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Exploring an Organization Skills Intervention for Improving Executive Functioning Skills within a Gifted Population: An Action Research Study

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Exploring an Organization Skills Intervention for Improving Executive Functioning
Skills within a Gifted Population: An Action Research Study

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Dedication

I dedicate this dissertation to my children, Samuel and Tatum. Their love, kindness, and humor kept me moving through this process and are what keep me moving forward through life.

Acknowledgements

I would like to offer my sincere appreciation to the students, faculty, and administration

that participated in this study. This study could not have been possible without their

participation, input and time.

Abstract

Exploring an Organization Skills Intervention for Improving Executive Functioning Skills within a Gifted Population: An Action Research Study examines the impact of providing gifted and talented (GT) middle level students at Ford Middle Academy (FMA), with an instructional program called *Homework, Organization, and Planning Skills* (HOPS) that was designed as an intervention to teach organizational, planning, and time management skills. The identified problem of practice at this school involved the lack of an instructional program to enhance organizational and study skills at the middle school level. The participant-researcher wondered if the HOPS program would be an effective program to use at FMA because the program was developed specifically for middle level students and was designed to be implemented in the school setting during the school day. Therefore, the research question "What is the impact of the *Homework, Organization, and Planning Skills* intervention program on participating middle level gifted and talented students' organizational and study skills?" guided the purpose of the Action Research Study. Quantitative data was considered the main data source to answer the research question. Paired-sample t-tests were conducted to compare the organizational points by materials and agenda recordings earned by student participants before participating in the HOPS intervention program and after participating in the HOPS intervention program. There was an increase in the scores for all organizational materials but no increase in the number of assignments recorded in student agendas after the implementation of the HOPS program. In order to provide a more in-depth and

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balanced understanding of the quantitative data, observations, teacher questionnaires, and interviews were collected, analyzed, and coded through the development categorization system (Mertler, 2014). Three themes emerged because of the categorization of data: Lack of Transference of Skills, Resistance to Change, and Time Management Struggles. An Action Plan based on these findings was written to improve the next implementation phase of the HOPS program. The Action Plan included: professional development to provide middle school teachers with classroom strategies designed to assist students with organizational skills, adding a bell ring to the current middle level bell schedule during the study hall period to cue teachers to have students engage in organizational tasks and the recruitment of an on-site co-facilitator for the next implementation phase of the HOPS program.

Keywords: executive functioning skills, gifted students, middle level students, Homework, Organization and Planning Skills (HOPS) Interventions

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Chapter One: Introduction

The purpose of Chapter One is to describe the Action Research Study involving Ford Middle Academy (pseudonym), a middle level school for identified gifted and talented (GT) students, and the participant-researchers goal of improving the organizational skills, time management skills, and planning skills of seven GT middle level students through the implementation of the *Homework, Organization and Planning Skills (HOPS) Intervention* program. While numerous explanations have been offered as to why GT students may not achieve up to their potential, one possibility is weak executive functioning skills (Finch, Neumeister, Burny, & Cook, 2015). Cooper-Kahn & Dietzel (2010) state that the term executive function can be considered an umbrella term for the neurologically-based skills involving mental control and self-regulation. Executive functioning skills are considered to be the processes that are used by an individual in order to achieve a goal. Executive functioning skills that have been linked to school achievement include: organizational skills, planning skills, time management skills, task initiation skills, attentional skills, working memory skills, emotional control skills and response inhibition skills (Cooper-Kahn & Dietzel, 2010; Dawson & Guare, 2009; Isquith, Gioia, & Roth, n.d.; Langberg, Epstein, Becker, Girio-Herrera & Vaughn, 2012).

Parents, teachers, and administrators at Ford Middle Academy (FMA) are consistently trying to pinpoint why our GT middle level students may not be achieving

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academically and why they lack executive functioning skills. Existing literature documents several factors that can be linked to poor academic performance among GT middle level students. For example, executive functioning skill deficits such as weak organization skills, lack of planning skills, deficit time management skills as well as excessive absences, and/or a documented disability such as attention deficit disorder or a learning disability can impact the performance of middle level GT students (Eckes & Swando, 2009; Gottfried, 2011). However, students at FMA are not identified with learning disabilities according to school district data (see Appendix A). Rather, standardized tests scores show these students have significantly higher than average academic achievement skills. Researchers have documented a link between weak executive functioning skills and poor academic achievement (Jacobson, Williford, & Pianta, 2011; Kennedy & Banks, 2011; Langberg et al. 2010). This theoretical foundation was used to frame the present action research study.

Background of the Problem of Practice

Three decades ago, the National Commission on Excellence in Education (1983) estimated that 10% to 20% of "dropouts" (i.e. students who leave high school before graduation) were identified as "gifted," and 50% of those students' achievement levels did not match their abilities. Seeley (1984; 2004) estimated that 18% to 40% of identified gifted middle school students were at risk for dropping out of high school or at risk for academic underachievement. More recent research studies examining variance among academic achievement in gifted children found that student study skills and organizational skills have an impact on their overall achievement (McCoach & Seigle 2001; 2003; The National Research Center on the Gifted and Talented, 2008).

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The academic underachievement of GT students is a problem that researchers and educators have grappled with for over fifty years. Passow and Goldberg (1958) provided a landmark study of the GT underachiever. GT underachievers are often seen as a potential loss to society, are at risk for developing negative attitudes toward themselves, school and learning, and frequently view themselves as inadequate in a variety of learning experiences (Albaili, 2003). Reis and McCoach (2000) report that despite widespread interest and concern about underachieving GT students, researchers have achieved only a limited understanding of this phenomenon.

There are numerous theories attempting to uncover the reasons for underachievement. Reis and McCoach (2000) state that "attempting to define overarching psychological constructs to describe gifted underachievers is virtually impossible" (p. 158). Kennedy and Banks (2011) contend that it is a myth that GT children should be able to achieve in any learning environment and that their high IQ's insulate them from academic failure. Renuzilli (2012) notes that the most creative ideas, advanced analytic skills and best intentions will not result in action until executive functioning skills are brought into the equation. Executive functioning skills such as organization, sequencing, integrating, and planning are needed to bring ideas into actions. Renuzilli (2012) advocates for gifted education practices to broaden focus from only the cognitive development of skills to include the development of executive functions. Research by Duckworth and Seligman (2005) support his contention that high cognitive skills alone are not predictive of student success. Duckworth and Seligman (2005) found that a measure of a student's self-discipline was a more reliable predictor of a student's grade point average than their IQ scores. Self- discipline was measured through instruments

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that rated characteristics associated with executive functioning skills such as planning, goal setting, organizing, and self-regulation.

This abovementioned research supports the concerns of the administration and faculty of FMA who worry that many of the GT students have difficulty transitioning to the middle school years due to poor organizational and study skills. A review of students' daily grades by the researcher prior to the study provided evidence to support this belief. For example, GT middle level students at FMA who had lower than expected overall subject grades often had these grades because they failed to turn in homework or complete assignments, not because they failed formative and summative assignments. Participants were sixth grade students attending a public school for the Gifted and Talented. The sixth-grade team of teachers and middle level counselor were asked to recommend six to eight students that they had noticed were consistently struggling to organize materials, turn in assignments on time and use their planning agendas. To meet these students' needs, the present study was designed to examine the HOPS program to determine if it was useful in enabling middle level GT students to get organized, manage their time and plan better, in order to enable them to increase their scholarly achievement overall.

Theoretical Framework

In addition to the abovementioned research (Jacobson, Williford, & Pianta, 2011; Kennedy & Banks, 2011; Langberg et al. 2010) Howard Gardner's Theory of Multiple Intelligences (1983) provided the theoretical framework for the present Action Research study. Gardner proposed that the traditional notion of intelligence, based on intelligence quotient (I.Q.) testing, was not sufficient in describing human potential. He identified

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eight different intelligences: linguistic intelligence, logical-mathematical intelligence, spatial intelligence, musical intelligence, bodily-kinesthetic intelligence, naturalistic intelligence, interpersonal intelligence, and intrapersonal intelligence. These eight different intelligences have their own paths of development that are influenced by the innate abilities of the individual "on one hand, and the priorities, opportunities, and limitations of the ambient culture on the other" (Moran & Gardner, 2007, p.35). Unlike other theorists who believe, that intelligence is an innate trait that is fixed, Gardner (1983) believes that the intelligences are not fixed but rather a combination of inheritable potential and skills that can be advanced in different ways via appropriate and pertinent experiences.

The intelligences are stated to be weakly correlated which can result in an individual having a pattern of strengths and weaknesses within their intelligence profile (Gardner, 1983). Gardner's theory offers one possible explanation of how a GT student can excel in academics (logical-mathematical intelligence/ linguistic intelligence) but struggle with executive function skills such as planning and organization (intrapersonal intelligence). Moran and Gardner (2007) reported that the purpose of Intrapersonal Intelligence is to process information to increase self- awareness and executive function within an individual. Self- awareness is the understanding of oneself and executive function is responsible for regulating a person's goal directed behavior through planning and organizing flexible, strategic, appropriate actions. Executive function assists individuals in regulating their behavior within changing environments by "orchestrating the other intelligences toward self-relevant purposes within and across temporal, social, and psychological contexts" (p. 20).

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Following Gardner's theory, educators should recognize and develop strategies to address all eight intelligences so that every student has the possibility of reaching her full potential (1983). His theory supports educators who provide instruction to address more than the so called core linguistic intelligence and logical-mathematical intelligence which are associated with reading and math. By providing interventions to address to intrapersonal intelligence (executive functions) which is the focus of this Action Research study researchers can address the social and psychological functions associated with doing well in American Public schooling.

Problem of Practice

The identified problem of practice (PoP) involves GT middle level students at FMA who have difficulty transitioning to middle level school due to lack of organizational, time management, and study skills. According to the school's middle level counselor and middle level teachers there was no support system in place to enable identified GT students to develop study skills and to learn to manage their time in the GT program. A new program called Homework, Organization and Planning Skills (HOPS) was adopted to meet the needs of the students and is the focus of the present study.

Purpose of the Study

The primary aim of the present Action Research Study is to assess the impact of the HOPS program on seven middle level GT students' organizational skills, time-management skills and planning skills by analyzing both student progress of seven student participants on weekly checklists and the results of a survey completed by four of five teachers of seven students who participated in HOPS. Prior to this research, HOPS had not been studied within this GT population to determine its effectiveness.

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Methodology

  This study was conducted using quantitative Action Research methodology. Unlike most traditional educational research, the purpose of Action Research is to describe a local and particular classroom, school, and/or other social institution and the participants within those institutions. According to Mertler (2014), Action Research focuses on problem solving in the real world of a classroom or a school which increases the relevancy and applicability for the researcher to improve her practice and it allows the action researcher to improve her practice through a four-step systematic process of planning, acting, developing, and reflecting. Huang (2010) describes Action Research as a research method that provides a path to change while generating knowledge and empowering the participant researcher. Action researchers do not separate understanding and action but instead believe that true understanding comes through action in a local and particular setting. The participant-researcher focused on an identified problem of practice specific to FMA. The study included seven middle level GT students that participated in the HOPS instructional program designed to provide support in organizational skills, time management skills, and planning skills. Quantitative data was collected, analyzed and reflected upon with the teacher-participants. Key questions emerged from the results of the study:

1. How can the HOPS program be modified to better support middle level student-participants?

2. How can time issues be addressed to better meet the needs of student participants?

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3. How can the middle level faculty advance the transfer of organizational skills, planning skills and time management skills within the classroom setting?

These questions guided the ongoing, collaborative discussions that occurred with the researcher participant and student-participants, teacher-participants, administration, and middle level counselor when developing an action plan for Fall 2017.

Research Question

RQ1: What is the impact of *Homework, Organization, and Planning Skills (HOPS) Intervention* on participating middle level gifted and talented students' organizational skills, time-management skills and planning skills?

Summary of the Purpose of the Research

The purpose of the present Action Research Study is to describe the impact of providing GT middle level students with an instructional program (*Homework, Organization, and Planning Skills (HOPS) Intervention*) designed to support seven students in their organization, planning, and time management skills. The secondary purpose of the study is to describe the consistent instruction vis-à-vis HOPS to these GT middle level students at FMA in order to improve their scholarly achievement overall. The tertiary purpose is to develop an Action Plan with the middle level faculty and administration at FMA to support the development of organizational skills, time management skills, and planning skills of the middle level GT students.

Keyword Glossary

Academic underachievement: A discrepancy between ability and grades, or between ability and achievement (Reis & McCoach, 2000).

Action Research: An inquiry-based process that is conducted by the individuals who have an interest in the specific problem that is being investigated (Mertler, 2014).

Cognitive Development: Cognitive development is the construction of thought processes, including remembering, problem solving, and decision-making, from childhood to adulthood.

Cueing: Assisting an individual in the completion of a task by offering prompts.

Emotional control: The ability to modulate emotions to achieve goals, complete tasks, or control and direct behavior.

Executive Functions: "an umbrella term for the neurologically-based skills involving mental control and self-regulation" (Cooper-Kahn & Dietzel, 2010, p. 1).

Flexibility: The ability to move between situations and revise responses and plans depending on the situation.

Gifted Students: "The term 'gifted and talented," when used with respect to students, children, or youth, means students, children, or youth who give evidence of high achievement capability in such areas as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services or activities not ordinarily provided by the school in order to fully develop those capabilities" (U.S. Department of Education, 2003).

Gifted Underachieving students: Students with high aptitude scores but low grades and achievement test scores, or high achievement test scores but low grades due to poor daily work (Whitmore, 1980).

Goal-directed persistence: The ability to formulate a goal and follow through to the completion of the goal.

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Homework, Organization, and Planning Skills (HOPS) Intervention: The HOPS

intervention program was developed for children of middle school age to teach

organization, planning and time management skills. The program is designed to be

delivered through a series of frequent but brief sessions (approximately 20 minutes). The

intervention is delivered in 16 sessions (Langberg, 2011).

Organization: The ability to create order and maintain systems to keep track of

information or materials.

Planning/prioritization.: The ability to manage current and future oriented task demands.

Response Inhibition: The ability to think before you act and the ability to stop behavior at

the appropriate time.

Self-Monitoring: The ability to monitor one's own performance and to measure it against

a standard of what is needed or expected.

Sustained attention: The ability to keep paying attention to a situation or task in spite of

distractibility, fatigue or boredom.

Task initiation: The ability to begin projects and tasks independently.

Time management: The ability to estimate and allocate time, as well as being able to stay

within time limits and meet deadlines.

Working memory: The ability to hold information in memory for the purpose of

completing a task.

