DSL Action Research Project Report

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**Practical Life in Education—Essential executive function skills from everyday life are vital to a child's autonomy and educational growth and to assist focus and a feeling of order: An Action Research Study.**

This paper will address how training with an Educational Executive Functioning and Life Skills curriculum (intervention) can support the readiness of student success in a program for gifted students.

**Introduction**

School administrators are crucial in fostering executive function skills in students, enabling them to take responsibility for their learning without constant instructor assistance. Enhancing these skills in the early years is essential for academic achievement. Training with an Educational Executive Function and Life Skills curriculum (intervention) can support the readiness of student success in a program for gifted students. Formative activities can improve academic success by addressing childhood development stages. This approach is modeled after the Montessori approach to Practical Life skills.

Students should ideally develop executive function abilities throughout their formative years through daily experiences. Research indicates that this is not occurring enough among gifted children and students with autism spectrum disorder (ASD), High Functioning Autism (HFA), or attention deficit hyperactivity disorder (ADHD). Various executive function skills impact educational results, and instructors must know how to assist students who lack these skills to enhance their academic ability. An executive function program should be developed and executed to address these essential shortcomings.

This project introduces an intervention to assess executive function (EF) skills, specifically in potentially gifted and twice-exceptional students from 3rd to 8th grade. It is anticipated that most students will possess a level of knowledge commensurate with peers of the same age. The project will be utilized for an experimental investigation on a sample of middle school children, aiming to examine the impact of executive function (EF) on academic achievement within the school setting. Gaining a deeper understanding of each topic standard's executive function (EF), prerequisites will enable educators to design more efficacious curricula and customize targeted interventions for students, considering their individual EF profiles.

Impaired executive function skills such as self-awareness, organizing and planning, focus, working memory, mental flexibility, problem-solving, and prospective memory can hinder the integration of gifted students, students with autism spectrum disorder (ASD), High Functioning Autism (HFA), or attention deficit hyperactivity disorder (ADHD) in conventional classrooms. Researchers have debated these individuals' specific executive function profiles, leading to efforts to separate them. The three essential executive function processes are inhibition, shifting/cognitive flexibility, and planning/working memory. ASD is associated with cognitive flexibility issues, leading to rigidity and repetitive behaviors. Poor cognitive flexibility preserves stereotypical behaviors and self-control issues, hindering daily life adaptation. Effective planning and working memory are essential for setting goals, prioritizing tasks, and initiating responses (Cohene, 2019). Students with low EF skills often have trouble making friends because their peers and teachers do not understand what is happening. This can make it harder for people to get to know each other in the classroom. Teachers should determine how to help students with HFA/ADHD fit in with their peers. A student's ability to get along with others in class could improve if they learned ways to deal with and lessen the effects of their lack of EF skills. If teachers knew more about students' lack of EF skills, they would be ready to teach differently by scaffolding and incorporating those methods into their regular lessons. If students with normal development knew about these problems caused by poor EF skills, they might be more willing to talk to and connect with students with HFA/ADHD in the classroom (Lima, 2021).

 Montessori education provides children with purposeful activities with an obvious underlying rationale, giving individuals meaning and direction. Providing significant activities is essential for a school system based on self-determination since meaning drives involvement. Participating in an educational program focused on executive function skills will impact students' preparedness to succeed. This study employs an action research methodology, using an executive function skills curriculum as a practical intervention to enhance practical life skills in schooling. It will assess self-reported awareness levels before and after the intervention.

**Statement of the Problem**

The problem is the organizational and attention problems gifted children experience. Organization, time management, study habits and skills, mentality, stress, sleep, and screens are the seven areas where disintegrating students exhibit skill deficiencies and unproductive practices. Executive functions (EFs) are high cognitive functions that enable individuals to respond to stimuli in different ways under different circumstances, delay responses, or not respond at all. These pathways promote goal-directed behavior planning. EFs grow progressively with life, some appearing as early as seven months. Children around four or five years of age have a significant increase in their capacity to block irrelevant information, recall and manage knowledge, and shift between tasks. EFs continue to grow and mature until people reach their mid-20s. EFs are also crucial for learning, and this proposal aims to introduce and demonstrate their importance in daily life (Arar, 2022). Enhancing early childhood executive function (EF) skills can help students regulate impulsivity and make choices that support goal achievement.

Higher-order cognitive functions, such as self-regulation abilities, substantially influence children's academic development. According to this project, Executive Functions directly affect critical abilities such as reading, arithmetic, and problem-solving. Academic success is related to motivation, effort, and self-efficacy. Recognizing oneself as a learner and creating effective tactics might help improve attitudes and school performance. Schools should teach students about their gifts, weaknesses, and techniques for empowering them. Students' task orientation, confidence, peer social skills, and self-regulation are predicted by EFs and challenge selection. Classrooms should push students to make difficult decisions by emphasizing work and learning. Training using an Educational Executive Functioning and Life Skills curriculum (intervention) can help children prepare for success in a gifted program.  The incorporation of executive function intervention into the curriculum has the potential to significantly improve academic content standards and give assistance to all students.

**Background**

Recent years have seen a surge in research on executive function in early infancy. Much of this research is based on the idea that executive function development occurs through the formation of a series of domain-general component processes (for example, working memory update, inhibitory control, and shifting). The evolution of executive function should be seen as the emergence of abilities to employ control to achieve specified objectives. Such objectives activate and are impacted by mental content acquired throughout development, such as information, beliefs, norms, values, and preferences. These are crucial when analyzing children's performance on executive function measurements. This explanation better explains empirical data than the component-process paradigm, generates precise, testable hypotheses, and has consequences for theory, measurement, and treatments (Doebel, 2020).

