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The Inclusion of Students With Significant Disabilities and Their Access to the General Education

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THE INCLUSION OF STUDENTS WITH SIGNIFICANT DISABILITIES AND THEIR ACCESS TO THE GENERAL EDUCATION CURRICULUM

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Abstract

Students with significant disabilities are continually placed in restrictive settings with a focus on functional and life skills becoming more excluded from their peers in the general education setting. This limits their access to the general education curriculum, requirements of No Child Left Behind (NCLD, 2002), Individuals with Disabilities Education Act (IDEA, 2004), and Every Student Succeeds Act (ESSA, 2015). These mandates expect all students with disabilities to make progress on the grade-level content standards. They fail to explain to education professionals how they are to be implemented for students with significant disabilities. By defining the type of students who are classified as having a significant disability and understanding the general education curriculum setting, we can clarify what is expected and perceived by educators to apply these mandates. Teachers remark all students, including those with significant disabilities, should be taught in the general education classroom to receive access to the general education curriculum standards. These educators also share concerns of how access comes into daily practice and instruction. There are strategies, such as pre-teacher programs, Universal Design for Learning, collaboration, and modifications to the curriculum. The *Beyond Access Model, The Self-Determination Model,* and *Dynamic Learning Maps* as specific programs to provide structured models to assist educators in helping students work toward their grade level standards. All of these systems help general and special education teachers to work together to see access come to life for students with significant disabilities in their classrooms.

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CHAPTER I: INTRODUCTION

Educating Students with Disabilities

The directive that drives education for students in the general education classroom is derived from the state standards set-forth by state departments of education. These standards provide a scope and sequence on what students at a specific grade level are expected to be able to complete before entering the next grade. These standards are taught by general education teachers who have specific training in their pre-service programs to teach the specific content areas. Students with disabilities, typically, are not achieving at the level of their peers in the general education class. Students may struggle in one or more areas with math, reading, or writing skills, or they may need assistance to complete specific tasks, such as needing extended time or location to take a test. Students with more significant disabilities tend to have deficits in all areas of their lives, including the academic skills and lacking the pace required by their grade-level general education classroom. “Significant disabilities” is recognized by professionals as an umbrella term for students under many different disability categories such as autism, developmental disabilities, downs syndrome, and cerebral palsy. This population of students often have dual special education labels and have needs in communication, gross motor, and fine motor skills. These students need additional support for their basic activities of daily living. As they get further behind their peers completing the standards, students with significant disabilities are often placed in a special education classrooms for a majority of their school day and focus on other content areas outside of core academics. These classes may include vocational,

social, communication, community, and domestic skills. The academic skills these students work on, at any grade level, may include working towards learning the vocabulary to safety signs, writing their name and address, or doing math with money. These are important skills for students to learn, understand, and to generalize, but the student's school day starts to look less like their peers, moving them away from the social development and access to the general education curriculum content their same-aged peers complete.

Historical Context of Access

There have been consistent mandates from the United States Congress, specifically since 2002, to have all students making progress on the standards set-forth by their state. The No Child Left Behind Act (NCLB, 2002) required educators to consider how a student with a disability would access and participate in general education curriculum and statewide accountability systems. IDEA (2004) defines the general curriculum as the same curriculum for students with and without disabilities. Every Student Succeeds Act (ESSA, 2015) requires schools to ensure students with disabilities have access to and make progress in the general education curriculum. School Districts do their best to complete these mandates, though the intent is clear, the defining details leave much to the interpretation of the readers. What does access mean? Where does the general education curriculum need to be taught? Who can teach it? These questions all have been inferred by school districts and educators and applied in different ways. Most participants in a study specified the general education classroom was not the only location in a school where students access the general curriculum,

even if they felt it was the best and most rational location for the majority of students (Dymond, Renzaglia, Gilson, & Slagot, 2007). Educators use the terms inclusion, mainstreaming and integration as an interchangeable way to describe access (Litcak, Ritche, & Shore, 2011) and Idol (2006) defines an inclusive school as one where all students are educated in general education programs. IDEA (2004) considers that when thinking about a student's least restrictive environment, that student is to be removed from general education classroom settings only when the severity of their disability is such that even with modifications, their needs cannot be met in a regular education classroom (Kleinert et al., 2015). Every professional will have a different perspective on what constitutes student needs, even with modifications, are too much for a general education classroom. In a high school setting, a student who was unable to sit still for an extended amount of time, even with a paraprofessional prompting, would result in daily emails about behavior from some general education teachers. For other teachers, the behavior modifications worked for their classroom and didn't interrupt instruction. When I asked the later educators about his "behavior" the modifications that were proposed worked for them and didn't bother them during instruction. When thinking about access and inclusion Obiakor, Harris, Mutua, Rotatori, and Agozzine (2012) noted that it is important to make all students feel a part of the classroom. "Inclusive education means all students within a school regardless of their strengths or weaknesses, or disabilities in any area become part of the school community" (p. 477). Students come to school with all types of needs, and the big picture before any learning for a student with significant disabilities is able to take place, need to ensure that first

the students feel a part of the school community. To include students with significant disabilities in the general education classroom, modifications to content, materials, instruction will need to take place. When creating these mandates the United States Congress took into mind not all students with significant disabilities would be at the expected level for assessment tests each year. Congress allowed states to create an alternative assessment that 1% of the district's students are able to take, typically the students with significant disabilities. These tests assess the content within the appropriate grade-level standard but are presented in a visual, lower skill, and/or simpler context. Peterson (2016) found some teachers believed students participating in the alternate assessment for the state counted as their access to the general education curriculum. Teachers' perspectives can influence how a student will work into their classroom. Having a positive or negative viewpoint impacts the ability of the general and special education staff to collaborate, assist in modifying, and applying strategies successfully to have students with significant disabilities in their classroom.

Defining Students with Significant Disabilities and Access to Curriculum

Students with significant disabilities are characterized as students with moderate to severe intellectual or developmental disability and may have diagnoses such as downs syndrome, autism, or cerebral palsy. There is a need for a large level of support for academic skills as well as other daily living tasks. Students with significant disabilities will also have needs in fine and gross motor skills, and communication needs. Significant disabilities is a way to label a group of students who fall into the low-incidence area

affecting less than 2% of all students with disabilities (Kleinert et al., 2015, Kurth, et al., Block et al., 2007).

Schools are made up of two educational systems including general education and special education. General education is a location and placement of typical performing students of a similar age. There is a general education teacher with expertise on the scope, sequence, and instruction needs to meet the general education curriculum requirements for general education students. The special education path can be made up of a variety of methods to apply services to meet the needs of students who have an identified disability. The location of these services can vary in a school depending upon the needs of the student. Students can be placed in small group sessions, pulled out for one-to-one instruction, attend a special education version of a general education class, participate in an alternative functional curriculum, or placement in an alternative school for students who have needs that cannot be met in a general public school (Obiakor et al., 2012). The special education teacher typically has training to teach strategies, alternative curriculum, and apply accommodations and modifications to help students be successful in school.

Access is an interchangeable word that educators use. In the variety of studies, access was also referred to as mainstreamed, inclusion, and integration. These terms all mean the participation of students from special education in the general education classroom setting. Access, when defined by educators, has meant access to information, materials, and the classroom where instruction is delivered, access to learning, access to curriculum aligned to state standards (core curriculum, academics), access to all

experiences in the general education, or access to academics that include life skills (Dymond, Renzaglia, Gilson, & Slagot, 2007).

The curriculum is a set of state developed standards, with many states participating in the Common Core curriculum, that give the expectation on what students are to know in a specific course at the specific grade level. Curriculum access is generally understood as engagement and progress in the general education curriculum (Peterson, 2016).

Guiding Questions

When looking at students with significant disabilities and their access to the general education curriculum there are three areas this review will address. How do educators and researchers define the terms that show up in the federal mandates such as significant disabilities, access to the general curriculum, and alternate assessment? What are the perspectives of school administrators, general educators, and special educators in response to students with disabilities and their access to the general education curriculum? What are systems, strategies, and programs that can be used to assist teachers for including students with significant disabilities in the general education classroom?

There is also pressure for educators to agree with these federal mandates but some educators state they do not want to have the added stress and pressure to have these students with significant disabilities in their general education classroom. Through researching teacher perspectives, it is not always seen as the best for these student to participate 100% of their day in the general education classroom. Many teachers do, in

theory, believe the best way for a student to make progress in the general education curriculum is to attend the general education classroom. Through the research there are strategies that a single teacher or a school system could implement to promote the inclusion of all students with significant disabilities in their classrooms. Many of these strategies are simple, like collaborating as a team for a student and modifying expectations of the curriculum and classroom activities. A consistently noted problem is the time needed for educators to do this properly. By exploring recent literature related to accessing the curriculum, significant disabilities, perspectives of special and general education teachers, and the strategies, models and programs for assisting educators with implementing access to the general education for students with significant disabilities, this literature review can hopefully provide a guide of practices for educators to utilize to meet the federal requirements expected for all students to make progress in the general education curriculum.

CHAPTER II: LITERATURE REVIEW

Literature Search Procedures

To locate the literature for this thesis, searches of Educator's Reference Complete, Expanded Academic ASAP, Education Journals, ERIC, Academic Search Premier, and EBSCO MegaFILE were conducted for publications from 2006 to 2018. This list was narrowed by only reviewing published empirical studies from peer-reviewed journals focused on defining access to the general education curriculum, significant disabilities, and teacher perspectives on working with students who have significant disabilities in journals that addressed the guiding questions. The key words that were used in these searches included "access to the general education curriculum," "significant disabilities," "alternative placement," "process to inclusion," and "inclusion of students with significant disabilities." During research, significant disabilities was replaced with "intellectual disabilities", "cognitive disabilities", and "developmental disabilities". The structure of this chapter is to review the literature on the inclusion and access to the general education curriculum for students with significant disabilities in three sections in this order: Defining Significant Disabilities and Access to the Curriculum; Teacher Pre-preparation Programs and General Education Training, Responsibilities, and Perspectives of the General and Special Education Staff and Student Benefits due to Inclusion; and Processes, Methods, and Programs for Special Education Students to Access the General Education Curriculum in the School Setting.

Defining Significant Disabilities and Access to the Curriculum

The No Child Left Behind Act (NCLB; 2002) required educators to consider how a student with a disability would access and participate in general education curriculum and statewide accountability systems (Peterson, 2007, p. 19). IDEA (2004) defines the general curriculum as the same curriculum for students with and without disabilities. IDEA does not define access according to a physical location or type of teacher (Dymond, et al., 2007). IDEA further raised expectations with an emphasis on student outcomes, particularly for students with significant cognitive disabilities. Dymond, Renzaglia, Gilson, & Slagot (2007) mention, "these variables are often mentioned when discussion of access arise. The law stops short of identifying these parameters, thus leaving the decision up to each IEP team" (p. 12). IDEA required schools to institute policies and practices to promote involvement with and progress in the general education curriculum, including aids and services and special education services to students with disabilities to promote such outcomes (Lee, Wehmeyer, Soukup, & Palmer, 2010). Timberlake (2014) states in her article that terms from IDEA such as "opportunity," "high expectations," and "access," for example, were not defined by policymakers, an therefore could be difficult to define and agree on during implementation. With the lack of definition to key terms impacting student access Doyle and Ginareco (2013) stated it best, when people use the same terms while assigning different meanings to them, it can create barriers to effective communication and teamwork.