Study Limitations and Significance

This Action Research study was impacted by several limitations. The study was

conducted in a middle level setting where all the students in the school have been

identified as GT. Student-participants were identified by their teachers as needing to

improve their organizational skills, time management skills and planning skills. This selection process relied on teacher perception of student need with no set criteria being used for inclusion. This selection process resulted in a group of students that varied in their executive function skill level and awareness. The difference in the student's self-awareness and executive function skill level when they began the program may have impacted the study results.   Another way the teacher selection process might have influenced the study is that students might have only participated in the HOPS program because they were recommended and not because they thought it was an opportunity to gain skills they needed. Additionally, the HOPS program recommended no more than 6-8 students in an intervention group. This small group size resulted in small data samples and limited the study's statistical power. Time constraints and scheduling prevented the intervention program from exceeding eight weeks. The HOPS is sequential program with a series of sessions addressing different topics. The HOPS manual states that all sessions do not have to be conducted and recommends not moving to the next session in the series if the students had not mastered the concepts from the previous session. The participant-researcher followed these suggestions which resulted in the students not progressing through all the sessions by the end of the eight week time frame. The student's lack of exposure to all the sessions may have impacted the overall results.

Conclusion

Chapter One detailed the present Action Research Study designed to determine the impact of providing GT middle level students with an instructional program called *Homework, Organization, and Planning Skills (HOPS) Intervention* designed to support seven student-participants in their organization, planning, and time management skills

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and to answer the research question, "What is the impact of the *Homework, Organization, and Planning Skills* intervention program on participating middle level gifted and talented students' organizational and study skills?"

Gardner's theory of multiple intelligences (1983) provided a theoretical framework for the current Action Research study. Gardner proposed that the traditional notion of intelligence, based on I.Q. testing, was not sufficient in describing human potential and that educators should provide instruction addressing the eight different intelligences. This Action Research study focuses on executive functions or what Gardner refers to as Intrapersonal Intelligence.   The purpose of intrapersonal intelligence is to process self-relevant information. It helps the individual with an understanding of oneself (self-awareness) and provides control over the aspects of oneself within societal situations (executive function).

This present Action Research study focused on providing GT students a support system to enhance skills associated with executive function through the HOPS program. Seven GT students received consistent instruction vis-à-vis HOPS order to improve their executive functioning skills. Quantitative data was considered the main data source to answer the research question. Paired-sample t-tests were conducted to compare the organizational points by materials and agenda recordings earned by student participants before participating in the HOPS intervention program and after participating in the HOPS intervention program. There was a increase in the scores for all organizational materials and but no increase in the number of assignments recorded in student agendas after the implementation of the HOPS program. In order to provide a more in-depth and balanced understanding of the quantitative data, observations, teacher questionnaires and

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interviews were collected and analyzed coded through the development of a system of categorization (Mertler, 2014).

An Action Plan based on these findings was written to enable staff to make an informed decision regarding the continuation and improvement of the HOPS program within the FMA setting for interventions with organizational planning skills. An overview of the content in Chapters 2-5 is discussed next.

Dissertation Overview

Chapter One detailed the present Action Research Study designed to determine the impact of providing GT middle level students with an instructional program called *Homework, Organization, and Planning Skills (HOPS) Intervention* designed to support seven student-participants in their organization, planning, and time management skills and to answer the research question, "What is the impact of the *Homework, Organization, and Planning Skills* intervention program on participating middle level gifted and talented students' organizational and study skills?"

Chapter Two presents a review of related literature addressing several topics such as theoretical framework for providing an program to address executive function to GT students, an overview of research regarding the giftedness and executive functions, definition of executive function, the importance of executive function on academic achievement, and executive function interventions.

Chapter Three describes the quantitative action research design used to collect data, analyze data, reflect on data and report data as it relates to HOPS program FMA. In addition, the participation selection and the research site are discussed.

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Chapter Four describes the results gathered in the present action research study. The analysis of quantitative data was conducted throughout the Action Research study and qualitative data from informal interviews as well as observations. Specific results for the organizational checklist and homework checklist are reported. Observation and interview notes are summarized and analyzed through three emergent themes.

Chapter Five summarizes the findings the study and draws conclusions that are articulated in an Action Plan for FMA, which includes recommendations about the continuation of the process and needed adjustments for the next implementation phase. The Action Plan included: professional development to provide middle level teachers with classroom strategies designed to assist students with organizational skills, adding a bell ring to the current middle school bell schedule during the study hall period to cue teachers to have students engage in organizational tasks and the recruitment of an on-site co-facilitator for the next implementation phase of the HOPS program.

Chapter Two: Literature Review

Introduction

The purpose of Chapter Two: Literature Review is to describe the scholarly literature involved in enabling middle level GT students to develop executive functioning skills which are responsible for regulating a person's goal directed behavior through planning and organizing flexible, strategic, appropriate actions. For example one of these skills is to be able to manage time, another is to increase planning skills, and another is to organize their materials. When students are able to independently monitor, evaluate and increase their executive functions their academic performance increases (Jacobson, Williford, and Pianta, 2011). Almost twenty years ago, Reis and McCoach (2000) published a comprehensive summary of research on GT students who underachieve and urged researchers back then to expand upon the limited studies of interventions to address the academic underachievement of GT populations. They recommended that researchers develop approaches to both prevent and reverse academic achievement. Today, while numerous explanations have been offered as to why GT students may not achieve up to their potential, one possibility is weak "executive functioning skills" (Finch, Neumeister, Burny, & Cook, 2015).

The work of Howard Gardner (1983) is used to organize the thinking involved in designing this quantitative action research study. According to Gardner, the traditional notion of intelligence, based on I.Q. testing, was not sufficient in describing human

potential and he believes educators should provide instruction addressing the eight

different intelligences. Gardner posits that the intelligences are not fixed but rather a

combination of inheritable potential and skills that can be advanced in different ways via

appropriate and pertinent experiences.

Executive Functioning Skills

This Action Research study focuses on executive functions or what Gardner refers

to as Intrapersonal Intelligence. Research (Langberg, et. al. 2010) shows that students

who have poor "executive functioning skills" are more likely than their peers to not bring

home assignments, not know what was assigned, not return assignments to school, not

complete homework assignments, and procrastinate. Additionally, these students have

difficulty organizing materials. Their desks, binders, lockers, and book bags are

unorganized so they lose materials, agendas, and assignments (Langberg, Epstein,

Urbanowicz, Simon, & Graham, 2008). Deficits in organizing and planning often become

most noticeable during the transition from elementary to middle school. Middle school is

a time when students are expected to move to another physical location, work with

multiple teachers, adjust to decreased teacher support, acclimate to increased class sizes,

navigate changing peer networks, and fulfill increased expectation for individual

responsibility (Jacobson et al., 2011).

The identified problem of practice (PoP) involves GT middle level students at

FMA who have difficulty transitioning to middle level school due to lack of

organizational, time management, and study skills. According to the school's middle

level counselor and middle level teachers there was no support system in place to enable

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identified GT students to develop study skills and to learn to manage their time in the GT program. A new program called Homework, Organization and Planning Skills (HOPS) was adopted to meet the needs of the students and is the focus of the present study. Research studies indicate that executive skills have been shown to improve with predictable routines, external cues, organizational strategies, and specific skills training (Campbell, Duffy, & Salloway, 1994; Dawson & Guare, 2009).

Research Question

RQ1: What is the impact of *Homework, Organization, and Planning Skills (HOPS) Intervention* on participating middle level gifted and talented students' organizational skills, time-management skills and planning skills?

Purpose of the Study

The purpose of the present study is to assess the impact of the HOPS program on seven middle level GT students' organizational skills, time-management skills and planning skills by analyzing both student progress of seven student participants on weekly checklists and the results of a survey completed by four of five teachers of seven students who participated in HOPS. Prior to this research, HOPS had not been studied within this GT population to determine its effectiveness. The practioner-researcher provided consistent instruction vis-à-vis HOPS the student-participants in order to enable them to increase their scholarly achievement overall. The research provided an Action Plan for supporting the development of organizational skills, time management skills and planning skills of GT middle level students at FMA.

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Purpose of the Literature Review

The purpose of the following literature review is to present important findings from an extensive body of peer reviewed literature about the importance of executive functioning on academic achievement and its impact on the GT student. The first section of this review presents a theoretical framework for providing GT students with a program to address executive function, an overview of research related to GT students and executive functioning, followed by research highlighting the link between executive functions and academic achievement. Lastly, research exploring key components for effective executive function interventions within the school setting is reviewed.

Theoretical Framework for Addressing Executive Function

Gardner's theory of multiple intelligences (1983) provides a theoretical framework for the current Action Research study. Gardner proposed that the traditional notion of intelligence, based on I.Q. testing, was not sufficient in describing human potential. He identified eight different intelligences: linguistic intelligence, logical-mathematical intelligence, spatial intelligence, musical intelligence, bodily-kinesthetic intelligence, naturalistic intelligence, interpersonal intelligence, and intrapersonal intelligence (Gardner, 1999). These eight different intelligences have their own paths of development that are influenced by the innate abilities of the individual and their environments (Moran & Gardner, 2007). Unlike other theorists who believe that intelligence is an innate trait that is fixed, Gardner (1983) believes that the intelligences are not static but rather a combination of inheritable potential and skills that can be advanced in different ways via appropriate and pertinent experiences.

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The intelligences are weakly correlated which can result in an individual having a pattern of strengths and weaknesses within their intelligence profile. This study focuses on Intrapersonal Intelligence. Moran and Gardner (2007) reported that the purpose of Intrapersonal Intelligence is to process information to increase self- awareness and executive function within an individual. Self- awareness is the understanding of oneself and executive function is responsible for regulating a person's goal directed behavior through planning and organizing flexible, strategic, appropriate actions. Executive function assists individuals in regulating their behavior within changing environments by "orchestrating the other intelligences toward self-relevant purposes within and across temporal, social, and psychological contexts" (p. 20).

Individuals show great variance in their ability to use self-relevant types of information to monitor, evaluate, express and increase their executive functions (Wilson & Dunn, 2004). Gardner's Multiple Intelligence theory offers one explanation of how a GT student can excel in academics (logical-mathematical intelligence/ linguistic intelligence) but struggle with executive function skills such as planning and organization (intrapersonal intelligence). Gardner (1983) stated that current education system focuses and values only two intelligences –linguistic and logical math. He argues that this focus should change and all eight intelligences should be addressed for individuals to productively function in society. Therefore, educators should strive to influence and support the development of Intrapersonal Intelligence (executive functions) by providing opportunities for students to learn how to manage their executive functions through modeling, practice and the gradual fading away of external controls (Moran & Gardner, 2007).

In order to embrace Gardner's Theory of Multiple Intelligences as a framework for addressing executive function, a turn away from the prevalent essentialist pedagogy that currently exists in education would be needed. The rise of essentialism in the public school setting can be linked to the landmark report issued by the National Commission on Excellence in Education, *A Nation at Risk* (1983). Sweeping educational reforms were called for due to the "rising tide of mediocrity" that the report claimed was prevalent in the educational system. The reforms included lengthening the school day and increasing standardized testing (Allen & McLaughlin, 1990). In early 2002, President George Bush signed No Child Left Behind (NCLB) into law. One of the main focuses of NCLB was accountability. NCLB linked federal funding to student performance of standardized test scores. The linking of test scores with federal education dollars continued with President Obama's Race to the Top grant program which dispersed federal money to states based on competition that awarded funds based on performance. This heavy emphasis on standardized test scores furthered the essentialist agenda which promoted the belief that the goal of education was for the mastery of essential skills and subject matter. Essentialists are influenced by William Bagley who believed that a teacher's role was to possess a strong knowledge base in their area of content and transmit this knowledge to their students (Schramm-Pate, lecture, June, 2014). Essentialists would argue that if a student is scoring well on standardized testing, that is all the student needs to be successful. Since most GT students are identified by their above average test score, most essentialists would find it unnecessary to provide interventions for students who did demonstrate deficits in standardized testing.

However, Gardner argues that all intelligences should be recognized and developed by educators if a student is to reach their full potential (1983). Gardner's philosophy of education supports educators addressing more than linguistic intelligence and logical-mathematical intelligence which are associated with reading and math. Gardner believes that relevant and appropriate experiences enhance and strengthen learning. His philosophy aligns with progressive pedagogy often associated with John Dewey. Progressives believe that the role of the teacher is to work in collaboration with students to build upon the students' knowledge through active, meaningful, real life experiences (Schramm-Pate, lecture, June, 2004). Education is seen as more than just a study of the basics. The curriculum should align with student interest and needs, as well as, provide the experiences necessary to for the student to engage in problem solving and connect with their community. Progressives claim that educating a student in this manner provides the student with tools necessary to impact the environment and ultimately bring about societal change.

In order for GT students to reach their full potential, it is vital educators move toward a progressive curriculum design which addresses and provides skill development in areas such as executive function.

Gifted Students and Executive Functioning

The academic underachievement of GT students is a problem that researchers and educators have grappled with for over fifty years. Passow and Goldberg (1958) provided a landmark study of the GT underachiever. GT underachievers are often seen as a potential loss to society, are at risk for developing negative attitudes toward themselves, school and learning, and frequently view themselves as inadequate in a variety of

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learning experiences (Albaili, 2003). Reis and McCoach (2000) report that despite widespread interest and concern about underachieving GT students, researchers have achieved only a limited understanding of this phenomenon.

What is known is that the problem usually begins during the late elementary years and becomes more evident by secondary and high school (McCall, Evahan, & Kratzer, 1992; Peterson & Colangelo, 1996). Reis and McCoach (2000) highlight there is no universally agreed upon definition for underachievement in the body of literature that exists for underachieving GT students. Many researchers define underachievement as a discrepancy between ability and grades (Peterson & Colangelo, 1996; Reis & McCoach, 2000; Rimm, 1997). In other words, GT underachieving students are those students who are not performing according to their potential ability in school (Albaili, 2003).

There are numerous theories attempting to uncover the reasons for underachievement. Reis and McCoach (2000) state that "attempting to define overarching psychological constructs to describe gifted underachievers is virtually impossible" (p. 158). Kennedy and Banks (2011) contend that it is a myth that GT children should be able to achieve in any learning environment and that their high IQ's insulate them from academic failure. Renuzilli (2012) notes that the most creative ideas, advanced analytic skills and best intentions will not result in action until executive functioning skills are brought into the equation. Executive functioning skills such as organization, sequencing, integrating, and planning are needed to bring ideas into actions. Renuzilli (2012) advocates for gifted education practices to broaden focus from only the cognitive development of skills to include the development of executive functions. Research by Duckworth and Seligman (2005) support his contention that high cognitive skills alone

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are not predictive of student success. Duckworth and Seligman (2005) found that a measure of a student's self-discipline was a more reliable predictor of a student's grade point average than their IQ scores. Self- discipline was measured through instruments that rated characteristics associated with executive functioning skills such as planning, goal setting, organizing, and self-regulation.

GT students who are underachieving should be provided with interventions in order to increase their likelihood of success in their current studies and future endeavors. Schools serving GT students should be providing underachieving GT learners with specific guidance and counseling services that address the issues and problems related to underachievement and should be providing specialized intervention services to GT learners who do not demonstrate satisfactory performance in regular and/or GT education classes (National Association for Gifted Children, 1998).

