with Chiari malformation, was assessed using a variety of formal (Peabody Nonverbal Picture Vocabulary Assessment (Form A)), and informal assessment tools (interviews and teacher-made literacy assessments) to determine what literacy skills she possesses. The findings suggest that Trinity possesses a variety of receptive and expressive literacy skills typical of other children her age. Teachers just need the resources to help determine what literacy skills students with multiple disabilities possess and the necessary tools to help these students reach their full potential.

At a school for students with special needs, you will find a six-year old girl, Trinity (a pseudonym as are all the names given to the participants), who has been diagnosed with Chiari malformation who is nonverbal. Chiari malformation is an abnormality in the lower part of the brain (the cerebellum) where the indented bony space at the lower rear of the skull is smaller than normal, which then pushes the cerebellum and brainstem downward. . As a result, the pressure on the cerebellum often can block the flow of the liquid that surrounds and protects the brain and spinal cord. Individuals with this abnormality have tonsils that hang below the herniate line in the spinal canal which can cause visual problems, balance difficulties, vertigo and dizziness. Trinity also has muscle weakness, coordination and git abnormalities which are caused by her diagnosis. A year ago she develop excessive fluid in her spinal cord (syrinx) which led to the need for Trinity to undergo surgery to relieve the pressure caused by the fluid in her spinal cord, on her cerebellum.

Even with Trinity's diagnosis of Chiari malformation, she has been able to develop literacy skills. Trinity is able to spell words using magnetic letters and she comprehends verbal directions, however the staff at her school struggle to find ways for Trinity to communicate what she knows and wants to say due to her limited speech and her poor motor planning abilities. Many teachers are not taught effective strategies to help students who are not "typically" developing, such as students like this little girl. In addition, many teachers do not even know where to begin with teaching these unique students, because there are limited strategies that assist teaching in assessing students with multiple disabilities. The problem with this is that there are children who are twice-exceptional- have a disability but are also gifted, and because their disability masks their abilities, these students are often overlooked in the education system. Therefore, the question is what tools can teachers use to assess the literacy skills of children who

have both verbal and motor limitations?

Students with limited verbal speech are still able to acquire meaningful language through visual and technical support (Broun, 2004). As a special education teacher in New York State, I see first-hand how visual support systems help with communication between teachers and students. However, because my education did not prepare me to work with such a unique population of children who have the severity and uniqueness of need, I have limited knowledge on how to help those students with higher language skills, who learn language differently than many students in mainstream school districts. It is vital for educators to do what they can to acquire more knowledge about children who are twice exceptional and ways we can effectively assess the students so we can plan a more appropriate education program for them. It is not fair that individuals who have these unique needs are pushed to the back of the classroom and essentially “forgotten”. The student in my classroom is now six-years old and her mother has been advocating for three years trying to find an effective communication system for her daughter to use. Due to the uniqueness of her daughter, she feels Trinity has high receptive language skills, but she is unable to express what she wants, needs and/or knows. Trinity has low muscle tone, which makes it difficult for her to write point or grasp objects at times. Educators need to find ways to help all students be active participants in the classroom and in their society and the key to determining this starts with being able to effectively assess the students and their strengths and needs in the area of literacy.

Today, teachers rely heavily on assessments to help inform and plan instruction. Teachers utilize informal and formal observations in order to determine a student’s strengths and needs. Formal assessments such as the Peabody Nonverbal Picture Vocabulary Assessment (Form A) have their limitations. These formal assessments, although they are attempting to test

an individual's ability to identify vocabulary, require them to use their physical ability to point to a requested item. It is the teacher's responsibility to determine if the result of any assessment is due to an individual's ability to complete the (i.e. literacy) test, or if the test results were affected by a different skill area (physical ability to direct select). In addition the images presented in the Peabody Nonverbal Picture Vocabulary Assessment (Form A) were new to Trinity and Trinity often just wanted to look at the pictures and trace the outline of the image with her finger. Informal assessments such as teacher made tests and observations can be very informative. Interviewing individuals in Trinity's life, served to be very useful. Those who work with her on a day to day basis understand and know much of what Trinity is capable of. However, it is important to take into consideration that teachers, therapists, and family members can have a bias and may assume Trinity knows something, when in reality this is not true. The results of the data collected on Trinity demonstrated Trinity's ability to express to others her wants, needs, emotions. The data also proved that Trinity's inability to produce clear articulated speech prevents her from expressing herself fully. Trinity demonstrates her ability to receptively understand others, by her ability to follow or fail to follow directions. If Trinity does not like the direction given to her, then she will lie on the floor and/or flail her arms. Even with Trinity's diagnosis of Chiari Malformation, she has overcome many obstacles to acquire expressive and receptive literacy skills.

Theoretical Framework:

Literacy occurs in everyday activities and in multiple ways (Larson and Marsh, 2005). An ideological model looks at literacy as a social practice that is rooted in social, historical and political contexts and it is therefore necessary to adjust literacy instruction to allow for individual diversity of students. Events such as authentic practices connected to broader social and cultural practices allow for valuable literacy events for all students (Larson & Marsh, 2005). Heath

(1982) describes any situation in which written text and conversation around that text constructs interpretations, extensions and meanings as a literacy event. When we talk about students with disabilities we need to broaden our view of what it means to have a “conversation” around a text. For students with disabilities we need to allow opportunities for these students to respond through body language, written language and through augmentative systems such as a DynaVox.

Lankshear and Knobel (2003) break down literacy in three parts to define it. First, they state literacy is developed through socially recognized ways. The social context in which literacy is acquired defines what it means to be literate (Moll and Gonzalez, 2001). Second, literate individuals are able to encode texts or make meaning of texts (Lankshear and Knobel, 2003). And lastly is that meaning of texts is made by our knowledge and affiliation with different discourses or our social identities (Lankshear and Knobel, 2003). In this paper I will begin to reevaluate some of the traditional ways in which we look at what it means to be literate.

We no longer want to define literacy through one’s ability to effectively use oral language to communication. Therefore we can look at how literacy is effectively developed through a combination of acquisition and learning (Gee, 2001). Acquisition is an informal process that is natural and often developed through the subconscious, by a process of trial and error. However learning is a more formal process, where individuals are consciously taught new knowledge or a new skill in parts (Gee, 2001). Both acquisition and learning are processes that are used together by the individual to develop not just oral language, but just language. Larson and Marsh (2005) state that literacy is more than acquiring content, it is situating reading and writing in the social and linguistic practices that give them meaning. Therefore, teachers need to be model readers and writers that show how literacy is used every day. Student such as those in Gatto’s city classroom, work on projects for a real audience with a real purpose (Larson and

Marsh, 2005). It is important to recognize that students who are nonverbal are still able to partake in events similar to those completed in Mrs. Gatto's classroom. By enabling the students to participate in these events, they are not only able to learn literacy skills, but become part of their community.

