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Remediating Secondary Alternative School Students’ Academic Outcomes Using the Writing and Sharing Connections Process

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I am submitting herewith a dissertation written by Laura Karen Kildare entitled "Remediating Secondary Alternative School Students’ Academic Outcomes Using the Writing and Sharing Connections Process." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Teacher Education.

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Remediating Secondary Alternative School Students’ Academic Outcomes Using the 
Writing and Sharing Connections Process

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mentioned, have given their time, knowledge, and encouragement. Thank you just
doesn’t seem adequate.
Abstract

Given steady increase in numbers of students enrolled in alternative schools (U.S. Department of Education, 2003, 2008), a lack of emphasis on academic gains, as opposed to behavior control (Fuchs, Fuchs, & Stecker, 2010), and the well-documented school-to-prison pipeline for students considered school behavior problems (Wald & Losen, 2003), there is a need to establish viable, engaging instructional approaches with youth in alternative school settings. This study was designed to investigate effects on secondary alternative students’ attitudes toward writing and their ability to express complex ideas in writing, as a function of implementation of Writing and Sharing Connections (W&SC) (Wooten, 2009). W&SC, based on constructivist philosophy, uses children’s literature to engage learners, as they learn to write increasingly sophisticated connections among content presented in class and beyond.

Significant attrition resulted in low sample sizes (W&SC group n = 7; control, n = 4). Participants were aged 14 to 18; 10 were male. Repeated measures analyses of variance with one between subjects factor (condition) and one within subjects factor (pre-post) were conducted for the attitude measure (Thought Bubbles, Zambo, 2006) and the writing measures (Woodcock Johnson III, WJIII, writing subtests) (Woodcock, McGrew, & Mather, 2001). Results indicate no significant differences between pre and post test scores for W&SC and control students on attitudes and writing measures (p > .05). However, a small effect size (Cohen, 1988) was indicated for the Written Expression Composite (.201) and a small to medium effect size for Writing Samples (.309). Students in the W&SC group gained more than did control students. Thought Bubbles’ average gain for W&SC students was .42, compared to .25 for control (range = 0 to 1). Written
Expression’s average gain for W&SC students was 13 standard score points compared to a loss of 5 standard score points for control.

Though tentative, results indicate Writing and Sharing Connections is a promising instructional strategy for students in alternative schools. Post-hoc analyses of individual participants’ writing supports this conclusion. Embedding a constructivist-based instructional strategy into a behaviorally-based school environment is a unique approach that has potential to increase academic outcomes for highly at-risk students.
Preface

“I passed my English Gateway? Maybe I shouldn’t drop out… You know this school wouldn’t be so bad, if there was a football team.”

Myron – 17 year-old Student

Teaching in a behavioral alternative school is a very different experience than teaching in other settings. Students are sent to alternative schools because of behaviors so disruptive or dangerous that administrators in their base schools are not willing to tolerate their presence in the base school. Once a student enters an alternative school, he or she typically finds an environment of carefully structured rules and procedures that are used to ensure the safety of all students and staff. After the student becomes accustomed to daily body searches and a strictly enforced code of conduct, the student typically finds comfort in the rules. For some, it may be the first time that explicit boundaries are in place, which offers a sense of safety that may have been previously missing. In some ways the school offers an oasis of stability to those who may have never experienced real security.

Once the boundaries are in place, students may find that learning becomes less problematic. The rest of the students in the class are facing some of the same dilemmas, so no one should laugh if mistakes are made. There is a sense of comfort, of not being quite so alone because students are no longer in an environment (base school) that they perceive as hostile. While some of these students may be enemies out in the world, in this particular place and time, while in the alternative school placement, they are fellow travelers working toward a common goal of learning to survive.
When beginning this journey, it never occurred to me that I would one day feel so passionately about these individuals that I would want to devote my life to helping them achieve some sort of “normalcy.” Dealing with the various problems that survival in school and out, holds for some of these children, made me think that we, as a society, are doing a poor job of helping students overcome troubled backgrounds. When I looked for a common theme, I discovered that most secondary school students with emotional and behavioral problems are poor readers and writers, still struggling with skills their peers had mastered long before they reached the secondary level. In order to actually do something to help them, I decided that we need to find ways to remediate their academic deficits. That is the underlying genesis of this study, and the guiding ideas that have led to the use of the *Writing and Sharing Connections Process* (W&SC) (Wooten, 2009) with this particular population. These are the reasons I decided to pursue a doctorate, to work to support alternative school students so they do not fall victim to the *school to prison pipeline*, and to try to help them achieve the fulfillment of the promises of the American educational system.
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Chapter 1

Introduction

The passage of the No Child Left Behind Act (NCLB) (2001) has changed the culture of schools by requiring that students identified with disabilities are included in annual yearly performance (AYP) assessments. This law, due to be reauthorized with no date set, has resulted in increasing emphasis on academic achievement for all students. Along with increased expectations for student achievement, there is an emphasis on teacher accountability and federal laws that mandate the use of scientifically-based instruction. There is a large body of research on academic interventions that can be implemented with younger students with emotional and behavioral disorders (EBD) but there is a much smaller body of work with secondary students and an even smaller body for students who are in an alternative school setting. Students served in alternative school settings may not be identified formally as having emotional and/or behavioral disorders, but the vast majority is placed in this setting for behavioral infractions.

As has been noted there is an increasing emphasis on outcomes for all students in public education. For students in alternative education there is a dearth of information to inform effective practices to improve progress in academic areas. Though most research has focused on directly improving behaviors, there is some evidence to suggest that remediating literacy skills will help improve behaviors (Coultino, 1986; Hudley, Graham, & Taylor, 2007). With improved skills, these students will be more accepted by their peers and teachers. Their increased academic competence leads to more socially acceptable behaviors and lessens the incidence of maladaptive behaviors (Hudley, et al., 2007).
Significance of Problem

Secondary students in alternative schools comprise 5% of the K-12 population of students in public schools in the United States (U.S. Department of Education, 2003, 2008). While behavioral alternative schools are heterogeneous institutions, students in these schools comprise the largest segment of the entire U.S. student population that is considered at-risk for dropping out of school (Ruzzi & Kraemer, 2006; U.S. Department of Education, 2003, 2008). These students have academic deficits from three to five years behind their grade level peers (Coutinho, 1987; Lane, Wehby, Little, & Cooley, 2005a), which puts them at risk for dropping out, having unsuccessful post-secondary outcomes, and eventual incarceration, becoming a drain upon public resources, and/or a premature or violent death. It is imperative that we implement effective strategies so that academic outcomes improve, increasing the probability that the students will actually graduate.

Due to the current emphasis on graduation outcomes and accountability, it is becoming increasingly important that scientifically research-based instructional strategies are used with the Emotional Behavioral Disturbance (EBD) population in order to support their educational attainment (Vannest, Temple-Harvey, & Mason, 2009; Fuchs, Fuchs, & Stecker, 2010), especially in content area classes. For a variety of reasons, much of the research with alternative school students has focused on behaviors, rather than instructional strategies, which leave many practitioners in the field without the resources necessary to help students make the academic gains they need in order to successfully complete high school. A unique feature of this study is to embed constructivist-based literacy instruction in an environment based on Skinnerian
behavioral principles. A social constructivist approach may provide the scaffolding, motivation, and engagement needed to meet academic needs of these students. The study is designed to address a gap in the literature by investigating the results of embedding a constructivist-based literacy intervention in a behaviorally-based secondary alternative setting.

**Theoretical Basis of Study**

The theoretical basis of this study is pragmatism. Pragmatism is a construct developed by Charles Sanders Pierce in 1870, which assesses truth through the lens of what works through practical application. Although pragmatism was not well known as a philosophy until 1907, when William James and John Dewey became proponents, it became more accepted in the early part of the 20th century. After the 1920s, there was a decline in this approach until the 1970s, when it was reexamined for its utility for those working in the social sciences. Pragmatism is an approach that assesses the truth of meaning or belief in theories based on the success of their practical applications. As Danforth (2006) states, “The truth value of a belief, then, is found in the effectiveness and ethical consequences of the accompanying action” (p. 340). Pragmatism requires social science researchers to set aside epistemological disputes, in favor of action. Pragmatism is about direct action and framing that action in whatever way best serves the population being studied (Danforth, 2006).