Definition of Executive Functions

The concept of executive functioning has yet to be given a universally accepted definition (Jurado & Rosselli, 2007). Research regarding the specific components that make executive functions has yielded contradictory findings; however, agreement exists in terms of the importance of executive functioning to human adaptive behavior, and that executive functions include attentional control, cognitive control, and self-regulatory behaviors (Hsu, Novick, & Jaeggi, 2014; Jurado & Rosselli, 2007). A literature review reveals that executive functions are necessary for academic achievement and school success. Cooper-Kahn & Dietzel (2010) state that the term executive function can be considered an umbrella term for the neurologically-based skills involving mental control

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and self-regulation. Executive functions are considered to be the processes that are used by an individual in order to achieve a goal.

Many neurologists and researchers refer to executive functions as the "conductor" of cognitive tasks or "the CEO of the brain." There is general consensus that there are numerous functions needed to successfully complete tasks and deal with life events but researchers define executive skills differently. The differences in research has resulted in a vast number of definitions by researchers with some researchers such as McCloskey, Perkins, and Van Diver (2009) listing as many as twenty-three executive functions, Dawson and Guare (2009) listing eleven, and Isquith, Gioia, and Roth (n.d.) listing eight. Although the lists differ, a literature review reveals that the researchers are in agreement that the skills are related and overlapping. The following executive functions frequently appear in the literature as linked to school achievement: response inhibition, working memory, emotional control, flexibility, sustained attention, and task initiation (Cooper-Kahn & Dietzel, 2010; Dawson & Guare, 2009; Isquith, Gioia, & Roth, n.d.; Langberg, Epstein, Becker, Girio-Herrera & Vaughn, 2012).

Importance of Executive Functions on Academic Achievement

Jacobson, Williford, and Pianta (2011) report that performance measures of executive functioning as early as preschool are a better predictor of later academic performance than either cognitive ability or family characteristics. In addition, they suggest that executive functioning is also associated with how well a student functions socially and behaviorally. As a student progresses through elementary to middle school, the demands on executive functioning skills increase. Students with weak executive functioning skills who may have performed adequately in elementary school suddenly

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find themselves failing in middle school. The demands of middle school require that a student complete seatwork independently, produce longer written assignments, and manage more complex tasks, such as completing long term assignments and studying for unit and semester tests. These students are also trying to adjust to multiple teachers with different demands who do not always coordinate homework, projects, and class assignments. The social life of middle school students starts to expand, leaving less allocated time for studying. These increased demands require a student to have excellent executive functioning skills in order make a smooth transition from elementary to middle school; many times students with weak executive functioning skills are not able to make this transition successfully (Langberg et.al, 2010).

Executive Function Interventions

Individuals show great variance in their ability to use self-relevant types of information to monitor, evaluate, express and increase their executive functions (Wilson & Dunn, 2004). A literature review of executive skills interventions indicated that executive functioning skills have been shown to improve with predictable routines, external cues, organizational strategies, and specific skills training (Campbell et al., 1994; Dawson & Guare, 2009). The key to effective interventions for students with executive functioning weaknesses is to take the process of providing routines and strategies from external supports and guidance to internal generation and use of routines and strategies by the student. Interventions to address executive skill weaknesses are most effective when they are used as a means to form good habits. Having an adult responsible for providing structure and creating all routines for the student may help address the student's immediate executive skill weaknesses; however, it will not allow them to

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become independent and generalize the skills to other aspects of their lives outside the school environment. An individual's ability to internalize and control their executive functions is impacted by whether or not an individual has the opportunity to learn how to manage their executive functions through practice and the gradual fading away of external controls (Moran & Gardner, 2007). Keeping this in mind, the interventions used to improve a student's executive functions should start with increased awareness and goal setting and progress from external control to self- regulation. The key is to teach a goal directed problem solving process within everyday routines. Initially, external models of problem solving routines will be needed in addition to external guidance to develop and implement everyday routines. The student will need opportunities to practice the use of these routines. Once the routines have been practiced and internalized then external support can be faded and cueing used to generate internal production and implementation of the problem-solving routines (Dawson & Guare, 2009).

When trying to switch a student from an external process to an internal process, it is important to make sure the student can generalize the problem solving routine to new situations. This can be done by providing the student consistent feedback, allowing the student to become active in formulating plans for new situations and reviewing their performance. Feedback is usually provided in the form of monitoring charts and rewards. Rewards can be instrumental for a student who has difficulty aligning internal desires with external demands; however, rewards do not teach the child how to change their thoughts and actions. Rewards only reinforce a desired behavior. Reward programs that do not have a skill teaching component imply that a student can produce the desired behavior if they are motivated enough to change, but do not address the student who may

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be motivated to change their behavior yet does not have the skills needed to change the behavior (Isquith et al., n.d.).

Many of the elements researchers describe to be effective for students with executive functioning difficulties are present in the HOPS intervention program. The HOPS intervention program provides direct instruction to teach skills related to school materials organization, homework management, and time management and planning. The program uses goal setting and progress monitoring as the student practices these skills within the school setting. Once the student has mastered these skills, the program teaches the student how to fade from external cues and create a self-management system.

Action Research Methodology

This study has been conducted using quantitative Action Research methodology. Unlike most traditional educational research, the purpose of Action Research is to describe a local and particular classroom, school, and/or other social institution and the participants within those institutions. In contrast, traditional educational research seeks to provide understanding about broad educational issues and practices (Mertler, 2014). Action Research focuses on problem solving in the real world which increases the relevancy and applicability for the action researcher/participant researcher whereas traditional educational researchers decide what to study and how to study it based on literature studies and removed from a specific classroom setting (Dana and Hoppey, 2014). Action researchers improve their practice through a four-step cyclical process of planning, acting, developing, and reflecting while traditional research is linear and does not allow for procedural adjustments during the process (PDH Education, 2014). Dick (1993) states that linear, traditional research methods gain their rigor by control,

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standardization, objectivity and the use of numerical and statistical procedures which is easier to replicate. Advocates of Action research believe that the rigor gained using the traditional research method sacrifices flexibility and prevents researchers from adapting study procedures if warranted by the situation (Mertler, 2014). Huang (2010) states that unlike conventional research the purpose of Action Research is just not to understand but to provide a path to change while generating knowledge and empowering the participant researcher. Action researchers do not separate understanding and action but instead believe that true understanding comes through action. This allows the action researcher to critically examine their own practice, implement strategies for specific issues relevant to their situation and impact change in a much more expedient manner than the traditional research paradigm (Mertler, 2014).

The participant-researcher focused on an identified problem of practice specific to FMA. The study included seven middle level GT students that participated in the HOPS instructional program designed to provide support in organizational skills, time management skills, and planning skills. The study was designed to gain knowledge to improve practices within a particular setting. The action research model was determined to be the best model to address the problem of practice due. The study followed the cyclical four step model of action research to include planning, acting, developing and reflecting.

Key Concepts

The academic underachievement of gifted students is a problem that researchers and educators have grappled with for over fifty years. Gifted underachievers are often seen as a potential loss to society, are at risk for developing negative attitudes toward

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self, school and learning, and frequently view themselves as inadequate in a variety of learning experiences (Albaili, 2003). Researchers have documented a link between weak executive functioning skills and poor academic achievement (Jacobson et al., 2011; Kennedy & Banks, 2011; Langberg et al. 2011). Additionally, findings indicated that the non-academic factors of academic-related skills (time management skills, study skills, and study habit such as taking notes, meeting deadlines, using information resources), academic self-confidence, academic goals, institutional commitment, social support, certain contextual influences (institutional selectivity and financial support), and social involvement all had a positive relationship to retention at colleges and universities (Lotkowski, Robbins, & Noeth, 2004). Given that the importance of organizational skills and planning skills does not lessen over time it is vital that educators provide students with instruction to strengthen these skills.

Conclusion

Chapter Two presents the literature on executive functioning skills and the importance of providing GT students with programming to address executive functioning skills. The literature indicates that executive functioning skills can be improved by providing predictable routines, external cues, organizational strategies, and specific skills training (Campbell et al., 1994; Dawson & Guare, 2009). The HOPS program is designed to provide students with predictable intervention session, external cues and organizational strategies. The HOPS program was used by the participant-researcher to address the problem of practice that involved providing GT middle level students at FMA a program designed to increase and practice executive function skills such as organization

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of materials, time management skills and planning skills in order to improve their

scholarly achievement overall.

Chapter Three: Methodology

Introduction

The purpose of Chapter Three: Methodology is to describe the quantitative action research design used to collect data, analyze data and reflect on data as it relates to the *Homework, Organization, and Planning Skills (HOPS) Intervention* program at Ford Middle Academy (FMA). The HOPS program was implemented with a group of seven gifted and talented (GT) students who were identified as needing assistance with planning skills, and organizational skills. The HOPS program was designed and implemented to enable these GT students to strengthen these skills in order to enable them to improve their scholarly achievement on tests and in homework completion.

Purpose of the Study

The primary aim of the present Action Research Study is to assess the impact of the HOPS program on seven middle level GT students' organizational skills, time-management skills and planning skills by analyzing both student progress of seven student participants on weekly checklists and the results of a survey completed by four of five teachers of seven students who participated in HOPS. Prior to this research, HOPS had not been studied within this GT population to determine its effectiveness.

Statement of the Problem of Practice

The identified problem of practice (PoP) involves GT middle level students at FMA who have difficulty transitioning to middle level school due to lack of

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organizational, time management, and study skills. According to the school's middle level counselor and middle level teachers there was no support system in place to enable identified GT students to develop study skills and to learn to manage their time in the GT program. A new program called Homework, Organization and Planning Skills (HOPS) was adopted to meet the needs of the students and is the focus of the present study.

Research Question

RQ1: What is the impact of *Homework, Organization, and Planning Skills (HOPS) Intervention* on participating middle level gifted and talented students' organizational skills, time-management skills, and planning skills?

Research Methodology

This study has been conducted using Action Research methodology. This methodology allows the individual to become an active researcher by finding solutions to problems that are important to them and by testing the effectiveness of the solutions in the settings in which they work. Huang (2010) states that unlike conventional research the purpose of Action Research is just not to understand but to provide a path to change in the school setting while generating knowledge and empowering the participant researcher, teacher-participants and faculty.

Action research methodology was chosen as an appropriate methodology to address the problem of practice. The primary goal of the research was to gain knowledge about the impact of the HOPS program in the FMA setting. A traditional model of research would have been applicable if the participant-researcher was seeking to generalize knowledge to other populations (Mertler, 2004). Additionally, action research allows for the use of multiple sources of data collected through different techniques.

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Multiple sources of data assist the participant- researcher is gaining a more in-depth and balanced understanding of the research (Mertler, 2004). The primary form of data collection for this quantitative action research study involved checklists. However, additional data sources were included (teacher questionnaire, interviews, and observations) to give additional insight into study results. Finally, the action research model allowed the practioner-researcher to be an integral part of the action research and not remove themselves from the action phase of the plan.

Research Design

Mertler (2004) lists four stages within the action research process. Planning, acting, developing and reflecting are vital components of the cyclical process involved with action research studies. This model was used to design the present study.

Planning Stage

During the planning stage of the study, the participant- researcher collaborated with administration and teachers on noted areas of concern at FMA. Middle level teachers reported that middle level students lacked organizational skills which impacted their overall performance. An investigation revealed that although many teachers and school counselors helped students with organizational skills individually, there was no consistent uniform instruction available for middle level students. Interventions programs were researched and the HOPS program was chosen because it was geared for middle level students, required few resources, and could be implemented in a group format. In addition, the HOPS program was chosen because it provided predictable routines, external cues, organizational strategies, and specific skills training which the literature supports as needed components of an effective executive functioning program

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(Campbell, et al., 1994, Dawson & Guare, 2009). Further collaboration and reflection was required among the stakeholders (middle level teachers, administration, counselor, and participant-researcher) to decide upon participant selection, a schedule of delivery for the HOPS sessions and data collection methods. The decision was made to recommend students based on teacher identification of need. The HOPS sessions were scheduled twice a week for eight weeks during middle level study hall to ensure that students would not miss instructional time.

Participant Selection

Participants were sixth grade students attending a public school for the Gifted and Talented. The sixth-grade team of teachers and middle level counselor was asked to recommend six to eight students they thought could benefit from the HOPS intervention program. Eight male students were recommended to participate in the program. The participant-researcher questioned the sixth grade team and middle level counselor as to whether why no females were recommended. The team and counselor reported that they were unaware of any sixth grade female students who were having difficulty staying organized and turning in assignments.   A consent form (Appendix B) inviting students to participate in the HOPS intervention program was distributed to the parents of the recommended students. The consent forms outlined the procedures that were put in place to protect the anonymity of the student-participants, and the right of students and parent/guardian to discontinue participation at any time throughout the intervention. The participant-researcher also contacted parents via phone to explain the HOPS program and answer any questions about the Action Research Study. Eight consent letters were sent to parents and seven consent letters were returned. This resulted in seven student-

participants. Six of the student-participants were in the sixth grade and one was in the seventh grade. All student-participants were male. The initial meeting with the student-participants outlined the purpose of the HOPS program. Students were informed of their right to not participate in the HOPS program or to stop participation at any point during the program. Intervention session dates and times were discussed with the student-participants. Sessions were scheduled during the last period of the school day which in the FMA middle level schedule was a study hall. Study hall time was devised by the middle level administration and faculty as a time in the day where teachers could schedule enrichment activities, and students could work on long term projects and assignments. Pulling students during the last period of the day ensured that the students did not miss instructional time. The students were scheduled to meet with participant researcher every Tuesday and Thursday for eight weeks which resulted in sixteen sessions.

During each session, the participant researcher taught or reviewed skills related to materials organization, time management skills, or planning skills. The participant researcher met with each student individually before or after each session to provide support, review student progress, and problem solve.

Research Site

The research site for the Action Research Study was conducted at a public school which serves as an elementary school for students 4K-5th grade and also serves as the home of a county-wide gifted center for identified GT students grades three through eight. Initial entry into the center at third grade is based on three student performance dimensions-reasoning ability as measured by nationally standardized aptitude

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assessments, achievement as measured by nationally standardized assessment, and classroom performance as a composite of four authentic student performance measures. A student must meet the criteria in two of the three dimensions in order to qualify. First, aptitude scores are analyzed and students who score at the 99th percentile in all areas of the aptitude test meet the criteria for admission. Secondly, students are ranked by 99th and 98th percentile and their achievement scores from Fall Measures of Academic Progress (MAP) or Iowa Test of Basic Skills (ITBS) are matched to their aptitude scores. Students who meet the top scores in Aptitude and Achievement are identified and offered admission to the gifted center. Approximately 450 students attend the school for gifted and talented. Of the 450 students that attend FMA, 232 students are male and 218 are female. An enrollment summary by ethnicity indicates that 13.7% of students are identified as Asian, 2% are identified as black or African American, 1.7% are identified as Hispanic, 22% are identified as American Indian or Alaska Native, 3.7% are identified as two or more races and 78.4% are identified as white (Appendix C).