Defining Significant Disabilities

Kleinert et al. (2015) acknowledges significant disabilities under IDEA does not represent one single disability category. “Rather, students with the most significant cognitive disabilities typically include students with moderate and severe intellectual disability as well as many students receiving special education services under the IDEA categories of autism, multiple disabilities, and deaf-blindness” (p. 314). Litvack, Ritchie, and Shore add “students with more severe disabilities included downs syndrome, fragile X, and severe developmental disorders (e.g., autism)” (p. 476). Kurth, Gross, Lovinger, and Catalango (2012) described the definition of significant disabilities as low-incidence disabilities such as autism, cerebral palsy, and severe intellectual disabilities. Low-incidence disabilities occur in less than 2% of a school population, and these students requiring significant supports to meet their educational needs. Block, Klavina, and Flint (2007) add that students with severe multiple disabilities have a combination of two or more impairments such a movement difficulties, intellectual disabilities, sensory losses, and/or behavioral difficulties. These impairments are of a severe nature requiring systematic, long-term curricular, instructional, and environmental accommodations and support (p. 30).

Students with significant disabilities typically have complex needs. Erickson and Geist (2016) looked at profiles of students with significant cognitive disabilities who had complex communication needs. “Significant Cognitive disabilities is a term coined by the US Department of Education to describe a group of students who receive special education services under a variety of eligibility categories and who have cognitive

disabilities that prevent them from achieving grade-level standards, even with the very best instruction and appropriate accommodations" (p. 187). "Students with significant cognitive disabilities are a diverse group that generally requires extensive repeated individualized instruction and support, substantially adapted and modified materials and individualized methods of accessing information to acquire maintain, generalize, demonstrate and transfer skills across setting" (p. 187). Many students with significant cognitive disabilities have co-occurring motor and sensory impairments that impact their ability to learn. Educators must understand that students who use symbolic communication methods need to be able to develop supports and services needed to help students successfully develop the language and literacy skills needed to access the general curriculum and is a feature of many students who have a significant disability. The students in these studies consisted of 35.4% female and 64.6% male with 68.9% of these students spending less than 40% of the day with their peers without disabilities. The analyzed data can be used to understand the differences of the development of resources and designing supports to assist these student when utilizing assistive or augmentative communication and/or sign to communication in the general education classroom. Educators needs to take into consideration the motor, language, sensory needs, and the students literacy abilities. The study also added the absence of speech or using an assistive or augmentative communication system significantly increased the probability the student would be retained in a more restrictive setting to students who used speech to communicate. Among students who used speech with our without assistive or augmentative communication, 36% read with comprehension and 62% read

individual words. Among students who used assistive or augmentative communication as an alternative to speech, 3% read with comprehension and 12% read individual words. Only 30% of the entire sample was reported to read text with comprehension. “If students with significant cognitive disabilities are going to experience more academic success, we will need more effective approaches to literacy instruction” (p. 195).

Defining Inclusion and Access to the Curriculum

Many authors have different perspectives on defining inclusion. Golmic and Hansen (2012) note inclusion is often used to describe specially designed instruction for students in special education accessed in the general education classroom, but continue in their article to define effective practices of inclusion as all learners having equal access to general education programs, where the individual strengths, challenges, and diversity are accepted, appreciated and accommodated, and the practice of differentiated instruction engage all students, and community and collaboration are linked to provide quality programs and services for all students.

Kilanowaki-Press, Foote, and Rinaldo (2010) state, “inclusion isn’t so much a delivery model as it is a frame of mind for a learning community” (p. 45). Adherence to federal mandates in the United States calling for the education of students with disabilities in the *least restrictive environment* has resulted in the decades-long drive towards the development of educational programs allowing for the inclusion of students with disabilities in the general education classroom to the maximum possible degree. Inclusion is needing to bring services and support to the student in the general

education classroom, as opposed to removing students from learning experiences with their same aged peers (p. 43).

Idol (2006) defines an inclusive setting to be a school where all students are educated in the general education classroom. Inclusion is when students for a part of their school day are educated with their same grade-level peers even for a student with special learning or behavioral needs. These classes are meant to be age-appropriate and not associated with the perceived appropriate learning level. The Litcak, Ritche, and Shore (2011) study noted mainstreaming, integration and inclusion were used interchangeably by administrators, teachers, and paraprofessionals.

Recent research by Kleinert et al. (2015) looked at a 15-state database of almost 40,000 students participating in their particular state's alternative assessment based on alternative achievement standards and look to answer to what extent students across all of these states have access to the general education setting, how that correlates with communication, literacy, and math skills, as well as identifying characteristics predict student educational placement. "Students with the most significant cognitive disabilities- those students for whose regular educational assessments, even with appropriate accommodations, are inappropriate measures of school achievement account for an estimated 1% or less of all students" (National Center and State Collaborative, 2012, p. 1). The No Child Left Behind Act of 2001 requires for a yearly assessment in Grades 3 through 8 and once in high school for assessing student performance on content linked to grade level standards, IDEA (2004) mandates all students with disabilities participate in the general curriculum for all students with

disabilities. There are two main explanations when considering the times students with disabilities are included in their general education classroom. The first reason is IDEA's least restrictive environment mandate is to ensure students are to be removed from the general education only when their disability, even with modifications, is so severe that the needs they have cannot be met in the general education setting. Second, the general education curriculum provides gains in skills not obtainable in the special education setting. This includes the use of learning materials and tools used in the core subject area, a teacher with expertise in the academic core subject, and opportunities for learning with their peers as natural supports. Results from the study show that in relation to finding what extent do students across all of the states have access to the general education setting, teachers reported that most frequently the primary classroom setting for students who participated in the alternate achievement test for their state as learning in a self-contained special education classrooms with some special inclusion activities. Across all states, less than 3% of special education students with intellectual disabilities have their primary placement the general education classroom. When looking at the correlations between communication, math, and reading skills on educational placement the study found all states but two had produced a statistically significant positive correlation between a student's expressive communication and participating in an increasingly inclusive classroom setting. The study also noted as expressive communication, reading skills, and math skills increased, it in turn increased the odds of being in a higher level classroom placement. The magnitude in which students with significant cognitive disabilities in a large multistate

sample for the study are excluded from regular education and placed in a more restrictive setting is unknown. Students with the most significant disabilities are placed at a considerably higher rate in separate classrooms or separate schools.

Obiakor, Harris, Mutua, Rotatori, and Agozzine (2012) concluded "Inclusive education means all students within a school regardless of their strengths or weaknesses, or disabilities in any area become part of the school community" (p. 477). The system for providing services to students with special education needs begins by considering all educational placement options. It is important educators consider how the decision of placement will impact the lives of their students, including the students' access to the general education curriculum that is used to teach academics and provide social interactions with peers. The consideration of removing a student from the general education setting should only be considered if the student cannot be adequately educated with the use of supports and services in the general education setting. "There are a variety of special education placement possibilities for students with disabilities including *inclusion*, where students participate fully in the general education curriculum and receive special education services as needed with their peers without disabilities; *resource* where students are pulled out and provided service outside of the general education environment, usually in the special education classroom; *self-contained* where students remain in and receive services in a special education classroom for the majority of their school day; and *alternative* where students receive services outside of the general public school" (p. 479). Though the goal is always to strive for inclusion and access to the general education class, there are times when placement in the general

education classroom or being in the special education classroom does not result in the expected improved academics or social outcomes for students with disabilities.

Doyle and Ginareco (2013) pointed out currently inclusive opportunities, especially for high school students with intellectual disabilities, are the exception rather than the rule in schools and inclusive education is more than merely being physically present in a general education classroom (p. 60). Data from the study suggested the proportion of students who are included in the general education classroom with a disability for 80% of more of the school day significantly varied based on the disability category and where the student lives. This same data shows that for students who are labeled with an intellectual disability only 17% of them are included in the general education setting 80% of the time.

Brock and Schafer (2015) looked at the educational placement of students with developmental disabilities based on their geographic location. There is disappointment among educational advocates regarding the small proportion of students with a developmental disability who are included in the general education setting. They see the rate these proportions are increasing as slow. The educational placement at the state level show that there is progress headed towards a more inclusive education for all, but this is varied across the United States. States who have larger urban areas tend to be among the states having the most restrictive placements for students with developmental disabilities. Educational placement may be explained by urbanicity. The study gives proof that school districts in larger urban settings may tend to be more restrictive in their placement of students with developmental disabilities. Brock &

Schaefer's (2015) study used the state of Ohio due to its high level of urban cities and population as well as areas of suburban and rural areas. The goal of the study was to better understand patterns of geographic areas and the placement in school settings for students with developmental disabilities. The finding can assist in how groups develop targeted advocacy to promote inclusive education for all students. The observed placements do not reflect from schools a commitment of full participation in the general education classroom for students with disabilities or reflect a common understanding of the least restrictive environment based on students with disabilities characteristics. The analysis showed a rather insufficient number of students with developmental disabilities spend a majority of the school day in the general education classroom. The relationship between these reasons is unclear. The two possible explanations found were the population density with a higher concentration of students with developmental disabilities in urban school districts and urban poverty and diversity. The population density possibly creates financial incentives to concentrate the special education services and have students be placed in separate classrooms. Given that typically there is a higher number of students with developmental disabilities in urban school districts as compared to rural school districts where there are fewer students with developmental disabilities who are spread across a less populated area, there would be a higher number of students with developmental disabilities to place in the general education of an urban school setting as the rural school district would need to place students with developmental disabilities in the general education out of necessity. Urban school districts tend to be more diverse and have a higher poverty level. There

are six districts in Ohio with the highest enrollment overall and serve 15.6% of all students with a primary educational diagnosis of developmental disability, autism, or multiple disabilities in the entire state. These districts tended to have the lowest percentage of students attending general education classrooms.

Dymond, Renzaglia, Gilson, and Slagot (2007) identify there are many ways to define access to the general education curriculum through teacher interviews. Some definitions are access to information, materials, and the classroom where instruction is delivered, access to learning, access to curriculum aligned with the state learning standards, access to academics, access to the core curriculum, access to all experiences included in general education, and access to a curriculum that extends beyond academics to include functional life skills. Of the teachers surveyed, 75% felt that guaranteeing access would help increase educational expectations for students with severe disabilities. They focused on answering the question of how high school educators defined access to the general education curriculum for students with significant cognitive disabilities and how special educators and general educators had differences in how access was described. “Most participants (80%) specified that the general education classroom was not the only location where students could access the general curriculum, although they felt it was the best and most logical location for the majority of students” (p. 9). Concern was expressed by several educators that decisions about the locations of where a student with disabilities receives their instruction should be decided based on their disability label. A teacher from the study shared,

> I think if you just automatically say all students with [moderate disabilities] belong in a very segregated self-contained setting that you're doing them a real disservice. We need to identify student by student what their needs are. There is not a set of needs for the students [with moderate disabilities]. There is not a different set of needs for the [students with mild disabilities] There's a set for Johnny and a different set for Fred. And, that's how it has to be done [special educator] (p. 9).

When the educators were creating their definition of access to the general education curriculum, 8% of the educators discussed location and 36% identified the types of instructors as key points in the definition. Collaboration was indicated by special and general education teachers as a key to being able to deliver the general curriculum to students with significant disabilities though their definitions differed. Some viewed collaboration as discussing and doing parts individually or putting it on one educator, while others saw it as working together and having the shared responsibility for teaching the curriculum and the progress of the student.

"Discovering what educators believe, value, and understand about the general education curriculum is essential to understanding how the "access to the general education curriculum" provisions are implemented and what students with significant disabilities receive in the name of access" (Timberlake, 2014, p. 84). In Timberlake (2014) there were three themes that arose regarding the perceptions of the participants in regards to curriculum access and the struggle to access it. These included students' skills and abilities, professional beliefs and values, and the general education dilemma.