Executive functioning skills are essential for connecting one's knowledge with its practical application, enabling effective handling of various aspects of daily life. Implementing a program that encourages the development of practical life skills through educational activities is part of the approach. These skills are essential for improving a student's ability to flourish academically and in various aspects of life. Executive functions are high cognitive skills that allow people to react to stimuli in multiple ways depending on the circumstances, postpone responses, or not respond at all. These routes encourage goal-oriented behavior planning. Executive function develops gradually throughout childhood, with some emerging as early as seven months. Children at four or five years old show a significant boost in their ability to block extraneous information, retain and manage knowledge, and switch between activities. These skills and abilities develop and mature until individuals reach their mid-20s. These skills are also essential for learning, and this idea seeks to present and illustrate their significance in everyday life. Improving early childhood executive function skills may help children control their impulses and make decisions that promote goal accomplishment. Without strong executive function skills, students may begin school at a disadvantage that worsens with time. Studying these skills and treatments may enhance educational practices and student experience by including mindfulness and social skill programs. Strong executive function skills (cognitive flexibility, inhibitory control, and working memory) are critical for academic performance and relationships. Executive function skill development happens fast between the ages of three and six. Therefore, it is critical to group treatments and methods by age to better understand what works best with various age groups and student demographics (McCatharn, 2021).

As a school administrator for gifted education, the awareness that students have become less motivated and are not taking autonomous initiative in their work is increasingly evident. There are advantages of intrinsic instructional goals for teachers who desire to help students become autonomous and intrinsically motivated. Executive function skills serve as a crucial link between one's knowledge and the practical application of that knowledge to handle many aspects of everyday life effectively. These skills include setting objectives, devising strategies, and adjusting plans in response to obstacles, ultimately leading to success in both academic and personal spheres. Healthy executive function skills enable students to cultivate regular study and work habits, diminish distractibility, regulate impulses, and engage in acts advantageous to their current and future well-being (Arar, 2022).

Executive function skills are crucial for developing self-management abilities, resilience, and self-improvement. However, the explicit and systematic instruction of Executive Function skills is not universally provided to all learners. Proficiency in executive functioning results in enhanced achievement in academics, improved interpersonal connections, and crucially, facilitates the personal development of students, consequently promoting heightened self-assurance and self-regulation (2022).

Academic and personal success in school relies on students' ability to autonomously develop strategies for completing projects and meeting deadlines, necessitating a high level of competency in executive functioning. By engaging in deliberate practice, executive function skills enable students to overcome the disparity between their abilities and difficulties, teaching them to embrace assistance to become self-reliant. Structured instruction and introspection may enhance executive function skills and can be mastered through practice. Executive function skills enhance cognitive abilities, equipping students with mental strategies and efficient methods to maximize their learning. This empowers individuals to recognize their potential for personal growth and excel academically and throughout everyday practical life.

**Sociological Theory**

 I analyze executive function skill inadequacies using sociological structural functionalism and social cognitive theory within this research project. These ideas suggest that executive function skills are not innate but cultivated through interactions and experiences. Structural functionalism is useful when looking at executive function inadequacies as individuals cannot comprehend or grasp all the separate elements of society; therefore, they do not feel they are a part of it.  Social cognitive theory is a useful lens for examining the relevance of executive function skills to academic achievement.

 Durkheim discussed the concept of social cohesiveness that arises in cultures where people's relationships are influenced by the division of labor in economic and home responsibility. There is a breakdown in social solidarity and integration. When individuals cannot comprehend or grasp all the separate elements of society, they do not feel they are a part of it. Durkheim believes this occurs as soon as the totality of individuals cannot visualize social processes and boundaries and thus cannot comprehend the social whole at a glance. As a result, the social institutions grow opaque and lose the ability to maintain social linkage between individuals and groups (Morrison,2006).

 According to Durkheim, social cohesiveness is a concept that emerges in communities where people are bonded to one another through their shared experiences of home and economic responsibilities. When social integration and solidarity break down, people experience a lack of sense of belonging since they cannot understand or appreciate the many components of society as a whole. According to Durkheim, this occurs when everyone cannot see social boundaries and processes, making it difficult to understand the social whole quickly. Consequently, social structures become more ambiguous and cannot preserve the social connections that bind people and communities (2006).

 According to structural functionalism, all social structures, including the educational system, cooperate to serve society's requirements. According to this concept, society is a complex system comprising interconnected pieces that serve social and biological demands. It views societies as specialized parts that evolve towards common goals like stability, harmony, and growth. Structural functionalism is a consensus theory stating that society is based on mutual agreements and that creating and maintaining shared values and norms are crucial to society. Social change is viewed as a slow, orderly process (Wasilah, 2023).

 Sociology of education is a sociological study that seeks to address the fundamental challenges of education. Sociology of education studies the link between society and education, specifically where social interactions occur. Educational institutions are implementing transformational management models and leadership styles, particularly transformative ones, to adapt to globalization. To effectively manage an educational unit, indicators must include a safe and orderly environment, a mission and quality targets, strong leadership, high expectations from staff, continuous improvement, continuous evaluation of academic and administrative elements, and communication support from parents and communities. Developing executive function skills curriculum to manifest functions can be transformative. Learning or education is the process of changing behavior to mature humans through teaching and training efforts and is the method, process, and act of educating. This includes implementing continuous evaluation of academic and administrative elements, utilizing results for development and quality improvement, and providing communication support and incentives from parents and communities (Wasilah,2023).