The identified GT students that are in the sixth through eighth grades attend classes in an upstairs hall of the building. The upstairs hall serves as the middle school area. Student lockers and middle school classes are located on this hallway. There are no elementary classes or teachers located on this hall.

Acting Stage

The "acting stage" (Mertler, 2014) occurred during the implementation of the HOPS program in the fall 2016. Data was collected by the participant researcher over eight weeks. The data was analyzed with student and teacher-participants throughout this phase. Student-participants were shown their individual checklists during each session.

This allowed the participant-researcher and student-participant an opportunity to discuss progress that had been made over sessions as well as any setbacks.   The participant – researcher met with teacher-participants to discuss teacher observations of classroom progress and share checklists. Ongoing data collection and analysis informed decisions about ongoing data collection techniques, providing individualized support to students, and expanding the length of time to cover time management skills.

Data Collection Strategy

The HOPS intervention is designed to be delivered through a series of sixteen sessions. The sessions lasted approximately 20 minutes. Three main skill areas are taught as part of the HOPS program: school materials organization, homework management, and planning. The first three sessions are designed to teach students a specific organization system for organizing a school binder, book bag, and locker. The middle sections (sessions 4-11) focus on time management and planning and the final sessions, sessions (12-16) focus on teaching students to self- monitor and maintain their systems. Although the HOPS intervention is designed to be delivered in sixteen sessions, Langberg (2011) stresses that some students may need more time to learn skills so some flexibility may be required. In addition, the HOPS program can be adapted to meet the particular needs of the students and time constraints that may arise in different situations and settings. Throughout the HOPS sessions, students are awarded points for demonstrating organizational skills and time management skills. These points are used to monitor student progress and allow students to earn rewards through an accumulation of points.

All students were issued school agendas. If students did not have binders or organizational materials required for the HOPS organizational system they were supplied to the student. Students were interviewed regarding possible rewards and all seven students responded that they would like to be rewarded with candy. A variety of candy was purchased and used as a reward for obtaining the predetermined goal for the upcoming week. The goal was determined each week in collaboration with students.

During each HOPS session, the participant-researcher spent time individually with each student reviewing their organizational systems, asking questions about their progress, and problem solving. If a student needed additional assistance, a meeting time was set up with student to provide additional assistance and support. The participant-researcher would also meet with students at alternate times if the student missed a session due to absence.

Quantitative Data Collection

The primary form of data collection for this quantitative action research study involved checklists. Quantitative data was collected using instruments developed and provided by Langberg (2011) in the HOPS manual (Appendix D & E). The quantitative data was analyzed to monitor student progress in regards to organizational skills and agenda recordings. The following checklists were utilized:

Organizational skills checklist. This instrument was used to assess a baseline assessment of the student's materials organization system before the intervention and to monitor the student's progress during the intervention. This checklist consists of 14 operationalized criteria for binder, book bag, and locker organization. This checklist was

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completed during the first session (baseline) and for each subsequent session (Appendix D).

Homework checklist. The participant- researcher used these sheets to maintain a record of homework assignments, teacher initials, and missing assignments. This checklist was completed during the first session agenda recording was introduced (baseline) and for each subsequent session (Appendix E).

A questionnaire composed of five short questions with a Likert scale ranging from a response score of 1-5 (Appendix F). This questionnaire was distributed to the teachers of student-participants via their teacher mailboxes and returned to the participant-researchers mailbox. No identifying teacher information was requested to ensure the anonymity of the teacher responses.

To support the quantitative data, qualitative data was gathered throughout the sessions by individual interviews with student-participants during each session and observations of the sessions. Journal entries of observations during HOPS sessions and student responses during one to one interactions with participant researcher and teacher comments were recorded by the participant researcher after each HOPS session or interaction with teachers about the HOPS program. To maintain confidentiality, the participant-researcher's journal, checklists, and surveys were kept in a locked file cabinet and student-participants were assigned a code which connected them to the entries and checklists. Teacher surveys did not require a teacher name, grade, or subject area so that the anonymity of the teachers could be maintained.

Polyangulation

In order to provide a more in-depth and balanced understanding of the checklist data polyangulation was utilized. Multiple sources of data were used to assist in the participant researcher in gaining a broader view of the impact of the HOPS program. The data sources included teacher questionnaire, interviews, and observations. The semi-structured interviews were conducted during each session beginning with four questions: How did things go since last time we met? What did you do or not do that made completing your assignments easier or harder? Is there something I can help you with? What is your plan between now and the next time we meet? The questions allowed responses to be compared among student- participants; however, student-participants were able to comment upon other ideas or ask additional questions. These interviews were conducted as the participant researcher checked the student's organizational materials and agendas. In addition, journal notes were kept when the participant researcher met with students individually to help with specific tasks such a locker organization, filing loose papers, etc. The participant-researcher jotted down notes in a journal rather than audio recording interactions so as not to make the students uneasy or self-conscious. The notes were expanded upon after each session as soon as possible. Each student was assigned a code so the responses remained confidential and the transcribed responses were kept in a locked file cabinet. Journal entries were made after each session regarding the participant-researchers reflections and observations during the sessions and teacher-participant comments about student-participants. The journal was kept in a locked file cabinet when it was not being used to record or being analyzed by

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the participant researcher. All procedures were approved by the Internal Ethics Review Board and the school district research office.

Data Analysis

A quantitative data analysis of the organizational skills checklist, homework checklist, and teacher survey was conducted. The following descriptive statistics were performed: mean, standard deviation, frequencies for variability, and t-tests. In addition, qualitative data collected from interviews with student participants, observations during HOPS sessions, and informal conversations with teacher-participants through journal entries were analyzed for themes, patterns, and relationships.

Developing Stage

The developing stage occurs after the action stage or after data has been collected and analyzed. This is stage in which the data is used to guide or develop future actions (Mertler, 2004). The data was used to develop an action plan for FMA. The study results were shared with student and teacher participants. The middle teachers, middle level counselor, participant-researcher, and administration worked in collaboration to formulate the action plan.

Reflecting Stage

Reflection is a vital component of the Action Research process that occurs throughout the study but also is the final stage in the cyclical process. The process is designed to be open-ended in which the steps of the process are examined systematically. The process begins with the development of an idea or area concern, researching existing knowledge about the idea, formulating a possible solution, implementing the solution, generating new knowledge through implementation, and then changing practice based on

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knowledge gained (Vaccarino, Comrie, Murray, & Sligo, 2007). Action research is designed to be a continuous process which involves the researcher evaluating what they are researching and consistently reflecting on if what they are researching is actually working and reaching the desired outcome. The final stage of this research process requires the participant- researcher to critically examine the research design, acknowledge issues and road blocks that occurred during data collection, plan modifications that could enhance future implementation, determine themes and patterns that emerge through the study and formulate new areas of research that emerged as a result of the study.

Conclusion

A quantitative action research design was used consisting of Mertler's (2004) four stages- planning, acting, developing and reflecting to to collect data, analyze data and reflect on data as it relates to the *Homework, Organization, and Planning Skills (HOPS) Intervention* program at Ford Middle Academy (FMA).

A quantitative data analysis of the organizational skills checklist, homework checklist, and teacher survey was conducted to determine the impact that the HOPS program had on students' scholarly achievement. The following descriptive statistics were performed: mean, standard deviation, frequencies for variability, and t-tests. In addition, qualitative data collected from interviews with student participants, observations during HOPS sessions, and informal conversations with teacher-participants through journal entries were analyzed for themes, patterns, and relationships.

The quantitative data enabled the researcher participant to compare scores obtained on the checklists pre and post HOPS intervention sessions. Polyangulation of

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other data sources assisted in the understanding of the data and informed changes that

needed to be made in the next implementation phase.

Chapter Four: Findings and Implications

Introduction

The purpose of Exploring an Organization Skills Intervention for Improving

Executive Functioning Skills within a Gifted Population: An Action Research Study was

to examine the impact of the *Homework, Organization, and Planning Skills (HOPS)*

Intervention program with a group of gifted and talented (GT) students at Ford Middle

Academy (FMA). The research site for the Action Research Study was conducted at a

public school which serves as an elementary school for students 4K-5th grade and also

serves as the home of a county-wide gifted center for identified GT students grades three

through eight. Initial entry into the center at third grade is based on three student

performance dimensions-reasoning ability as measured by nationally standardized

aptitude assessments, achievement as measured by nationally standardized assessment,

and classroom performance as a composite of four authentic student performance

measures. A student must meet the criteria in two of the three dimensions in order to

qualify. First, aptitude scores are analyzed and students who score at the 99th percentile in

all areas of the aptitude test meet the criteria for admission. Secondly, students are

ranked by 99th and 98th percentile and their achievement scores from Fall Measures of

Academic Progress (MAP) or Iowa Test of Basic Skills (ITBS) are matched to their

aptitude scores. Students who meet the top scores in Aptitude and Achievement are

identified and offered admission to the gifted center. Approximately 450 students attend

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the school for gifted and talented. Of the 450 students that attend FMA, 232 students are male and 218 are female. An enrollment summary by ethnicity indicates that 13.7% of students are identified as Asian, 2% are identified as black or African American, 1.7% are identified as Hispanic, 22% are identified as American Indian or Alaska Native, 3.7% are identified as two or more races and 78.4% are identified as white (Appendix C).

The identified GT students that are in the sixth through eighth grades attend classes in an upstairs hall of the building. The upstairs hall serves as the middle school area. Student lockers and middle school classes are located on this hallway. There are no elementary classes or teachers located on this hall.

The identified problem of practice (PoP) involves GT middle level students at FMA who have difficulty transitioning to middle school due to lack of organizational, time management, and study skills according to the middle level counselor and middle level teachers at FMA. There was no support system in place at FMA to enable these students to develop study skills and manage their time in the GT program so a new program called, *Homework, Organization and Planning Skills* (HOPS) was adopted.

Chapter Overview

Chapter Four describes the results gathered in the present action research study. Metler (2014) refers to this stage as the acting phase. Specific results for the organizational checklist and homework checklist are reported in Tables 4.1- 4.2 (see Appendix D & E). Observation and interview notes are summarized. Feedback from teacher-participants questionnaire and informal conversations that took place during period the HOPS intervention program was implemented are also included and analyzed to expand upon the data from the checklist. The analysis of data was conducted

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throughout the Action Research study. Data from informal interviews as well as observations revealed three themes: Lack of Transference of Skills, Resistance to Change, and Time Management Struggles. These themes emerged through coding analysis (Mertler, 2014).

Review of Data Collection Strategy

The HOPS intervention is designed to be delivered through a series of sixteen sessions. Sessions last approximately 20 minutes and were scheduled twice weekly resulting in an eight-week program. The participant-researcher was responsible for meeting with the students and delivering the sessions. Three main skill areas are taught as part of the HOPS program: school materials organization, homework management, and planning. The first three sessions are designed to teach students a specific organization system for organizing a school binder, book bag, and locker. The middle sections (sessions 4-11) focus on time management and planning and the final sessions (sessions 12-16) focus on teaching students to self-monitor and maintain their systems. Although the HOPS intervention is designed to be delivered in sixteen sessions, Langberg (2011) states that flexibility with the pace that skills are introduced is important and that some students may need more time learning strategies. In addition, the HOPS program can be adapted to meet the particular needs of the students and time constraints that may arise in different situations and settings. Throughout the HOPS sessions, students are awarded points for demonstrating organizational skills and time management skills. These points are used to monitor student progress and allow students to earn rewards through an accumulation of points.

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All students were issued school agendas. If students did not have binders or organizational materials required for the HOPS organizational system, they were supplied to the student. Students were interviewed regarding possible rewards and all seven students responded that they would like to be rewarded with candy. A variety of candy was purchased and used as a reward for obtaining the predetermined goal for the upcoming week. The goal was determined each week in collaboration with students.

During each HOPS session the participant- researcher met with the group as a whole and spent time individually with each student reviewing their organizational systems, asking questions about their progress, and problem solving. If a student needed additional assistance beyond what could be provided during the session, a meeting time was set up with the student to provide additional assistance and support. The participant-researcher would also meet with students at alternate times if the student missed a session due to absence.

Reflection

Reflection is a vital component during the action phase of Action Research. The participant-researcher met consistently with teacher- participants and student-participants throughout the implementation of the program. This enabled the researcher to follow up with individual students on specific needs or problems and reflect on teacher comments. Reflection then turned into action through adjusting data collection techniques.

Initially, teachers were asked to email the researcher with concerns, questions, or ideas. The participant researcher did not receive the anticipated number of emails about student progress so the researcher began checking in weekly with face to face contact with teachers. In conjunction with teacher input, the researcher gained student input

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during each session. Students participated in the review of checklists and agendas that monitored their progress with organizational skills. Information gathered from teachers and students determined the amount of additional intervention time a student might need and guided week to week planning. Student-participants could and did request additional meetings with the participant-researcher often to help with organization of materials and to gain assistance with determining what materials were needed to complete missed assignments. Early analysis of the checklist data indicated that students were making progress with their organizational skills and recording homework assignments. Conversations with teachers did not reflect this progress. The participant researcher spoke with middle level teachers and administrations about the conflicting data. In order to keep all parties informed, middle level teachers created a shared Google document to keep a running list of missed assignments for middle level students. This way all staff members could see which middle level students had missing assignments and what they were missing. Access to this list enabled the participant-researcher to follow up on student's progress and reinforce a plan for the completion of assignments. While working with the students it became apparent that although they were writing some of the homework assignments in their agendas they were not always writing all of them, were not always completing the homework assignments they recorded, and were not recording incomplete classroom assignments. When meeting with the students individually, it was discovered that most had started the assignments but had not completed the assignment. In addition, teachers observed and reported organizational issues that some student -participants were having outside the intervention scope of the HOPS interventions program. For instance, some middle level teachers required students to maintain an interactive classroom

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notebook. These interactive notebooks were used during class time. The teacher would give students a handout and students were required to cutout material from handouts and paste them in the notebooks. Teacher-participants observed that many students were not securing the handouts in the notebooks which results in them losing the handouts. The HOPS program was not set up for the participant–researcher to assist with materials organization beyond the binder, book bag, and locker so these issues were problem solved on an individual basis with the teacher-participants.

Input from students regarding obtaining teacher initials in their agendas resulted in the initial requirement being dropped. Students were asked to record assignments and have teachers initial their entries. Teachers were informed that students were going to be asking for initials and that students were to be independent in this process (teachers should not prompt). Students reported two reasons for not getting initials. The first was that they forgot obtain initials without teacher prompting. The second reason given was that they were reluctant to ask for teacher initials in their agendas because it singled them out in front of their peers. In order to make sure students were not embarrassed due to requirements of the HOPS program, the initial component was dropped.

Upon analysis of the data, the dropping of the initial requirement lessened the ability of the middle level teachers to monitor what student-participants were recording in their agenda, and communicate via the agenda with the practitioner- researcher items that had not been submitted. Another method of gathering this type information should have been devised and implemented. It was not until week six that a system was devised to track this information.