Special educators saw their role and responsibility in creating access to the general education curriculum for their students with severe disabilities as an ongoing process of "cost-benefit" decisions. The highest "cost" was defined as "wasting time", or using limited instructional time in unimportant ways. In terms of "benefits," participants – especially middle and high school teachers – used words like "payoff" and "trade-off" and "dividends to be gained" (p. 89). Benefit was defined as the amount of benefit in an activity and how that activity has long-term practical value "5 years from now." Of the elementary and middle school teachers surveyed more than half thought that access to the general education curriculum to mean a placement in the general education classroom where the academic instruction took place. Teachers commented that the location of the general education classroom would be appropriate only if students could grasp the content, follow along, or have the ability to keep up with the class pace and expectations. Special education teachers discussed wanting to have high expectations for their students while also being "realistic" of students' abilities. Special educators also stated they felt it was their job to modify content and prioritize the content in the general education classroom. Special education teachers also commented general education access to instruction was unreachable for their students because of the scripted nature of the instruction and the fast pace. Struggle was a word used by eight of the special educators when trying to explain their role in regards to accessing the general education. Teachers shared financial problems were another reason curriculum access to academics in general education classrooms was not always possible. The educators did not have enough staff to go with the students with disabilities to provide

the needed supports in the general education classroom. The interpretation of access to the general education curriculum by special education teachers may be theorized as a constant weighting and assigning value on curriculum options, time and resources for their students. This was a decision making process that was ongoing for these students. Academic access in separate settings was not attributed to the lack of skills and strategies of the teacher's abilities, but to limitations by budgets and special education teachers having a commitment to functional specialized skill instruction. These findings suggest a gap between the standards associated with academic access in the literature and the norms 'on the ground'.

Theoharis and Causton (2014) looked at the overall reform of a school and system-wide approach for students with disabilities. They identified that the instrumental figures in creating and carrying out a vision for inclusive schools are the school leaders and the evolvement of inclusion overtime. The period of accountability and standards has become a key aspect in deciding about the access to the general education curriculum increasing for students with disabilities. Students with disabilities are given access to classroom content that is rich in academic instruction in the general education setting, allowed to have continued connections to their peers, and have full membership in their schools and communities.

Peterson (2016) looked at the perspectives of special education teachers on the general education classroom. Teachers have continued confusion about how curriculum access and progress is enacted and defined. Teacher's responses shared further confusion about this concept and the engagement of students with disabilities are in the

general education classroom. The teachers' questions about how the curriculum access connected to students' Individual Education Program showed they did not understand how assessment, curriculum access, and students' IEPs could support a comprehensive educational plan.

Academic Standards, Alternative Achievement, and Curriculum

Kurth, Gross, Lovinger and Catalano (2012) identified different ideas of school practices that assist with accessing the curriculum for students with disabilities. Evidence from the study supports inclusive practices but challenges the application of an inclusive education in the general education setting for students with significant disabilities. There are two educational processes that drive the education of students with disabilities teachers need to take directions from: the general education curriculum with the local and state assessment and the student's Individual Education Program. An Individual Education Program is required to identify the needed goals and objectives, support services, and state the specifically designed education for the students with disabilities which allows them to reach maximum success in all identified areas of needs. Adaptations for students in the general education classroom with significant disabilities will alter the assignment or assessment creating different grading procedures compared to the other students in the classroom. Grades for students with disabilities in the general education setting cannot be an accurate representation of what they have learned when the curriculum, materials and expectations have been adapted to meet their needs. It is necessary to have an alternative grading system for students who complete adapted work as a part of their access to the curriculum. Rupper, Dymond,

and Gaffney (2011) apply these concepts to literacy instruction. “Focusing on access to general education content within the special education settings or focusing on access to inclusive environments without also addressing content results in incomplete access to the general curriculum” (p. 101). Providing an option for access and participation in the general education curriculum can be as simple as making certain a student has access to literacy instruction. Literacy instruction has the ability for a student who uses augmentative and alternative communication to access the general education curriculum. Literacy content has opportunities for the student to apply the content skills in daily living opportunities outside the classroom. This gives that student power to determine their own needs and establish relationships; one of the more important functional life skills for students with significant disabilities.

Ryndak et al. (2014) used their study to review the policy and impact on the placement in the general education classroom. Using the more recent national data, over the past ten years there has been little to no change from a segregated functional setting to a general education setting for students with significant disabilities. “Educational systems inherently resist systemic changes in services, leading to substantial lags between what we know about educating students with significant disabilities in general education contexts and what occur in practice” (Ryndak et al., 2013, p. 6). The Least Restrictive Environment principle and the current systems in place at school settings support the range of servicers that lead to an assortment of misconceptions about the education of students with significant disabilities. First, it shares that there is misinterpretation about special education services as a location

instead of a support system to be accessed anywhere. Second, the decisions about placement are based in the student's need for more services to there is a need for a more restrictive setting. Third, the incorrect belief that a student with disabilities needs to earn the right to move across placement settings by making improvements in their performance in the areas of academic skills, functional skills, and their behavioral choices. Lastly, it shows due to the limited options for placement for students with significant disabilities in the past has created incorrect assumptions about the abilities and potential for short and long term skill development. Trela and Jimenez (2013) discussed the unintentional consequence when instruction is aligned to a "functional curriculum." This curriculum is a set of community and living skills where activities and lessons have the ability to be repeated unrelatedly to a student's grade level or the grade-level standards. This occurs when students are presumed to be unable to attend the general education classroom and receive that curriculum. An isolated functional curriculum was often associated with the need for instruction to be delivered at a different pace in a different setting. The functional curriculum became the title for a program of set life type skills and activities for students who are not following the same curriculum as their peers in the general education classroom. Trela and Jimenez (2013) continue to discuss the concept of the personally relevant curriculum as a set of modifications shaped by the ecological framework which would connect students to their current school-based community by considering skills, settings, and relationships that support students' full participation in the school community (p. 118). The personally relevant curriculum modification consider how students with disabilities have

access in the general education classroom by creating normal opportunities found in the classroom with instruction focused on grade appropriate curriculum, and applying modifications that are personally relevant to the student so they can connect the skills learned in the classroom to their community and life experiences. Personally relevant is not the same as a functional curriculum, but a system that provides a differentiation approach that promotes access to the general education curriculum for students with disabilities by allowing students to make meaningful progress. This limits the need of having a separate curriculum for these students with significant disabilities. Lee, Wehmeyer, Soukup and Palmer (2010) also address the functional curriculum and the needed supports to modify the curriculum for students with significant disabilities in order for the student to access it. Modifications to curriculum come in two forms. The first is curriculum adaptations, which modifies the way curriculum content is presented and how students engage with it. Curriculum adaptations find opportunities for students to access the general education curriculum through multiple means, often using principles of UDL (Universal Design for Learning), but does not alter the content in anyway. The other is curriculum augmentations. Curriculum augmentations provide additional skills or strategies for students to help supplement or expand the general education curriculum. This form teaches students learning-to-learn or executive processing strategies that assist with allowing students to engage more successfully with the curriculum content. Content is not altered but instead additional content is added that teaches student strategies that enable them to more effectively engage with the curriculum content (p. 214).

La Salle, Roach, and McGrath (2013) finds a relationship between the IEP of a student and the quality of curriculum access and the achievement of students with disabilities. Students' IEPs were used in this study have between three and four IEP goals. While 73% of the IEP goals were academic-focused which was significantly higher in elementary school students' IEPs at 79% over the middle school students' IEPs at 64%. Student IEPs that had more academic-focused goals were more likely to include information about the connections to the curriculum and the current grade-level standards while including progress monitoring strategies. These IEPs were also less likely to include enough data about a student's present levels of performance and the purpose of the IEP goals in relation to the student's educational needs.

The Every Student Succeeds Act (ESSA 2015) requires schools to ensure students with disabilities have access to and make progress in the general education curriculum (p. 115). IDEA (2004) and ESSA (2015) gave the expectation that each state needs to develop a set of education standards that serve as the base for curriculum requirements for the general education student. A common group of leaders from across the United States worked together to develop the Common Core State Standards in English Language Arts and Mathematics (2010). By the development of state standards and the laws of IDEA (2004) and ESSA (2015) students with severe disabilities will no longer be exempt from the same learning opportunities as their general education peers. Ballard and Dymond (2017) set to find out that in spite of an ethical commitment to high expectations for all students, and teaching students with significant disabilities in the general education classroom, questions persist about how to balance access to

academic standards with functional curriculum in ways that best prepare this population for success in their future education, life, and work (p. 156). There were four methods of accessing the general education curriculum based on the findings in these studies for students with significant disabilities: having a positive learning community in the school through classroom membership, student participation, having positive behavioral supports, and continued high expectations for all learners fostered by school staff. The study participants viewed adult supports were essential to enable access to the general education curriculum in general education classrooms for students with significant disabilities. Some general educators stated they relied on the need of one-to-one paraprofessionals to adapt the curriculum and provide behavioral supports to students with significant disabilities. Most participants in the study believed general and special educators should work in collaboration in providing students with significant disabilities access to the general education curriculum. Teachers believed adaptations and modifications were necessary for students with significant disabilities to access the general curriculum in the general education setting. The belief of the location best suited for students with significant disabilities to access the general education curriculum is up for discussion between educators. Special educators more often selected the special education classroom and community experiences over academic general education classes in the school, whereas general education teachers saw their classrooms with applied supports to be the best location for ensuring access.

Nolet (2006) also took the view of guaranteeing access to the general education curriculum by using assessment data. State standards define what *all* students are

expected to understand as a result of the instruction provided in the general education classroom. When providing access to the curriculum, the IEP team must determine the learning targets that will enable the student to ultimately demonstrate understanding with respect to the long-term standards, though often IEPs are a collection of isolated skills with goals and objectives, these can lead to isolated skills that result in isolated instruction in an alternative setting. The student's IEP may be been individualized, but it often is separated from the scope and sequence the curriculum provided in the general education classroom. The IEP becomes the curriculum for these students. Students with disabilities need accommodations and modifications to access the general education curriculum. Accommodations are supports and services that help a student access the content and instruction but it does not change the content or the performance expectations. Modification change the rigor of the curriculum where a student may have an alternative form of activity or instruction and/or a change in the level of difficulty. Browder et al. (2007) also addresses the need for modifications and accommodations by also aligning grade-level content to students with significant disabilities. Functional skill goals are not appropriate measures of academic achievement for students with significant disabilities, but that does not mean these goals should be excluded from the students' IEP. The combination of instruction of functional skills and the expectation of the access of academic grade-level content means teachers need to find a creative way to meet both these needs for students with significant disabilities as it is required by federal mandate that all students are to be assessed in math, science, and language arts/reading. Accessing the general education

content standards means the equivalent grade should be based on instruction of the chronological age of a student. When educators are looking at access to the general education curriculum they can start with an academic content standard for the grade where the student is enrolled and then adjust or “extend” the content for the individual with disabilities. To make these adaptations to standards educators can select skills based on the correct grade for the individual with disabilities and identifying specific activities for classroom content instruction and allow for the planning needed to provide the accommodations and supports for the student with disabilities to be successful. These standards will happen in the general education setting with the same activities and materials to the greatest extent possible as the general education peers. Teachers may determine functional tasks and materials may be used to promote content understanding, but the target skill for defining student achievement is always academically focused. The expectation for the student with disabilities will differ in complexity compared to their peers and require a response that shows not just a rote response, but some level of comprehension of the academic content standard. The study did find limitation in that research is needed to illustrate ways to teach grade-linked academic skills to students with significant disabilities.