 This link demonstrates how society may impact education, which can affect society. Sociology is concerned with society at all levels, from the macro (the whole society) through the meso (the learning process in schools) to the micro (the tiniest portion of society). According to the functional, structural view, the goal of education is to expose the younger generation to become members of society, which may then be utilized as a space to study, acquire information, modify behavior, and master the values required to appear as productive citizens. According to the systemic functional concept of society, it is a social framework comprising interconnected components that operate harmoniously. Changes to one element will affect other systems. The functional approach posits that society is cohesive because its members share a set of social ideals. Society, as a properly integrated social structure, is in balance. This school of thinking is known by several names, including the integration approach, the order approach, the balanced approach, and the structural-functional approach. Structural functionalists think that education may be transformational. The structural-functional approach sees society as a network of interrelated pieces. Mutualism exists in society through reciprocal interactions and symbiosis. A system is dynamic when it searches for equilibrium. Social dysfunction or social disparities may eventually be rectified independently due to the adaption and institutionalization processes. System changes are not revolutionary and are implemented gradually through tweaks. The value of consensus in the integration process cannot be emphasized. Every civilization has a unique collection of subsystems, each with structure and functional value to the greater community (Smith,2020). Structural Functionalism states that things occur in society for a specific function, maintaining stability and order and how to create order. Change can happen with life interactions. Neuro-divergent and gifted students require holistic benefits that can transform academics and cognitive development.

 Vygotsky's cognitive development theory emphasizes the importance of cultural and social factors in children's mental abilities, such as speech and reasoning. He posits that culture is significant in learning, language is the root of culture, and individuals learn within their community role. The more knowledgeable other is someone with a higher level of understanding, such as a teacher, parent, coach, or peer, who provides guidance and modeling to enable the child to learn skills within their zone of proximal development.

 According to Lev Vygotsky's Sociocultural Theory of Cognitive Development, social interactions constantly alter children's ideas and behaviors, which differ greatly throughout cultures. According to Vygotsky's theory, people's ability to grow relies on their interactions with others and the resources culture offers to shape their worldview. For children who are neuro-divergent and have difficulty with executive functioning, this is challenging. Three methods exist for transmitting cultural tools from one person to another: collaborative learning, taught learning, and imitation learning. The interdependence of macro-social (cultural-historical) and micro-social (interpersonal) impacts on cognitive development and social influences on learning in general is emphasized in Vygotsky's work. While Piaget's theory identifies internal factors as the primary drivers of cognitive development, learners are thought to need the influence of external social influences in order to progress (Huang, 2021).
 According to Vygotsky, language is the foundation of awareness and allows for cognition. Without language, human development would not have been able to progress above the basic senses and perceptions seen in lesser mammals. Additionally, language was seen to be a cultural instrument that promotes social interaction, the formation of attitudes and behaviors, and the spread of culture itself (2021).
 Vygotsky's theory of social influences on cognitive development highlights the role of cultural, historical, and interpersonal factors in shaping a student's mental development. He believes that higher mental development is inseparably dependent on social interactions, and new understanding is created in social interactions. In practical teaching, scaffolding involves continuous evaluation of a student's progress and modifying tasks or objectives. It is vital to transition away from conventional educational techniques and conventions and instead promote tools that enhance students' self-efficacy in learning and academic satisfaction inside the classroom (Munoz, 2016). This might be seen as efficacious in The Montessori Practical Life Skills and Waldorf's emphasis on Real-World education. These educational views support the development of critical thinking skills and recognizing complexities in both academic and social contexts. Integrating executive function supports and curriculum into educational contexts aims to empower students to realize their highest potential fully.

**Faith-Based Analyzation of the Problem- (“7 Universal Human Longings”)**

 The author describes the seven themes of justice, love, spirituality, beauty, freedom, truth, and power as "broken signposts." These themes are universal human longings that are true signs that a good and wise Creator makes humans. However, these signposts often need to deliver on their promises, leading people to draw different conclusions about them (Wright,2020). This aligns with Maslow's Hierarchy of needs, which postulates that humans are driven by five main needs: self-actualization, safety, love, esteem, and physiological requirements. A framework used in education to comprehend people's basic needs. It consists of four levels: basic needs (like food, thirst, and sleep), safety needs (like security and protection from harm), belongingness needs (like acceptance, affection, and friendship), and esteem needs (like feeling competent, strong, and successful). These levels are based on Maslow's theory that the appearance of one need depends on the prior satisfaction of another, making it essential for complex development processes like learning. In education, these basic needs include physical equipment, supplies, and technological-related demands. The hierarchy also includes safety, belongingness, and esteem needs, essential for a person's development and success (Hopper,2020). Maslow's hierarchy of needs outlines the stages of human motivation, from basic physiological needs like food and shelter to higher-level needs such as self-actualization. On the other hand, executive functioning skills encompass a set of cognitive abilities crucial for managing tasks, organizing information, and regulating behavior. Interestingly, there's a clear connection between these two concepts. At the base of Maslow's pyramid lie physiological needs, which must be fulfilled for an individual to function effectively. Similarly, basic executive functioning skills like impulse control and attention management are essential for meeting these needs. As one moves up the hierarchy to safety, belongingness, esteem, and self-actualization, higher-order executive functioning skills such as problem-solving, decision-making, and goal-setting become increasingly important. In essence, Maslow's hierarchy provides a framework for understanding the fundamental human needs that executive functioning skills support and enhance, highlighting their intertwined nature in achieving personal growth and fulfillment.
 How each of these signposts fails corresponds to the way Jesus of Nazareth went to his death, with a kangaroo trial, friends betraying and denying him, truth sneered at, and so on. This is why Jesus's crucifixion still functions across different human cultures and as a sign of hope, pointing to a God radically different from all other gods (Wright,2020).
 For these signposts to work as outward-facing signs of the presence and reality of the true God, followers of Jesus need to use those signposts to frame their vocations. By working on projects demonstrating a passion for justice, spirituality, beauty, and the proper and humanizing exercise of power, it will be apparent that the God of whom they speak is indeed present, however mysteriously, and working in the world to accomplish his new creation (2020).
 John's gospel is the gospel of creation and new creation, of "witness" to Jesus and the Father, of the Greeks coming to the feast and the victory over the dark powers. Through the power of the Spirit of Jesus the Messiah, crucified and risen from the dead, these signposts can become genuine signposts, mended signals, and missional marker posts. They will point more clearly, in the mercy of God, to the cross of Jesus and his resurrection as the start and sign of the new creation.
 The seven themes of justice, love, spirituality, beauty, freedom, truth, and power serve as broken signposts indicating the presence of the real God and the new creation. Each philosophy, religion, political system, and society has its take on these signposts. They gain importance when a crisis emerges; if neglected, they may seek retribution. Identifying and comprehending these signs, mindfully dealing with their relevance, and taking into account the distinctive ways of others are all part of living an informed life. These seven entities may act similarly to safety measures, with access to the innermost safe permitted only when all seven entities are present and working together. However, the signs are confusing and defective. Humans consistently see the world as a unified entity that should be logical. There are several indications or hints that may help determine the intended meaning or logic it should possess. However, circumstances do not unfold as they first seem to imply (Wright,2020).