Teachers need to recognize where a student is coming from and find a way to adjust his or her teaching approach to help students to battle cultural barriers. Gee (2001) bases much research into the idea of d/Discourse and how this affects a person's acquisition of learning. Each person develops a primary discourse, or "identity kit". Non mainstream children develop discourses that may put them at a disadvantage because it conflicts with the primary discourse and affects learning. Students with disabilities, and more specifically students who are nonverbal, have very different identity kits and discourse than their verbal peers in the classroom (Gee, 2001).

Children at a young age start developing the ability to access multiple social, cultural and literate worlds as resources for thinking and development (Moll and Gonzalez, 2001). The role of a teacher is to enable, guide and involve students as thoughtful learners in socially and academically meaningful activities. The collaboration of teachers to compile research into students' households has proven to give true insight into their students' social and cultural backgrounds. Households have extensive funds of knowledge and skills where members of the family are involved in informal economic activities to help family. Teachers can learn about the student's family knowledge and build on it. The social relationship between teachers and students is vital to the success of the classroom. Children should feel comfortable to pose their own questions, collaboratively plan and implement research to explore their questions and to collect and analyze and interpret any data collected (Moll and Gonzalez, 2001). Larson and

Marsh (2005) and Moll and Gonzalez (2001) would all emphasize the importance of the teacher as a guide for the authentic literacy learning of their students. Teachers are facilitators of learning.

Literacy today has evolved from what it looked like even forty years ago. Larson and Marsh (2005) would agree with Jenkins (2006) that new technology allows new generations of students to interact with literacy in new ways. Learners today use literacy for a variety of purposes in a variety of contexts, in and out of school, in what is called New Literacy Studies (Larson and Marsh, 2005). In a world consumed by new technology, the concept of what it means to be literate is redesigned. Children are competent in a range of techno-literacy practices. It is the job of the teacher to help incorporate this new literacy into school to help extend children's competencies and understanding. Texts today have become multimodal and incorporate both digital and non-digital media (Larson and Marsh, 2005). New literacy texts such as graphic novels are a great way for teachers to incorporate new technology into the classroom in a way that will interest learners (Yang, 2008). Comics can be a powerful educational tool because they are visual and help bridge the gap between image and text (Yang, 2008). It is the role of the teacher to utilize all the resources he or she needs to engage the students in literacy learning.

Children at a young age start developing the ability to access multiple social, cultural and literate worlds as resources for thinking and development (Moll and Gonzalez, 2001). The role of a teacher is to enable, guide and involve all students as thoughtful learners in socially and academically meaningful activities, regardless of their varying abilities. The social relationship between teachers and students is important to the success of the classroom. Larson and Marsh (2005) and Moll and Gonzalez (2001) all emphasize the importance of the teacher as a guide for the authentic literacy learning of his/her students. Teachers are the facilitators of learning and

they need to find meaningful ways to engage students in literacy acquisition regardless of the abilities of the students. If the definition of literacy is broadened, it opens up opportunities for individuals to participate in a literate society. For example, we can think back to the time of the Civil War and how it was not until we began to recognize blacks as individuals of society in which they became active participants in our country. It is time for us to recognize that although those with disabilities are “different”, they still have much to offer. For example, Stephen Hawking is a man with neuro-muscular dystrophy which has left him almost completely paralyzed, however this same man is also a world-renowned scientist whose work in the past 40 years has helped earn him the Presidential Medal of Freedom. There are many other amazing individuals out there like Mr. Hawking and the key is to helping recognize these individuals and be advocates for them, so that they are able to reach their full potential.

As educators, we need to recognize that popular culture/media can engage students to enhance learning and visual literacy is a form in which many students may find an intellectual outlet. Compton-Lilly’s (2009), the study on Kenny demonstrates that many students struggle in school. Even with a great teacher, the students may still struggle with literacy, but using visual literacies such as computers, TVs, videos and multimedia texts, may help students to become more engaged in learning. Therefore these students who use visual strategies will be more successful than those taught by teachers who use traditional practices that focus on one culture/type of learning.

People of different races often acquire different dialects and languages due to differences in how their mouths form words, often resulting in different dialects. Well what about those who are nonverbal and do not form any words? Lack of words does not inherently mean lack of intelligence or lack of language. For example, children with Autism, or any disability for that

matter, who also lack verbal language, can acquire sign language. This is a visual language where individuals can effectively communicate with one another. “While it may limit the ability to perform tasks related to speech perception, one of the important recent discoveries of linguistic science has been that even the most severe and absolute loss of this sensory channel does not, in and of itself, affect either the integrity of the language faculty or the ability to communicate (Francis, 2008, p.174)”.

The issue of various dialects, used in schools today, relates to how various learning styles are looked at and valued in school. Standardized testing demonstrates the insensitivity to learning styles. There is no such thing as two children learning in exactly the same way. This is made very evident when you place a student with any learning “disorder” in the viewing frame with a “typically-developed” student. Students with disabilities often have learning delays and/or physical developments that are different than the “norm” group. These differences put children with disabilities at a disadvantage from their peers in schools- since instruction is too often based on the needs of the “average” student (without disabilities).

Research Question:

Given literacy is acquired in different ways and a student’s ability to be literate by socially defined ways, this action research projects asks what strategies can a teacher utilize in the classroom to help nonverbal students acquire the appropriate skills needed to be literate in our world today. Even students who are not capable of producing oral speech, they are capable of communicating with peers and adults in their day to day life. New technologies are continuously developed to assist students in participating in literacy activities. The role of the teacher in the classroom is to be a facilitator of literacy learning in the classroom for all students, verbal and nonverbal.

Literature Review:

There are two key components to consider when looking at literacy barriers; access and opportunity barriers (Pufpaff, 2008). Access barriers refer to the student's impairments that prevent the student from using tools that will help him/her acquire literacy (Pufpaff, 2008). This can include a student's inability to see or the student's inability to speak. Opportunity barriers refer to the student's limited access to active participation in literacy events (Pufpaff, 2008). This is due to limited collaboration amongst education staff and individuals in the student's life, such as parents and family members (Pufpaff, 2008).