Ridgeview School is an elementary school that has received a prestigious award regarding the systems they have in place at their school for being an inclusive school where all students learn in the general education classroom. Olson, Leko, and Roberts (2016) examined this school system to find the strategies they used to have a successful system in place for all students to succeed. Educational personnel highlighted the

following parts in their definition and description of how their school provided access for all students to the general education curriculum. They did this by using instructional and social contexts, curriculum, instruction, and collaboration in all setting. In regards to instructional and social contexts school staff believed the general education setting was the most appropriate and favored location to provide students with access to the general education curriculum. The students with severe disabilities were constantly observed accessing the same content and learning materials as their peers without disabilities. Curriculum content standards were taught so all students had access to them. There was a consistent focus on academic content and activities for students with and without disabilities. The general education teachers took an active role in ensuring curriculum was accessible to students. The teachers planned to implement specific accommodations, adaptations, and modifications based on each individual student's needs so each can access the curriculum. An assortment of learning opportunities, including independent work, one-on-one support from an educational assistant, team teaching, cooperative peer groups, and large group instruction were all methods used by general education teachers. Many participants' definitions of access to the general education curriculum included the concept of collaboration. The findings indicate the Ridgeview staff constructed a multi-dimensional definition of access to the general education curriculum that incorporates students with severe disabilities and viewed the shared responsibility between general and special education teachers as a part of their success with inclusion.

Perspectives of Pre-Services Teachers, Administrators, and General and Special Educators on Inclusion

Access for students with significant disabilities to the general education classroom is dependent on the teachers who work in the schools. There is a level of responsibility to ensure these students are participating in the general education classroom and accessing the general education curriculum as stated in IDEA (2004). People that have an impact on the education and access for students with significant disabilities include pre-service teachers, current general and special educators, and administrators.

Pre-Service Teacher Perspectives

McCray and Mcatton (2011) along with Golmic and Hansen (2012) have created research in the areas of pre-service teachers in the general education content area. Both studies viewed the perceptions and attitudes of these teachers after having field experience or student teaching in an inclusive setting. Researchers have noted the continued need for educating students with disabilities in general education settings and emphasized the need for all teachers to be prepared to work with all students in their classrooms. Pre-service teachers offered differentiation and accommodations as key factors of effective instruction for students with disabilities in their classrooms. “By participating in an inclusive pre-teaching experience, these pre-service teachers noted a personal strength as having “different viewpoints than some other teachers” due to their experience” (p. 148). The pre-service teachers noted they are less afraid and had a greater appreciation for working with a variety of students with disabilities. These

results do not equate directly to a supportive learning environment or effective instruction, just a perspective of pre-service teachers (McCray & McHatton, 2011).

Golmic and Hansen's (2012) research has revealed that attitudes of secondary teachers towards inclusion of students with disabilities in their classrooms are lower than those of teachers at other grade levels. This secondary teacher college program gives pre-service teachers specific instruction before working with students and their attitudes after their experience working with varying levels in the classroom. The university designed a structured experience that encourages the pre-service teachers to engage, teach, and support students with exceptional needs in inclusive secondary education classrooms. This university created a model that has impacted the student teachers' attitudes in a positive way and reduced many concerns. The data obtained from this study covered three semesters and included five certification areas of the pre-service teachers. The sample from this study included 85 pre-service teachers who were placed in secondary education classrooms. The *Included Experience* includes eight steps to identify elements that affect learning for students with disabilities. These steps outline how the pre-service teachers to be able to navigate through a student's Individualized Education Plan, categorized the student's strengths and achievements, and list the student's needs and barriers to success. Pre-service teachers were expected to utilize their cooperating teacher's expertise and document their own ability to select and apply specific accommodations, modifications, or strategies to be able to evaluate students' performance and progress on the classroom curriculum and content. The pre-services teachers lastly need to be able to describe and recommend a plan of specific

accommodations, modifications, and strategies for the student's continuous improvement in the general education setting. Overall, the *Included Experience* shows potential as an educational opportunity for pre-service teachers to use while making connections and planning for students with exceptional learning needs in a general education classrooms at the secondary level. The pre-service teachers, had a more positive attitude and opinions towards students with disabilities in the general education classroom than they did prior to student teaching in the inclusive setting and overall concerns were reduced.

Teacher and Administrator Perspectives

Peterson (2016) complied special education and general education teacher perspectives on general education curriculum access. She noted the shift to an emphasis on general education curriculum access including academic progress resulted in significant change in expectations of teacher of students with significant disabilities. Teachers of students with significant disabilities are required to have the knowledge, skills, and personalities to be able to incorporate and arrange many different instructional parts into their daily instruction. These factors include Common Core State Standards, state and district level assessments, and Individual Education Programs for students with disabilities participating in their classroom. The special education teacher is expected to plan to assist each of the student's learning goals and unique needs, but also coordinate general education curriculum requirements. Special educators must guarantee a student with disabilities makes progress toward their individualized educational goals while engaging with the general education curriculum access and

supports, preparing students for state accountability assessments, and continually measure students' progress with formative and summative assessments. Given that for students with significant disabilities an emphasis on life skills curriculum has been of long-standing importance, there are new expectations that special education teachers are tasked with the responsibility of ensuring students' access and participation in the general education curriculum, which can become a daunting task. There were three themes that emerged from the focus groups' discussions and data; confusion about curriculum access, the logistics of curriculum access, and the need for collaboration and communication.

Confusion about Curriculum Access. Peterson (2016) found that in the focus groups, teachers predominately spoke about curriculum access as participation in the alternate assessment given by the state. They understood the Individual Education program for students, the alternative assessment, and Common Core state standards each as a separate entities, with each component requiring separate planning, instruction, and assessment needs. Teacher comments included, how they would "Get it all done" and "… but I feel like I have to do each separately". One teacher stated, "I feel like I have to choose today whether I am going to teach the core curriculum, skills for the alternate assessment, or I am going to teach to the IEP. So which is access?" (p. 24).

Logistics of Curriculum Access. A teacher shared, "Does my fifth grade student who is reading at a second grade level, do the second grade or the fifth grade standard?" while another teacher, who also serves half-time as a work experience coordinator added, "I'd like to see more of the job skills because teens don't know what

they are going to do when they graduate because they are not going to college… So, I think we need to prepare them more on that" (p. 25). Teachers questioned the appropriateness and pragmatics of curriculum access (Peterson, 2006).

The Need for Collaboration. Peterson (2016) found educators greatly felt that curriculum access requires the need for collaboration between special and general education teachers. Collaboration with their special education colleagues, one general education teacher stated, "It would be beneficial to have those I work with on a regular basis on my team together so we're working on the same information, and we can share it. And, to be able to see what each other is doing as far as assessment goes because she might have a really good idea on one of the standards I'm struggling with and instead of reinventing the wheel I could adapt it for my grade level" (p.26). Teachers of special education and general education classes also needed added contact with their colleagues. Few teachers reported they had opportunities to collaborate during the day and everyone shared a common desire to collaborate together. "I have administrators that come in and tell me that I need to be consulting with a teacher who is certified in a particular area. I need to consult with a math teacher, a science teacher, a reading teacher, there's no time for that. And, I don't even know which teachers to contact. I mean there's nothing set up to give you that support" (p. 27) shared a special education teacher.

Jorensen and Lambert (2012) also had areas on concerns for teachers in regards to access of the general curriculum for students with disabilities. When an educator reported they did not have students with significant disabilities in their classroom

before they expressed fears that are common to that of other general education teachers. The United States special education law states that schools are accountable for all students with disabilities to make progress with the general education curriculum. There is a clear preference stated for those students to learn in a general education classroom, translating policy into daily practice is a challenge for educators.

Ballard and Dymond (2017) also had teachers in studies who identified with the struggle of time and access for collaboration with their educational peers. The barriers and concerns showed appropriateness of the general education content and collaboration with others as key obstacles in providing access to the general education curriculum. The collaboration challenges between general and special educators was identified as a significant barrier in the ability for students with significant disabilities to access the general education curriculum in the general education classroom in four of the five studies. In half of the studies they looked at, teachers voiced concerns about the level of the curriculum that was taught in general education classes and how it is appropriate for students with significant disabilities to participate in with their classmates. Beliefs among educators were consistent with IDEAs focused on individualizing and addressing both academic and functional curriculum. Special education teachers viewed both academic and functional curriculum as important but stressed that decisions should be relevant to students' individualized needs and goals. Many teachers viewed access to social inclusion the primary curriculum for students with significant disabilities when in the general education classroom.

Ryndak et al. (2014) found that one obstacle to participating in the general curriculum is the skepticism of teachers about the appropriateness of general education contexts for instruction where the belief is activities in general education classes provide limited opportunities for students with significant disabilities to learn the needed life skills (p. 68). There are three related issues teachers and administrators struggled with the most in regards to assessment and access of grade-level standards for students with significant disabilities. First is the curriculum content, where educators believe the grade-level standards was inappropriate for these students. Second, focuses on the relationship of the general education curriculum content instead of the perceived crucial functional skills content currently taught to students with disabilities. Third, is the relationship to assessments and that they should be done in an alternative context. After nearly three decades of research, however, the arguments now focus mostly on students with significant disabilities, and have shifted from "should we do it" to "how do we do it" (p. 73).

Obiakor, Harris, Mutua, Rotatori and Algozzine (2012) reviewed how general educators make inclusion work in their classrooms. Inclusion for students with disabilities is most effective when teachers are collaborative and consultative. "For this to become a reality within the school, teachers and service providers must be willing to provide differentiated instruction and have the resources to implement it within their classrooms" (p. 483). General education teachers accept the responsibility for all student learning in their classroom and all students are instructed from the general education curriculum while the entire school's additional resources are organized to

benefit all students. Students with disabilities are included in all activities, and benefit from all school resources like their general education peers. “Educating students with disabilities within the general education classroom means that these students are not only members with the classroom and school community, but also are valued members within that community” (Obiakor et al., 2012, p. 487).

Kilanowaski-Press, Footer and Rinaldo (2010) identify the factors influencing successful inclusion of students with significant disabilities and the current practices and perspectives of general education teachers. Factors that are influencing inclusion success for students with significant disabilities are the qualifications and strengths of teachers, the role of the special educator related to the content instruction, the professional development experienced teachers have had in understanding and applying inclusive programs, and the time available for planning and consultation. In their study, 71 inclusion teachers in the general education setting were surveyed and of those 58 reported they receive consultation teacher supports, leading to the finding that consultant teacher support was the most predominant type of support when providing assistance to teachers in inclusive schools. The consultant teachers when in the general education classroom are providing small group instruction, planning assistance, and one to one student assistance as supports to the instruction of the curriculum in the general education setting. Of the 71 teachers, 15 reported they had a teacher’s aide while 45 teachers, typically in elementary settings, had classroom volunteers to assist in their classrooms. The teachers who received one to one assistance in a classrooms had the highest number of students who had a severe

disabilities in their classroom with an average of 4.71 students. General education teachers received small group instruction, co-teaching, and received planning support from consultation teachers in classrooms that reported between 1.39-1.5 students with severe disabilities in their classrooms. Most often reported as the support most reflecting of inclusive classrooms and least restrictive environment is co-teaching by the consultant teacher, yet it is the least used support reported by the teachers in the study. Although co-teaching was the least reported type of support, the staff who used this method typically had a larger number of significantly disabled students in the class (Kilanowaski-Press et al., 2010).