According to the definition compiled by Mackenzie and Knipe (2006),

Pragmatism is not committed to any one system of philosophy or reality. Pragmatist researchers focus on the 'what' and 'how' of the research problem (Creswell, 2003, p. 11). Early pragmatists "rejected the scientific notion that
social inquiry was able to access the 'truth' about the real world solely by virtue of a single scientific method" (Mertens, 2005, p. 26). The pragmatic paradigm places "the research problem" as central and applies all approaches to understanding the problem (Creswell, 2003, p. 11). With the research question 'central', data collection and analysis methods are chosen as those most likely to provide insights into the question with no philosophical loyalty to any alternative paradigm. (p. 195)

Mackenzie and Knipe (2006) continue their exposition of the pragmatic paradigm by describing the terms associated with pragmatic research. The language most commonly associated with pragmatic research includes consequence of actions, problem centered, pluralistic, real-world practice oriented and mixed models. When the researcher frees herself from the demands of a single theoretical framework, then she is able to recognize the value of the experience of the practitioner and use it as a basis to build upon, rather than to try to create an illusory world that she controls.

This study’s components include a constructivist approach to literacy intervention in a behavioral environment to support the academic growth of the population. Critics of behaviorism cite lack of intrinsic motivation and reductionistic teaching/learning (Mapel, 1977). To counteract these criticisms the Writing and Sharing Connections process (W&SC) (Wooten, 2000; 2009) uses a social constructivist approach (Cambourne, 2002) to enhance student engagement and make the content relevant to students. The approach is based on the work of Louise Rosenblatt (2004). She believes that a transaction occurs between the person and the text and that transaction is considered a poem. Further, Rosenblatt postulates that the reader brings life experiences and ideas with him or her to
the text as he or she reads, and as the reader interacts with the text unique new ideas and interpretations are formed. In essence the transaction becomes a personal response to the text. In other words, readers bring their own experiences and perceptions to the text and make meaning based upon their own unique perspectives (Cambourne, 2002; Newman, 2005; Rosenblatt, 2004).

Alternative schools typically use Skinner’s behavioral principles (1957) to create a structured educational environment. Skinner is known for having coined the term operant conditioning, based on the principle that consequences shape behavior. In this paradigm, consequently, classrooms are structured to reinforce desired/appropriate behavior and to punish or extinguish undesired/inappropriate behaviors. In behaviorally-based classrooms, students typically are rewarded points for appropriate behavior, with points redeemable for material and/or intangible rewards. If students commit major rule infractions, school personnel often conduct a functional behavior assessment, once again based on behavioral principles. This assessment relies on identifying the antecedent, behavior, and consequences to determine the reinforcer derived from a behavior. Then a behavior plan is developed to support the change of inappropriate behavior into a socially acceptable alternative.

Situating a social constructivist-based approach to literacy instruction within a behaviorally-structured classroom is a pragmatic attempt to create positive outcomes for academically and behaviorally challenged students. Allowing students to socially interact within the perimeters of the classroom, in an environment that normally discourages this sort of discourse, offers students an incentive to participate. As students become successful, their motivation to continue should be enhanced and their academic outcomes
improve. By drawing on these two divergent theoretical models, a positive outcome is anticipated.

**Importance of Addressing Academic Needs of Students in Alternative Schools**

Research shows students in alternative schools make behavioral gains but lag behind their peers academically. Typically these students show progress that is three to five years behind the academic progress of their grade level peers, although it has also been shown that they do make more gains in the alternative school than in traditional settings (Rutherford, 2002; Morgan & Fuchs, 2007). Current emphasis on graduation outcomes and accountability increases the importance for the use of scientifically research-based instructional strategies with this population to support educational attainment (Singer, 2000; Cook, Landrum, Tankersley, & Kauffman, 2003; Vannest, Temple-Harvey, & Mason, 2009; Fuchs, et al., 2010; Wanzek, et al., in press), especially in content area classes. For a variety of reasons, rather than instructional strategies, which leave many practitioners in the field without the resources necessary to help students make the academic gains they need in order to successfully, complete high school.

There is also evidence that in an effort to counteract a national proliferation of violence in schools; zero tolerance policies, first enacted in 1994, have created a *school to prison pipeline* (Wald & Losen, 2003). According to Wald and Losen, zero tolerance, accompanied with high stakes testing and underfunding in lower socioeconomic areas is creating an underclass of citizens. Once students enter the alternative school and/or face expulsion for their “dangerousness”, it is difficult for them to re-enter their base schools and remain until graduation. Casella (2003) argues that punishment, which excludes
students from their base schools, is a form of racial profiling. This belief is based on the disproportionality in the ethnicity and socioeconomic status of alternative school students.

Some of these students are pushed out of school due to their low academic attainment. While the general belief is that the reason for the change in placement is behavioral in origin, with the emphasis on annual yearly progress (AYP), some administrators have found it expedient to place lower performing students in alternative schools. Since most systems do not have clear-cut guidelines for a change of placement, the reasons for student placement can vary from zero-tolerance infractions to rude behavior. With the increase in school shootings, the number of students being expelled has risen from 1.7 million in 1971 to 3.1 million in 2000, as reported in 2003 by the American Civil Liberties Union (ACLU, 2013). Statistics compiled in 2007 indicate that the problem is continuing. For every 100 students suspended, 15 are black, 7.9 are American Indian, 6.8 are Latino and 4.8 are white (Amurao, 2013).

According to U.S. Census data (U.S. Census Bureau, 2013), the breakdown of population by ethnicity is white 77.9%, black or African American 13.1%, American Indian or Alaskan 1.2%, Asian 5.1%, Native Hawaiian or other Pacific Islander 0.2%, biracial 16.9%, and Hispanic or Latino 16.9%, federal funding in the United States has increased 127% for incarceration, probation and parole from 1987-2007, while funding for higher education has risen only 21% for the same time period. These statistics indicate there is a systemic failure to address the disproportionality of students who are placed in alternative schools, are expelled, and who drop out. Once students enter an alternative setting with limited remediation in academic areas, they tend, as adults, to be
incarcerated. This so-called school-to-prison pipeline creates an underclass; further some (Wald & Losen, 2003) consider these practices discriminatory and violations of the students’ civil rights, specifically the 14th amendment of the U.S. Constitution, which guarantee no citizen’s rights may be abridged by the state, nor can any person be denied equal protection under the law.

**Literacy Interventions for Struggling Secondary Learners**

To address the academic deficits that contribute to the school to prison pipeline, effective literacy interventions are needed. Unfortunately, there is very little research documenting the effectiveness of secondary students with weak literacy skills. While there has been some attempt to research this population (Brunner, 1993; Duffy & Israel, 2009; Benner, Nelson, Ralston, & Mooney, 2010) most of the results have been mixed and this population is still in need of a range effective strategies.

One promising approach that addresses the need for variety and collaborative learning is Writing and Sharing Connections (W&SC). In this process, students listen, read, write, and speak. After listening to a read-aloud nonfiction text, the student writes a connection that is shared with the class. As students listen to their classmates, they collaborate to make meaning from the text and their own connections. There are indications that this process is successful with elementary and middle-school age children (Wooten, Vining, & Bell, 2012; Wooten, Clabough & Rhea, 2013). However, research is needed to establish its effectiveness with secondary students in general and specifically in alternative school settings.

The W&SC process has the potential to improve students’ written expression skills as well as their perceptions of their own abilities in writing and social studies. This
study will help bridge a gap in the research by investigating the efficacy of this approach for an underserved segment of the secondary student population. This study is designed to investigate, in a behaviorally-based alternative school setting, a unique constructivist approach that engages students to help them form increasingly sophisticated connections across content areas via scaffolding and social interaction in a supportive environment.

**Problem Statement**

The purpose of this study is to investigate the effects on student attitudes toward writing, their confidence in their abilities in social studies, and their ability to express complex ideas in writing, as a function of implementation of the W&SC process in an alternative school setting. A quantitative design was used. Specifically, a pretest/posttest control group design was used to examine student gains on measures of attitudes toward writing and written expression.

**Research Questions**

The study will be guided by the following questions:

1. Do students in a secondary alternative school setting who participate in the W&SC process view writing more favorably than peers who do not participate in the W&SC process, as indicated by pre and posttest responses to Thought Bubbles (Zambo, 2006)?