Although more information pertaining to the field of disabilities is available, there still is the misconception that an individual with a disability is not able to learn to acquire literacy to the same capacity as an individual without a disability. Society underestimates individuals who learn differently than the "average" person. Just because a student has a disability, it does not mean that is appropriate to have low expectations of the student and limit the literacy instruction the student receives and we only focus on "functional life skills" (Mirenda, 2008). There is no denying that an individual who has access to the use of AAC devices or other forms of augmentative speech, increase participation of the individual not only in their family life, but their participation as a literacy individual in society (Granlund, Bjorck-Akesson, Wilder, & Ylven, 2008).

Speech Impairments:

Individuals with speech impairments often encounter a variety of challenges; these challenges include problems with articulation, internal speech sound system, letter knowledge, phonological processing, linguistic ability, working memory, and sometimes even general cognitive ability (Ferreira, Ronnberg, Gustafson, & Wengelin, 2007). Individuals with typical

speech are able to make speech sound connections to letter symbols; they are able to connect oral language with written language (Ferreira, Ronnberg, Gustafson, Wengelin, 2007).

There are two types of speech impairments: phonetic (physical) and phonological (cognitive). Individuals with phonetic speech impairments are capable of making speech, but with no distinct words or blurry speech sounds. An example of this is an individual with Dysarthria, where there are physical issues that affect speech production (Ferreira, Ronnberg, Gustafson, Wengelin, 2007). Dysarthric speech has the ability to give self-generated auditory feedback to the speaker, where Anarthric speech does not give reliable auditory feedback.

Individuals with phonological speech impairments (Anarthric speech) lack auditory discrimination for speech sounds and the speech is distorted. The phonological speech impairments are caused by cognitive disabilities (Ferreira, Ronnberg, Gustafson, Wengelin, 2007). This can strongly influence to what extent the individual can develop literacy based on their specific speech impairment (Ferreira, Ronnberg, Gustafson, Wengelin, 2007).

When students with disabilities are not able to learn how to verbally communicate, due to neurological or physical impairments, then sometimes a different approach needs to be taken. Mirenda (2008) would refer to a different approach to teaching this unique population as a “back door” approach. Sometimes addressing a problem head-on and directly will not get the job done. Although Mirenda’s (2008) research focuses on students with Autism, it can be apply to any student who is not able to produce verbal speech.

Assessing the Child

Perhaps one of the first steps to helping be an advocate for the student is to find ways to assess what the student really knows. Often students with disabilities are difficult to test using standardized testing materials and this leads to IQ scores that are inadequate representations of

the student's intelligence and academic capabilities (Mirenda, 2008). It is important to use assessment tools such as the Leiter that do not require the student to use speech (Mirenda, 2008). As an assessor, it is important that a tool is actually assessing the area you are looking to find out more information about and that the test score is not affected by a student's inability to do something else in a different area. For example it is unfair to test a student who is nonverbal, in the area of vocabulary, using an assessment that is designed for a student who is verbal. The assessment should be modified to accommodate the student's abilities, so that their disability does not skew the results of the assessment.

The teacher's role should be an advocate and director of student learning. In order to have an intervention be effective, it is important that three ideas are kept in mind: effective instructional techniques are used (reinforcers, scaffolding etc); the intervention is taught in such a way that the methods can be sustained over a long period of time; and finally that the team involved in the interventions are collaboratively working as a team for the common goal of finding ways for the individual to communicate effectively in society (Granlund, Bjorck-Akesson, Wilder, & Ylven, 2008).

Teaching the Child

One issue today in our schools is that gifted students are underserved and under stimulated in our schools (Willard-Holt, 1998). This issue is exacerbated when you encounter a student who is gifted and has a disability, also known as twice-exceptional. Willard-Holt (1998) took a closer look at gifted students with disabilities. Students who are twice exceptional are easily frustrated because they are cognitively on grade level with their peers, but their disabilities sometimes prevent them from sharing with the world what they know and what they have to say (Willard-Holt, 1998).

Parents and family members should always be given opportunities to be taught and given feedback on the intervention program to ensure the strategies and AAC inventions are used effectively outside the classroom (Granlund, M., Bjorck-Akesson, E., Wilder, J., & Ylven, R., 2008). Also, all individuals involved in the interactions with a student using AAC devices, should be properly trained in such a way that they are able to use the assistive technology and deal with the technical upkeep and maintenance of the device (Granlund, Bjorck-Akesson, Wilder, J& Ylven, R.,2008).

The important thing to remember when teaching a student who has been labeled with having a disability, is that the student may have great learning weaknesses in one area, but they may have great learning strengths in another area (Winebrenner, 2003). Teachers need to develop effective strategies to help all their students learn (Winebrenner, 2003). Sometimes this means modifying the ways a student is able to demonstrate his/her knowledge (Willard-Holt, 1998). It is important to set realistic short term goals that help the students to be motivated to learn, without being overwhelmed (Winebrenner, 2003). It is the job of the teacher to find ways to teach the same concept in a variety of ways and to be cognizant of the fact that misbehavior often masks the student's true abilities (Winebrenner, 2003).

Those with learning disabilities often learn best through visual/tactile/kinesthetic formats (Winebrenner, 2003). One strategy that has demonstrated some success with helping our twice-exceptional students is Brain Gym exercises. These activities helped a student who stutters focus on what he/she is saying, rather than on the fear of stuttering while speaking (Winebrenner, 2003). Another useful strategy is for the teacher to focus on major concepts in a unit first and then to focus on the finer details second. This allows the students to first get an idea of the "big picture". Always ensure that previous knowledge is built on when teaching new content, to help

the students to draw connections and more effectively make meaning of what it is they are learning (Winebrenner, 2003).

The expectations need to be raised for students who are gifted (Willard-Holt, 2003). All students should be given the opportunity to engage in challenging activities. After a teacher has determined what a student knows, it is important to then plan ways to differentiate instruction so that the student can reach their full potential (Willard-Holt, 2003). Students should be placed in flexible groupings that are based on their strengths, needs and/or interests (Willard-Holt, 2003). Another thing that is important is to provide students with an academically stimulating environment, where all students in the class are learning the same content, but the students can choose culminating activities to stimulate their intelligence (Willard-Holt, 2003). In addition, teachers need to accelerate the teaching of content for the students who learn material in less time than their peers to help prevent restlessness in the classroom and help increase engagement (Winebrenner, 2003). If a student is not learning, it is vital that we look at the real reason why the student is not being successful. Do not immediately assume the student is not learning due solely to the fault of him/her alone. Assess the literacy instruction in which the student is receiving; what is being taught and how all need to be considered when we are looking at the literacy success of a student (Mirenda, 2008).