Exploring the pathophysiological pathways between depressive symptoms and executive dysfunction may aid in identifying biomarkers that elevate the susceptibility to dementia-related conditions and therapeutic therapies. It is important to find protective variables for behavioral therapies that may sustain excellent executive functioning while dealing with depressed symptoms and lower the risk of cognitive impairment. Christian education emphasizes the importance of developmental considerations, rooted in the command of Moses in Deuteronomy 6 and Jesus' disciple-making. Early educational pioneers struggled to find teachers with the necessary skills for classroom teaching. We continue to need to equip teachers with the skills needed for spiritual nurturing, development, and discipleship of followers of Christ. Christian education is an intentional process that helps individuals be formed in Christ, nurtured through Scripture by the Holy Spirit and the human teacher, and encouraged to continual development into mature disciples of Christ. Children struggle with abstract language, so teaching them concrete content from the Scriptures is essential. By introducing these concepts, children can better understand and apply the principles of Christianity and the Bible. Jean Piaget's theory suggests that the purpose of education is development, with the ultimate goal of glorifying God by becoming like Christ in every aspect of life. The Christian educator's task is to foster people's stories so they will become like Christ, who more fully love, know, and glorify God. Learning is a social activity, and good education must involve the whole body of believers, the church. Fowler's definition of faith as a universal human phenomenon applies to the Christian faith, where God is the ultimate environment and relationships are transformed. The Gospel offers a lens for understanding life issues, with the assurance that God loves us and controls our destiny (Williamson, 2006).

Gifted and twice-exceptional students are cognitively advanced and have heightened intensities that interact with their cognitive abilities. This critical distinction between intelligent and gifted students is crucial as it highlights the difference in intensity. Demanding immediate compliance from gifted students may not work, as it may not have the child's heart. The Bible in Isaiah 40:11 emphasizes the importance of a shepherd's care, as he tends to his flock like a shepherd, gathering lambs and carrying them close to his heart. Therefore, it is essential to understand and respect the unique needs and intensities of gifted students to ensure their well-being and success (Borrnick,2015). Christian teachers are responsible for supporting gifted students' social and emotional needs, as they may be susceptible to depression due to their early understanding of moral and intellectual concepts, requiring different and additional support (Cannaday,2017).

Many students struggle with goal setting and funneling thoughts in an organized manner. 1 Corinthians 14:40 emphasizes the importance of order, organization, and support for children's executive function abilities. Educators must develop these deficiencies in order to support academic success. Proverbs 22:6 encourages children to follow their path, even as they grow older.

Goal Setting and Organization: Many students face challenges in setting goals and organizing their thoughts effectively. Drawing from 1 Corinthians 14:40, educators are reminded of the importance of order and support in developing children's executive function abilities, which are crucial for academic success. By providing structure, guidance, and support, educators can help students cultivate these skills.

Individual Paths and Identity: Proverbs 22:6 encourages children to follow their unique paths, which becomes especially significant as they grow older. Gifted children often struggle to find peers who share their academic interests, leading to feelings of isolation and identity uncertainty. It's essential to help them recognize their identity in Christ, providing a sense of belonging and connection beyond academic achievements.

Executive Functions and Mental Health: Executive functions, such as decision-making and impulse control, are essential for daily living and independence. However, they can decline with age and be further compromised by depressive symptoms. Educators and caregivers need to be aware of these challenges and provide appropriate support and interventions to help individuals maintain their cognitive function and mental well-being.

By understanding these principles and integrating them into educational practices and support systems, educators can better address the diverse needs of students and foster their holistic development.Gifted children often struggle to find friends who share their academic interests, leading to identity uncertainty and individualism. It is crucial to help them recognize their identity in Christ to connect with them. Executive functions, essential for daily living and independence, decline with age and can be further compromised by depressive symptoms. Understanding the pathophysiological mechanisms underlying the association between depressive symptoms and executive impairment can help identify biomarkers that increase the risk for dementia-related disorders and potential interventions. It is also crucial to identify protective factors for behavioral interventions that maintain optimal executive functioning in the presence of depressive symptoms and reduce cognitive impairment risk.

Although many people know the well-known verse, John 3:16, about God "so loved the world" that he sent his Son to rescue it, they may not understand that a profound declaration about justice immediately follows it. God's light will reveal wrongdoing done in darkness. Justice is an expression of God's love. The arrival of God's light and love symbolizes the ultimate reconciliation of all things. In Jewish culture, the ultimate revelation of "justice" was the "passing of judgment"(Wright, 2020, pp.14-16). The life of Jesus provides a fresh perspective on reality. The triumph against corruption and death frames a new creation (Wright, 2020, p. 192).