Dymond, Renzaglia, Gilson and Slagot (2007) looked at the perspectives of high school teachers working with student with significant disabilities. In the study all participants agreed special education teachers should provide students with significant cognitive disabilities access to the general curriculum, while most believed access should be obtained through the general education teachers as they are viewed as the content experts. They believed that special education teachers were “more specialized in the subject taught,” “more versed in the content,” and “usually the most knowledgeable in that curriculum” (p. 9). Special education teachers viewed general education teachers as having “the broad picture of where everybody needs to be” whereas the role of the special educator was to “individualize things” and “figure out how much” information the students received (p. 10). The decision about the needs of students with disabilities when placed in the general education classroom should be balanced with the needs of that whole classroom. There was acknowledgement between educators that there is

more planning and work required of them when a student with a significant disability is in the general education classroom. There was a noted lack of general education training as a reason for not having students with significant cognitive disabilities receiving instruction from general education teachers. These educators thought special education teachers should provide the instruction for this population because they were the “best prepared” and had more “special training” and possessed the needed patience (p. 10).

Idol (2006) continues to identify the different views and processes of inclusion at the elementary and secondary level. At elementary schools, administrators and teachers both had positive attitudes towards inclusion and their attitudes towards students with disabilities were very supportive, but no administrators during the interviews were in favor of the inclusion of students with significant disabilities without additional support for the classroom teacher. Administrators’ first choice for students with disabilities to be best educated in the school system was to attend grade-level classes with a special educator or an instructional assistant. Little change is noted in teachers’ attitudes about inclusion and students with disabilities across the four elementary schools from year to year during the program evaluations. Staff at these schools are in favor of inclusion and are willing to implement it in their classrooms. There was no concern that students with disabilities in the classroom would adversely affect the other students. In secondary schools, administrators agreed with elementary staff on that fact that they were not in favor of inclusion without additional support to the classroom teacher. The principal at High School H added she thought there remained some cases where full inclusion was

not appropriate. However, she said the theory was good and that the staff should make every effort to include a student. In every school, nearly all secondary educators (77% across schools) thought the best choice was to include students with disabilities with general education students and to have all available adults work with any student needing assistance, not just students with identified disabilities. The majority of educators in all four secondary schools found it ideal that in teaching students with disabilities in grade-level classes there was a need for a special educator (a teacher or teacher assistant) to be with them. “As teachers have more practice with inclusion, their acceptance and tolerance of students with disabilities in their classrooms seems to improve. They also become more skilled in delivering lessons that accommodate students at various levels of learning and performance” (p. 94).

The concept of all students accessing the general education curriculum education and the ideals of having students with disabilities in the general education classroom is agreed upon by teachers as best practice, but there are still areas that have concerns at the secondary level on including these students. Doyle and Ginareco (2013) found high school teachers do articulate two primary reasons for the lack of inclusive opportunities as the high school level, their own lack of understanding of inclusive education, and concerns over the cognitive discrepancies between students with and without intellectual disabilities in their classrooms. For years, teachers have viewed the functional life skills such as cooking, shopping, telling time and money management to be important in educating students with intellectual disabilities because these skills assist students in some of the daily responsibilities they have which connects to their

home, work, and leisure time. These skills will take student with intellectual disabilities longer to learn. When special education teachers only focus on the functional life skills, it ignores the functional skills that are related with being a teenager such as attending athletic events, participating in school performances, or texting with a friend. It also excludes the student who may have a specific interest in an academic content area that is available to most students through the general education high school curriculum. A focus on functional skills curriculum causes students to be away from same-aged peers which in turn often leads to social isolation by high school for these students. Doyle and Ginareco (2013) continue to share that the principle of the least dangerous assumption sees educators applying the appropriate and least intrusive supports in a general education classroom content to be able to encourage the student to at least be a part of the curriculum to the best extent possible. There are opportunities in a general education classroom for students with intellectual disabilities to engage in connections with their same-aged peers while accessing the curriculum content. Through these interactions the students with disparities will be able to learn the life skills associated with being a teenager. “It is important to note that several teachers reported concerns about fairness and equity related to grading and modification practices, including how both teachers and students perceive these practices of students with intellectual disabilities in their classroom” (p. 55).

Another viewpoint on access to the general education curriculum is how general education teachers are expected to grade students with significant disabilities in the classroom. Kurth, Gross, Lovinger, and Catalano (2012) looked at the teacher

perspectives on this topic. A total of 139 teachers responded to an anonymous on-line survey. These results show elementary teachers believed the most fair and appropriate approach to grading students with disabilities is on improvement over their past performance. Secondary teachers believed grades should be based on the student's performance on selected tasks. Rubrics can be used as an option to grade the modified work of students with disabilities, was used seldom with general education teachers, where special education teachers reported they do use rubrics to grade and assess students. The effort a student with disabilities will put forth and showing progress on their IEP goals is how special education teachers report they grade their students in the inclusive setting of the general education classroom. Of the participants who took the online survey, 59% of the teachers reporting stated they assign grades based on the student effort put forth or their participation in the classroom. Of teachers who were unsure how to even grade a student with disabilities in their classroom, that result was only 6% of the teachers. To modify classroom work expectations to meet the needs of students with disabilities in the general education classroom, secondary teachers more often reported using modifications in their classes than elementary teachers did. The modifications included using alternate or parallel assignments, alternate instruction, peer tutors, and allowing students to demonstrate their knowledge in alternate forms. Shortened or reduced quantity of assignments were noted by teacher as their most common type of modifications to use. Special education teachers assumed they created and utilized more modifications during the school day than the general education teachers do. General education teachers were more likely to report they thought that

special education teachers should make modifications to the content. It is unlikely that simply reducing the quantity of assignments is an appropriate modification for students with significant disabilities; rather, providing materials and information at the instructional level of the students would seem more suitable (p. 55). The survey identified between general education teachers and special education teachers there was a discrepancy on the common knowledge, suggesting that general education and special education teachers need to work in collaboration with each other to be able to provide more inclusive education strategies in the classroom that student with disabilities would be able to access.

Ruppar, Dymond and Gaffney (2011) focused on students with severe disabilities who use augmentative and alterative communication systems and their access to literacy instruction. Their study looked at special education teachers of students taking the Illinois alternative achievement test who use augmentative and alternative communication in public schools in Illinois. The survey has eight statements relating to beliefs about literacy instruction. There was strong support for literacy instruction indicated by teachers, and these teachers believed through literacy instruction, all students can benefit from it. Of the 26 literacy interventions the relevance to students' current and future environments were the two highest rated interventions. The teachers also rated that skills which were able to be applied in multiple environments was rated higher than teaching skills that can promote inclusion in current and future environments for students. Of six setting options for instruction, special education classrooms received the highest rating for the placement of students for literacy

instruction were the academic general education classroom was the lowest rating. Participants were also given a list of seventeen barriers to literacy in the general education environments. The results from the barriers showed that the standard deviations were high, suggesting there is little agreement about providing literacy instruction in the general education environments and what types of barriers teachers reported prevented it from happening. The most significant barrier teachers defined was the characteristics of the general education classroom curriculum. Top-rated barriers when providing literacy instruction in the general education came up at the type of content provided. Literacy instruction that is linked to the life skills provided skills necessary for students to use in their current and future settings. There was not an exclusive view on life skills literacy instruction and general education curriculum access to mutually work together as many teachers shared a higher rating overall for segregated settings with the ability for students with disabilities to be learning and applying their literacy skills in home, school, and community settings where there are needed skill development for student with disabilities.

Though special educators did not seem to enjoy the idea of their students in the general education classroom working on literacy, Block, Klavina, and Flint (2007) identified ways students with severe, multiple disabilities could have access to general education physical education classes. Typically we find students with more severe disabilities do not try general physical education due to their skills. These students are placed commonly into an alternative option for physical education because of the beliefs of the student's IEP team. The safety and the student's success in general

physical education class, they will not benefit from general physical education, or the student may require so many accommodations their participation in the class will lessen the experience of peers without disabilities in the class are common beliefs among IEP teams. This report lays out specific strategies that allow a student with severe, multiple disabilities to be included in general physical education. These strategies include education teams to identify and select appropriate goals and objectives for the students with disabilities and then find a way to help the students make progress on the selected goals and objectives while attending the general physical education classes. By making the general physical education setting safe for the students with severe multiple disabilities and educators facilitating opportunities for peer social interaction between the students will create a better opportunities for the students to be successful in the general physical education class. The general physical education content needs to be examined to determine what is appropriate students with severe, multiple disabilities to participate in as some general physical education content might not be appropriate even when modifications are present. The IEP team is able to create goals and objectives from the content standards for students with severe, multiple disabilities to be implemented, these will often be created by the students' physical and occupational therapists. The goals designed by professional therapists assist to improve the student muscle and tone, while preventing deformities and assisting with overall functioning. Goals of the therapists can easily be modified or applied to work in the general physical education class. The concern of safety was a top obstacle when including students with severe, multiple disabilities into the general physical education. The general education

teacher and teacher's aid should also provide constant reminders and needed education to students without disabilities in the class not to bump into a peer with severe, multiple disabilities or someone using a wheelchair or gait trainer. The team also noticed that many general education peers enjoy taking a break from the general physical education games and activities to do an alternative activity with students with severe multiple disabilities. A continued important aspect of access to the general education curriculum and classroom continues to be the development of social skills and that is one of the major reasons to include students with severe multiple disabilities in the general physical education. The physical education inclusive setting typically will offer students with severe, multiple disabilities the opportunities to interact and play with their peers in an active, fun setting (Block, Klavina, & Flint, 2007).

Parents had concerns about the practical impact on their own children [with severe disabilities]. Parents expressed positive social implications for other students in the classroom in preparing them for the real word and enhancing awareness of individual differences. Prime concerns for students with severe disabilities were social isolation, teacher readiness, quality of instruction, and parental support (Litvack, Ritchie, & Shore, 2011, p. 475).

In a study from Litvack et al. (2011), students described having four kinds of relationships with classmates who have a disability. These four areas are either none, being an academic helper, being a casual playmate of a student with disabilities, or being friends who regularly spend recess together and talking on a personal level. A

student quote from study stated, “We usually don’t do much with them. They’re usually with another teacher at the far end of the room” (p. 482).

Carter and Pesko (2008) studied how the social validity of peer interaction and intervention strategies in high school are used. “For most youth, peer relationships emerge “naturally” and somewhat independently for the direct facilitation of educators. For adolescents with severe disabilities (e.g., moderate to severe intellectual disabilities, multiple disabilities, autism), however these relationships remain particularly elusive” (p. 156). The study questioned 34 general educators, 29 special educators, and 18 paraprofessionals at one high school within an urban school district. General education teachers had to have at least one student who has a severe disability participating in their classroom curriculum. There courses included culinary arts classes, keyboarding, core academics, physical education or art classes. Educators indicated at 45.7% there were consistent opportunities for students with disabilities to interact within the general education classroom. These educators saw there to be greater opportunities to interact than paraprofessionals, with the fewest opportunities identified by special education teachers. In the study 44.4% reported students with severe disabilities interactive less or significantly less often than their classroom peers. Participants in the study were given a list of 12 social interaction strategies that they rated and all 12 social interaction strategies as being somewhat to very effective. The most effective strategies to increase peer interactions in the general education setting were rated as the special education teacher providing support to students with disabilities, having paraprofessionals provide support to students with disabilities, and a peer buddy

program. Particular to schools' heavy reliance on paraprofessionals and special educators to provide direct support to students with significant disabilities in inclusive classrooms, it is not surprising educators judged these two forms of adult-delivered support to be among the most effective, but ironically the research shows these two approaches may inadvertently stifle interactions in general education classrooms of peers (p. 168). Awareness efforts may help to reduce informational and attitudinal barriers to peer interaction, serving as an important adjunctive but not wholly sufficient approach to increasing interactions among classmates (p. 167).