Comments made by teachers after completing the questionnaire led the participant-researcher to realize that the questionnaire questions did not assess other possible positive outcomes students or teachers might have received from participating in the program. In addition, two teachers wrote on the questionnaires that they would have preferred to answer the questions relative to each student- participant rather than the group as whole. This resulted in the participant–researcher meeting with middle level teachers to gain additional information about their perceptions of the HOPS program.

Findings of the Study

The data collection and analysis of the study is considered the action stage of Action Research (Mertler, 2014). During this stage data was collected and analyzed to answer the research question, What is the impact of *Homework, Organization, and Planning Skills (HOPS) Intervention* on participating middle level gifted and talented students' organizational skills, time-management skills and planning skills?

The study consisted of seven student-participants. All of the students were male. Six of the student-participants were sixth graders and one of the student -participants was in the seventh grade. Each student had been recommended by a teacher due to his exhibiting organizational skills, planning skills, and time management skills that needed to be improved.

Quantitative data was collected during a series of HOPS intervention sessions with the participant researcher and student- participants by the use of checklists that were developed and provided by the HOPS manual and from a teacher questionnaire that was distributed at the completion of the HOPS intervention program.

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The checklists measuring organizational skills and agenda entries served as pre-test and post-test measures for the study (Appendix D & E). Baseline data was obtained for each student prior to the introduction of organizational skill and agenda entry instruction.

Results for Organizational Skills

Organizational skills were monitored by using fourteen operationalized criteria for binder, book bag, and locker organization (Appendix D). Students were awarded one point for each of the fourteen operationalized criterion that was met. A student could earn seven points for the binder, four points for the book bag, and three points for the locker.

Baseline data collected regarding students organization of their binder, book bag and locker was obtained by using an Organizational Checklist (Appendix D) which listed the operationalized criteria. Data was also collected at the completion of the HOPS program.

A paired-samples t-test was conducted to compare the organizational points by materials earned by student participants before participating in the HOPS intervention program and after participating in the HOPS intervention program. There was an increase in the scores for all organizational materials after the implementation of the HOPS program. Specifically, the results suggest that when the students participated in the HOPS program, they increased the earned organizational points in binder, book bag, and locker criteria.

Table 4.1

Results of t-test and Descriptive Statistics for Pre- and Post-Organizational Data

	Before HOPS		After HOPS			
Material	M	SD	M	SD	t	p
Binder	3.28	1.60	5.85	1.06	6.00	<0.01*
Book bag	1.71	1.79	3.14	1.21	2.70	0.04*
Locker	1.14	.37	1.71	.48	2.82	0.03*

* p < .05.

Results for Homework Checklist

In order to aide students with increasing their time management skills, students were instructed in how to record homework assignments, tests, and projects in their school issued agenda beginning in HOPS session four. The importance of keeping a daily agenda was stressed and students were instructed to record daily homework assignments, tests and projects for each of their academic areas (five total) in their agendas. The participant researcher checked each student agenda during subsequent sessions and awarded one point for each subject area that an assignment was recorded. The participant-researcher obtained a baseline the first week and checked each student agenda during subsequent sessions. Each week the student could earn up to 25 points.

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Based on the results of weekly agenda points, students obtained a baseline average of 8.57 points out of a possible 25 points. A paired-samples t-test was conducted to compare the number of homework assignments prior to HOPS sessions addressing the recording homework assignments and after participating in the HOPS sessions. There was an increase in the scores for the first week after the introduction of the agendas (Week 4) but no increase in the scores for weeks five and six after the implementation of the HOPS program. Specifically, the results suggest that when the students participated in the HOPS sessions addressing recording homework assignments they did not increase the number of recordings of homework assignments.

Table 4.2

Weekly Student Agenda Points

Week	Mean	SD	t	p
4 /Baseline	8.57	10.29		
5	21.47	9.44	3.06	0.02*
6	17.85	12.1	1.37	0.22
7	18.57	9.88	1.95	0.10

*p<.05

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Results of Teacher Questionnaire

To gain information about how teachers of the student-participants perceived the impact of the HOPS intervention on student organization and homework completion teachers were asked to complete a five-question survey (Appendix F). The questionnaire was designed by the participant researcher and given to the teachers after the students had completed the HOPS program. The questionnaire allowed teachers to provide information with anonymity. Five questionnaires were distributed and four questionnaires were returned. Each question on the questionnaire required a response using a Likert Scale ranging from 1-5 (1: Strongly Disagree; 2: Disagree; 3: No Opinion; 4: Agree; 5: Strongly Agree).

Due to the range in scores and small sample size, questionnaire results were analyzed by frequency of responses. Table 4 reports the frequency results from the Teacher Questionnaire.

Table 4.3

Frequency of Responses for Teacher Questionnaire

	frequency of responses				
Questions	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
1. I saw a difference in the homework completion of students who participated in the HOPS program.	1	3	0	0	0

2. I saw a difference in the organizational skills of students who participated in the HOPS program.	1	1	0	2	0
3. I think there is a need to offer an organizational program for middle level students at FMA.	0	0	0	1	3
4. I would be willing to recommend other students to participate in the HOPS program.	0	0	0	2	2
5. I think there is a need to offer the HOPS programs to other middle level students	0	0	1	1	2

An analysis of the frequency of responses to the questionnaire questions revealed that none of the four teachers completing the questionnaire saw a difference in the homework completion of students who participated in the HOPS program. Two teachers reported seeing a difference in the organizational skills of the students who participated in the HOPS program while two teachers did not report seeing a difference. All four teachers indicated that they thought there was a need to offer an organizational program for the middle level students at FMA and indicated they would be willing to recommend other students to the HOPS program. Three of the four teachers thought there was a need to offer the HOPS program to other middle level students at FMA while one teacher did not have an opinion. The teachers were allowed to complete the survey without revealing their identities. Although the anonymity allowed for teachers to respond to the

questionnaire freely and without risk of being singled out due to their responses it prevented the practioner-researcher from interviewing the teachers about their specific responses.

To polyangulate the quantitative data (Mertler, 2016), qualitative data was obtained through observations and interviews with students during the HOPS. Comments made by student/teacher-participants and observational notes documented in a journal by the participant researcher were analyzed and are discussed in this chapter for the purpose of explaining and elaborating on the organizational checklist and homework checklist findings.

Direct Observations

Observational notes were taken during the HOPS sessions by the participant-researcher in order gauge student-participant reactions to the sessions and give deeper meaning to the quantitative data. The participant-researcher met with students in the teacher workroom on the middle level hall. The observations occurred over eight weeks at which time the participant–researcher met with students twice weekly. Notes were recorded by the participant researcher of who attended the sessions, how long they lasted, activities covered, and any unusual occurrences. The on-site field notes were then elaborated upon as soon as possible after each observation. The data was analyzed according to themes that emerged.

Interviews

Students were informally interviewed during each session with the participant-researcher asking these four questions during each session: How did things go since last time we met?, What did you do or not do that made completing your assignments easier

or harder?, Is there something I can help you with?, and What is your plan between now and the next time we meet? These interviews were conducted as the participant researcher checked the student's organizational materials and agendas. In addition, journal notes were kept when the participant researcher met with students individually to help with specific tasks such as locker organization, filing loose papers, etc. The participant researcher jotted down notes in a journal rather than audio recording interactions so as not to make the students uneasy or self-conscious. The notes were expanded upon after each session as soon as possible. Student codes were used to protect the identity of the students and the journal was kept in a locked file cabinet. The data was analyzed according to themes which emerged.

Observation/Interview Notes Summary

During the first week, six of the seven students were excited to be part of the HOPS intervention program. Students met with the practitioner-researcher in a teacher workroom on the middle level hall. The practitioner-researcher gave a brief overview of the HOPS program and reminded students that their participation was voluntary. Students were told that they would be able to earn rewards based on points for organizing materials and recording in their agendas. Baseline data was collected from all seven students. The practitioner-researcher met with the one student who was reluctant to participate and after receiving individualized instruction and problem solving strategies the student indicated that he wanted to remain a participant.

Overall, all seven students were a little unsure as to how the new organizational system would work and needed support and reassurance to try and revamp their current systems. During the second week, most students had adjusted to coming into the session

and having their materials checked. The students were excited about the points they were earning. The fourth week introduced a new component to their organizational and planning system, record homework assignments and obtain teacher initials to verify they recorded the assignment correctly. Agendas were checked at the next session and most students had not received full credit for recording homework assignments or obtaining teacher initials. When asked why they did not write down all their homework assignments and get teacher initials, the students stated that they did not have much time to write in their agendas when they remembered to write in them. The students further indicated that they did not like writing down homework assignments because they thought they could remember them or go to a teacher website. The rationale behind writing in the agenda was reiterated and goals were set to obtain a reward. Many students were able to get rewards for recording homework assignments and seemed excited about getting rewarded. Although the students showed progress in recording assignments, they did not obtain teacher initials. During week five, students continued to maintain their organizational systems with their binders and book bags but struggled to keep their lockers organized. All students reported that they lacked time during the day to organize their lockers. Students were still not obtaining teacher initials. The participant researcher asked the students why they were not getting teacher initials. Students reported that they did not like being different from the rest of the peers in class by requesting teacher initials.   The decision was made to no longer require initials as long as the students continued to record assignments. Students were rewarded with a tangible reinforce for reaching predetermined point goals.   Students also received verbal praise and recognition from the participant researcher and other students for reaching the goal. Week six and

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seven included instruction regarding time management techniques and students practiced test/ quiz recording and long term project recording. All the students needed individualized instruction when asked to perform this task. They did not grasp how to estimate study time and record it prior to the test or quiz date. During these weeks, the middle level team created and shared a Google document that listed all middle level students and the assignments that had not yet been turned in. The middle level teachers updated the document daily. The participant researcher met with the five students-participants whose name appeared on the list individually to make a plan for completing and turning in the missed assignments. While working with the students it became apparent that although they were writing homework assignments in their agendas they were not always turning in the homework assignments and were not recording incomplete classroom assignments. Many of the students had partially completed the assignments and when asked why they did not finish stated that they "forgot" they had to finish it. It was noted that during week six and week seven many special events were taking place in the school. Students were very excited about these events but stated that the change in schedule these events brought caused them to be less organized. Week eight was the final week of the program. The sessions for week eight were initially scheduled to be instruction in self-management techniques, yet based on the observation and interview notes, and informal conversation with teachers during the prior weeks, the group was not yet ready to create a self- management plan. The HOPS manual indicates that the HOPS program can be adapted to meet the particular needs of the students and/or time constraints that may arise in different situations and settings. Given the flexibility allowed by the HOPS program and the need of the students, additional time was spent

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reviewing time management techniques and wrapping up the intervention program. The participant researcher met with each student to discuss the progress they had made with their organizational skills and spent time reviewing and formulating strategies for completing unfinished assignments.

Observational/Interview Data Analysis and Themes

In order to code the data, the participant researcher followed Mertler's (2014) suggestions regarding the development of a system of categorization. The notes taken during the observations and interviews were read numerous times. As the notes were read the process of coding, the information was begun by jotting down key words and phrases in the margins to identify possible themes or categories. Once this was done, the key words and phrases were highlighted in different colors to represent recurring themes or patterns. The same colored key words and phrases were then grouped together. These colored coded groups of key phrases were further reviewed to determine if they could be combined effectively into major categories or themes. This categorizing system produced three overall themes: Lack of Transference of Skills, Resistance to Change, and Time Management Struggles.

Theme Discussion.

Theme 1: Lack of Transference of Skills.

The Lack of Transference of Skills emerged as a theme when the participant researcher reviewed the observational notes and notes taken during conversations with the five teacher-participants. The students were showing improvement in the organization of their materials as evidenced by the checklist that was compiled each session and were increasing the recordings in their agendas from the first week. However, conversations

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with teachers indicated that students were not keeping their interactive notebooks organized and were not always turning in assignments.

Theme 2: Resistance to Change.

Although the students stated that they needed assistance organizing their binders and lockers, many were initially resistant when new organizing strategies were introduced. Students commented, "I don't do it that way," "I think I will keep it how I have it," and "If I do it that way, it will make my binder bulky." When students were reluctant to try it out new components of the organizational system they were assured that if did not work for them, the practitioner researcher would problem solve with them and if a solution could not be worked out they could return to the old system. When approached in this manner students agreed to give it a try. Students also stated that they "liked how they had their binder" and needed reassurance that they would acclimate to the new system. The introduction of recording assignments in the agendas was met with student remarks of "I can just look on the website," "I don't need to write it down, I can remember it," and "I don't have time to write it down." Students were reminded about the reasoning behind writing assignments in agendas (don't need to rely on teacher updated website, don't have to try and remember everything, time spent recording assignments will save time later) and with verbal and tangible reinforcement began recording assignments.

These responses support the need for ongoing interaction between the participant researcher and students as students learn new organizational, time management, and planning skills.

Theme 3: Time Management Struggles.

When students had organizational difficulties with physical items (binder, locker) they often reported that they had not maintained the system because they did not have time. They indicated that there was no time at the end of the class period. Students tended to put off organizing loose papers and returned work rather than managing the papers on a daily basis. They reported that they thought they would make time to organize later in the day or week but then they forgot to carry out the task or as they neglected the task, it grew larger and became overwhelming. This was the same reason given for why they had not recorded items in the agendas. Students often misjudged the time needed to organize papers. In an individual meeting with the participant researcher, E.H. stated, "I have lots of papers to organize but I don't have time now-I'll do them at home." The participant researcher encouraged E.H. to do the task right then assuring him it would take less time than he thought. E.H. complied and was able to complete the task in less than five minutes. When finished, he remarked, "That was easier than I thought." The participant researcher reminded students that the time spent looking for lost assignments or misplaced papers could be shortened by daily organization.

Additionally, when students were asked to plan times to work on projects and study for tests, students had difficulty making realistic judgements about when and how much time they would need to allot. The participant researcher was working with C.P. completing his agenda when he remarked that his brother's birthday was on Friday, November 11th. He stated that the family was going to celebrate by going out to dinner. While scheduling a time to study for a test that was to occur on November 16th, C.P. began to write the word study on November 11. The participant researcher asked him if

he really thought he would study on a Friday night and he stated, "Yes, I think I would."
The researcher then reminded him of his earlier comment that his family was to celebrate
his brother's birthday. C.P. remarked, "Oh, you're right. I probably won't study."

These responses highlight the need to provide middle level students with time
management strategies for completing homework/projects, performing daily tasks, and
planning to study for tests. It also supports the need to for middle level teachers to
provide time at the end of the period to allow students to organize materials, write down
assignments, etc.