# Designing the Intervention

Executive functioning challenges can be experienced by individuals with various disorders, including autism spectrum disorder, oppositional defiant disorder, bipolar disorder, Tourette's syndrome, traumatic brain injury, and learning difficulties. As these students are increasingly included in general education classrooms, instructors must be knowledgeable about evidence-based strategies to support them effectively. Implementing executive function interventions should involve systematic instruction of metacognitive strategies relevant to the curriculum. The acquisition of strategic skills requires scaffolding, modeling, and deliberate practice. Instructors should incorporate students into the process to enhance strategy use. Children and adolescents must understand their cognitive aptitudes and deficiencies and actively address and ameliorate them. Identifying learning styles helps young students understand their strengths and weaknesses, enabling them to identify situations that require appropriate techniques (Childers, 2020). These disorders are not evident within some educational methods, such as the Montessori Method, as the curriculum and classroom are set up to normalize and support students.

Impaired executive function skills can hinder the integration of gifted students, students with autism spectrum disorder (ASD), High Functioning Autism (HFA), or attention deficit hyperactivity disorder (ADHD) in conventional classrooms. Researchers have debated these individuals' specific executive function profiles, leading to efforts to separate them. The three essential executive function processes are inhibition, shifting/cognitive flexibility, and planning/working memory. ASD is associated with cognitive flexibility issues, leading to rigidity and repetitive behaviors. Poor cognitive flexibility preserves stereotypical behaviors and self-control issues, hindering daily life adaptation. Effective planning and working memory are essential for setting goals, prioritizing tasks, and initiating responses (Cohene, 2019). Students with low EF skills often have trouble making friends because their peers and teachers do not understand what is happening. This can make it harder for people to get to know each other in the classroom. Teachers should determine how to help students with HFA/ADHD fit in with their peers. A student's ability to get along with others in class could improve if they learned ways to deal with and lessen the effects of their lack of EF skills. If teachers knew more about students' lack of EF skills, they would be ready to teach differently by scaffolding and incorporating those methods into their regular lessons. If students with normal development knew about these problems caused by poor EF skills, they might be more willing to talk to and connect with students with HFA/ADHD in the classroom (Lima, 2021). The development of Executive function assistance within a curricular format has the potential to effectively enhance class content standards and provide help to all students. Using a curriculum that leads to improved performance is a growing necessity to support a growth mindset and strengthen executive function deficiencies.

NT Wright’s seven signpost themes of justice, love, spirituality, beauty, freedom, truth, and power are broken signs that indicate the presence of God and the new creation. Living an informed life involves understanding these signs, recognizing their relevance, and considering others' unique ways. These seven entities act like safety measures, allowing access to the deepest safety only when all seven are present and working together. This project focuses on the themes of freedom and power, aiming to help students develop essential executive function skills and autonomy, enabling students to thrive. The themes of freedom and power are supportive in nurturing executive function skills and autonomy in students, significantly enhancing their educational development. Freedom allows students to explore, make choices, and learn from their experiences, fostering a sense of ownership and responsibility throughout their learning processes. Autonomy is crucial for developing self-regulation, goal-setting, and decision-making skills, which are central to executive function. Power, in this context, refers to the ability to influence one's environment and outcomes, empowering students to apply their executive function skills effectively. By integrating these themes, educational approaches can help students build confidence, resilience, and the capacity to navigate complex challenges. Freedom and power create a framework supporting students in mastering essential executive functions, ultimately contributing to their success and well-being in both academicly and socially.Schools need to develop unique ways to support students with the implementation of executive function assistance in curricular formats, which can significantly improve class content standards and support student growth, making it a crucial tool to strengthen executive function deficiencies and enhance overall performance.

I expect to explore how an executive function skills curriculum can improve students' academic success. This will be done using strategies, techniques, and overall learning preparedness. This intervention uses structural functionalism to address executive function skill needs in the educational system. It aims to transform education systems, promoting stability and growth within curricula and supporting student success. The study emphasizes the importance of shared values for autonomous functioning within society. It highlights the sociology of education and the link between society and education and suggests educational institutions adopt transformational management models and leadership styles to address these challenges.

 Christian educators are responsible for assisting gifted children in addressing their social and emotional needs. These students may be more prone to experiencing depression as a result of their advanced comprehension of moral and intellectual ideas. Consequently, they need distinct and additional support. I Corinthians 14:33 states that God is not the originator of disorder or chaos. Students need resources that enable them to enhance their comprehension and operate autonomously. According to 1 Corinthians 14:40, all actions should be appropriate and organized. This further underscores the need for a well-structured system and assistance to enhance children's executive function skills.

In the context of this project, these interventions may be implemented by incorporating them into the age-appropriate online curriculum within a school environment for 6th-8th grade students. The intervention results of the project will be assessed in terms of effectiveness through the use of pedagogical strategies by online instructors and online platforms and monitored by on-site teachers. These strategies aim to facilitate students' acquisition of skills related to monitoring essential information, planning and monitoring progress, and organizing resources to support the students to independently manage their academic pursuits and effectively manage their social interactions. The individuals will formulate goals, establish a hierarchy of tasks with specified timeframes, and develop strategies to mitigate procrastination effectively. The individuals will ascertain the methods required for project completion and adherence to certain time constraints. Students will understand the importance of working memory about academic and personal accomplishments and acknowledge several strategies that might enhance memory function. The students will experiment with various memory strategies and, after that, assess their efficacy. This online ExQ Program is a complete toolkit designed to assist students in developing critical Executive Function skills such as mental flexibility, memory, and focus.  ExQ will help students optimize their learning. ExQ will support the primary objective for students to learn how to learn. A thorough assessment will be given at the beginning of each student's ExQ training. This assessment will identify each student's strengths and weaknesses and help them set short-term and long-term goals for their learning through videos, diaries, vision boards, graphing, and documenting progress.