Facilitated communication is highly controversial. Throughout history, teachers have used this technique to help students who have physical disabilities. The only problem with this technique is with facilitated communication it is not easy to determine how much of the end product, i.e. typed response on the computer, is created by the student and how much is created by the facilitator (Mirenda, 2008). The role of the facilitator is to support the student's physical needs, but allow the student to complete the task. This technique is often used at my job. It is

always important when I work with my students that this physical assistance is faded as it is not needed by the student and it is important that the physical support is hand over hand, where the student's hand is actually on the material and the staff's hand is used as a guide.

Supporting the Child (Modifications)

Technology should be utilized whenever possible to help students be as successful as possible in and out of the classroom (Winebrenner, 2003). Technology and visual cues are simple adaptations which may not only help students such as those who are nonverbal, but also the students who always sit in the rear of the classroom, unengaged in the lesson currently being taught. Just because a student may not have the skills to speak verbally, it does not mean that the student is unable to acquire literacy (Wilkins & Ratajczak, 2009).

Augmentative and alternative communication (AAC) devices and techniques are tools that can be used by individuals with limited expressive speech (Johnson, Hough, King, Vos, & Jeffs, T, 2008). A few examples of a variety of low and high-tech AAC devices are Picture Exchange Communication Systems (PECS), speech-generated devices (a big macs or a DynaVox) and perhaps even simple sign language. It is imperative to recognize that a person's abilities and disabilities will need to be considered to determine what type of AAC device will affectively help the individual acquire literacy.

There are a variety of different forms of AAC that have demonstrated that students with disabilities such as aphasia are able to acquire a variety of literacy skills (Johnson, Hough, King, Vos, & Jeffs, 2008). Some examples of effective AAC systems are Computerized Visual Communication (C-VIC), Portable Communication Assistant for People with Dysphasia (PCAD), and Gus Multimedia software (Johnson, Hough, King, Vos, & Jeffs, 2008). These AAC systems demonstrate effectiveness in individuals having the capability to use the computer to

produce phrases and short sentences (Johnson, Hough, King, Vos, & Jeffs, 2008).

There is important information that needs to be considered before specific augmentative and alternative communication devices (AAC) are selected for a student to use to communicate (Granlund, Bjorck-Akesson, Wilder, & Ylven, 2008). First of all a team consisting of education professionals and the student's parents need to meet to discuss the desired outcomes of the child using such a device (Granlund, Bjorck-Akesson, Wilder, & Ylven, 2008). For example, perhaps the goal in the use of the AAC device is for the student to improve functional communication and enhance participation in social interactions (Granlund, Bjorck-Akesson, Wilder, & Ylven, 2008). The family's routines and life style need to be considered when deciding what device will be most effective. It is important to recognize and accommodate for the student's physical abilities (Granlund, Bjorck-Akesson, Wilder, & Ylven, 2008). Students should be able to use their AAC device with as little assistance as possible.

Many students with disabilities typically have strength in visual skills (Craig & Telfer, 2005). Since spoken language is auditory and children with disabilities are visual learners, they often have a difficult time understanding and producing oral language (Wilkins & Ratajczak, 2009). Research demonstrates that teachers can use a student's strength in visual learning, to help the student acquire literacy. It is a misconception that students who are nonverbal are not able to acquire literacy due to cognitive impairments (Mirenda, 2003). Nonverbal learners, specifically Autistic learners, demonstrate word and sentence recognition and comprehension skills through the use of images (Broun, 2004). Students with Autism may have the strength that allows them to decode through their visual-spatial skills, application of phonological rules and detection of patterns in words to excel in phonics instructions (Mirenda, 2003).

AAC is a visual language system that can allow students, who are nonverbal, to both

communicate with others and to understand language (Wilkins & Ratajczak, 2009). Teachers can incorporate visual images and graphics with print on cards to help students who are visual learners (Olcott & Kluth, 2009). These cue cards can include, but are not limited to, schedules, task lists, and cueing tools (Wilkins & Ratajczak, 2009). Picture schedules during group activities, can promote independence in students, without building an over-reliance on verbal prompting from the educational staff in the classroom (Diehl et al, 2005). There should be a focus on selecting AAC interventions that allow an individual to most actively and effectively participate in literacy experiences across all settings Granlund, M., Bjorck-Akesson, E., Wilder, J., & Ylven, R. (2008).

Research has also demonstrated the benefit of using visual cue cards to help students to anticipate transitions between activities (Craig & Telfer, 2005). These cards may be used to help students to transition between activities throughout their day or they maybe be used in visual priming. Priming is a technique used to pre-teach concepts to children with disabilities (Craig & Telfer, 2005). This requires collaboration between the student's educational staff and the family in order to be effective (Craig & Telfer, 2005). According to Brown, even nonverbal students are able to demonstrate their word/sentence recognition and comprehension through the use of images. This enables all students to be evaluated on ability verses lack of ability. It enables students to participate in meaningful and comprehensive ways (Broun, 2004).

It is important to incorporate images with text whenever it is possible in order to help support comprehension for students who are nonverbal (Olcott & Kluth, 2009). Pairing verbal words while pointing to the written word, can enhance a student's ability to learn language (Wilkins & Ratajczak, 2009). For example, research shows that increased comprehension occurs when students are taught how to generate questions while they read (Whalon et al, 2009).

Teachers can initially pair a visual cue with a written script and then eventually the goal is to fade assistance as the student can independently generate questions to comprehend material as they read a text (Whalon et al, 2009). Graphic organizers such as Venn diagrams can allow students to visually see how topics/objects are similar and/or different from one another (Diehl et al, 2005).

Children with and without disabilities may act out when they are unable to effectively express themselves. It is important that individual's develop the ability to use language effectively to interact socially in their environment. Augmentative and alternative communication devices are a way in which individuals can use technology with their visual strengths to acquire literacy skills (Wilkins & Ratajczak, 2009).

Times are changing and so are language systems and how society views communication. Visual supports and technological voice output systems are being used in and out of the classroom. Teachers can use this strength to support literacy acquisition (Craig & Telfer, 2005). Augmentative and alternative communications (AAC) are tools that enhance, expand, or help individuals develop communication skills. It is important to keep in mind that being nonverbal or having limited verbal speech does not mean low cognitive functioning. The multimodal nature of some of the high-tech AAC devices involves highly complex thought processes (Wilkins & Ratajczak, 2009). These technological devices such as communication boards, speech generating devices, keyboards, email and instant messaging help students with limited speech communicate with others.