Processes, Methods, and Programs for Special Education Students to Access the General Education Curriculum in the School Setting

Many of the studies had positive processes, methods, programs and initiatives that assisted in the planning and preparation for students with significant disabilities in the general education classroom. This includes looking at pre-service teacher programs, systems for an entire school, and small achievements by single classroom and teacher experiences.

Pre-Service Teacher Programs

Fullerton, Ruben, McBride, and Bert (2011) looked at a university that created a merged secondary and special education teacher preparation program. In this program, the faculty in the general and special education courses collaborated to develop one program where teaching candidates receive their state education licensure in both

general and special education. “The faculty at this university described the need for all teacher candidates to be adequately prepared to teach students with the range of learning needs found in secondary classrooms” (p. 29). . In return, the special education faculty determined that more content area preparation was in order for special education teacher candidates. This would help them serve as more knowledgeable co-teachers and consultants in the general education classrooms. The university created what they called the Secondary Dual Educator’s Program (SDEP), a full-time two-year graduate program ending in licensure as a secondary educator in a content area with endorsement to teach mid-level and/or high school, secondary special education, as well as receiving their master’s in education (M.Ed.) degree. The SDEP cohort has secondary teacher candidates from a variety of different content areas. During the SDEP program, the teacher candidates build upon their undergraduate content matter by completing two additional graduate-level content-specific methods courses in the same area of the undergraduate degree. The program is set-up into six quarters. The first quarter builds the foundation of skills needed for secondary dual educators. The cohort of educators receives an intentional development of a professional opportunities to be in a collaborative mindset with all teacher candidates acting as observers and members in both the general and special education systems. During the second quarter, the teacher candidates learn to assess students with disabilities performance and apply research-based instruction practices focusing on literacy access for all students in the classroom. The strategy instruction areas included improving reading comprehension, the printing process, note taking, as well as other study skills which applied to students

in supervised field experiences. During the third quarter the teacher candidates will do a student teaching experience as special education teachers with a content focus on literacy interventions. The teacher candidates apply the strategies they have learned in past quarters of assessment, planning, and instruction to complete a formal work sample. Coinciding with the beginning of the public school year, teachers participate in a one-month course to learn the processes of educations preparing for the start of the school year. In the fourth quarter, candidates apply their skills in the role of secondary content area teachers. They are prepared to apply their understanding of students with learning differences in the general education context. Teacher candidates approach the task of teaching large groups of diverse learning with an obligation to utilize collaboration and inclusion. The fifth quarter education candidates continue their preparation for content area instruction while also engaging in coursework and field experiences with students with significant disabilities in the school. The teacher candidates are expected to be able to assess individual students with significant disabilities and instruct them in functional skills. The last quarter of the program is the candidates are asked to apply and reflect upon the strategies and best practices learned throughout the SDEP program. Upon completion of the six quarters, they fulfill a fulltime student teaching experience in their specific content area in an inclusive classroom. Within their student teaching placements, teaching candidates complete their Masters in Education degree by returning to the research base that underlies the teaching practices they have applied and complete an action research project.

“Supervisors of the teaching candidates commented that the SDEP program creates

teachers who take a lean in promoting high expectations for all students, and not writing off a student because they have special needs" (p. 37). The SDEP model is one form of preparing teacher candidates to meet the challenges of secondary teaching in an inclusive setting.

School-Wide System Approaches to Inclusion

Lowery, Hollingshead, Howery, and Bishop (2017) investigated the way that the Universal Design for Learning (UDL) affects the inclusive classroom for students with significant disabilities. They interviewed eight general educators, all who worked in an inclusive classroom. Throughout the interviews, four distinct themes emerged across all participants stories.

Designing for Learning Variability. In Lowery et al.'s (2017) study, a teacher shared "and the other thing that has really impacted me as far as UDL and lesson planning is that I really try to – when I am planning my lesson, I try to provide as may scaffolds as I can" (p. 230). ? Another example of intentional planning helped make every child in an inclusive classroom feel included. It perhaps was best captured by a teacher's statement "We need to take all of that in mind when we are designing those lessons so that we can hit each and every kid in every way" (p. 230).

Talking about Inclusion. There is a clear connection between UDL and inclusive practices. The interconnected strategies of inclusion UDL was articulated in how teachers each describes their own diverse classrooms, their instructional designs, and the implementation of lessons. One teacher shared, "I think about UDL as it pertains to inclusion, I think all this stuff is good for all the kids and that's how we do it, but it is

really good for my inclusion students" (p. 232). The Universal Design for Learning, as it pertains to inclusion, is good for all students (Lowery et al., 2017).

Teaming Fosters Success. There was a clear importance from the interviewed educators to have access to a professional network when planning and teaching with a UDL framework. The teachers felt their districts were supportive of them and their work and provided opportunities for ongoing professional development. "Teachers talked about the importance of having a building-based UDL resource person to support day-to-day implementation as well as a content area specialist to trouble-shoot the instructional challenges and having a team of professionals collaborating so that inclusion of students with moderate to severe intellectual disabilities is more meaningful" (Lowery et al., 2017, p. 234).

Differing Descriptions of UDL. Lowery et al., (2017) study participants shared experiences that demonstrated a different language from how the UDL framework is intended to be applied. Some educators talked about planning using the UDL framework while also intentionally planning for a separate individualized instruction, using the terms interchangeably for their planning. Many research based practices that good teachers use can be implemented without using the whole UDL framework. "However, the core concept of UDL used consistently throughout all CAST literature that is UDL is based on proactive, intentional planning to overcome barriers to learning and providing flexible instruction for all students" (p. 236).

In the interviews and analyzing of the data the researchers (Lowery et al., 2017) identified a disconnect between stories depicting planning for all learners differences

while accessing the same curriculum. These teachers' stories described planning for learners with moderate to severe intellectual disabilities a completely separate experience in their classroom. Often while sharing accounts that focused on an inclusive classroom while implementing a UDL framework. When teachers implement UDL in their classroom it does not abandon the need to apply individualization, but in turn looks for ways to which individualization can fit into the UDL framework and assist all student learning needs. A promising example from the study was that all participants shared stories representing their students with moderate to severe intellectual disabilities can, and should, be included in the general education classroom by using UDL intentional planning. General education teachers did share the need for more support and training to be able to understand different instruction methods, the use of materials, and options to continually include students with intellectual disabilities into the general curriculum of their classroom.

Morningstar, Shogren, Lee, and Born (2015) and Lee, Wehmyer, Soukup, and Palmer (2010) in their research found the Universal Design for Learning was also an important piece for educating students with severe disabilities within the general education classroom, but also found other approaches to meet the need to access for these students. When using UDL, students have the ability to show evidence of their learning. These options may consist of reports, exams, content portfolios, drawings, performances, oral reports, video-taped reports, and other alternative means. Modification was the focus of the study done by Lee et al. (2010). They found there would be improved student engagement and a decrease in competing (nonacademic)

behaviors in the general education classroom when modifications to the curriculum were present for students with disabilities. There are many variables noted for student with disabilities having access and showing progress in the general education curriculum. It is important to consider the classroom, student, and teacher variables that affect modifications to curriculum. “While findings from this study supported the importance of curriculum modifications on teacher and student behaviors and suggested practices to enhance implementation of curriculum modifications to promote access to the general education curriculum for students with disabilities” (p. 229). The academic responses of students with disabilities when engaged in standards aligned curriculum with modifications were more prevalent and there were no competing behaviors distracting the learning of others around them. There was a noted inconsistent use of modifications dependent on the subject area. Modifications to the curriculum were rarely preset in language arts and math classes, but showed more consistently in other classes such as social studies and science. General education teachers felt that the paraprofessionals in their classrooms helping students with disabilities can apply and use the modifications for the curriculum, but the researchers also felt that general educators need the training to also prepare them to deliver curriculum modifications independently of the special education teacher.

Morningstar et al. (2015) conducted observations that took place in inclusive settings in elementary and middle school classrooms (six schools - 65 total classrooms). Two essential scopes of inclusive classrooms that are impacting students, the supports

necessary to participate in inclusive environments, and the supports to engage students in learning were discovered.

Supports for Participation. There are five target areas on how inclusive classrooms are able to support all learning to participate fully in the general education classrooms. First, the instructional staffing was important. Almost all classrooms had a general education and special education teacher present and almost half the classrooms who had student with more significant disabilities had paraprofessionals present. Full co-teaching was in 100% of observations across all classrooms that have a general and special education teacher in the classroom. These teachers worked as a team to organize and provided tiered instruction to all students in the room. "The predominant staffing model in the six schools were primary instruction led by the general education teacher (25%-80%), with full-time paraprofessional support (17%-44%) directed towards students with significant disabilities" (p. 201). Special educations teachers were assigned to one or more classrooms often by grade level. These teachers were observed learning and entering classrooms to provide a variety of supports to the general education teacher of that classroom. This rotation typically was seen on a structured schedule. The effort of the special education teacher was working with students on academic content was different from the rest of the classroom or working with the students with significant disabilities in the classroom. The instructional formats of the classrooms or lessons would start with the teacher presenting information on the board for whole-group instruction. The general education classrooms had Smartboards which made whole-group learning interactive and kept all students, even those with disabilities,

engaged when the teacher was instructing the lesson. The highest level of student engagement was when instruction from the teacher was led from the board. After whole-group instruction teachers moved to flexible groups. These consisted of smaller groups, stations or centers, and paired learning to continue applying the curriculum content. Another important area was peer-supported learning. The study showed 60 opportunities where peers were engaged in the classroom content with others in the classroom. These peer opportunities consisted of using stations or centers, peers tutoring, student-led demonstrations, or pair work and adults in the classroom were actively engaging with students during this time. Inclusive school settings provide the opportunities to access the core academic content in the general education classroom (Morningstar et al., 2015).

Supports to Engage in Learning. Morningstar et al. (2015) found that the Universal Design for Learning (UDL) was observed and methods from this system were used 2.3 times per observation. These methods were visual and auditory (34%), modeling (15%), pictures (13%), objects and manipulatives (12%), and technology access (10%). Teachers provided different options and styles in their instruction so all student in the class could access the curriculum information, not just for those with disabilities. Behavioral Interventions was another support to help engage all students in the classroom. "Observers tended to report that students understood classroom expectations by noting that students responded to behavioral management approaches, such as a teacher holding up a hand or clapping three times with students responding or quieting down and orienting to the front of the room" (p. 205). Adaptations and modifications is a

needed system to assist students with disabilities in the classroom. The most frequent adaptation was changes in how materials are presented (31%) such as using a larger print or providing a variety of formats of graphic organizers in the classroom. Environmental adjustments were observed 23% in observations, which means moving students to the front of the room or having the access to wearing headphones. Alterations to response options was observed in 25% of observations. The most frequent form of modifications used was decreases in the cognitive demands of classroom work at 51% of observations. These include students needing to accomplish fewer tasks, having access to picture-based stories other than written stories, and differing the complexity of math problems.