2. Does the writing output of students in a secondary alternative school setting who participate in the W&SC process improve more than the writing of peers who do not participate in the W&SC process, as indicated by the Woodcock Johnson III (WJ III) Written Expression Composite (Woodcock, McGrew, & Mather, 2001)?
Chapter 2

Literature Review

Historical Background and Current Status: Students with Emotional and Behavioral Problems in Alternative School Settings

In the field of Special Education there has been growing concern about students with problem behaviors or emotional disturbance who have reached the secondary level without acquiring the basic academic skill set needed to succeed in high school or beyond. As these students transition into post-secondary life, whether they go to college, become involved in some form of vocational training, or try to find jobs with the few skills they may have acquired, the outcome for this population is not encouraging (Griffith, Trout, Hagaman, & Harper, 2008).

The focus of this study is secondary students in alternative settings, some of whom are formally identified as having an Emotional Disturbance or a Behavioral Disorder, and others who have exhibited behavior infractions significant enough to warrant placement in an alternative school but without being formally identified. In the U.S., some state departments of education do not recognize the disability category of Behavioral Disorders (BD), only Emotional Disturbance (ED). Nonetheless, these students are studied concurrently due to the similarity of their behaviors and are generally treated as one population in the professional literature. Students with EBD represent 2% to 20% of the overall student population in the United States, with conservative estimates ranging from 3% to 6% (Lane & Menzies, 2010). Statistics indicate that more of these students are at risk to leave school early than students from any other segment of the student population (Griffith, et al., 2008; King-Sears & Bowman-Kruhm, 2010). The
placement of students with a diagnosis of EBD in alternative settings is growing and has increased dramatically in the last decade.

The 30th Congressional Report on Individuals with Disabilities Education Act (2011), covering the 2008-2009 school year, reveals that alternative setting services have increased to serving 6% of the entire student population in the United States. Of those students in alternative settings, 19% had been identified for special education services, compared to a national average of 12% (U.S. Department of Education, 2011) across all school settings. Alarmingly, half (49%) of the students in alternatives schools identified as special education eligible were identified as ED (compared to 12% across all school settings). Although not all students placed in alternative schools have been identified as EBD, a number of them receive special education services (90,300) and 9% have been identified as having Oppositional Defiant Disorder (ODD) or continue to display other behavioral problems that limit their opportunities to receive an education within the regular education system. Records from the state of Tennessee indicate that the percentage (6%) of students placed in alternative school settings correspond to the national statistics (U.S. Department of Education, 2011).

The 35th Congressional Report on Individuals with Disabilities Education Act (2014), covering the 2010-2011 school year, recounted that, “In every year from 2001–02 through 2010–11, a larger percentage of the students reported under the category of *emotional disturbance* (italics in original) exited special education and school by dropping out. In fact, in each year, the dropout percentage was no less than 37 percent, which was substantially larger than the dropout percentage for any other disability category” (p. xxviii). This figure reflects all students in the United States and associated
territories diagnosed with an emotional disturbance.

The report also reveals that in the state of Tennessee, 46 out of every 10,000 students served in special education are removed from their base schools to an alternative school setting due to offenses involving alcohol, tobacco use, drugs, or violence. The total number is 3,609 students for all age groups and 2,406 for students in the secondary level age group. While the report shows that the number of students being served in special education in all disability categories has dropped by 11% since the 2001-2002 school year, it also indicates that the ED disability category is still one of the four largest disability categories and that the decline of students being served has not been as substantial as in the case of Specific Learning Disability (SLD) or the Speech/Language (S/L) categories (U.S. Department of Education, 2014). These data demonstrate that there is a pressing need to remediate the academic needs of students certified as ED.

While studies indicate that the main reason these students have such poor educational outcomes have more to do with socioeconomic status and other factors that are traditionally outside the domain of school systems (Wald & Losen, 2003), there is also clear evidence that most of these students also display poor literacy skills and that there is a link between social competence and literacy (Allington & Cunningham, 2007; Winn & Behizadeh, 2011). There is concern that the number of students being sent to alternative school reflects a growing trend in what is called the school to prison pipeline. This phenomenon has come to the attention of practitioners and researchers with the proliferation of zero tolerance offenses (Wald & Losen, 2003). These offenses include drug and tobacco use, and having weapons on school grounds; what defines a weapon is loosely defined and somewhat subjective. Once a student becomes part of this pipeline
there has to be serious behavioral intervention, as well as academic, to steer the student in a socially acceptable direction. The mounting evidence indicates increasing the number of students in the school to prison pipeline has societal consequences in the higher costs of prisons and loss of human resources (Mendez, 2003).

Wexler, Pyle, Flower, Williams, and Cole (2014) synthesized 16 studies using academic interventions with incarcerated adolescents. Conducted between 1970 and 2012, the studies considered, which all appeared in peer-reviewed journals, were conducted mainly between 1980 and 1990 and 2000-2012, and focused on academic remediation in reading (12), math (1), multicomponent interventions (2), and writing (1). The study designs were also varied; seven used experimental or quasi-experimental design, four used single subject design and 5 used single group design. The 586 participants in the 16 studies varied in age from 3rd grade level to 18 year olds. The majority of the participants were young men from ethnic minority backgrounds, although some females did participate. The findings of the synthesis are that incarcerated adolescents are a difficult population to research and remediate for many of the same reasons there is difficulty in an alternative setting. Attrition is just one factor that effect results. There are the same behavior problems e.g., violence, drug use, that are seen in alternative settings and also the same focus on behavioral issues rather than academic success in the research conducted. The authors concluded that the best way for incarcerated adolescents to smoothly integrate back into society is to increase their academic skills, but the findings were not encouraging due to many barriers in these locations, as in alternative schools.
African-American males are particularly at-risk in school because referrals are made more frequently than for Caucasian students by teachers to have them removed from the classroom (Serpell, Hayling, Stevenson, & Kern, 2009). Whether the consequence is a discipline referral or for special education services, the result is less time in the general education classroom to receive instruction. Discipline referrals result in out of school suspension, which is on average four times greater for African Americans than for students from other ethnic groups, including other minority populations (Serpell, et al., 2009). While students receiving special education services cannot be suspended for more than 10 academic days within a school year (IDEA, 2004), their placements can be changed if there is a manifestation determination and it is determined that the behavior is not a result of a disability. In most instances, these students will end up in an alternative setting that may or may not best serve their needs. Since the priority is on maintaining appropriate behavior, rather than academic success, there is concern that inadequate time is given to remediating academic skills, such as literacy. It is clear that in this area the American educational system is failing. “Black males had higher imprisonment rates across all age groups than all other races and ethnic groups. In the age range with the highest imprisonment rates for males (ages 25 to 39), black males were imprisoned at rates at least 2.5 times greater than Hispanic males and 6 times greater than white males. For males ages 18 to 19—the age range with the greatest difference in imprisonment rates between whites and blacks—black males (1,092 inmates per 100,000 black males) were more than 9 times more likely to be imprisoned than white males (115 inmates per 100,000 white males).” (Carson, p. 6, 2014).
The perception by adults of student behavior as threatening or inappropriate has an especially devastating effect for students from ethnically diverse backgrounds. The problem of over-identification in special education and (in alternative settings) of male students from ethnically diverse backgrounds has been a problem for many years (Serpell, et al., 2009). On average, the ratio of identification for special education is six males to one female (Fenning & Rose, 2007). This difference may be due to behaviors that are exhibited by males in the classroom when they become frustrated. Girls tend to be quieter and more compliant, while boys tend to act out and disrupt the learning environment. African-American males, in particular, are over-identified due to miscommunication and cultural misunderstanding. The fact that most teachers are middle-aged white women likely contributes to this problem (Serpell, et al., 2009).

The current school climate, with its emphasis on high stakes testing and accountability under No Child Left Behind (NCLB, 2002) and IDEA (2004), has forced researchers and practitioners to focus on academic achievement for all students, including those in special education (Lane & Menzies, 2010) and in alternative school settings. In particular, the EBD/special education segment of the school population has seen an upswing in the amount of research conducted in academic achievement, although most of this attention has been focused on younger students (Lane, et al., 2005). Following is a review of the literature on behavioral and academic interventions for students diagnosed as EBD in secondary alternative settings.