Communication devices are a tool that students can utilize to increase their expressive language skills. The way in which these devices work is they are programmed with frequently used messages and when the student presses the device, the recording will play. Phrases such as

“I am finished.”, “I need help.”, or “I need a break.” are used throughout the day for the student to more effectively communicate his or her needs and wants (Wilkins & Ratajczak, 2009).

Utilizing AAC devices takes practice and patients and the teacher should continue to encourage students to communicate using any necessary AAC or other support necessary to acquire literacy (Wilkins & Ratajczak, 2009). The use of AAC devices in the classroom can also enable typically developing children to independently interact with children with Autism, which serves to not only foster these important positive peer interactions and it also enables the students using the AAC devices to develop functional communication skills (Wilkins & Ratajczak, 2009). A teacher must always be sure to always assume his or her students are intelligent and capable of acquiring some level of literacy, otherwise the student is doomed to fail.

With all this said, it is important to recognize the importance of ensuring that students are able to utilize their AAC devices at home, as well as in schools. To effectively increase the quality of life of children with disabilities is to give these children resources to be able to communicate not only in school, but at home with their friends and family members (Granlund, Bjorck-Akesson, Wilder, & Ylven, 2008). We want to find AAC devices that will support long-term language development (Mirenda, 2008).

One of the major issues when it comes to helping students with speech impairments is there is a deficit of elaborated AAC systems that produce language. Too many of the AAC systems are not capable of simulating the child in literacy the same way as oral language can (Ferreira, Ronnberg, Gustafson, Wengelin, 2007). Research demonstrates that children with motor/speech impairments need instruction to increase complex, high level, top-down skills such as general language ability and auditory discrimination (Ferreira, Ronnberg, Gustafson, Wengelin, 2007).

Conclusion

In order to help this unique population of students, educators need to learn to push the boundaries and sometimes look for unconventional ways to allow our students to grow (Mirenda, 2008). A variety of assessments are needed to help determine systematic and thorough instructional strategies that are vital helping an individual acquire literacy. A year ago, one of my student's was trialing a DynaVox. Before her trial, staff was using photo cues to help the little girl anticipate what was happening next. When the girl was given a DynaVox to trail, the speech therapist programmed PEC symbols on her device. It took the student about three weeks for frustration to learn just what the new symbols meant, before she was able to begin to demonstrate success with the use of the DynaVox. If a student is not given adequate instruction and modeling on how to use a tool, we cannot expect them to just "pick it up". For that student, it was an extremely unfair trial and because of that, the speech therapist did not have enough data at the time to justify the appropriateness of the device for her individual use. Now a year later, this same student has gone through a second trial in which she demonstrated great success in the use of the AAC device to communicate her needs. This issue also relates to assessments, if a student is assessed in a format that is unfamiliar to him/her it is difficult to expect the student to be able to demonstrate their knowledge. Teachers need to use a variety of assessments to effectively assess their students and therefore plan literacy instruction.

*Methods:**Context*

The research will take place at one location: a special education school for children birth-21 years old. The school is a private, nonprofit agency that provides services to children with disabilities. The agency provides individualized services for children with developmental delays

and especially for those with complex or multiple disabilities. There are roughly 550 children who come to this agency from ten different countries and 50 school districts within 50 miles of the agency. The children have been referred to the agency because the student's home county health department or school district is unable to meet the needs of the child by public or private schools.

Participant(s)

The one student involved in the study is nonverbal and consent was given by the parent for her to participate in the study. It will be explained to the girl what will take place before the study begins. No compensation was given to the student or the parent for participation in the study. Trinity (a pseudonym as are all the names given to the participants) is a six-year old, nonverbal girl who is supposed to be in the first grade. Trinity was diagnosed with Chiari Malformation January 2009. Trinity is from Rochester, NY where she lives with her parents. Trinity is a very curious little girl who shows great interest in learning academics in the classroom. Trinity is placed in a 7:1:4 classroom with six other students ranging in ages six-nine years old, with similar academic and behavior needs as her. The student was selected by the researcher's observations and assessments of Trinity in the classroom. Much like Jan and Brad, who were observed by Willard-Holt (1998), this little girl who is in my classroom appears to understand cause and effect without the physical experience of manipulating the environment. Trinity has also demonstrated great ability in spelling words that she has seen in print, but has not been directly taught through teacher/parental instruction. Trinity demonstrates attributes of being twice-exceptional; the key is to determining assessments that will show what Trinity knows in the area of literacy (expressive/receptive language).

Aside from intelligence, there are personality traits that are common with gifted students.

For example, students who are gifted often demonstrate a “quickness, curiosity, insight, advanced sense of humor, and maturity” (Willard-Holt, 1998). Before Trinity had a posted visual schedule in her classroom, an one activity was ended in the classroom and many students were verbally cued to check their schedules, this little girl would get up and change her peer’s schedule to see what was coming next. It is important to recognize that at this time, this little girl’s staff member would use a photo cue ring to show Trinity what activity was coming next and this girl had never been directly taught how to use the posted visual schedule. Trinity had just observed her peers checking their schedules and she mimicked their behavior. This same student now has her own mounted wall schedule and she will change her schedule when she feels an activity should be over and she will put pictures of activities in her “finished” box when she does not want to complete the activity. Trinity has a great sense of humor and demonstrates many aspects of giftedness. She is always trying to find out how things work; she will sit in front of a sliding glass automatic door and watch it close and then she will get up to make the door open again, just to then sit back down to watch the door close again. The facial expressions Trinity expresses during this exploration, demonstrates her great curiosity and desire to learn about things in her environment.

Researcher Stance:

In this special education classroom I am an active researcher. I am currently the special education teacher in charge of the 7:1:4 classroom and I interact with Trinity on a day to day basis. I will observe Trinity during academic activities, in which I do not interfere with the independence of Trinity being able to complete a task.