Idol (2006) and Theoharis and Causton (2014) both looked at systems of whole-school shift to inclusion and what is successful to make it work. Theoharis and Causton (2014) gave a multistep process to help school personnel turn their school from a traditional set-up to an inclusive set-up for all students. For school to move from current practice to and inclusive reorganization will result in the need for all students with disabilities to be placed into the general education settings and providing services to meet their needs while attending the general education classroom, and needing to eliminate pullout or self-contained special education programs.

Step one, the team needs to set a vision. There are three areas to consider when making the vision for an inclusive school. The current school structure of how the school arranges its adults and students, meeting the needs of all student in general education, and current school climate. Step two, create a service delivery model. Teams examine

the current practice of all of the services which are provided, additional resources, and what school staff are providing them. An important part when creating the service maps is to indicate which staff members during a school day pull students from which classrooms. Needing to understand which students learn in self-contained classrooms and where paraprofessionals are used. This will create the complete picture of where staff in the school work and apply services to students. Step three, align school structures. Schools need to rethink current systems and use staff members to create teams of professionals that serve all students inclusively in the general education setting. By creating this new service delivery map there is a plan to use staff members to make balanced general education classrooms of special and general educators where all students are provided instruction. Step four, rethink staffing and create instructional teams. When schools rethink how they use their staff members, they are able to implement a new system of a team approach. This involves creating teams of general education teachers, specialists and paraprofessionals to serve all students in the general education setting. Changes will be for teachers who traditionally were in a self-contained rooms may now become co-teachers and will plan instruction and lessons and consult with two general education teachers. Using the school's natural proportion ratios of students with special education needs to general education peers, should be the same ratio used to add the students with disabilities into the general education classroom, as well as considering the additional needs of students with significant disabilities. Step five, impacting classrooms practices. Administration teams need to continue to provide professional development around what is the impact of skills

needed in the daily classroom practices. These can include collaboration, co-teaching, differentiated instruction techniques, working with challenging behaviors, literacy, etc. Step six, ongoing monitoring, adjusting, and celebrating. Staff need to feel they can get feedback from all staff members, students, and families, to monitor and adjust the plan as needed, but without abandoning the program at the first moment of resistance. Step seven, creating a climate of belonging. “Creating a climate of belonging, a component of this necessitates involving all staff members in the planning and implementation of a more authentically inclusive school” (p. 87). The goal is to create inclusive schools that are focused primarily on all students to have access to the general education core curriculum which is paramount to the learner’s success.

Idol (2006) focused on the different forms of delivery that special education can perform in a school to support students with disabilities. First was noted about the many ways of being collaborative in a school. To support general education teachers in teaching students with disabilities there are a variety of collaboration programs. The special education teacher can become a consultant to the teacher to provide indirect special education services and may provide co-teaching systems that can enhance the education for all students in the classroom. A supportive resource approach is used in any setting where students can have access to instruction on specific content on a regular basis or attend when needed.

Obiakor et al. (2012) share about co-teaching systems and differentiated instruction. There are many types of co-teaching models that schools can utilize with staff. The one teach, one assist model has one teacher providing the instruction for all

students while the other teacher provides assistance to the students who need additional support in the room. The stations teaching model has students broken into three separate small groups. Two groups will work each teacher while one group completes independent work. The student groups will rotate through the 3 stations. Parallel teaching model has teachers to planning the lessons together as a team and then splitting the classroom into two smaller groups to instruct the same lesson within the same classroom, giving all students access to small group learning. Alternative teaching has one teacher teaching to the whole group while the other teacher will pre-teach and re-teach students in the class who need the additional supports for the lesson. Team Teaching requires both teachers providing instruction together within the same classroom. Teachers must follow guidelines provided below to make instruction that is differentiated in the inclusive setting successful. Teachers need to make sure there is clarification of all concepts and the process to generalize the skill. The need to use assessments as a tool to extend and modify the lesson instead of using assessment just to measure instruction. To engage all students in the general education curriculum there needs to be a balance of teacher assigned tasks and the ability for student to select their tasks to show their understanding of the curriculum content.

In the study (Idol, 2006) four elementary schools and four secondary schools were interviewed. Some schools were very traditional while others practiced a full inclusion model. The elementary schools C and D had special education staffed differently than a traditional model. In school C, their special education support model consisted of a consulting teacher, a cooperative teacher, a content mastery resource room, two self-

contained classes for students with behavioral challenges, and two life skills classrooms. In school D all students with disabilities were taught in the general education classroom. The special education support services provided to classrooms teachers included one teacher who worked as a consulting teacher or as a cooperative teacher, depending on needs in the class. In the secondary level, middle school E and F, and high school H were at varying levels of inclusion. High school G was a traditional high school set-up. At middle school E all of the special education staff members were available to classroom teachers as consultants and advisors. They were supported by using cooperative teaching, access to a resource classroom for math and a resource class for other subjects. In middle school F, Available special education support included a consulting teacher, a cooperative teaching, a curriculum coordinator who helped in finding appropriate instructional materials, an instructional coordinator who provided lessons and advice on instructional techniques to teachers, and two classes for behavioral disorders. At high school H, Had similar special education supports in a consulting teacher and cooperating teachers, but it also had a resource class providing support for the general education curriculum, a life skills program with two teachers, a greenhouse program for special education students, and a work study and career development program (p. 85). Recommendations from this study consist of remembering that schools need to support classroom teachers who teach in inclusive classrooms by the use of consulting teachers, instructional assistants, applying cooperative teaching, and teacher assistance teams for teachers who do not have a co-teacher in the classroom to have access to support. Schools should reconsider the practicality of self-contained special

education classes. Those interviewed seldom choose self-contained classes as a first choice for the best service delivery for students with disabilities. Resource special education programs should become supportive rooms where the curriculum matches what is utilized in the general education classroom. The special education and general education teachers should work together to plan and monitor a student's academic programming. Special education teachers who have a full special education assignment, but were expected to consult with general education teachers frequently, report no one felt successful. Schools needs to allow for a formal time where classroom teacher consultation can be provided, instead of simply expecting it to happen. Dymond, Renzaglia, Gilson, and Slatot (2007) also mention the need for collaboration. Most educators (general and special) indicated they should work collaboratively to provide students with significant cognitive disabilities access to the general curriculum. Some staff saw collaboration as "doing it jointly" or working "together as a team," the general and special education teachers would each share the responsibility for teaching the curriculum to the student with disabilities. "Others defined collaboration as a separation of roles with the general education teacher teaching the curriculum to the whole class and the special educator assisting those students who need help" (p. 10).

Jorgensen and Lambert (2012) reviewed a developed model that will assist teachers in planning and collaborating for students with intellectual disabilities in the classroom. Students with intellectual disabilities have shown that many more students than ever thought possible can learn academic knowledge and skills when they are provided with high quality instruction and assistive technology within a general

education classroom. The *Beyond Access Model* incorporates the use of four interactive phases: baseline needs assessment, exploring and describing best-guess team and student supports, systematic implementation of promising supports with data collection, and a review and revision of student and team supports based on data analysis. The team of teachers work together to answer five questions,

> What is the general education instructional routine? What are students without disabilities doing to participate in the instructional routine? Can the student with the disability participate in the same way in all components of the instructional routine or does that student need an alternate way to participate? What supports does the student need to participate using alternate means? and Who will prepare the supports? (p. 23).

It is important that the team looked to the lesson and find the behaviors (the skills and expectations of all students in the classroom) will be present in that lesson. The team then works together to discuss whether the student can participate in the lesson in the same way as the general education students or if the team will need to find alternative ways for the students to participate. The team will brainstorm ways the student with disabilities could participate and identify who is responsible to prepare the support either before or during the activity. The team will evaluate the effectiveness of the selected supports by using a checklist that describes each strategy and rate its level of application on of a scale of 1-3. "If all supports are not rated 3, the team discusses and implements strategies for improving the accuracy and consistency of the support" (p. 28). Pre-planning of the possible instructional routines a teacher will utilize in their

classroom is a way to make planning of inclusion for students with disabilities in the general education classroom more organized, as most general education teachers use specific routines in their classroom. Once a successful strategy for an instructional routine is found, it can be consistently used in that class or across other classes and subject areas. Typical routines to plan for to include students with intellectual disabilities are during teacher lectures and students are expected to take notes, when the teacher has a large group discussion where students are expected to have comments on the topic are seen often. Other classroom systems include completing assignments at their desks, manipulating classroom equipment, participating in small groups and typing to obtain information for online research or writing. The *Beyond Access Model* is comprised of creating a routines-based instructional plan that gives a process for a student's education team to have prepared and organized supports ready so the student can participate with the greatest extent possible in the general education classroom. The regular instructional planning meetings with the team is one of the critical team supports for success of this model. One area of concern is how teachers will have the time to meet consistently with this system. The study gave some creative ideas for identifying common planning time if it is not available in the school day currently.

> School can rotate a substitute teacher throughout the building for a day each week. At elementary schools, educators can hold meetings during recess and rotate responsibilities each day, build time during service provider times when

> students are out of the classroom and have the school engage trained volunteers during a teacher's current additional duty times (lunch, recess) (p. 33).

Strategies for Access That Individual Teams and Teachers Can Apply

Browder et al. (2007) gives skills that are needed to teach students with significant disabilities including teaching prioritized skills with systematic prompting and fading, teaching student skills to generalize across multiple settings, promoting access through the use of materials, activities and settings typical of general education and depending on the student's level of symbol use, materials are adapted and instructional activities designed to require different levels of cognitive demand (p. 7). Block et al. (2007) shared the concept of accessing about accessing general physical education that the general physical education teacher with support from a teacher's aide or the special education teacher can teach general education students to help peers with severe multiple disabilities during the class. By having a trained students provide help to students with these disabilities the connection can become more frequent and create interactions among all types of students.

Nolet (2006) viewed methods of how to collect assessment data for access in the general education curriculum. He identified rubrics were a way to assess and evaluate students on performance criteria for data. There are two types of rubrics: holistic and analytic. Holistic rubrics give an overall impression of a student's work and then compare with examples and samples that represent different levels of competency in understanding the content. This is a system where multiple aspects of a task can be evaluated at the same time. Analytic rubrics provide a list of pre-determined statements

that specifically describe expected performance on a task. Analytic rubrics are established before any student work is evaluated and are intended to describe clearly the continuum of competence along which a learner would move to become more proficient.

Doyle and Ginareco (2013) looks at the perspective of high school students with developmental disabilities and how to include them in the general education curriculum. Partial participation is the idea that all students can access at least part of the curriculum and participate in most activities provided in the general education setting which gives a name to a strategy educators have been using in various forms. When considering how a student might partially participate in any high school activity, it is important to keep in mind the context and nature of the involvement must be at least status-neural, but preferably status-enhancing (p. 63). If a teacher considers partial participation is a way to include all students in the majority of the educational activities, then the ability for students accessing the general education curriculum becomes endless. Curriculum overlapping is a way for teachers to plan and think about how students with disabilities will participate in the curriculum that allows for meaningful inclusion. Combined with the principle of partial participation, curriculum overlapping allows students with severe intellectual disabilities ways to participate in the same age-appropriate activities and content as their general education peers.

Agran, Wehmeyer, Cavin, and Palmer (2010) promote the active engagement of students with cognitive disabilities through the *Self-Determination Learning Model of Instruction*. This model is a system of student-directed learning strategies that can

promote opportunities for access to the general curriculum for students with significant disabilities. The study consisted of three participants with an identified target behavior. These behaviors showed an increase in skill performance (80%, 76%, and 81%) on their specific task using the self-determination model. The students continued to maintain performance level task expectations during the entire study with success of 80%. This result shows that the model can be an effective tool when teaching students with disabilities skills that are commonly expected in a general education setting. The effects of the model showed increase for the students with two types of communication skills and a functional content skill were identified. "Although these skills are not core academic skills, they are skills that allow students to have positive experiences as they participate in the general education curriculum and for the two communication skills, have utility in other general education classes" (p. 172).