**Behavioral Research for Alternative School Students**

The extent of research on academic outcomes for both the EBD and alternative school population is scarce, with more attention paid to decreasing behaviors rather than
increasing academic achievement. For many, symptomatic behavior has been dismissed as merely adolescent behavior and there has been scant attention focused on remediating the underlying causes for frequent outbursts (Wald & Losen, 2003). With public attention focused on high school graduation rates and increased public scrutiny and accountability, more research is needed to validate effective academic instructional practices with alternative school populations.

Among the problems for students with chronic emotional and/or behavioral problems are self-esteem deficits due to low academic achievement, as well as poor socioeconomic status, challenging home situations, and a host of other problems that impact ability to function in and out of school settings. While it has been shown that these students’ achievement improves with early intervention, there is some debate as to the efficacy of later intervention (McCarty, Stoep, & McCauley, 2007). Younger students tend to respond better to interventions than older students (Gonzales, Vannest, & Reid, 2008). Once students reach the secondary level their behaviors tend to become externalized making it more difficult for them to receive the help they need, according to Gonzales, et al., (2008). Also according to Gonzales, et al., many adults do not understand that the behaviors are actually symptomatic of depression and/or self-esteem deficits. Hence, some students are misunderstood and do not get the help needed because of behaviors labeled as maladaptive. These behaviors are in reality representational of feelings of anxiety, depression, and in some cases an inability to perform academic tasks that are beyond the students’ understanding and/or developmental level (Arnold, Goldston, Walsh, Reboussin, Daniel, Hickman, et. al., 2005; Griffith, et al., 2008).
According to Reid, Gonzales, Nordness, Trout, and Epstein (2004), in their meta-analysis of EBD studies conducted from 1974 to 2001, most of the research focused on behaviors displayed by students with a diagnosis of EBD. Perhaps not surprisingly, they discovered that the educational attainment of these students was limited by these same behaviors. When interventions were systematically used and expectations were made clear, inappropriate behaviors typically subsided and student achievement also improved. Unfortunately, externalizing behaviors that are associated with EBD are so disruptive that many students are not in class long enough to benefit from interventions. For this reason most of the studies used in their meta-analysis had small numbers of participants, which is a commonality of special education research, meaning that the findings may not be generalizable. The research on literacy indicates that if students are able to acquire the skills needed to succeed in class, peer acceptance improves, teacher acceptance improves, negative behaviors decrease, and student self-esteem rises (Cook, et al., 2012; Coutinho, 1986; Gonzales, et al., 2008).

The Link Between Academic Achievement and Behavior

Arnold et al. (2005) studied 188 adolescent students identified with learning deficits in literacy. They wanted to determine whether these students were at risk for displaying signs of emotional and/or behavioral problems. The students were followed for 2.4 years and the students, teachers, and families were interviewed frequently to find if students with low achievement in reading were in danger of becoming emotionally disturbed. Results indicated that these students were more likely to display inattention, somatic complaints, and delinquent behaviors than peers without learning deficits.
In the Cook et al. (2012) study, the researchers sought to confirm a transactional relation between literacy deficits and behavioral problems. Their study was conducted using a multiple baseline approach with six middle school participants. Three of the participants were in 6th grade and three were in 7th grade. The 6th grade students received a behavior intervention only, while the 7th grade students received a reading intervention. Each of the students improved according to their intervention, but the researchers then compared the collateral effects of the interventions. They found that two of the 6th grade students improved in reading, as well as improving time on task. One of the 7th grade participants improved time on task while all the participants’ reading fluency levels increased an average 0.52 words per week while the intervention was taking place. The researchers reached the conclusion that for some students reading deficits and behavioral problems were in fact transactional, but for some students this was not the case. Their findings were based on Functional Behavior Assessments (FBAs) and through observation and statistical analysis. Their findings supported the concept that improving literacy skills may in fact also affect behavior for some students, but more research is needed.

There is a lack of meaningful, validated interventions for students with emotional and behavioral problems. Specifically, in alternative school settings there is a need to improve literacy outcomes, raise student content area comprehension and writing capabilities, to help them develop higher order thinking skills, and increase positive motivation. Students in alternative schools historically have been hard to deal with, as they do not make grade level progress within regular school settings for a variety of reasons. Their behaviors are disruptive and can be violent, which has led many to believe
that the focus of work with this population should be on behavioral issues rather than academics. While there is older research (Coutinho, 1987) that shows that these students had no behavioral issues in elementary school but had reading comprehension problems, these same students developed these behavioral issues and had noted discrepancies in their literacy outcomes as they aged within the school system that only increased over time. Later research (Gunter, Coutinho, & Cade, 2002) indicates that there is still a debate over the causal relationship between the presence of emotional and behavioral problems, and academic skills, but those students whose academic skills improve are able to maintain better relationships with their teachers and peers.

Overall, the research that has been conducted suggests that using direct instructional programs that remediate basic literacy skills are successful with younger members of EBD and LD populations, but that as students age there is a limited effect (Slavin, et al., 2008). Arnold et al. (2005) argue that the lack of literacy skills has a direct relation to social competence because the pressure of being unable to perform age-appropriate tasks causes the behaviors displayed by students who are identified as EBD. These behaviors cause peers and significant adults, teachers and administrators, to view these students negatively and withhold approval and acceptance. When students successfully master the necessary skills to succeed the number of behavioral incidents decrease and social acceptance and approval usually follow. While increasing literacy skills cannot be seen as a panacea to cure all societal ills, there is evidence that supports increasing mastery will aid students in social acceptance and might keep members of this population in school long enough to obtain a high school diploma (Hudley, et al., 2007; Sutherland, Lewis-Palmer, Stichter, & Morgan, 2008; Wexler, Pyle, Flower, & Williams,
The social isolation that these students experience due to their behaviors make it difficult to form lasting relationships and the bonds one normally expects on the secondary level. If the behaviors can be decreased using academic achievement and a combination of self-management techniques there is some reason to hope that members of the EBD population can become productive citizens, rather than a lifelong drain on public resources, whether due to incarceration or as recipients of government subsidized assistance.

**Research on Academic Remediation**

Studies indicate that students with mild to moderate disabilities, i.e., SLD and EBD, can acquire reading/literacy skills if a concentrated effort is expended with these students. They must receive services in the early grades with consistent application. If these factors are in place there is an increase in reading outcomes, although the rate of gain for students diagnosed for SLD is much higher than gains made by students diagnosed as ED (Arnold, et. al., 2005; Fink, 1996; King-Sears & Bowman-Kruhm, 2010, 2011; Morgan & Fuchs, 2004).

According to Fink (1996) people diagnosed with SLD can gain skills in literacy, but not until much later than their age level peers; in fact, they might exhibit as much as a five-year gap in the attainment of reading skills and writing. This motivation to work on literacy skills comes from an intense interest in a subject area that inspires a passionate desire to learn. Fink’s study consisted of nine interviews with persons identified with SLD in a case study format and included a Nobel Laureate to emphasize that high achievement is possible, with the proviso that the person acquiring the skills is motivated to learn.
King-Sears and Bowman-Kruhm (2010) examined students’ academic outcomes in high school. They were especially concerned with the IEP content and the actual remediation of students who were identified with moderate levels of disabilities. Their findings showed that students in high school inclusion content area classes were reading on the second to fifth grade level, but were receiving no reading remediation, even if their IEPs included that stipulation. King-Sears and Bowman-Kruhm (2011) later found that special education teachers were increasingly concerned that these students were being denied an appropriate education. The stipulations of No Child Left Behind mandate that students being served by special education have to be included in state and district assessments, but because of the lack of time in the school day it was difficult to teach all that was required for both the students’ IEPs and district level testing.

Morgan and Fuchs (2004) found 15 studies in their meta-analysis of the literature on early reading proficiency and motivation. The studies had a combined total of 2,441 participants who varied in age from six to 12 at the onset of the study in which they participated. These studies took place in the United States (2), Finland (7), and New Zealand (5). Fourteen of the 15 studies were longitudinal and followed the students as they progressed through school to discover if there were improvements in their reading as they aged. The remaining study was quasi-experimental and dealt with reading self-concepts. Morgan and Fuchs found that there was a moderate correlation between reading skill (i.e.; phonemic awareness, sight word recognition, and comprehension) in the early grades and motivation to read. They also found students who read poorly in first and second grades were still likely to read poorly in 11th grade. Weaknesses in early reading skills negatively affected not only later reading skills, but also motivation to succeed in
content areas and behavior as students aged. Morgan and Fuchs (2004) posited that to remediate reading skills, especially in the early grades, it is also necessary to address motivation. The students who were motivated tended to read three times more outside the classroom than their less motivated peers. Another finding was that these students continued to lack motivation as they aged, even when intensive remediation in reading deficits had taken place when they were younger.