ExQ trains teachers to be an integral part of students' success. Through 10 lessons, students will strengthen skills through mini-video lessons, online games, and goal setting. Each lesson will focus on the seven assessment areas: self-awareness, organizing and planning, focus, working memory, mental flexibility, problem-solving, and prospective memory. Each student will learn how to learn best and support these skills. Each lesson includes a personalized three-part To-Do list, which includes challenging cognitive games related to the seven domains of Executive Function. The second part focuses on coaching by reviewing mistakes and learning from them. The third part, M-E-T-A training, is centered around metacognitive training, which aims to enhance self-efficacy by guiding students through the WHY of learning and prompting self-devised strategic thinking. This meta-approach is designed to help students overcome challenges and improve their overall performance.  Students will be encouraged to practice building skills with commitment and focus. Students will also reflect on goals set and create future videos. This curriculum intervention will run for eleven weeks. Students will need access to chrome books and have headphones. This intervention costs $275 per student and will be covered by the school for 5 students as a trial group. Each student will need to have access to Chromebooks and headphones. The challenge of this intervention is that students will be required to complete the full ten-week sessions. Completion is necessary for measuring the success of the intervention and its results in terms of effectiveness. Make-up sessions may be necessary to support the accuracy of outcomes.

**Ethical Considerations**

The idea of a growth mindset has become more important as educators work to assist students in reaching their goals. This paradigm holds that motivation, consistent effort, and grit may enhance performance, skill acquisition, and ability. In the face of difficulties, adaptable and resilient students are better equipped to continue making personal and academic progress. Supportive educators might benefit from using growth mindset techniques in job descriptions and other contexts to promote resilience and progress (Baker-Hewey,2022). A Growth Mindset is characterized by students who believe their results can be improved through persistence, hard work, and feedback. This mindset outperforms those with a fixed mentality, who view abilities as natural gifts. Students with a Growth Mindset focus on learning and are less concerned with appearing clever. Research psychologist Angela Duckworth defines grit as hard work and passion for long-term goals. Studies show that students with grit are more engaged and motivated and take responsibility for their learning. Educating students about mindsets is crucial for influencing their learning skills and responsibilities. School administrators play a pivotal role in developing strategies to support teachers in developing EFS among students.

 Gifted children often have extraordinary intellectual capacities, although they may encounter difficulties in executive function skills, which might impede their scholastic achievements and social-emotional welfare. Students face significant challenges during middle school as they manage growing academic expectations and social influences. When establishing intervention strategies to help these children, it is crucial to successfully prioritize ethical issues to protect their rights and dignity. This intervention examines the ethical aspects of creating intervention strategies for intellectually advanced middle school adolescents with deficiencies in executive function abilities.
 The executive function skills included in this intervention include planning, organizing, managing time, focusing, exercising self-control, and solving problems. Despite their high intellectual capacity, talented children might struggle with organizational skills, impulsivity, procrastination, and difficulty finishing tasks. Recognizing and solving these challenges is critical for gifted kids to improve their academic performance and general development. Furthermore, the design of interventions is inevitibly linked to ethical concepts, especially beneficence. Intervention options should put gifted children's academic success and well-being first. Tailored strategies address executive function deficits and promote overall growth and development.
 This intervention aims to minimize any possible risk or negative consequences for the students. It carefully evaluates the intervention approaches to ensure they do not worsen the problems or cause needless stress. Gifted students will be given the opportunity to participate actively in preparing the intervention, giving them a voice in their preferences, worries, and goals. The intervention places a high value on the students' independence and ensures that their evaluation is tailored to their replies to the questions. All students readily participate in this intervention program, regardless of their background or demographic characteristics. It is equitable. Differentiation in instruction helps treat executive function deficits but will not exacerbate current disparities; instead, it will advance equity and inclusion. The EXQ curriculum encourages students to acknowledge the impact of cultural variables on their academic viewpoints and help-seeking tendencies. Interventions will be courteous and sensitive to cultural differences as each assessment differentiates learning according to each student’s needs, strengths, and weaknesses. This intervention strategy uses the ExQ Program to meet the requirements for executive function skills for gifted middle school students. The intervention aims to improve students' self-discipline and academic achievements by providing focused curricula, teacher training, and intervention assistance.

**Evaluation of Results**

In this impactful curriculum intervention, all five students underwent initial and final assessments, showcasing remarkable growth ranging from 30% to 60% in multiple categories, such as: game performance, self-awareness, learning from mistakes, strategic thinking, and work habits over the ten-week period. Tailored lessons addressing their specific strengths and weaknesses were meticulously crafted, complemented by engaging activities, games, and reflective exercises centered around their vision boards. These activities not only fortified their executive function skills but also ensured sustained focus on their personal goals throughout the program. The executive function skills that this curriculum intervention focused on were: organization and planning, focus, working memory, problem solving, prospective memory, mental flexibility, and self-awareness. As a result, each student not only surpassed initial expectations but also demonstrated a tangible commitment to their individual development, marking a significant stride towards their academic and personal achievements.

The executive function skills curriculum effectively supported work habit trends and facilitated significant achievement of goals among all five students by integrating targeted strategies that enhanced organization, time management, and goal-setting abilities. Through structured modules focusing on prioritization techniques, task breakdown, and effective planning, each student developed a personalized toolkit to manage workload efficiently. Regular goal-setting sessions encouraged students to articulate clear objectives and track their progress, fostering accountability and motivation.