Petersen (2016) found that *Dynamic Learning Maps* can assist with general education access for special education teachers. "Many teachers of students with significant disabilities were prepared to teach at a time when teacher preparation programs also emphasized a functional or life skills curriculum, many special education teachers may not have formal preparation in academic content such as math or literacy" (p. 20). The *Dynamic Learning Maps* (DLM) and the National Center and State Collaborative (NCSC) formed groups of people to develop a system for students with significant cognitive disabilities to have access the general education curriculum. Each group developed documents with professional development materials that aligned the Common Core state standards in math and literacy grade level expectations and gave

teachers resources and supports to increase content knowledge and improve instructional practices for students with significant cognitive disabilities. The essential elements of the *Dynamic Learning Maps* might provide a linkage to the Common Core state standards which assist in providing access to the general education curriculum. This connection was significant to special education teachers in the study because they shared they did not understand how the Common Core state standards could be applied or relevant to their students with significant disabilities. The *Dynamic Learning Map Essential Elements* give educators ways students could access academic content and gain access to the general education classroom. Teachers predicted that this document connecting standards to their students with disabilities could help make decisions about what to teach. "The *Dynamic Learning Map* would provide a roadmap for instruction, and this roadmap would assist teachers in prioritizing instruction and ensuring their instruction was connected and aligned to the standards" (p. 28). Curriculum access for students with significant disabilities is possible when supports are intact. Teachers' comments show a continued need for professional development in the areas of content standards and leaders in the schools need to have formal structures in place for educators to have ongoing collaboration and communication between the general education and special education setting. Educators need to have ways to assist each other with how to prepare, plan, and deliver instruction for all students with significant disabilities, but also ensures not only curriculum access but positive student outcomes for all in the general education setting.

CHAPTER III: DISCUSSION AND SUMMARY

Summary of Literature

Attempting to define students with significant disabilities is a complicated system. According to IDEA (2004) and additional disability terms, significant disabilities is not a stand-alone definition. Through these studies it has been discussed in multiple ways students with significant disabilities are able to be under the umbrellas of autism, moderate to severe developmental and intellectual disabilities, deaf-blindness, Downs Syndrome, and cerebral palsy, as well as a low-incidence disabilities. Students may have a dual diagnosis with two from the list or have additional needs in communication skills and motor skills (Block et al., 2007; Kleinert et al., 2015; Kurth et al., 2012; Litvack et al., 2011). Students with augmentative and alternative communication methods such as a communication devices, signing, or gestures were also a common theme to student with significant disabilities and their access to the general education curriculum (Erickson & Geist, 2016; Rupper et al., 2011).

Access to the general education curriculum is a term that does not have a clear definition through the review of research. Some authors believe that access is best met in the general education classroom with a general education teacher teaching the curriculum and standards. The special education teachers are there to support the student with significant disabilities and general education teacher and apply services in the classroom. This was the ideal noted location and system for access and inclusion (Dymond et al., 2007; Golmic & Hansen, 2012; Kilanowaski-Press et al., 2010; Litvack et al., 2011; Obiakor et al., 2012). Other research shows special education and general

education teachers favor students with significant disabilities being in a general education classroom part-time or receiving all their instruction in the special education setting with a focus on functional skills (Doyle & Ginareco, 2013; Ryndak et al., 2014; Timberlake, 2014). A reasonable explanation for a student's placement could be the location where the live. Rural schools tend to have a higher level of inclusion of students with significant disabilities over students from urban settings (Brock & Schaefer, 2015; Carter & Pesko, 2008). Inclusion was a common theme when discussing access for students to the general education curriculum. Inclusion was defined as when students with disabilities were in the general education setting with their same-aged peers learning, even when it was modified from the class expectations (Golmic & Hansen, 2012; Kilanowaki-Press et al., 2010). Access to the general education curriculum also gives students with significant disabilities the ability to utilize the alternative assessment to make progress towards the standards for their appropriate age-level. The alternative assessment can be used as a guide to help identify standards that are priority for a student. Studies showed that students who take the alternative assessment are more likely to be placed in a more restrictive setting (La Salle, Roach, & McGrath, 2013; Nolet, 2006). Special education teachers continue to use social skills as a reason over the academic content for a student with a significant disability to attend a general education class (Carter & Pesko, 2008; Kilanowaski-Press et al., 2010; Litvack et al., 2011; Obiakor et al., 2012; Theoharis & Causton, 2014).

To be able to have inclusion work in the general education setting for a successful learning environment and academic rigor to the standards, there is a need for

modifications of content for students with significant disabilities (Browder et al., 2007; Lee et al., 2010; Nolet, 2006). Others have focused on the Universal Design for Learning (UDL) model as a system for including all learners in the general education classroom content (Lee et al., 2010; Lowery et al., 2017; Morningstar et al., 2015; Trela & Jimenez, 2013). Teachers positively mention the need for collaboration between special education and general education. The special education teacher has the expertise to work with students with significant disabilities, while the general education teacher can assist with how the student can access the general education curriculum (Idol, 2006; Obiakor et al., 2012). The struggle continues to be the structured time needed to effectively collaborate together (Ballard & Dymond, 2007).

Pre-service teachers who are working towards their education licensure in general education content areas are now able to have a background or dual licensure in special education services through colleges and universities, seeing a benefit in student teachers being comfortable and including students with disabilities in their classroom. These teacher leave the college programs ready to work in inclusive settings (Fullerton et al., 2011; Golmic & Hansen, 2012; McCray & Hatton, 2011).

The *Beyond Access Model* (Jorgensen & Lambert, 2012), *Dynamic Learning Maps* (Peterson, 2016), and *The Self-Determination Model* (Agran et al., 2010) are all models that special education teachers can utilize to assist in providing in a structured format to provide inclusion and access to the general curriculum for students with significant disabilities. There is also a difference between the traditional school and an inclusive school set-up. The traditional school focuses on teachers pulling out students with

disabilities from the general education classroom to meet their service needs. A school that is full inclusion will utilize support staff as co-teachers in the classroom providing services to the student with disabilities or a consultant to the general education teacher to assist in modifying and including the student with significant disabilities with the rest of the class (Idol, 2006; Olson et al., 2016; Theoharis & Causton, 2014).

Limitations of the Research

The research was narrowed by reviewing peer-reviewed journals that focused on defining access to the general education curriculum, significant disabilities, and teacher perspectives on working with students who have significant disabilities. The key words that were used in these initial searches included “access to the general education curriculum,” “significant disabilities,” “alternative placement,” “process to inclusion,” and “inclusion of students with significant disabilities.” During research, significant disabilities was replaced with “intellectual disabilities”, “cognitive disabilities”, and “developmental disabilities”. Information was also found on programs and models to be used specifically with student who have disabilities and programs to assist with inclusion and access

One limitation of the research for this review was the scarce amount of articles focusing specifically on students with significant (developmental, intellectual, cognitive) disabilities. This low-incidence disability affects not even two percent of the school population, but it created limitations when attempting to find articles that would fit and be able to be compared against each other. Starting with research in 2015 and searching again in 2017 and 2018 resulted in few additions to these topics.

A second limitation in this review was the lack of participants in many of the research articles that were found. Many articles had small samples that did not always provide a clear way to be able to generalize the data from setting to setting. Some studies would only focus on one education level, elementary or secondary, which the difference between these levels is very different when trying to apply practices across all settings. Other studies had samples of three to eight participants. Others focused on one specific geographical area. Many of the studies were interview based for their data. While the interview technique garners opinions of teachers, teacher are also people who do not want to look bad or that they are not doing what they should. Observation with clear outcomes from it were stronger arguments for best practice over interviews of teachers sharing what they say they do.

Implications for Future Research

Ryndak et al. (2014) stated for how to move forward in a practical sense looking at "should we do it" to "how do we do it." Working with students with significant disabilities is not a cookie cutter system. Even curriculum that is made specifically for this level of student still needs modifications, adaptations, and configuring to make it work. Research is still needed in specific practices and their reliability and success in the general education setting. Research is needed on the specific modifications that work for students with limited expressive communication and the modes for a student to communicate their understanding of content when writing is not a skill they are independent at. Researchers need to look at the specific area of significant disabilities

and find opportunities within this small disability category on what specifically works for them in the variety of content areas within the general and special education setting.

Implications for Professional Application

Education is a constantly changing platform where new systems, standards, and models are introduced each year and districts choose to apply and skip what makes sense and works for them. Many systems in education do not have a right or wrong answer, and all educators have the goal of increasing the skills and knowledge of their students while they are in their classroom. An area of education that has had minimal change in the past ten years is how students with significant disabilities are serviced. Though districts spend time looking at programs, curriculum, and staffing for students with significant disabilities in their center-based and functional skills classrooms, little change is happening in the training, time, and skills for these teachers to get these students learning in the general education classroom. As students become older, the gap between their peers and them widens so that by the time they attend high school, they have been out of the general education setting for their core classes for years. Outside of lunch, assemblies, a homeroom or advisory, and elective type courses such as art, foods, and music, the typical placement for a majority of the school day for students with significant disabilities is the center-based functional skills classroom.

Using the information gained in this literature review, I have a better understanding of the possible reactions of my general education colleagues when they see that a student with significant disabilities will be attending their general education class. Using collaboration as a priority to communicating how the student will be able to

attend and access the class and what the classrooms systems are like is important. I hope to implement parts of the *Beyond Access Model* to assist the general education teacher and paraprofessional know what expectations to have so that the student is able to learn skills and participate in the class to the best extent possible. I hope to help the teacher apply some skills from the UDL mindset to not only assist my students, but also the others that are in the class who could also benefit from the other modes of learning outside of the standard reading a passage or listening to a lecture. Through this review I have also gained the insight that time is needed as the special education teacher to collaborate, make modifications to curriculum, and assist the general education teacher and paraprofessional as they work with the student. I will need to advocate for that time in the school day. As a functional high school teacher in a five-period school day, four of the periods I am teaching are functional skills type courses, and my prep time is typically filled with planning and preparation for those courses, communicating with parents, and working on the due process legal requirements.

Conclusion

Students with significant disabilities are students who typically are dual identified and may have motor or communication concerns that affect their daily life and in school need a high level of support to access their basic needs. Teachers define access to the general education curriculum through a variety of methods. These include being in the general education classroom with modifications and support all the time, being in the general education classroom sometimes, but leaving to get information another way, having the special education teacher teach the content and life skills

dually with consultation at times from the general education teacher, or forgetting about the general education curriculum and solely focusing on the life skills needed for future success. There are many methods teachers are able to use to assist student with significant disabilities access the general education curriculum. These methods include modifications to standards and work, creating rubrics to see progress, having teaching staff co-teach in the general education classroom, or use strategies of the *Universal Design for Learning model*, while having consistent opportunities to collaborate between the general and special education teachers. When collaborating, using the *Beyond Access Model* breaks down and give structure to identifying the needs of the student to access the general education curriculum. It also assigns responsibility to each educator on who will manage each of the identified accommodations and modifications. However, schools that use a 100% inclusive program for all students in the school with disabilities are changing the way special education teachers are typically teaching. These schools have the special education teachers become a consultant (typically in one content area or grade level) where they will consult with a group of general educators or co-teach in their classroom depending on the need and level of the students in the general education classrooms they support.

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