Wills, Kamps, Abbott, Bannister, and Kaufman (2010) studied 117 first through third graders, with or without risk for EBD and identified as having reading deficits. Eight schools were involved, four schools as a control and four schools where the intervention was used. The participants were instructed in small groups and were kept engaged in the academic work through reading aloud and questioning. All schools had a school wide behavioral plan in place. The participants were assessed regularly using the Dynamic Indicators of Early Basic Literacy Skills (DIBELS) (Good & Kaminski, 2002) and all intervention participants were found to make progress in this environment. At the end of the intervention all students, control and intervention, were tested using the Woodcock Reading Mastery Test (Woodcock, et al., 2001). There was no difference in the outcomes for the students in the control group, but all the students made gains in the schools where the intervention was used.

**Relevant Alternative School Research**

When academic interventions are implemented, most are direct instruction programs that concentrate on discrete skill sets needed to become successful readers (Hargis, 2006). In the early grades, 1st through 3rd, a concentration on phonemic awareness and fluency is a valid approach for students with academic and behavioral
deficits because it is age appropriate and does not differ significantly from the curriculum of their peers (Lane & Menzies, 2010). As students get older, however, this becomes more problematic as curricular demands increase due to content area reading and high stakes testing. In commercial programs, like Language! (Greene, 1994) and/or Voyager Passport, (Arguelles, Cunningham, Henry, Klingner, & Peyton, 2003) comprehension strategies may or may not be taught, depending on which program is purchased and all literacy needs may not be addressed (Griffith, et al., 2008; Slavin, Cheung, Groff, & Lake, 2008).

In a meta-analysis of 300 reading programs, and associated studies, intended for use with middle and high school students, Slavin, et al., (2008) found that none of the studies showed strong evidence of effectiveness. The criteria used by Slavin and colleagues to evaluate the studies in their meta-analysis were as follows: at least two qualifying studies; used random assignment or well-matched control group, intervention lasted a minimum of 12 weeks; used established standardized reading measures; had 250 or more participants. Only four programs were moderately effective, six had limited effect, four had insufficient evidence, and 286 programs did not meet their criteria for consideration; only 14 programs had qualifying studies.

Slavin et al. (2008) defined effectiveness as having a mean effect size of at least +0.20 and two large qualifying studies of 250 participants and/or several smaller studies that had a combined total of 250 participants. They could find no literacy programs that had been evaluated with studies meeting this definition. To be considered moderately effective, programs studies had a mean effect size of at least +0.10 and fewer students, but used randomized controls. Those that were considered limited had at least one
qualifying study but had a much smaller number of participants. The extensive list of programs that had no qualifying studies to support their effectiveness provides evidence that while there is a good faith effort being made to remediate secondary students’ literacy skills, there is limited research to support the effectiveness of a majority of the reading intervention programs available for this age group. This meta-analysis was conducted to discover the effectiveness of reading programs for secondary students who were poor readers, not necessarily those who had been identified as having EBD.

Even if certain programs have demonstrated effectiveness, treatment fidelity and time constraints can be a challenge to effectiveness in practice. Teachers must be taught how to use programs and implement them in a specific manner for the programs to work as intended. From personal experience, it can be difficult to find the time to follow each step specifically as intended. If the program is supposed to be taught in a two-hour block of time (e.g., Language!) (Greene, 1994) or there is an expectation from the administration of simultaneously teaching more than one level treatment fidelity is a luxury that can be dreamt of, but not a realistic expectation. Constraints such as treatment fidelity and instructional time lead many systems to lose faith in the efficacy of given programs. Many systems tend to drop programs within two years if they do not seem to be working, when in fact it may take as many as five years to show improvement (Griffith, et. el., 2009; Lane & Menzies, 2010).

**Alternative School Personnel**

In secondary alternative schools, the majority of the teachers are not special education teachers. According to Carver, Lewis, and Tice (2010) in the 2007-2008 school year 30% of all public school districts in the United States, required having specific
requirements for teaching in alternative schools and programs besides the usual teaching certification requirements. They also reported that 46% of districts required additional professional development in behavioral interventions and 63% required a written learning plan for specific students beyond the IEP written for students receiving special education services.

Lehr and Lange (2003) reported that according to the state directors of special education in 48 states and the District of Columbia, the emphasis of alternative schools is behavior, whether the students receive special education services or not. One of the biggest problems noted was the lack of qualified individuals to teach in behavioral alternative schools, since the preferred teachers would have dual certification in general and special education, as well as being highly qualified to teach multiple academic subjects. The directors also noted that many of the decisions were made in the local districts where the alternative schools were located, so the quality of alternative school staff varies because of local interpretations of state mandates.

As has been noted above, the majority of teachers in secondary alternative schools are not special education teachers, but teachers certified to teach in an academic content area. These teachers generally are not prepared to assess the reading skills of their students (Hargis, 2006). Since the expectation is that students who have reached the secondary level will be as proficient as their grade level peers, most secondary teachers have very little background in how to teach reading. The same can be said for special education teachers, as well. While most special education teachers are proficient in teaching foundational reading, math and writing skills and strategies to help students succeed in content area classrooms, their expertise in reading education varies widely.
Consequently, they may be dependent on the programs provided by their school systems (Allington & Cunningham, 2007). Increasingly, computer programs are used to increase phonemic awareness and fluency, which have been proven ineffective if not used in conjunction with collaborative efforts (Slavin et al., 2008). If special educators are asked to supplement these programs with comprehension strategies, there is a possibility that they will not possess the knowledge base needed to help individual students (Morgan & Fuchs, 2004).

**Time Away from Class**

With the inclusion of special education students in high-stakes state testing, it has become important for all schools that receive federal funding to ensure that these students receive appropriate instruction in the content areas that are tested. The problem that occurs most frequently is the lack of instructional time needed to help students achieve the goals of their Individual Education Plans (IEPs) and the time used to teach content area curriculum. With the trend toward inclusion in regular educational settings, the content area needs are being taught more systematically, but this leaves the IEP goals unmet (King-Sears & Bowman-Kruhm, 2010). Many students, especially those with a diagnosis of EBD, have goals and objectives that address social and behavioral needs, rather than just academic deficits. They may also have reading comprehension and/or writing goals that cannot be addressed in the regular secondary education setting, due to content area demands. With the time constraints that are inherent in the average school year, there is the very real possibility that some, if not all, of the student’s individual needs are not being realized. In contrast, behavioral goals are emphasized in an
alternative placement. In these schools, the primary focus of the school is usually on
behavioral issues, with academic attainment a secondary goal (Lehr & Lange, 2003).

The time taken away from content area classes to remediate reading deficits
(Allington & Cunningham, 2007) may be problematic. Allington and Cunningham
discuss the implications of time allotment and its impact on the learning of all students.
They show that school time is structured legislatively, i.e., school year, the number of
hours in the school day, and how many minutes comprise an instructional hour. Once this
has been decided in each state, the school boards further define their expectations within
their districts. While the time allotment seems to be uniform, the reality is that
instructional time can vary greatly from school to school and even from class to class.
The interruptions in the day, including announcements, class bathroom breaks, and
transitions can affect all students. If a student has been identified for special education or
is an English Language Learner (ELL) time in class can be further lessened by receiving
services outside of the classroom. One must also account for the transition time from one
room to another. Over the school year, what is considered a short period per day can
become an enormous amount of wasted time, and seriously impact the amount of actual
instructional time the student receives. As Allington and Cunningham point out, lost
instructional time can be extremely detrimental for students already at-risk.

Research also has revealed that students identified as EBD in the early grades
tend to lag behind their peers by two years in literacy with the number of years increasing
as the student ages, usually to as much as a five year gap (Arnold et al., 2005). These
differences are not remediated as readily for students identified with EBD as students
identified with LD. The behavior of these students is often disruptive to the learning of
other students and to themselves, so students identified, as EBD may not receive as many instructional hours, a likely contributor to the gap in academic achievement. Students with a diagnosis of EBD are often so disruptive that their peers find it difficult to learn, so teacher time is interrupted to try to correct behavior, and if severe enough, the student manifesting behavioral issues will be removed from class (Winn & Behizadeh, 2011).