Individuals who are unable to acquire literacy skills are also unable to be active participants not only in the school setting, but also society (Pufpaff, 2008). Too often children with disabilities are seen as a disruption within the classroom and are pushed aside. Pufpaff

(2008), discusses how a student, William, lacked functional speech and when he did things such as reaching up to a peer's newly cut hair, his teacher was unable to recognize that William was trying to communicate his thoughts in the only way he knew how. I work with students every day who have very limited, if none at all, functional speech. Trinity often expresses her needs/feelings through disruptive behaviors. These behaviors can be as simple as being noncompliant while on a walk in the hallway, or clearing the table because she does not want to complete a task or she is not feeling well. It is easy for teachers to want to just find a way to stop the behaviors by placing a student in time out, or moving him/her away from his/her peers, instead of finding better ways for the student to communicate what it is he/she is thinking.

Method:

Trinity was assessed with a variety of formal and informal assessment strategies in attempt to determine her expressive and receptive language development. I also completed interviews with Trinity's mother and the educational staff that works with Trinity at school, on a daily basis. On multiple occasions I brought Trinity to a side room where we engaged in a variety of literacy tasks where Trinity had to identify how to spell various words and also identify pictures when given a verbal prompt. I also used field notes I completed on the progress/changes Trinity has undergone in the past year and a half.

I will send home a survey with Trinity for her parents to fill out about what they observe her doing at home that is literacy based (focusing on Trinity's receptive and expressive language). I also met with Trinity's occupational therapist, speech therapist and physical therapist to interview them about what tasks they see Trinity is capable of. In addition to this I observed Trinity working with teacher aides in the classroom and I implemented formal and informal literacy assessments with Trinity in an attempt to determine what she is capable of. Most of the time Trinity and I worked 1-1, however once a day for about 20 minutes Trinity often completed literacy tasks in a small group of

seven students.

Based on Guba's criteria for validity of qualitative research (as cited in Mills, 2007) my research can be considered valid. In order for research to be creditable, the research has to accept patterns that are not easily explained and account for complexities that may occur while gathering research (Mills, 2007, p. 87). To ensure creditability, I worked closely with Trinity's current aides and therapists who work with Trinity on a daily basis. My knowledge as Trinity's teacher will allow me to work with my colleagues in regards to my research, which will take place over an extended period of time. In order for the research to be valid, it has to be transferable.

Data Collection:

A variety of tools were used to collect data. I completed interviews/surveys with Trinity's mother, physical therapist, occupational therapist and speech therapist. As Trinity's teacher I took field notes while I observed Trinity interact with staff and peers in her classroom. In addition I attempted to use a formal assessment, the Peabody Nonverbal Picture Vocabulary Assessment (Form A) to determine Trinity's expressive and receptive literacy skills. All of these tools helped to inform my research on effective assessment strategies that should be used with students who are twice exceptional.

Findings and Discussion

Literacy Opportunities:

Trinity is exposed to a variety of literacy activities in and outside of the school setting. Trinity's mother exposed Trinity to as much literacy as possible, as she realizes Trinity's desire to learn. At home Trinity will look at books independently; her mother will read to her, she will look at letter and word/picture flash cards. At school and at home, one of Trinity's favorite activities is to



have an adult write on a magna doodle, a magnetic drawing toy. Trinity is very systematic with this activity, she expects the adult to write the capital letter, lower case letter, spell a word that begins with that letter and draw a corresponding picture. In addition, Trinity demonstrates preference that this task is completed by going through the alphabet one letter at a time, starting with the letter “a” and ending with the letter “b”. If an adult does not write a word or draw a picture in which Trinity likes, she will independently erase the magna doodle screen and/or she will take the magna doodle and give it to a more preferred adult to continue the activity with.

While at home, Trinity’s mother allows her to watch primarily educational TV shows and movies such as Word World, where animal characters are made up of letters and spell words throughout the show, and the Alphabet Jungle Game, where Elmo and other characters make words with each letter of the alphabet and name an animal that begins with each letter of the alphabet. During car rides, Trinity’s mother will play ABC and other educational CD’s in their vehicle.

In addition to all of this, Trinity’s mother works with Trinity to compose words. Trinity will write letters and words hand over hand in letter books and on white boards. Both at school (in the classroom and with her occupational therapist), Trinity will compose words out of magnetic letters.

Although for all intents and purposes, Trinity is considered nonverbal, this does not have any reflection on her intelligence. Those who interact with Trinity on a regular basis-teacher, therapists, family, speak to Trinity like they would to an six-year old little girl. Her parents try to explain everything they are doing while with Trinity and let her know what is going to happen next and where they might be going. At school and at home, Trinity is asked questions and is expected to respond (though vocalization, reaction-following directions, communication book). Trinity utilizes a Go Talk 9 at home with her parents and recently she began using a Pragmatic Organization Dynamic



Display (PODD) communication book at school and at home where she selects images that represent feelings, nouns and other words.

The Go Talk 9 is a battery powered augmentative/alternative communication device in which a person will record messages that an individual who cannot communicate through verbal words. An individual such as Trinity is then able to press one of the pictures to play a message such as “I want milk please”. You can make up and program up to five overlays at once for this device at once.



Motivators:

Trinity is very self motivated by academics. Trinity has a strong desire to learn and to try to “figure things out”. For example, at school, Trinity was experiencing difficulty transitioning in the hallways, because she is easily distracted by sliding glass doors near the reception area. Trinity would walk up to the door, causing the doors to open, and then she would take a step back and watch the door close. Then she would run back up to the door to make it open again and then she would take a step back to watch it close. This would go on up to 45 minutes, where Trinity would show “confusion” on her face as she knew that when she moved close to the door it would open and when she moved back it would close, however she was not sure how this worked. Her curiosity is what motivates her to learn more. Trinity is also motivated by songs, hands on activities (such as cooking groups), and experimenting and studying an object by herself. Trinity is a determined little girl, she will keep attempting to get her point across until her communication partner understands what it is she is attempting to express.

Receptive Language:

At school and at home Trinity demonstrates her ability to understand verbal instructions. For example, Trinity will pick up an object when asked. At home, Trinity will listen to songs that involve movements and she will follow the directions in the song such as “point to your head”, or

counting such as “five little ducks”. At school, the therapists will ask Trinity what it is that she wants to do that day, and Trinity will go over to a desired area or object. Even when not given a choice, Trinity will lead an adult to a desired object that is out of reach to get help. If that adult is unwilling or unable to help her at that time, Trinity will attempt to get another adult to help her achieve satisfaction of her wants/needs.

At school, Trinity’s teacher has created a walking transition activity for Trinity that incorporates literacy. Trinity is asked to go around the hallway and collect a variety of words that correspond to the book “Goodnight Moon”. When Trinity comes back to the classroom she is asked to order a group of five words, at a time, in the corresponding word order to the book “Goodnight Moon”. This demonstrates Trinity’s ability to recall words, comprehend and “retell” the story.