Interpretation of Results of the Study

Both quantitative and qualitative data were considered when interpreting the
results of the study. Quantitative data compiled from student checklists indicated that
students increased their ability to organize their binders, book bag, and locker. The data
indicated that students were most successful in organizing their binders. Students also
exhibited increases in the number of agenda entries they recorded from the very first
week data recordings were checked; however, this increase was only apparent the very
first week and was not sustained. However, the small sample size of the study must be
acknowledged when interpreting the quantitative data. A small sample size decreases the
likelihood of finding significant relationships from the data. This is because the main
impact of a small sample size is the one it has on statistical power. Statistical power
refers to the probability of a statistical test detecting traits or differences that exist in the
population. Given the difficulty small sample sizes pose when looking for statistically
significance, the impact of the program on gathering agenda data should continue to be
investigated in future studies.

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Qualitative data was collected and analyzed to give deeper meaning and understanding to the quantitative data. The qualitative data revealed that students did not transfer the skills from the HOPS program sessions into their day to day classroom experiences as the practitioner researcher had hoped at the beginning of Action Research study. Questionnaire results from four teachers indicated that two teachers reported seeing a difference in the organizational skills of the students who participated in the HOPS program while two teachers did not report seeing a difference. None of the teachers saw a difference in students' homework completion. All four teachers indicated that they thought there was a need to offer an organizational program for the middle level students at FMA and indicated they would be willing to recommend other students to the HOPS program. Although teachers did not report seeing an increase in skills targeted by the HOPS program, they did stay committed to finding an organizational program and appeared to be willing to continue to refer students to the HOPS program. This leads the participant researcher to believe that the collaboration that occurred between students, teachers, and participant researcher was beneficial. It provided a catalyst for teachers to think of ways to assist students who exhibit a need to increase their organization skills, time management skills and planning skills. It also revealed that teachers were willing to continue supporting and adjusting the HOPS program in order to provide interventions for students with organizational and planning weaknesses.

The lack of transference of skills into the classroom setting could be a result of the eight-week time frame for the intervention. The eight week time frame might not have been sufficient for the student- participants to learn new skills and begin demonstrating them. The student-participants required more support than anticipated with

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time management and planning skills so they had less time to demonstrate mastery of these concepts when the teachers completed the questionnaire. Another possible obstacle to the transference of skills related to time constraints was revealed through observational and interview data. This data indicated that students took more time than initially projected to adjust to the changes in their organizational systems and agenda recording. It also revealed that the students struggled to find time to implement the organizational strategies they had learned during the school day. In addition, the small sample size of the study must be acknowledged when interpreting the quantitative data. A small sample size decreases the likelihood of finding significant relationships from the data. This is because the main impact of a small sample size is the one it has on statistical power. Statistical power refers to the probability of a statistical test detecting traits or differences that exist in the population. Given the difficulty small sample sizes pose when looking for statistically significance, the impact of the program on gathering agenda data should continue to be investigated in future studies.

Conclusion

Quantitative data was considered the main data source to answer the research question. A paired-samples t-test was conducted to compare the organizational points by materials and agenda recordings earned by student-participants before participating in the HOPS intervention program and after participating in the HOPS intervention program. There was an increase in the scores for all organizational materials and no increase in the number of assignments recorded in student agendas after the implementation of the HOPS program. In order to provide a more in-depth and balanced understanding of the quantitative data, polyangulation was used through the collection of observations, teacher

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questionnaires, and interviews. Information gained from teacher interviews and questionnaires revealed that students did not transfer the skills from the HOPS program sessions into their day to day classroom experiences as the practitioner researcher had hoped at the beginning of Action Research study. Questionnaire results from four teachers indicated that two teachers reported seeing a difference in the organizational skills of the students who participated in the HOPS program while two teachers did not report seeing a difference. None of the teachers saw a difference in students' homework completion. All four teachers indicated that they thought there was a need to offer an organizational program for the middle level students at FMA and indicated they would be willing to recommend other students to the HOPS program. Although teachers did not report seeing an increase in skills targeted by the HOPS program, they did stay committed to finding an organizational program and appeared to be willing to continue to refer students to the HOPS program. This leads the participant researcher to believe that the collaboration that occurred between students, teachers, and participant researcher was beneficial. It provided a catalyst for teachers to think of ways to assist students who exhibit a need to increase their organization skills, time management skills and planning skills. It also revealed that teachers were willing to continue supporting and adjusting the HOPS program in order to provide interventions for students with organizational and planning weaknesses. Observational notes made by the participant-researcher during the HOPS sessions and during interviews with student-participants were analyzed through the development of a system of categorization and coding analysis (Mertler, 2014). Three themes emerged because of the categorization of data: Lack of Transference of Skills, Resistance to Change, and Time Management Struggles. The results in Chapter Four are

used in Chapter Five for the purpose of discussing the Research Question and creating an

Action Plan for the next implementation phase.

Chapter Five: Summary and Conclusion

Introduction

Chapter Five summarizes the findings from the study and draws conclusions that are articulated in an Action Plan for Ford Middle Academy (FMA), a public school for the gifted and talented. FMA is a public school which serves as an elementary school for students 4K-5th grade and also serves as the home of a county-wide gifted center for identified GT students grades three through eight. Initial entry into the gifted center at third grade is based on three student performance dimensions-reasoning ability as measured by nationally standardized aptitude assessments, achievement as measured by nationally standardized assessment, and classroom performance as a composite of four authentic student performance measures. A student must meet the criteria in two of the three dimensions in order to qualify. First, aptitude scores are analyzed and students who score at the 99th percentile in all areas of the aptitude test meet the criteria for admission. Secondly, students are ranked by 99th and 98th percentile and their achievement scores from Fall Measures of Academic Progress (MAP) or Iowa Test of Basic Skills (ITBS) are matched to their aptitude scores. Students who meet the top scores in Aptitude and Achievement are identified and offered admission to the gifted center. Approximately 450 students attend the school for gifted and talented. Of the 450 students who attend FMA, 232 students are male and 218 are female. An enrollment summary (Appendix A) by ethnicity indicates that 13.7% of students are identified as Asian, 2% are identified as

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Black or African American, 1.7% are identified as Hispanic, 3.92 % are identified as

American Indian or Alaska Native, 3.7% are identified as two or more races and 78.4%

are identified as White (Appendix B).

Overview of the Study

The focus of the study investigated the impact of providing seven gifted and

talented (GT) middle level students at Ford Middle Academy (FMA) with an

instructional program (*Homework, Organization, and Planning Skills (HOPS)*

Intervention) designed to support their organizational skills and planning skills in terms

of homework completion, recording of assignments in agenda and organization of

materials (binder, book bag, locker).

The identified problem of practice at this school involved the lack of an

instructional program to enhance organizational and study skills at the middle school

level. The participant-researcher wondered if the HOPS program would be an effective

program to use at FMA because the program was developed specifically for middle level

students and was designed to be implemented in the school setting during the school day.

Therefore, the research question, "What is the impact of the

Homework, Organization, and Planning Skills intervention program on participating

middle level gifted and talented students' organizational and study skills?" guided the

purpose of the Action Research Study.

Participants

The gifted program serves students attending third through eighth grades.

Students are chosen to attend FMA from a three-tiered criteria designed to identify highly

gifted students from throughout the District. Approximately 450 students attend FMA,

232 of the students are male and 218 of the students are female. An enrollment summary (Appendix A) by ethnicity indicates that 13.7% of students are identified as Asian; 2% are identified as black or African American; 1.7% is identified as Hispanic; 3.92 % are identified as American Indian or Alaska Native; 3.7% are identified as two or more races; and 78.4% are identified as white.

The identified GT students that are in the sixth through eighth grades (middle level students) attend classes in an upstairs hall of the building. The upstairs hall serves as the middle school area. Student lockers and middle school classes are located on this hallway. There are no elementary classes or teachers located on this hall.

The HOPS intervention is designed to be delivered through a series of sixteen sessions with the participant researcher and students. Each session lasted approximately 20 minutes. Three main skill areas are taught as part of the HOPS program: school materials organization, homework management, and planning. The first three sessions are designed to teach students a specific organization system for organizing a school binder, book bag, and locker. The middle sections (sessions 4-11) focus on time management and planning, and the final sessions (sessions 12-16) focus on teaching students to self-monitor and maintain their systems. Throughout the HOPS sessions, quantitative data was comprised using a series of checklists with seven students. The checklists were developed and provided by the HOPS manual to track students' organizational skills and planning skills. In addition, observations and interviews during the intervention sessions were recorded in a journal and teacher-participants completed a questionnaire at the conclusion of the HOPS program.

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Quantitative data was considered the main data source to answer the research question. Additional data was gathered through observations, interviews, and a teacher questionnaire. After participation in the HOPS sessions, student- participants' scores increased in all areas of material organization (binder, book bag, and locker) but no increase was noted in the number of assignments recorded weekly in their agendas. In order to provide a more in-depth and balanced understanding of the quantitative data, observations, teacher questionnaires and interviews were collected, analyzed, and then coded through the development of a system of categorization (Mertler, 2014). Three themes emerged through the categorization of data: Lack of Transference of Skills, Resistance to Change, and Time Management Struggles. The data results were discussed both student and teacher participants. Their comments and suggestions were use when developing an Action Plan.

An Action Plan based on these findings was written to enable staff to make an informed decision regarding the continuation and improvement of the HOPS program within the FMA setting for next implementation phase.

Key Questions from Study Findings

Key questions emerged from the results of the study:

1. How can the HOPS program be modified to better support middle level student- participants?

2. How can time issues be addressed to better meet the needs of student participants?

3. How can the middle level faculty advance the transfer of organizational skills, planning skills and time management skills within the classroom setting?

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These questions guided the ongoing, collaborative discussions that occurred with the researcher participant and student-participants, teacher-participants, administration, and middle level counselor when developing an action plan.

Action Researcher Role in the Study

The action researcher serves a dual role in the study as both researcher and implementer in the study. This duality results in the action researcher being an active participant throughout the Action Research cycles of planning, acting/observing, reflecting, and revising (Mertler, 2014).

Serving as both a participant and researcher within the Action Research process provided a unique set challenges. The participant- researcher struggled to allot the additional time required to meet the individual needs of some students beyond the twice weekly scheduled sessions and gather information about student-participants from the middle level teachers. Finding time to work with students that did not impact on their instructional time and worked into the participant researchers schedule was a challenge. The participant- researcher was not only conducting an Action Research study at FMA but was also fulfilling obligations required as a school psychologist serving two elementary schools, one middle school and one high school. Teachers were urged to communicate any concerns or questions about the student-participants and their involvement in the HOPS program with the participant researcher; however, information was not routinely shared unless the participant–researcher made direct individual contact with the middle level teachers. The middle level teachers were always willing to provide information in this format but due to busy schedules, these interactions were brief.

Also, the participant- researcher realized during the course of the study that many of the students would need increased middle level teacher support to successfully generalize skills they had learned into the classroom setting. The practitioner- researcher was reluctant to approach the middle level teachers with additional demands and requirements for the HOPS program due to the knowledge that the teachers had an intensive workload and were pressed for time with their current duties. When the teacher-participants were approached, they were open to brainstorming suggestions and strategies to assist the students and the practitioner-researcher should have attempted these conversations earlier.

Action Plan: Implications of the Findings

Development of an Action Plan

Action research requires consistent reflection throughout each phase of the process. As the researcher develops an action plan, it is important to reflect on what has been learned through the planning, acting, developing and reflecting phases. The cyclical process requires the participant researcher to use the information gained by reflection to inform and improve the next cycle of the research. In order to begin the developing phase, the participant researcher set up two meetings after the completion of the HOPS program. The first meeting included the participant- researcher and student-participants. The second meeting included the participant –researcher and teacher-participants.

After the final session of the HOPS program, the participant researcher met with student-participants to review the findings of the data and ask for their comments and suggestions for improving future implementation of the HOPS program. Student-participants suggested that it would be helpful to have set a time during the study hall

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period for students to write their assignments in their agendas and organize their materials. They also stated that when they were missing numerous assignments, it was helpful to meet individually with a staff member in order to create a plan for completing missed assignments.

The second meeting focused on the practioner-researcher sharing the data with the teacher-participants, counselor and administration. The participant- researcher led the discussion of the results of the data, key findings of the study and suggestions made by students. The group reflected on the data and discussed ways to address the findings for future phases of the HOPS intervention program. The group determined that another phase of the study should be considered and made suggestions to improve the next implementation phase of the HOPS program. The stakeholders agreed that a shared Google document to monitor missed student assignments would be used from the onset of the next implementation phase of the HOPS program. The shared document would be updated daily by all middle level teachers. In addition, it was suggested that the program be increased from eight weeks to 12 weeks in order to provide time to review material/concepts that students needed additional assistance with such as practicing planning skills associated with long term projects . Another outcome of the discussions between the participant researcher, teacher-participants and administration, was the acknowledgement of the need for staff development. Teachers stated that they would benefit from an in-service that provided information about organizational strategies they could use within the classroom setting. The group also discussed the student-participant comments about needing time to incorporate the HOPS strategies within the classroom setting. The group thought that the best time to have students organize materials, and

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record assignments in their agendas was the last period of the day. The last period of the middle level student's day is a study hall. The study hall is used for enrichment activities, time for students to finish projects and time for teachers to meet with students. Teachers indicated that they would be willing to prompt students to make sure they had recorded assignments in their agendas and to organize materials. However, the teachers were concerned about their ability to consistently remember to prompt their students without some type of reminder (bell or buzzer through intercom system).

Ongoing discussions with members of the administration occurred throughout the action research process. The administration was informed of the results of the data, key findings of the study and suggestions made by students and teachers. During these discussions, the participant researcher presented the need for an on-site coordinator to co-facilitate future implementations of the HOPS program with the participant researcher. The participant –researcher explained that an on-site co-facilitator could assist in providing more timely support to students and teachers. Administration was open to the idea of having an on-site staff member share responsibilities for the implementation of the HOPS program as long as it did not require reducing the on- site co-facilitator's instructional time with students.

The participant researcher used the information gathered from the various stakeholders to develop an action plan incorporating the new components for the implementation phase of the HOPS program during the 2017-18 school year. The following four step plan has been developed.

Step One

In July of 2017, the participant–researcher will meet with the FMA administration. The meeting will focus on key components that will improve the next implementation phase of the HOPS intervention program: providing an in-service for middle level teachers during the month of August or September of 2017, formulating and choosing a strategy for reminding teachers to prompt students to perform organizational and planning tasks, and the recruitment of an additional on-site staff member to assist with the HOPS program.

During this meeting a date in either August 2017 or September 2017 will need to be selected for the middle level in-service. The goal of the in-service will be to provide teachers with classroom strategies to assist students with executive functioning skills. Also during this meeting, administration will be asked to review strategies and select one that will help cue middle level teachers when to prompt students to perform planning and organizational tasks. Two strategies that will be presented involve adding a bell ring to the current middle level bell schedule or using the intercom system to broadcast a predetermined sound or word. The participant–researcher will also need to ask the administration during this meeting for their support in recruiting a FMA staff member to serve as a co-facilitator of the HOPS program. The participant–researcher would be responsible for meeting with the selected co-facilitator to review the HOPS program, discuss and divide duties associated with the implementation of the HOPS program and plan a schedule of HOPS sessions for 2017-18 school year.