**Writing and Sharing Connections**

A promising approach to address the problem of improving academic skills, is W&SC. It is hypothesized that the W&SC process will help students become more cognizant of their learning and can help them begin to find tools that will lead to academic and possibly behavioral improvement. There is some reason to suspect that problem behaviors are due to high motivation to avoid embarrassment due to academic failings (Coutinho, 1987; Hudley, et al., 2007). One of the foundational elements of W&SC is to create a safe literacy-learning environment so that all students will feel comfortable while expressing themselves. With this in mind, it is important to examine the theoretical basis for the process to understand how it can help alleviate alternative school students’ academic difficulties, which hypothetically will improve their behaviors.

Understanding how children learn has long been the subject of debate and scientific investigation. Specifically, understanding how children learn to read and to comprehend complex ideas found in text has been of significant interest to investigators worldwide (Baptista, Bohn, Kliegl, Engbert, & Kurths, 2008). Upon realizing that reading is not a natural development, it became more important to begin to understand the motivational factors involved, as well as how the brain specifically processes information gained by reading. To understand the theoretical underpinnings for W&SC
one must consider the work of Louise Rosenblatt and Lev Vygotsky. Their theories can be examined from a pragmatist’s perspective to more fully understand their utility in the learning process. Pragmatism is an American movement in philosophy founded by C. S. Peirce and William James and marked by the doctrines that the meaning of conceptions is to be sought in their practical bearings, that the function of thought is to guide action, and that truth is preeminently to be tested by the practical consequences of belief (Burch, 2010).

**Transactional Theory**

Louise Rosenblatt (2004) relied on the work of Pierce and James, and to some extent John Dewey when developing her ideas about transacting with literature. She posits that, when reading or writing, a person transacts with literature. This means that when we see symbols on a page, it is what we, as individuals, bring to the experience that actually creates meaning and influences how we are able to process the information. Without our individual history, culture, and understanding of language the symbols would be meaningless. In the context of our lives, meaning is created because of our reactions to what is being read. In effect, we create what Rosenblatt terms as a *poem*. She further theorizes that people read for a variety of reasons, these reasons fall on a continuum with *efferent* at one end and *aesthetic* as the other extreme (Rosenblatt, 2004) with the actual purpose usually falling somewhere between.

To define these terms, when one is reading aesthetically, the individual is reading with emotional sensibility, becoming engaged in the writing and empathizing with a main character or trying to discover what will happen next. The piece of literature becomes part of the person’s reading experience for a variety of reasons that are truly personal in
nature. Such reading might encompass the books such as *Sense and Sensibility* (1811) by Jane Austen or *Treasure Island* (1883) by Robert Louis Stevenson. Efferent reading is done for the purpose of learning and of gaining specific facts. It is the process of extracting information to “take away” from text and not for enjoyment or entertainment. For example, students read and analyze a text in preparation for a test. Whether one is reading to prepare for a class or to learn to put together a bicycle, this is reading with a purpose besides that of simple enjoyment, although both types of reading can be educational (Rosenblatt, 2004). The reason a person is reading will determine the mix of private or personal elements that will draw their attention. According to Rosenblatt (2004) most reading falls on this continuum because it is a combination of the two extremes. Only the individual can determine where on the continuum their transactional reading experience resides.

Rosenblatt (2004) relied on some of the works of John Dewey, an educational philosopher, while developing her theory. According to Dewey, schools are social constructs used to transfer knowledge about a complex society to its young. Schools, specifically, are institutions that teach children social norms, and transfer important cultural information to help the child work and thrive within society. According to Dewey, the socialization purpose of schools has special importance for the United States. Our society embraces so many different cultures and ethnicities that schools have to transfer the ideals of the American culture and meld young students into a community capable of interacting within a wider network that are linked into an increasingly complex system that makes up modern society (Dewey, 1918). While Dewey was specifically referring to his own time period of the early 20th century, his ideas about the
increasing complexity of society stand over time, and, as time has passed, have gained more relevance as different and more diverse groups of people have joined and become part of American society. Rosenblatt believed that the purpose of reading influences the amount that we actually learn and that everyone is motivated differently. Many times these motivations can be mixed. Motivations for reading/learning are much harder to discuss because so much depends on the individual, although in the school environment teachers can impact the motivation of students to read. As Gambrell (2011) points out, teachers can impact student motivation by ensuring that students are reading texts that are relevant to their lives. She also points to the importance of a wide range of material and choice. She further stresses the importance of a social component to engage students and to help them become intrinsically motivated to read, even if there is a need for the use of rewards for those extrinsically motivated.

Rosenblatt’s theory of transacting with literature draws upon the work of earlier philosophers and scientists allowing her to articulate the actual way in which squiggly lines take on meaning and become more than just symbols on a page. Her ideas about how these symbols become meaningful are the basis for the W&SC process and show that the process can be used to help secondary students in alternative settings become more proficient in the actual practice of making meaning from text. As this meaning is derived, then the motivation may change. Students may find that the reading begins as an aesthetic exercise can become efferent and vice versa.

Cambourne (2002) explains the social constructivist framework approach to reading instruction relies on three core theoretical assumptions:

a) What is learned cannot be separated from the context in which it is learned.
b) The purpose or goals that the learner brings to the learning situation are central to what is learned.

c) Knowledge and meaning are socially constructed through the process of negotiation, evaluation, and transformation (p. 26).

The first assumption signifies that how and where a skill is learned plays a vital role in the learner’s ability to use the new information and form a connection that is compatible with his or her conception of the world. The second assumption describes what must be present in order for the learner to invest in the process of learning. The third assumption shows that the learner must engage with the learning process in a collaborative way to build meaning that he or she can compare to the thoughts and ideas of his or her peers and guides. Once the learner is exposed to the understanding of others, he or she has to evaluate any discrepancies that may arise and use this cognitive dissonance to form a new more complete understanding of the material. As a student learns to differentiate between sources of information, the meaning created becomes more sophisticated and the ability to create more meaningful understanding is enriched.

Within the social constructivist framework, alternative school students collaboratively working to acquire new understanding and skills, is a somewhat novel approach. This approach taken with the support received in a safe, nurturing environment, allows these students to create new understanding of the materials presented, as well as develop belief in their abilities to actually perform the tasks being asked of them.
According to Lev Vygotsky, motivation for learning is found in a social context that encompasses the cultural elements of the learner’s experience. His complex ideas are more fully apprehended if one understands the Zone of Proximal Development (ZPD) (Newman, 2005; Putney & Wink, 2002). Vygotsky, a psychologist, believed that children learn by social interaction. In this belief, he disagreed with Piaget who developed the theory of development where children mature in specific steps naturally (Newman, 2005). Vygotsky claimed that rather than developing at different ages, children actually develop according to their social interaction and with instruction. Vygotsky believed that instruction led to development. In other words, the ZPD is the distance between the actual development level as determined by the child’s independent problem solving and the level of potential development as determined through a child’s problem solving ability under adult guidance or in collaboration with more capable peers (Vygotsky, 1978; 1986). Many of Vygotsky’s ideas about the culture and social interactions can be seen as the basis for the belief that many social constructivists hold that knowledge is constructed and that individuals construct knowledge within a known framework that help him or her retain their worldview (Newman, 2005).

ZPD is exemplified in an experiment conducted by Welch, as cited in Newman, (2005) where small children ages two to four, interacted with their mothers. At the outset of a task the mothers and children worked together and each mother explained to each child what the meaning of the task was, or the different steps and how she interpreted them. At the beginning the child did not have the same concept, but with the completion of the task the child had inculcated his mother’s ideas and attitudes about the task.
Vygotsky argued that interaction with adults and others within the ZPD led to the child’s growth in development and maturity (Newman, 2005).

The W&SC process is a set of literacy instruction practices based on the work of Rosenblatt and Vygotsky. The process allows the student to develop at his or her own pace within the ZPD (Newman, 2005) because students acquire new understandings and knowledge from their teacher as well as each other, their motivation to learn grows as the amount of success they have propels them to take on more challenges. One marked benefit of W&SC is that it fosters a safe environment wherever it is implemented, as well as providing choice and relevance to students’ lives to encourage motivation (Wooten, 2009). In an alternative school, a safe environment allows students to learn and express themselves in a risk-free place. All are free to articulate their ideas (Wooten, 2009), which makes W&SC appear to be an ideal process to try to help students that have learning disabilities or an emotional or behavioral disorder.