Expressive Language:

Despite Trinity’s inability to speak clear words, she has a variety of expressive skills that she uses to express her thoughts, needs and wants. In and out of school, Trinity will engage in some simple spontaneous sign such as more, please for a desired object or activity. At home, Trinity will sign “mother” and “father” while watching the show “Meet my Family”. This demonstrates Trinity’s understanding and connections to things around her. When excited or happy, Trinity will smile, squeal or vocalize. Also in a variety of settings, when Trinity gets what she wants, she will spin around and squeal loudly to show demonstrate her excitement. Trinity’s mother even noted that Trinity consistently will get excited while she is riding in the car on a familiar route that leads to a place she enjoys such as Chuck-E-Cheese or her grandmother’s house. Now when Trinity is going past a familiar hospital, she will whine, as she clearly recalls past experiences and demonstrates a good memory. Also, when Trinity is upset or she does not want to complete a task that is asked of her, she will flop on the floor and refuse to get up.

Adults around Trinity all attempt to acknowledge what Trinity spells. For example, during one occupational therapy time, Trinity used magnetic words to spell out “Elmo’s World” and then

the therapist played the song. Currently Trinity does not write independently. At school and at home Trinity is working on pre-writing strokes such as drawing a horizontal line, vertical line and circle. While Trinity is using a magna doodle she will trace around shapes, letters and numbers with the pen or her finger. Trinity and her mother will trace the alphabet hand over hand in letter books together.

Trinity demonstrates her ability to encode, through her use of magnetic letters to spell words. Trinity is also able to link two picture symbols together to create simple phrases such as “I want meat”, using a PODD communication book. At one point during the course of this school year, Trinity was utilizing a two voice output device to answer “yes/no” questions. When asked a question such as “do you want milk”, Trinity would utilize her head to activate the corresponding switch to answer the question.

Limitations of Assessments:

Through the course of my data collection with Trinity, I began to realize that many assessments had limitations; no single assessment was capable of determining Trinity’s true expressive and receptive literacy skills. Over the course of many days, I worked one-to-one with Trinity to try to determine more specifically her expressive and receptive skills. I quickly learned that Trinity not only could identify each of the twenty-six letters of the alphabet, but she could put all of the letters in ABC order independently. Trinity is able to spell a variety of nouns that are at the kindergarten/first grade level. During another session, Trinity was shown pictures of 26 different objects that corresponded to each letter of the alphabet and she was provided with a group of at least ten magnetic letters at a time to use to spell the words. The results are listed in the table below.

Table #1:

Picture	Spelling	Picture	Spelling	Picture	Spelling	Picture	Spelling
apple	apple	ball	ball	car	car	drum	drum
egg	egg	frog	frog	grapes	grapes	hat	hat
ice cream	ice cream	jar	jar	kettle	kettle	lemon	lemon
moon	moon	nest	nest	onion	oinon	pumpkin	puk
quilt	qutil	rainbow	raw	seal	seal	teapot	tep
umbrella	umbrella	vase	vase	whale	waeh	xray	xray
yarn	yarn	zero	ze				

This demonstrates Trinity’s ability to identify and spell a variety of words that follow a variety of word patterns. Out of 26 words Trinity correctly identified and spelled 18 words. Trinity recognizes beginning, middle and ending sounds within words. For example, with the word “teapot”, Trinity identified the “t”, “e” in the first syllable and “p” in the beginning of the second syllable. Trinity’s spelling of “kettle”- “kettle”, indicates a generalization of the double consonant rule. Also, when Trinity spelled “quilt”- “qutil”, she identified all the correct individual letters in the word, however she just a transposition of two letters. Trinity demonstrates a clear understanding of sound/letter correspondence as well as a memory of a variety of different words. Trinity is transitioning into the conventional stage of spelling and this is a high skill for a child who is only 6 years, 6 months old.

However, when I attempted to determine how Trinity was performing in comparison to children her age and to do so I utilized the Peabody Picture Vocabulary Test-4 (form A) (PPVT-4). I began with set 1, ages 2.6-3.11, even though Trinity is 6.5 years old. Trinity was only able to get 3 of the 12 items correct; therefore I stopped the testing there. This test is set up in such a way that

four images are printed on one page and the individual is asked to point to a specific photo. It is important to note that this type of computer generated photo is different than the Boardmaker picture symbols that are used with Trinity on a regular basis with Trinity. The reason it is important to recognize the difference in the images, is that these images are representations/ “symbols” of real objects. If you use one symbol to represent an image on a regular basis with a student, but then assess the student using a different symbol of the same image, there is a higher chance that the student will get the answer incorrect; they do not understand what this image is representing. It is unfair to test a student with images that are represented different and in a format that is unfamiliar to a student. That is why so many school districts go through a period of test preparation for state tests, because they do not want a student who understands the material to perform poorly because of the format of the test. This is unfair to the student and the skewed results could negatively affect a teacher’s plan for instruction for that student.

I wondered if her score was affected by the fact that motor planning can at times inhibit Trinity’s ability to accurately select through pointing. To compensate, I copied a couple pages of the test and cut the images apart separately and then asked Trinity to select a specific image. This is a skill Trinity is capable of. In school, Trinity will select an image that is velcroed to a board. Using this method there appears to be less room for error due to motor planning issues. I attempted to retest Trinity on three additional occasions with similar results as the original testing. I noticed while testing, Trinity would be very focused on the pictures and she would reach out to take a picture and hold on to it, as if she was examining it. As mentioned before, Trinity is a very curious and it is difficult to determine if Trinity understood what was being asked of her. I would like to note during the testing Trinity would scrunch up her eyebrows and she would have good eye contact with the test materials. There was no significant difference in score when I retested Trinity using the adapted format. I feel as though the novelty of this assessment was a distraction to her and she would need to be retested multiple times over a period of time to gain valuable assessment information from this

test.

At school, formal assessments are not often used with Trinity. It is much like how students will do poorly on the SATs if they have never completed practice tests. A student's background knowledge on the format of the test and the test material is vital in determining how the student will perform on the test. It is extremely difficult to determine what Trinity truly knows and understands due to the limitations of assessment tools based on her abilities. There are limited selections of literacy tests that can be used with students who are nonverbal. In addition to this, Trinity has limited strength in her arms that make it difficult to motor plan each movement. Trinity will look in the direction of desired objects and it is noticeable when she is more motivated during an activity- she is more effectively able to motor plan her arm movements to select a desired object. It would be unfair to determine who Trinity is and what she knows using tests such as the PPVT-4 (Form A), that requires her to use other skills (not part of the testing) that she has not yet fully developed.