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Step Two

During a preselected date in August or September of 2017, the participant-researcher will provide middle school teachers with classroom strategies designed to assist students with executive functioning skills   The in-service will be provided by the participant- researcher and will include a discussion about the use of a Google document that can be shared among middle -level staff to monitor missing student assignments. This document will allow the teachers, administration and participant- researcher and co-facilitator to monitor missing assignments from the beginning of the school year. The participant researcher will also present the organizational binder system that is used in the HOPS program and executive functioning strategies designed for middle level students from *Executive skills in children and adolescents: A practical guide to assessment and intervention* (Dawson & Guare, 2011).

During the third week of September of 2017, the participant- researcher and co-facilitator will ask teachers to recommend students to participate in the HOPS program. If the number of recommended students exceeds six, then the middle level teachers, participant -researcher, and co-facilitator will meet to narrow the group to no more than six student- participants. The group will consider student grades, observations and missing assignments when making final recommendations.

Step Three

The HOPS program will be implemented from October 2017 through December 2017. This time frame will allow the HOPS program to be extended from an eight week program to an 11 week program.   The addition of three weeks to the program will provide more time to teach skills that students are having difficulty mastering.   The

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participant-researcher and co-facilitator will collect, analyze and evaluate information by utilizing the HOPS checklists, shared Google document of missing assignments and teacher feedback to determine the need to spend additional time on certain concepts or sessions.

Step Four

During January 2017, participant-researcher and co-facilitator will interview student and teacher participants and ask them to reflect on their participation in the HOPS program. Data gained from interviews, checklists, and shared document of missing assignments will be analyzed and shared with participants and administration to determine the impact of the HOPS program for the 2017-18 school year.

Facilitating Educational Change

Mertler (2016) contends that Action Research methodology provides professional educators a process to develop innovations that have the potential to lead widespread school improvement. In the past, the responsibility of finding solutions for school problems typically was the responsibility of the district or building level administrators, and in response to federal and state mandates. Mertler (2016) recommends that teachers, administrators, and support personnel take a proactive stance and come together "to assume responsibilities for developing and implementing innovative solutions to local problems, for mentoring and providing support to colleagues, and for envisioning and leading changes to the status quo in our school" (p.2).

The opportunity to become a participant- researcher in an Action Research study has resulted in a desire to continue the cyclical process of Action Research. The cyclical process will provide the opportunity to refine and strengthen the next phase of the HOPS

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program at FMA. It will also provide an opportunity to share knowledge of the Action Research process with my school psychologist colleagues.

Time constraints and resistance to acquiring new roles are two challenges that must be addressed if teachers and support personnel such as school psychologists are to be recruited to use Action Research as an approach to effective change within their particular schools.

Educators, support staff, and administrators are required to shoulder more and more duties and responsibilities to meet the needs of students as well as gather information and collect data to comply with federal and state regulations. Therefore, asking anyone in the educational field to take on more work is often met with the comment "I don't have the time." A valuable asset of Action Research is that it can be designed, implemented, and conducted in a collaborative manner resulting in less time commitment than would be required for an individual endeavor.

Sharing the results of this Action Research study with the entire faculty at FMA will hopefully lead to further inquiry about the Action Research process and empower others to begin to reflect on their practice and ways to improve presenting problems within their classrooms and grade levels. As a support staff member at FMA, I would be able to mentor individuals who showed interest in the process and share resources about Action Research with the faculty.

The sharing of knowledge in about the Action Research process with the psychological services staff will allow my colleagues to pursue research related to the unique set of circumstances that exist within their different school settings in order to enhance the lives of students, teachers, and administrators. Professional development will

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be needed to introduce Action Research to my colleagues. Most school psychologists are familiar with traditional research models but are not well versed in the tenets of Action Research. The ability to conduct research as an active practitioner in order to improve one's own practice which in turn will positively impact the lives of those the practitioner works with is a powerful incentive to try out a new role as an action researcher.

I have scheduled a meeting with my supervisor in order to request time during an upcoming staff meeting to share the results of the Action Research study conducted at FMA. Sharing the results of this Action Research study with the school psychology staff will increase the number of individuals that could be introduced to Action Research. My district assigns a school psychologist to each school in the district. Providing my colleagues with information regarding Action Research that they can share with personnel at their schools is a start to increasing knowledge about a form of research that is conducted by educators for themselves (Mertler, 2014).

Furthermore, each school year members of the psychological services staff are assigned to one of four professional learning communities (PLC) to enhance the professional development of school psychologists. DuFour et al. (2008) discusses that PLC's are formed based on a shared mission, vision, and goals, and focus on learning. They implement collective inquiries into best practices and strive for continuous improvements in practice in order to enhance the effectiveness of professionals for student benefit. Staff members submit topics for the PLC's to investigate. The topic I will be submitting is Action Research.

Suggestions for Future Research

Future research will be needed to examine the impact that the suggested adaptations and components have of the next phase of implementation for the HOPS program. In particular, future

research needs to expand the input teachers have about the program. For instance, the teacher survey that was completed by the teacher-participants allowed teachers to respond anonymously and did not give teachers the opportunity to elaborate or explain their responses. The anonymity of the teachers completing the survey prevented the participant-researcher from interviewing the teachers about their responses. Future surveys could allow for anonymity while providing opportunities within the survey for teachers to give explanations for their responses. The survey should be modified to include open ended questions that allow teachers the opportunity to give their reasoning for their response choices.   This adaptation will allow for increased information that could lead to further adjustments to the HOPS program.

Additionally, only male students were recommended for participation in the program by the sixth grade team and counselor. Future implementation and research of the HOPS program should include females. Even though executive functioning delays, affects both sexes, the majority of research literature, including studies on neuropsychological functioning is conducted with male subjects (Gaub & Carlson, 1997; Gershon, 2002; Seidman, et al., 2005). The limited research studying the impact of sex differences on executive functioning skills in children has thus far yielded more similarities than differences between boys and girls (Seidman, et al., 2005). Future recruitment of participants could include having the participant-researcher and co-facilitator speak at Parent Teacher Association (PTA) meetings about the HOPS program and speak with the middle school classes. This would provide parents a chance to recommend their child and students the opportunity to sign up. Broadening the opportunities for students to be recommended to participate in the HOPS program may increase the chance of having both male and female students participate the study which will provide information about the impact of the program on different genders.

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Further research is needed about the small group format of the HOPS program versus implementation with a larger group. The HOPS program is designed to deliver interventions in individualized or in a small group format. The data and reflections that will be provided by the next implementation phase of this study could be used to plan a research study that would expand the number of students who have access to the HOPS program. The HOPS program can be adapted to be implemented in a larger group setting such as a classroom. Future research could be planned for the inclusion of one classroom of students in order to study the impact of the HOPS intervention program on an entire classroom's organizational skills, time management skills, and planning skills.

Conclusion

The identified problem of practice at FMA involved the lack of an instructional program to enhance organizational and study skills at the middle school level. The participant-researcher wondered if the HOPS program would be an effective program to use at FMA because the program was developed specifically for middle level students and designed to be implemented in the school setting during the school day. Therefore, the research question, "What is the impact of the *Homework, Organization, and Planning Skills* intervention program on participating middle level gifted and talented students' organizational and study skills?" guided the purpose of the Action Research Study.

The focus of the study investigated the impact of providing seven gifted and talented (GT) middle level students at Ford Middle Academy (FMA) with an instructional program *Homework, Organization, and Planning Skills (HOPS) Intervention* designed to support their organizational skills and planning skills in terms of

homework completion, recording of assignments in agenda, and organization of materials (binder, book bag, locker).

Quantitative data was considered the main data source to answer the research question. A paired-samples t-test was conducted to compare the organizational points by materials and agenda recordings earned by student -participants before participating in the HOPS intervention program and after participating in the HOPS intervention program. There was an increase in the scores for all organizational materials but not for agenda recordings after the implementation of the HOPS program. In order to provide a more in-depth and balanced understanding of the quantitative data, observations, teacher questionnaires, and interviews were collected, coded, and analyzed through the development of a system of categorization (Mertler, 2014). Three themes emerged because of the categorization of data: Lack of Transference of Skills, Resistance to Change and Time Management Struggles.

An Action Plan based on these findings was written to improve the next implementation phase of the HOPS program. The Action Plan included: professional development to provide middle level teachers with classroom strategies designed to assist students with organizational skills, adding a bell ring to the current middle level bell schedule during the study hall period to cue teachers to have students engage in organizational tasks and the recruitment of an on-site co-facilitator for the next implementation phase of the HOPS program.

References

Albaili, M. A. (2003). Motivational goal orientations of intellectually gifted achieving and underachieving student in the United Arab Emirates. *Social Behavior and Personality*, *31*(2), 107-120. doi: 10.2224/sbp.2003.31.1.107

Allen, J. & McLaughlin, M. (1990). A businessman's guide to education reform debate. Retrieved from http://thf_media.s#.amazonaws.com/1990/pdf/bg801.pdf

Ardila, A. (2008). On the evolutionary origins of executive functions. *Brain and Cognition*, 68, 92–99. Retrieved from http://www.sciencedirect.com.pallas2.tcl.sc.edu/science/journal/02782626

Baum, S. (1990). *Gifted but learning disabled: A puzzling paradox.* Retrieved from: http://www.gifted.uconn.edu/siegle/tag/Digests/e479.html

Baddeley, A. D., & Hitch, G. (1974). Working memory. In G.H. Bower (Ed.), *The psychology of learning and motivation: Advances in research and theory* (pp. 47–89). New York: Academic Press.

Bernstein, J. H. & Waber, D. P. (2010). Executive capacities from a developmental perspective. In L. Metzler (Ed.), *Executive function in education: From theory to practice* (pp. 55-76). New York: Guilford Press.

Brown, A. L., & Campione, J. C. (1983). Psychological theory and the study of learning disabilities. *American Psychologist, 41*, 1059-1068.

Brown, T. E. (2005). *Attention deficit disorder: The unfocused mind in children and adults*. New Haven, CT: Yale University Press. Burgess, P. (1997). Theory and methodology in executive function research. In P. Rabbitt (Ed.), *Methodology of frontal executive function* (pp. 81-116). Hove, East Sussex: Psychology Press.

Busch, B., & Nuttall, R. L. (1995). Students who seem to be unmotivated may have attention deficits. *Diagnostiques, 21*(1), 43-59. doi: 10.1177/153450849502100106

Campbell, J. J., Duffy, & M. B., Salloway, S. P. (1994). Treatment strategies for patients with dysexecutive syndromes. Retrieved from neuropsychiatryonline.org.pallas2.tcl.sc.ed_data_journals_NP_3823_411pdf

Carruthers, Peter (2003). Is the mind a system of modules shaped by natural selection? In Christopher R. Hitchcock (Ed.), *Contemporary Debates in the Philosophy of Science*. Blackwell.

Cooper-Kahn, J. J., & Dietzel, L. (2010). *What is executive functioning?* Retrieved from http://www. Ldonline.org/article/29122/

Dana, N., & Hoppey, D. (2014). *The Reflective Educator's Guide to Classroom Research: Learning to Teach and Teaching to Learn through Practitioner Inquiry* [Kindle Version] (3rd edition). Thousand Oaks, California: SAGE.

Dawson, P., & Guare, R. (2009). *Smart but scattered: The revolutionary "executive skills" approach to helping kids reach their potential*. New York, NY: Guilford Press.

Dawson, P. & Guare, R. (2011). *Executive skills in children and adolescents: A practical guide to assessment and intervention.* 2nd Edition. New York: The Guilford Press.

Dick, Bob (1993) *You want to do an action research thesis?* Retrieved from http://www.aral.com.au/resources/arthesis.html#a_art_every

Duckworth, A. & Seligman, M. (2005). Self-discipline outdoes IQ in predicting academic performance of adolescents. *Psychological Science*,*16(12)*, 939-944.

DuFour, R., DuFour, R., & Eaker, R. (2008). *Revisiting professional learning communities at work: New insights for improving schools*. Bloomington, IN: Solution Tree.

Dow, P. (1997). *Sputnik revisited: Historical perspectives on science reform*. Retrieved from http://www.nas.edu/sputnik/dow2htm

Eckes, S. E. & Swando, J. (2009). Special education subgroups under NCLB: Issues to consider. *Teachers College Record, 111*(11), 2479-2504.

Finch, M. E. H., Speirs Neumeister, K. L., Burney, V. H., & Cook, A. L. (2014). The relationship of cognitive and executive functioning with achievement in gifted kindergarten children. *Gifted Child Quarterly*, 58(3), 167-182.

Fischer, K. W. & Daley, S. G. (2010). Connecting cognitive science and neuroscience to education: Potentials and pitfalls in inferring executive processes. In L. Metzler (Ed.), *Executive function in education: From theory to practice* (pp. 39-54). New York: Guilford Press.

Flavell, J. H., Friedrichs, A. G., & Hoyt, J. D. (1970). Developmental changes in memorization processes. *Cognitive Psychology, 1*, 324-340. doi:10.1016/0010-0285(70)90019-8

Fodor, J. A. (1983). *The modularity of mind: An essay on faculty psychology*. Cambridge, MA: MIT Press.

Gardner, H. (1983). *Frames of mind*. New York: Basic Books.

Gardner, H. (199). *The disciplined mind: What all students should understand*. New York: Simon & Schuster.

Gaub, M., & Carlson, C. (1997). Gender differences in ADHD: A meta-analysis and critical review. Journal of the American Academy of Child and Adolescent Psychiatry, 36, 1036-1045. Retrieved from http://web.a.ebscohost.com.pallas2.tcl.sc.edu

Gershon, J. (2002). A meta-analytic review of gender differences in ADHD. *Journal of Attention Disorders*, 5(3), 143-154. doi:10.1177/108705470200500302

Gottfried, M. A. (2011). The detrimental effects of missing school: Evidence from urban siblings. *American Journal of Education*, 117, 147-182. doi:10.1086/657886

Hsu, N. S., Novick, J. M., & Jaeggi, S. M. (2014). The development and malleability of executive control abilities. *Frontiers in Behavioral Neuroscience,* doi: 10.3389//fnbeh.2014.00221

Huang, H. B. (2010). What is good action research? *Action Research, 8*(1), 93-109. doi: 10.1177/147670310362435

Isquith, P. K., Gioia, G. A. & Roth, R. M. (n.d.). Executive function: Concepts, assessment & intervention [PowerPoint slides]. Retrieved from http://www.caspwebcasts.org_pdfs_cho08_02.pdf

Jacobson, L. A., Williford, A. P., & Pianta, R. C. (2011). The role of executive function in children's competent adjustment to middle school. *Child Neuropsychology, 17*, 255-280. doi: 10.1080/09297049.2010.535654

Johnsen, S. K., & Kendrick, J. (Eds.). (2005). *Teaching gifted students with disabilities*. Waco, TX: Prufrock.