**W&SC Anecdotal Evidence**

Anecdotal evidence of the efficacy of the W&SC process has been documented in Wooten’s book, *Valued Voices: An Interdisciplinary Approach to Teaching and Learning* (2000; 2009). Davis, Wooten, and Bell (2006) reported using the W&SC process in an elementary school setting in a rural area in Tennessee. The participants showed improvement in critical thinking and literacy after the implementation. Wooten, Clabough, and Rhea (2013) examined the effects of the process in a middle school in a rural setting to increase literacy, social studies competency, and increase student success on their state mandated achievement tests. The authors reviewed the written work of students after four years of implementation and found that the process lent itself to
differentiation, cooperative learning, and the development of historical empathy. Wooten and Cullinan (2004) explored the efficacy of the W&SC process and illustrated the academic growth that a student experienced due to his or her exposure to rich, historical literature in a non-threatening environment. These studies provide preliminary evidence that this instructional process is conducive to forming a classroom community and encouraging students to review critically their connections and to explore their connections to literature, and to the world.

Overall, the W&SC process holds promise for helping secondary students in an alternative setting improve their writing, higher order thinking, content area skills, and motivation. During this teaching process books are read aloud. These books are selected with care, and can be an avenue to help students cover needed content area subjects, since most of these students lag behind in content areas (Lane & Menzies, 2010). With the transactional approach (Rosenblatt, 2004) to reading and writing, students are allowed to make meaning and share their ideas and develop the skills needed to reflect upon their learning. With the seeming built-in success of this process, students should become more motivated to learn (Coutinho, 1987) and their problem behaviors decrease as a result. Not only will success foster higher motivation, but also in the zone of proximal development, these students should experience psychological growth and become more intrinsically motivated as they realize that they can learn. While there is no panacea for students who have behavioral and learning difficulties, the W&SC process has the potential to help students develop better thinking and learning skills, which in turn could help with self-esteem issues. These positives provide compelling reasons to try using this
process with the alternative school student population, in order to support them as they learn to make better futures for themselves.

**Conclusion**

The literature on academic outcomes for students in alternative school settings is scarce. What few studies there are point to a connection between academic remediation and improved behaviors, although the relationship is tenuous at best. The reason for this tenuous connection is simply the lack of relevant research on academic outcomes. The research done in alternative settings has been primarily behavioral in nature and has shown limited success in improving behaviors. With these factors in mind, it would seem that a different theoretical approach is warranted that can increase the students’ participation in the learning process. A social constructivist approach with the use of scaffolding the development of literacy skills may prove to be more successful in engaging student interest than strictly behavioral approaches. While benefits of the W&SC process have been demonstrated through qualitative/anecdotal research with younger students in typical school settings, there is a lack of quantitative research to support its efficacy. Providing opportunities for and ensuring student success is an integral component of the W&SC process, so that it has promise to produce academic gains in students with EBD, and learning deficits, in an alternative setting.
Chapter 3

Introduction

The research questions that framed this chapter are:

1. Do students in a secondary alternative school setting who participate in the W&SC process view writing more favorably than peers who do not participate in the W&SC process, as indicated by pre and posttest responses to Thought Bubbles (Zambo, 2006)?

2. Does the writing output of students in a secondary alternative school setting who participate in the W&SC process improve more than the writing of peers who do not participate in the W&SC process, as indicated by the Woodcock Johnson III (WJ III) Written Expression Composite (Woodcock, et al., 2001)?

Methodology

This study was conducted using quantitative instruments. Quantitative data analyses were used to determine if the W&SC process resulted in significant academic and motivational gains. The study was comprised of a pre-post/control group design, necessarily quasi-experimental because the participants were in pre-formed groups and could not be randomly assigned. The three dependent variables were: a) students’ attitudes toward writing as measured by Thought Bubbles (adapted from Zambo, 2006) and b) written expression and higher order thinking skills as measured by the Woodcock-Johnson III: Written Expression composite (Woodcock, et al., 2001).
Secondary alternative school students need more academic remediation

The W&SC process (based on constructivism) may be a useful strategy to engage students and to remediate writing and higher order thinking skills in a behavioral setting.

5% of the U.S. school population will attend an alternative school - part of the School to Prison Pipeline.

The W&SC process will be the intervention and results will be measured using Thought Bubbles and the Woodcock Johnson Written Expression Composite.

While attrition negatively impacted the power of the study, contributing to nonsignificant findings, W&SC students' written expression scores improved by almost one standard deviation while the control students' writing regressed by one-third standard deviation.

There will be some attrition due to the nature of the institution. Students are sent for specific time periods, which may not be an entire year. Some students may choose to leave school, as well.

Figure 1
Study Graphic
Participants

The study was conducted at an alternative school in East Tennessee. The setting was rural with a mixed population with 90% of the population receiving free or reduced lunch. The number of male to female students was approximately 3:1. The genesis of the study was rooted in professional development. The co-investigator, Dr. Deborah A. Wooten, was working in different elementary schools in the county and was approached by a reading specialist to teach educators the W&SC process. The specialist was transferred to the alternative school during this time and informed the administrator. The administrator made contact and extended an invitation to conduct research in his school. The superintendent was contacted and once permission was obtained, the administrator introduced the primary investigator to the staff members interested in the process.

Two teachers at the alternative setting allowed me to implement the W&SC process in their classrooms as part of the regular and routine teaching processes. Students in four classrooms, two taught by each participating teacher, were involved in the study. One of the teachers was a licensed secondary English teacher and the other was a licensed K-12 special education teacher. Subjects taught in the classes in which W&SC was implemented were Language Arts (2 classes, 1 intervention, 1 control) and History (2 classes, 1 intervention, 1 control). The class periods were 50 minutes long. The classes consisted of both special education eligible and non-eligible students who were taught inclusively. Students in two of the classrooms participated in W&SC and students in the other two did not; this selection was made randomly.

I, Laura K. Kildare, M.S., an experienced classroom teacher and doctoral candidate, was the researcher and Principal Investigator (PI), and the Co-PI was Deborah
A. Wooten, Ph.D., the developer of the W&SC process. We provided professional development, support, and oversight for the implementation of the W&SC process throughout the school year, as well as actively implementing the process.

Participants ranged in age from 14 to 18 (n=12). Two students were designated as receiving special education services, but all were students in the alternative school due to behavioral issues. Ten of the students were male; two were female. Eleven were Caucasian; one was African-American. Of the two students who received special education services, one was identified as having a mild intellectual disability and the other student was identified as having emotional disturbance.

**Data Sources**

**Instrumentation**

1. Students were asked to complete a Thought Bubble based on Zambo (2006), pre and post intervention, about their attitudes toward writing. Each student completed the Thought Bubble, after being given the prompt, “Do you see yourself as a writer?”. The responses were classified as: 2) Yes; 1) Neutral; 0) No. Inter-rater reliability was established by calculating percentage agreement by two independent raters, i.e.; another advanced doctoral student and me. A third independent rater scored any items that did not produce agreement. See Appendix A.

2. The WJ III Tests of Achievement is widely considered to have strong psychometric properties. In this study, the Written Expression cluster was used as the measure of writing. It includes two subtests, Writing Fluency, and Writing Samples. Writing Fluency requires examinees to write as many
simple, complete sentences as possible in a seven-minute time frame; examinees are instructed to respond to a series of prompts each containing a picture and three stimulus words as rapidly as possible. The emphasis in the Writing Fluency subtest is on the participants’ ability to compose succinctly a number of correct, simple sentences. The Writing Samples subtest is untimed and requires examinees to write increasingly complex sentences in response to both verbal and visual stimuli; the emphasis is on the quality of sentence composition. Both tests require organizational skills, ability to access vocabulary, and language skills. The Written Expression cluster of the WJ III has a median reliability of .88 in the age 5 to 19 range (Woodcock, et al., 2001). Alternate forms (Forms A and B) of the two subtests were used pre and post intervention. The reliability of both forms range from .80 to .90. The median reliability across the Written Expression Cluster is .91 across all ages. The Writing Samples test- retest reliability for ages 14-17 is .76 and for Writing Fluency is .80. Inter-rater reliability between Forms A and B for Writing Fluency for grade 7 is .98 and for Writing Samples, it is .90 The WJ III was scored under the supervision of a special education faculty member who is also a school psychologist and experienced in psychoeducational assessment.