Moreover, the curriculum emphasized self-monitoring and reflection, empowering students to identify strengths and areas for improvement in their work habits. By cultivating these executive function skills, students gained confidence in their ability to meet goals, maintain focus amidst distractions, and adapt strategies to overcome challenges. As a result, all five students demonstrated noticeable improvements in productivity, task completion rates, and overall work habits, equipping them with essential skills for academic success and future endeavors.

**Sociological and Faith-Based Perspectives Reflection of Research Process**

The sociological research conducted in this intervention of an executive function skills curriculum is profoundly influenced by Paulo Freire's critical pedagogy. Freire emphasized a collaborative approach to education that empowers learners to critically analyze their social context and take proactive steps toward change (Taufiqurrohman et al., 2024). Similarly, this research applies Freirean principles by engaging participants in a learning process where their strengths and weaknesses shape the curriculum. This approach fosters a deeper understanding of how societal structures influence executive function skills development, encouraging participants to not only improve cognitive abilities, but also challenge systemic barriers that may hinder their growth. By integrating Freire's emphasis on praxis—action informed by reflection—into the research methodology, the utilization of this Executive Function Skills Curriculum intervention not only enhanced executive function skills but also promoted social consciousness and collective empowerment among the participants.

Building on the foundational insights drawn from Paulo Freire's critical pedagogy, which emphasizes collaborative learning and societal analysis, this research has illuminated a transformative approach to enhancing executive function skills. By integrating Freirean principles into the curriculum, participants not only developed cognitive abilities but also engaged in critical reflection and action against systemic barriers. This intervention underscores the potential of educational initiatives not only to improve individual capabilities but also to foster social awareness and collective empowerment.

First Corinthians 4:9-13 and Philippians 4:10-13 can explain the need to enhance executive function skills such as flexibility, endurance, and self-awareness by offering profound insights into resilience and adaptability. In 1 Corinthians 4:9-13, Paul describes the hardships he endured as an apostle, highlighting his ability to remain steadfast and adaptable despite challenges. This passage encourages individuals to develop flexibility in their approach to difficulties, fostering resilience and the capacity to navigate adversity effectively. Similarly, Philippians 4:10-13 reflects Paul's contentment and inner strength regardless of his circumstances, showcasing endurance and maturity in maintaining a positive outlook amidst both abundance and scarcity. These teachings promote emotional regulation, adaptive thinking, and the ability to maintain focus and determination in the face of challenges, thereby enhancing overall executive function skills essential for personal and professional growth. Incorporating the teachings from First Corinthians 4:9-13 and Philippians 4:10-13 further enriches our understanding of executive function skills as essential components of resilience, adaptability, and emotional regulation. These biblical passages highlight the enduring importance of flexibility, endurance, and self-awareness in navigating life's challenges. By embracing these principles, individuals can cultivate a robust framework for personal and professional growth, equipped to thrive amidst adversity. The intertwining of Freirean pedagogy and biblical teachings on resilience and adaptability are mirrored in this research which highlights the holistic approach needed to develop executive function skills effectively. It not only enhances cognitive capacities, but also empowers individuals to navigate societal complexities with a sense of purpose and resilience. This integrated approach holds promise for shaping future interventions that prioritize both individual development and collective empowerment in education and beyond.

**Reflection of Research Process**

The aim of this research was to evaluate the effectiveness of a curriculum intervention designed to improve executive function skills among students, specifically focusing on planning and organization, focus, problem solving, prospective memory, mental flexibility, and working memory.

**Expected and Achieved Outcomes**

The expected outcomes targeted a substantial 40-70% enhancement in these skills for each student. However, the achieved outcomes varied across categories, with an overall improvement ranging from 30% to 60%. This variance suggests that while the intervention showed promising results, the extent of improvement varied among different executive function domains.

**Challenges Faced**

Several challenges emerged during the implementation of the curriculum intervention. One significant challenge was the discrepancy between the anticipated and actual time commitment required from students. Initially projected at one hour per week, the actual time needed was closer to four hours weekly. This increased demand highlighted the necessity for adequate support and guidance to assist students in effectively navigating the curriculum and maximizing its benefits. Moreover, students exhibited varying levels of proficiency in navigating the online platform, particularly those who were less mathematically inclined. These students faced additional difficulties in engaging with the game-based sections of the curriculum, which were evidently tailored towards a more numerical and logical thinking approach. The need for personalized coaching and support became evident in order to bridge this gap and ensure all students could fully access and benefit from the curriculum's interactive components.

**Personal Learning Outcomes**

Engaging in this research process yielded several personal learning outcomes. The curriculum's mini lessons were instrumental in fostering students' ability to reflect on their own learning processes and encouraged them to seek assistance when needed. Importantly, these lessons helped dispel the misconception that asking for help indicated a lack of intelligence—a barrier that many students face when navigating academic challenges. However, it became apparent that the curriculum's emphasis on mathematical concepts within its game sections posed a challenge for students who did not naturally gravitate towards mathematical reasoning. This observation underscored the need for future curriculum iterations to incorporate elements that cater more comprehensively to diverse learning styles and cognitive preferences. A curriculum that encompasses a broader range of activities and exercises could potentially enhance engagement and effectiveness across a wider spectrum of students. While the research revealed positive outcomes in enhancing executive function skills through targeted interventions, it also illuminated areas for refinement and improvement. Addressing the identified challenges and leveraging the insights gained from this research will be crucial in developing more inclusive and effective educational strategies tailored to meet the diverse needs of students in enhancing their executive function skills.