Jurado, M. B., & Rosselli, M. (2007). The elusive nature of executive functions: A review of our current understanding. *Neuropsychology Review, 17,* 213-233. doi: 10.1007/s11065-007-9040-z

Kennedy, D. M. & Banks, R. S. (2011). *Bright not broken: Gifted kids, ADHD and autism*. San Francisco, CA: Jossey-Bass.

Langberg, J. M., Epstein, J. N., Urbanowicz, C., Simon, J., & Graham, A. (2008). Efficacy of an organization skills intervention to improve the academic functioning of students with ADHD. *School Psychology Quarterly, 23*(3), 407-417. doi: 10.1037/1045-3830.23.3.407

Langberg, J. M., Arnold, L.E., Flowers, A. M., Altaye, M., Epstein, J.N., & Molina, B.S. G. (2010). Assessing homework problems in children with ADHD: Validation of a parent-report measure and evaluation of homework performance patterns. *School Mental Health, 2*(1), 3-12.

Langberg, J. M. (2011). *Homework, organization and planning skills (HOPS) Interventions*. Bethesda, MD: National Association of School Psychologists.

Lezak, M. D. (1983). *Neuropsychological assessment* (2nd ed.). New York: Oxford University Press.

Lotkowski, V., Robbins, S., & Noeth, R. (2004). National research leader in college and

    workforce readiness. Retrieved from The Role of Academic and non academic

    factors in improving college retention,

    http://www.act.org/research/policy/index.html

Luria, A. R. (1980). *Higher cortical functions in man* (2nd ed.). New York, NY: Basic.

McCall, R. B., Evahn, C., & Kratzer, L. (1992). *High school underachievers: What do

    they achieve as adults?* Newbury Park, CA: Sage.

McCloskey, G., Perkins, L. A., & Van Diver, B. (2009). *Assessment and intervention for

    executive function difficulties.* New York, NY: Taylor & Francis Group.

McCoach, D. B., & Siegle, D. (2001). A comparison of high achievers' and low

    achievers' attitudes, perceptions, and motivations. *Academic Exchange Quarterly,

    5*, 71-76.

McCoach, D. B., & Siegle, D. (2003). Factors that differentiate underachieving gifted

    students from high-achieving gifted students. *Gifted Child Quarterly, 47*, 144-

    154. doi: 10.1177/001698620304700205

Matthews, D. (1996). Reviewing and previewing civics, in: W. PARKER (Ed.) Educating

    the Democratic Mind (pp. 265–286). Albany, NY: SUNY Press.

Mertler, C.A. (2014). *Action research: Improving schools and empowering educators.*

    Thousand Oaks, CA: Sage Publications, Inc.

Mertler, C. A. (2016). Leading and facilitating educational change through action

    research learning communities. *Journal of Ethical Educational Leadership, 3*(3),

    1-11.

Moran, S. & Gardner, H. (2007). "Hill, skill, and will": Executive function from a

multiple intelligences perspective. In L. Meltzer (Ed.), Executive function in

education: From theory to practice (pp. 19-38). New York: The Guilford Press.

National Commission on Excellence in Education (NCEE). (1983). *A nation at risk: The*

imperative for educational reform. Washington, DC: U.S. Department of

Education.

National Research Center on the Gifted and Talented. (2008). *Underachieving gifted*

students: A social cognitive model. Retrieved from

http://files.eric.ed.gov/fulltext/ED505382.pdf

Northwest Evaluation Association (NWEA). (2015). *Measure student progress with*

MAP. Retrieved from http://www. nwea.org

Passow, H., & Goldberg, M. (1958). Study of underachieving gifted. *Educational*

Leadership, *16*, 121-125. Retrieved from

http://www.ascd.org/ASCD/pdf/journals/ed_lead/el_195811_passow.pdf

PDH Education (2014, April 13). Action Research or Traditional Experimental

Research? [Web log post]. Retrieved from http://pdhed.com/2014/04/13/action-

research-or-traditional-experimental-research/

Peterson, J. S., & Colangelo, N. (1996). Gifted achievers and underachievers: A

comparison of patterns found in school files. *Journal of Counseling and*

Development, *74*, 399-407.

Power, T. J., Warba, B.E., Watkins, M. W., Angelucci, J. G., & Eiraldi, R. B. (2006).

Patterns of parent-reported homework problems among adhd-referred and non-

referred children. *School Psychology Quarterly*, *21*, 13-33.

Reis, S. M., & McCoach, D. B. (2000). The underachievement of gifted students: What

do we know and where do we go? *Gifted Child Quarterly*, 44, 152-170. Retrieved

from http://gcq.saagepub.com.pallas2.tel.sc.edu/content/44/3/152.full.pdfthml

Renzulli, J. (2012). Reexamining the role of gifted education and talent development for

the 21st century: A four-part theoretical approach. *Gifted Child Quarterly, 56(3)*,

150-159.

Rimm, S. (1997). An underachievement epidemic. *Educational Leadership, 54*(7), 18-22.

Seeley, K. R. (1984). Giftedness and juvenile delinquency in perspective. *Journal for the

Education of the Gifted, 8*, 59-72. doi: 10.1177/016235328400800106

Seeley, K. R. (2004). Gifted and talented students at risk. *Focus on Exceptional Children.

37*(4), 1-8.

Seiderman, L., Biederman, J., Monuteaux, M., Valera, E., Doyle, A., & Faraone, S.

(2005). Impact on gender and age on executive functioning: do girls and boys

with and without attention deficit hyperactivity disorder differ

neuropsychologically in preteen and teenage years? *Developmental

Neuropsychology*, 27, 79-105. Retrieved from

http://web.b.ebscohost.com.pallas2.tcl.sc.edu

Skogli, E., Teicher, M., Andersen, P., Hovik, K. & Ole, M. (2013). ADHD in girls and

boys-gender difference is co-existing symptoms and executive function measures.

BioMed Central Psychiatry, 13, 298. doi: 10.1186/1471-244X-13-298

Schramm-Pate, S. (Presenter). (2014, June). *Basic Theories of Curriculum*. Lecture

presented at University of South Carolina, Columbia, SC.

Spring, J. (2014). *The American school: A global context from the Puritans to the Obama administration, 9th Ed.* New York, NY: McGraw-Hill Education.

Smith, M.K. (2002). *Jerome S. Bruner and the process of education, the encyclopedia of informal education.* Retrieved from http://infed.org/mobi/jerome-bruner-and-the-process-of-education/

U.S. Department of Education (USDE). (2003). No Child Left Behind Act of 2001, Pub. L. No. 107-100. Retrieved from http://www.ed.gov/legislation/ESEA02/

Vaccarino, F., Comrie, M., Murray, N., & Sligo, F. (2007). *Action research reflections: The Wanganui adult literacy and employment project*. Retrieved from: http://www.massey.ac.nz/massey/fms/Colleges/College%20of%20Business/Communication%20and%20Journalism/Literacy/Publications/Action_Research_Reflections.pdf?A29032502C0118C4A017245B9095FC1A

Whitmore, J. R. (1980). *Giftedness, conflict, and underachievement.* Boston, MA: Allyn and Bacon.

Appendix A: Disability Categories FMA

Number of GT students by disability classifications and grade at FMA

Disability	6th Graders	7th Graders	8th Graders
Other Health Impaired (ADHD)	0	1	0
Speech Language Impaired	1	0	0
Autism	1	0	0
Learning Disabled	0	0	0
Intellectually Disabled	0	0	0
Hearing Impaired	0	0	0
Visually Impaired	0	0	0
Orthopedically Impaired	0	0	0
Emotionally Disabled	0	0	0

Appendix B: Consent Form

Dear Parent,

My name is Lynn Gee. I am a doctoral candidate in the Education Department at the
University of South Carolina. I am conducting a research study as part of the
requirements of my degree in Curriculum and Instruction, and I would like to invite your
child to participate. I hope to examine the impact of providing gifted and talented middle
school students with an instructional program, *Homework, Organization, and Planning
Skills (HOPS) Intervention*, designed to teach organization, planning and time
management skills Your child was selected as a possible participant in this study because
teachers and or you recommended their participation.

If you decide to allow your child to participate, they will meet with the researcher in a
group with five to seven other students twice a week for approximately thirty minutes
each session. The sessions will occur during the last period of the day which has been set
up for students to be able work on special projects and interests. This will guarantee that
they will not miss any academic instruction by participating in the sessions.

There are no foreseeable risks from participating in the study. The benefits of
participating may be increased organizational skills and homework completion.

Any information that is obtained in connection with this study and that can be identified
with your child will remain confidential. Subject identities will be kept confidential by

the researcher and any materials with identifying information will be kept in a locked cabinet. No information will be included in any report that may be published that would make it possible to identify your child. The school and individual's identities will remain strictly anonymous and confidential.

Your child's participation is voluntary. There is no penalty for not participating. Your decision whether or not to allow your child to participate will not affect your or your child's relationship Charles Townes Center. If you decide to allow your child to participate, you and/or your child may withdraw from the study at any time without penalty.

If you have any questions about the study, please feel free to contact me, Lynn Gee at lgee@greenville.k12.sc.us or by telephone 452-0071. You may also contact my advisor, Dr. Susan Schramm-Pate at sschramm@mailbox.sc.edu or by telephone 803-777-3026. If you like, a summary of the results of the study will be sent to you. You will be offered a copy of this form to keep.

Your signature indicates that you have read and understand the information provided above, that you willingly agree to allow your child to participate, that you and/or your child may withdraw your consent at any time and discontinue participation without negative consequence, and that you will receive a copy of this form.

Please sign below

A. YES. I do wish for (my child) to participate

Parent/Guardian Signature

Date

B. NO. I do NOT wish for (my child) to participate.

Parent/Guardian Signature

Date

Appendix C: Enrollment Summary

Term: 16-17 Year

Enrollment Summary: Scheduling/Reporting Ethnicity as of 01/11/2017 (A)

View: Scheduling/Reporting Ethnicity

Students:
All Active Enrollments
* Current Selection

Date: 01/11/2017

Grade Level	Total in Grade	Asian	Black or African American	Hispanic/Latino	American Indian or Alaska Native	Two or More Races	Native Hawaiian or Other Pacific Islander	White	Unclassified
3	64 50 / 54	12 8 / 4	3 2 / 1	3 2 / 1	0 0 / 0	4 2 / 2	0 0 / 0	62 36 / 26	0 0 / 0
4	81 40 / 41	15 4 / 11	1 1 / 0	3 0 / 3	1 0 / 1	5 2 / 3	0 0 / 0	56 33 / 23	0 0 / 0
5	75 37 / 38	9 3 / 6	2 0 / 2	2 1 / 1	0 0 / 0	1 0 / 1	0 0 / 0	61 33 / 28	0 0 / 0
6	64 28 / 36	7 0 / 7	2 1 / 1	0 0 / 0	0 0 / 0	3 0 / 3	0 0 / 0	52 27 / 25	0 0 / 0
7	75 39 / 36	11 7 / 4	1 0 / 1	0 0 / 0	0 0 / 0	1 1 / 0	0 0 / 0	62 31 / 31	0 0 / 0
8	71 35 / 36	8 5 / 3	0 0 / 0	0 0 / 0	0 0 / 0	3 1 / 2	0 0 / 0	60 32 / 28	0 0 / 0
TOTAL	450 232 / 218	62 27 / 35	2 4 / 5	8 3 / 5	1 0 / 1	17 0 / 11	0 0 / 0	353 192 / 161	0 0 / 0

The Scheduling/Reporting Ethnicity view displays student ethnicity data that is used in scheduling and preconfigured reporting. See the help for more information.

Appendix D: Organizational Checklist

ORGANIZATIONAL SKILLS CHECKLIST

Binder	HOPS Session Number								
Student brought binder to session (if no, student gets binder and mark *N* for criterion; if student cannot get binder, mark *N* for all binder criteria).									
The student's planner/assignment notebook or the Homework Assignment Tracking Sheet is secured by three rings in the binder.									
There is a section for each subject the student is taking (e.g., math, science, etc.) and a homework folder in the student's binder.									
All homework to be completed is in the left side of homework folder and all homework to turn in is in the right side of folder.									
There are no loose papers in the binder.									
All papers are in the appropriate class folder/section (e.g., math worksheets are in the math section).									
No old class papers are in the binder (e.g., no papers from a previous quarter that should be thrown away or filed).									
Number of binder criteria met (# of Ys/7)									
Bookbag									
If session is late in day: Books needed for homework are in bookbag. If session is early in day: Books needed for class are in bookbag.									
There are no books in the bookbag that are not needed for class or to complete homework assignments.									
There is no loose paper in the bookbag.									
There are no loose objects in the bookbag (pencils, pens, toys, etc.).									
Number of bookbag criteria met (# of Ys/4)									
Locker/Desk									
The books are neatly stacked (or shelved) with the spines facing out so that the student can easily grab one in between classes or after school.									
There are no loose objects (papers, pencils, pens, toys, magazines, etc.).									
There is no unnecessary clothing.									
Number of locker/desk criteria met (# of Ys/3)									

Note. Enter the HOPS session number at the top of the column and then go down the checklist and evaluate the student on each criterion. Record Y (for yes) if the student meets the criterion fully or N (for no) if the student does not meet the criterion fully.

Appendix F: Homework Checklist

HOMEWORK ASSIGNMENT TRACKING SHEET   Week of ___

Class/Subject	Monday ___	Tuesday ___	Wednesday ___	Thursday ___	Friday ___
	Teacher Initials ___ # Missing Assign. ___	Teacher Initials ___ # Missing Assign. ___	Teacher Initials ___ # Missing Assign. ___	Teacher Initials ___ # Missing Assign. ___	Teacher Initials ___ # Missing Assign. ___
	Teacher Initials ___ # Missing Assign. ___	Teacher Initials ___ # Missing Assign. ___	Teacher Initials ___ # Missing Assign. ___	Teacher Initials ___ # Missing Assign. ___	Teacher Initials ___ # Missing Assign. ___
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	Teacher Initials ___ # Missing Assign. ___	Teacher Initials ___ # Missing Assign. ___	Teacher Initials ___ # Missing Assign. ___	Teacher Initials ___ # Missing Assign. ___	Teacher Initials ___ # Missing Assign. ___

Note. The teacher's initials indicate that the homework assignment was recorded accurately; # missing assignments = the number of assignments not turned in that should have been.

Appendix E: Teacher Questionnaire

Circle the number that best represents your thoughts, opinions, and feelings about each statement.

Statement	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
I saw a difference in the homework completion of students who participated in the HOPS program	1	2	3	4	5
I saw a difference in the organizational skills of students who participated in the HOPS program	1	2	3	4	5
I think there is a need to offer an organizational program for middle school students.	1	2	3	4	5
I would be willing to recommend other students to participate in the HOPS program	1	2	3	4	5
I think there is a need to offer the HOPS program to other middle level students at CTC.	1	2	3	4	5