Instructional Practices:

Trinity's therapists and teachers work closely to help her grow in the areas of receptive and expressive language development. The occupational therapist works on fine motor development to help Trinity strengthen her body so that she is able to better plan her fine motor movements to increase her ability to express herself. In therapy, the therapist works with Trinity on shoulder strengthening, as well as Trinity's intrinsic musculature. Since development is proximal (close to the midline of the body-trunk) to distal (i.e. appendages-fingers toes), incorporating shoulder and core strength encourages hand strength. During speech sessions, Trinity's speech therapist works with her on her ability to make choices and to express her wants, needs and/or feelings.

Trinity recently finished a trial period with an augmentative device called a DynaVox. DynaVox is a product that is part of the DynaVox series which operates in conjunction with Mayer-Johnson products. This device assists individuals who are unable to communicate reliably with their own voices due to cognitive, language and/or physical impairments. After Trinity's short, six week

trial period, her teachers and therapists felt that she was a good candidate for the device and would be able to effectively use the device to communicate with others. Trinity's speech therapist sent the paperwork off to the insurance company, the device was denied by the company as they felt it was not a "medical necessity" and they said at that time, they were not willing to cover the \$8000.00 cost of the device.

Throughout the day, Trinity's teacher incorporates a variety of individual and small group activities to help teach Trinity academic and social skills. Currently Trinity utilizes her PODD book to interact with those around her. She is able to select picture symbols of desired objects. The PODD supports the instrumental function of language. There are a limited number of devices available that support more complex functions (such as interactional, heuristic, imaginative, or representational). This is some of Trinity's source of frustration, because she is a child limited in the functions of language that she can use. Trinity's speech therapist and teacher are working closely with her on creating simple phrases and sentences and constantly working together to find new ways in which she can do this more efficiently and effectively. Many sensory activities that involve things such as gross motor, fine motor and sensory activities are incorporated into academic activities to help strengthen Trinity's body.

At home Trinity's mother has been working closely with her daughter on teaching her about speech production. During the past few months her mother has been attempting to show Trinity where sound comes from by pressing her stomach and showing Trinity how the vibrations are in your throat by putting Trinity's hand on her mother's throat as she speaks and then having Trinity touch her own throat while she is making sounds. Trinity's mother even bought an acrylic mirror for Trinity to be able to see herself more when she was in their living room. They both will look in the mirror together while they make lip movements. And once while Trinity was making a sound/singing, her mother lifted just beneath her bottom lip to cause her to make the "mmm" sound while her mother spoke the word "mommy". Since Trinity's speech impairment is physical, not

cognitive, there is a possibility that she will be able to acquire oral language, which will help her increase her ability to use expressive language.

Implications:

The first step to planning instruction is determining what it is your student(s) know and do not know. This task is more difficult when the student has physical disabilities that hinder their expressive language. There are limited formal assessments and pre-made materials that aid in the determination of a child's level of knowledge in the area of literacy. For example, the PPVT-4 requires an individual to point to answers in a booklet and should not be used with students with severe disabilities. Researchers say that the purpose of nonverbal testing is often to minimize the role of language, but not necessarily eliminate oral language altogether (Hammill et al, 1997). The responses for nonverbal tests are often expected to be given through gestures, manipulation of objects, drawings and pointing. However, if you have a student who has a physical impairment, in addition to a language impairment, then the results of this sort of assessment most probably will be skewed. It is important that when testing children that one disability or impairment is not affecting the results when testing the child in another area; for example, in this case, the student's physical impairment is affecting her ability to demonstrate her knowledge of language.

Perhaps the issue here is changing people's perception. Isn't it medically necessary to communicate with others? Isn't it only fair to provide each and every person with the proper tools to communication their wants and needs? How is it fair to deny a child the ability to tell someone that she need to use the bathroom, she needs a drink, or to tell her mother than she loves her? Of course there are more simplistic augmentive devices, but they limit Trinity's ability to grow to her full potential. It is not fair to continue to make her use two switches to only answer "yes/no" questions.

As a society, we put a lot of focus on oral language. Many believe that in order to be literate and individual must produce oral speech. However, this is not true. Children such as Trinity are able to overcome obstacles of their disabilities to acquire literacy skills similar to other children their own

age. Trinity has self taught with the aid of therapists, teachers and her parents began to acquire literacy skills. It was not until after March, 2009 that Trinity began to blossom in the classroom. In January 2009, Trinity had surgery on her spine to relieve fluid that was putting pressure on her brain that was causing headaches and increased her imbalance. After the surgery/recovery time passed, Trinity was better able to demonstrate what it is she knew, as she is unable to effectively orally communicate what it is that she knows. Throughout the course of the year, I, as Trinity's teacher, took note of Trinity's curiosity and her ability to instantly recognize changes within her environment. For example, periodically I would change the type/color of the student's name tags and I even would change seating. As soon as Trinity got to school the next day, she ran right over to her new spot in the classroom. It was then that I recognized that Trinity was unique. Through informal testing I determined that not only could Trinity identify her name out of a field of at least seven names, but she was able to spell her name when given a set of magnetic letters. People look at children like Trinity and assume because they are "nonverbal" and their physical disabilities mask their abilities, that they are not smart and not capable of higher literacy skills. Careful observation and assessment shows that this is not true.

Last year was Trinity's first year at the "school age" level at her school. Before that she had attended the preschool program. On Trinity's Individualize Education Program (IEP), her previous teacher created an academic goal where the expectation was for Trinity to take a work task from one bin, complete the work task and then place it in another bin. This goal was very basic, with very low cognitive expectations. Within a very short period Trinity was able to complete a variety of in set puzzles, color matching tasks etc.

Conclusion

The lesson here to learn is to never look at anything as "face value" have high expectations of each student and do whatever it takes to determine what they know and how far you can push them. If teachers do not provide the educational resources for a student to learn, it is impossible to expect

them to grow. Not all children are as self-motivated and determined as Trinity. With that said, just imagine how much Trinity can learn if given adequate educational resources and opportunities and in order to provide her with these materials, teachers first need the tools to assess the student's current levels of abilities and needs. And in order to provide these academic opportunities, teachers need adequate resources to access student's expressive and receptive language skills.

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