This online curriculum platform produced these aggregate scores compiled from data gathered through various assessments, lessons,quizzes, assignments, and participation metrics. The online curriculum platform provides detailed result data through dashboards and reports that aggregate this information. The data analysis chart below illustrates the impact of the intervention curriculum on enhancing various executive function skills for students.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Game Performance** | **Self-awareness** | **Learning from mistakes** |
| **Student** | **Beginning** | **End** | **Growth** | **Beginning** | **End** | **Growth** | **Beginning** | **End** | **Growth** |
| A | 10 | 90 | **80** | 20 | 70 | **50** | 40 | 92 | **52** |
| B | 30 | 80 | **50** | 20 | 70 | **50** | 30 | 70 | **40** |
| C | 40 | 90 | **50** | 30 | 80 | **50** | 30 | 79 | **49** |
| D | 20 | 70 | **50** | 10 | 80 | **70** | 20 | 80 | **60** |
| E | 30 | 90 | **60** | 20 | 90 | **70** | 20 | 64 | **44** |

|  |  |  |
| --- | --- | --- |
|  | **Strategic Thinking** | **Work Habits** |
| **Student** | **Beginning** | **End** | **Growth** | **Beginning** | **End** | **Growth** |
| A | 40 | 94 | **54** | 10 | 88 | 78 |
| B | 30 | 80 | **50** | 20 | 50 | 30 |
| C | 20 | 68 | **48** | 20 | 60 | 40 |
| D | 20 | 90 | **70** | 40 | 90 | 50 |
| E | 30 | 90 | **60** | 30 | 80 | 50 |
|  |  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Organization and Planning** | **Focus** | **Working Memory** |
| **Student** | **Beginning** | **End** | **Growth** | **Beginning** | **End** | **Growth** | **Beginning** | **End** | **Growth** |
| A | 0 | 80 | **80** | 40 | 90 | **50** | 20 | 78 | **58** |
| B | 20 | 70 | **50** | 30 | 70 | **40** | 40 | 96 | **56** |
| C | 20 | 80 | **60** | 20 | 70 | **50** | 45 | 94 | **49** |
| D | 40 | 90 | **50** | 20 | 90 | **70** | 40 | 80 | **40** |
| E | 20 | 80 | **60** | 30 | 80 | **50** | 50 | 92 | **42** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Problem Solving** | **Prospective Memory** | **Mental Flexibility** |
| **Student** | **Beginning** | **End** | **Growth** | **Beginning** | **End** | **Growth** | **Beginning** | **End** | **Growth** |
| A | 20 | 75 | **55** | 20 | 70 | 50 | 50 | 90 | **40** |
| B | 40 | 82 | **42** | 40 | 77 | 37 | 22 | 80 | **58** |
| C | 40 | 91 | **51** | 30 | 63 | 33 | 20 | 70 | **50** |
| D | 47 | 98 | **51** | 34 | 92 | 58 | 34 | 92 | **58** |
| E | 30 | 75 | **45** | 45 | 98 | 53 | 22 | 89 | **67** |

#

# Constructive Social Change

When considering the future of clinical and applied sociology through the establishment of an executive function curriculum, the potential for transformative impact on students is significant. Such a program would combine spiritual and functional supports to improve students' cognitive and emotional abilities, allowing them to successfully navigate academic and social hurdles. This intervention would provide students with crucial tools for success in a variety of domains by focusing on executive function skills and supporting the spiritual connection as well.
Studies indicate that strong executive function skills are associated with greater academic success, social competence, and general well-being among students. A curriculum designed to develop these skills benefits not only individual students but also contributes to larger social transformation. By teaching students how to better moderate their impulses, emotions, and actions, the curriculum fosters a positive school environment conducive to learning and growth. This constructive social change would be evident by improved graduation rates, reduced disciplinary issues, and increased engagement in community activities among students who benefit from such interventions.

In addition, the intervention's impacts extend beyond the classroom. Students with high executive function skills are more likely to become productive members of society, able to make important contributions to their communities and beyond. Clinical and applied sociology can help shape a future in which all people, regardless of background or circumstance, have the tools they need to thrive personally and contribute to a more equitable and prosperous world by promoting the development of these critical competencies early on. Consequently, incorporating an executive function curriculum provides a potential avenue to attaining these objectives and fostering positive social change in education and beyond.

# Alignment and Divergence from Initial Expectations

Developing a comprehensive executive function skills curriculum that integrates spiritual scripture-based values and caters to diverse learning styles represents a compelling avenue for future research and educational development. By incorporating spiritual principles into the curriculum, educators can offer a holistic approach that not only fosters cognitive skills but also nurtures students' moral and ethical development. Moreover, addressing diverse learning styles ensures that the curriculum is accessible and effective for a broader range of learners, accommodating variations in cognitive processing and preferences for learning modalities. This endeavor aligns with the educational goal of promoting both academic achievement and character formation, thereby enriching students' overall educational experience and preparing them for lifelong success. This structured approach will systematically allow one to assess the impact of the curriculum on enhancing executive function skills in middle school students.

**Conclusion**

Executive function skills are essential for students' autonomy, focus, and organization, and they are generally developed through everyday experiences during a child's formative years. However, evidence indicates a gap in the development of these skills between gifted children and those with neurodevelopmental disorders such as Autism Spectrum Disorder, High Functioning Autism, or Attention Deficit Hyperactivity Disorder. This limitation has a major influence on educational outcomes, highlighting the need for targeted interventions.

Educators need to identify studnets who lack these essential skills in order to enhance their academic achievement and to support their autonomy. Interventions designed to address executive function deficiencies have shown potential for improving academic performance. Curriculum intervention should include executive function training within educational frameworks to provide a more inclusive learning environment to enhance educational experiences for all students.

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