Procedures

I administered pretests to students in intact classrooms during one 50-minute class period for each of the four classes involved, both those in the intervention group and the control group. The assessments were administered according to scripted instructions in
the following order: a) Thought Bubble; and b) WJ III Subtest 8 Writing Fluency and Subtest 11 Writing Samples.

I then implemented the W&SC process to teach social studies content for the Spring semester of the 2012-2013 academic year. Each W&SC session lasted an entire 50-minute class period. While the sessions were in progress, the classroom teachers randomly completed fidelity checks (98%) to insure that the session protocols were followed. After eight to 12 W&SC sessions, I administered the posttests, the attitudinal measure (Thought Bubble) and the WJ III Form B Written Expression subtests, again during one 50-minute class period per the four participating classes.

Following are the specific steps of the W&SC Process, as explained in Valued Voices: An Interdisciplinary Approach to Learning (Wooten, 2009). Further explanation for each step is provided after the steps are listed.

**Basic Steps for Writing and Sharing Connections:**

1. Introduce biographical/historical picture book
2. Implement timeline activity
3. Provide students access to 3x3 sticky notes
4. Read-aloud biographical picture book
5. Write Connections (responses to book read aloud)
6. While students are completing connections, instructor tapes chart paper (9x12) on the wall or white board and writes the title of the book and date
7. Each student stands next to the instructor and shares his or her connection with the class
8. Before students return to their seats, each connection is categorized (e.g., self, book, famous person, family). The connections are added to the chart paper and labeled according to their specific category.

9. A student volunteers to create a timeline piece to be hung on the classroom timeline. These pieces include the name of the person and their birth and death years or event from the book that was read aloud.

**Explanation of Steps**

Step one is the introduction of the book to be read aloud. A choice of books is offered to allow student input. Two books are shown and the students vote for the book they want to hear. Once this is accomplished, the instructor introduces the book by having the students look more closely at the book cover.

The second step involves having students guess the year that an event (e.g., Civil War, 1861) began or the subject of a biographical picture book was born. This information is used to create the timeline piece for the classroom timeline. The timeline is more fully explained in step nine.

In step three, students are given access to pads of 3x3 sticky notes to jot down a connection. Additional sticky notes are provided for students who have more than one connection.

Step four is reading the book aloud. The choice of book and subject matter are important and are given considerable consideration to support learning in content area(s). Some examples include books about Theodore Roosevelt, John F. Kennedy, or Alfred Nobel. Also, the instructor has already familiarized herself with the content of the text to ensure that the reading is dynamic and expressive.
In step five, students are instructed to write their connections. The instructor models a connection for students, so they know its format, for example: “This book reminds me of Joan of Arc because she had a sense of purpose, just like Wilma Rudolph when she ran in the Olympics and later became a teacher.” This supports students’ by giving them a structured format as a supportive framework for their own creative input about the content.

In step six, while students are completing their connections, the instructor affixes a poster-sized chart paper to the wall, so that students can later see their categorized work displayed after they have shared their connections. The instructor writes the title and the date on the chart paper.

In step seven, each student shares his or her connection. Some students are reluctant to share due to embarrassment or shyness. It is important that the students know they are safe, so the instructor stands next to each participant as he or she share the connection, to ensure that each student feels secure.

In step eight, the connection(s) is categorized and affixed to chart paper. The categories can include history, family, entertainment, famous person, or other designations suggested by the participants. Later, after several sessions, the students review their connections and the categories to reflect on how their thinking has developed.

In step nine, students volunteer to create the timeline pieces. Each timeline piece is an 8”x12” piece of blank paper that the student folds in half. Each entry includes the title of the book, or the name of the person, their birth and death years. If it is an event or
an era, then the dates are included. On the inside of the timeline piece, the student writes five facts about the subject are included. Students can be quite creative, decorating the timeline pieces so they are colorful, interesting, and reflective of the content of the text. Once students create their timeline pieces, they each present their five facts to the class, and then hang the entry on the timeline.

The timeline was, and is, an essential element of the process because it helps students connect the different biographical texts with important dates in history, providing a chronological context. If a student has difficulty thinking of a connection, looking at the timeline provides examples for students to use to write their response. The timeline serves as a classroom visual graphic organizer. If a student references other historical figures or events, during a connection session it will be added to the timeline, as well. This allows students to understand the inter-connectedness of the different subjects they study.

**Data Analysis**

Quantitative data were analyzed using Statistical Package for the Social Sciences (SPSS), version 22, software. Specifically, mean differences analyses ($t$ tests, tests of analyses of variance, ANOVAs) were used to determine if attitudes toward writing and written expression skills improved as a function of the W&SC process for those in the participating versus the control group.

**Summary of the Chapter**

The methodology of this study is quantitative. The independent variable is implementation of the W&SC process in two classes with secondary alternative students, with students in two other classes serving as a control group. Dependent variables are
attitudes toward writing as measured by Thought Bubbles (adapted from Zambo, 2006) and written expression as measured by the Woodcock-Johnson III Written Expression composite.
Chapter 4

Results

Introduction

The purpose of this research study was to investigate the effects of the Writing and Sharing Connections process when used with secondary alternative school students. By examining student responses to the Thought Bubbles based on Zambo, 2006, and the WJII Written Expression composite (comprised of Writing Fluency and Writing Samples subtests) (Woodcock, McGrew, & Mather, 2001) the effects were determined. Each of these instruments was administered pre and post exposure to W&SC to a control group and implementation group of participants.

Response Rate and Participation

This study was conducted at an alternative school in East Tennessee. The setting was rural with 90% of the population receiving free or reduced price lunch. The number of male to female students enrolled in the school was approximately 3:1. During the pre-test phase of the study, students in four classes were assessed, two designated as the control group and two as the implementation group (total \( n = 60 \)). Due to attrition, the final number of participants was 11. These 11 participants ranged in age from 14 to 18. Two students were designated as receiving special education services, but all were students in the alternative school due to behavioral issues. Ten of the students were male; one was female. Ten were Caucasian; one was African-American. Of the two students who received special education services, one was identified as having a mild intellectual disability and the other student was identified as having an emotional disturbance.
Data Analysis

Statistical Package for the Social Sciences (SPSS) version 22, a computer statistical software program, was used for data analysis. Descriptive statistics (i.e., means and standard deviations) were calculated for all variables for the entire sample and are presented in Table 1. Three people contributed to the scoring to ensure interrater reliability. I scored all items; the other two scorers were post-doctoral special educators. All scoring was done under the supervision of a special education faculty member who is also a school psychologist. Initially, the Thought Bubbles and the two WJ III subtests were scored by the researcher and another special educator. Percent agreement on the Thought Bubbles was 100%; percent agreement on the Writing Fluency subtest was 100%, and percent agreement on Writing Samples was 98%. The third special educator independently scored all items from Writing Samples that yielded a disagreement. The assigned score was the score that two of the three raters agreed upon. Once raw scores for the two WJ III writing subtests were determined, standard scores were obtained using WJ III scoring software by an advanced school psychology doctoral student and the researcher jointly to ensure no errors. The Written Expression Composite standard score is derived from the combination of the two subtests (Writing Fluency and Writing Samples).

The Thought Bubbles were scored on a range between 0 to 2, (using a modified Thought Bubbles (TB) technique, Zambo, 2006) to indicate the extent to which the student saw him or herself as a writer; 0 = not at all, 1 = to some extent, and 2 = he or she liked to write and thought he/she was good at it. Means, standard deviations, skewness and kurtosis for self-perception as a writer were as follows for the entire sample: Pre-test
\[ M = .73; \ SD = .905; \ \text{skewness} = .797 \ \text{and kurtosis} = -1.269. \] The post-test \( M = 1.09; \ SD = .944; \ \text{skewness} = -1.277 \ \text{and kurtosis} = 1.539. \) For the post-test, most Thought Bubble scores were to the right of the mean as demonstrated by the skewness statistic.

The Written Expression composite of the Woodcock Johnson (WJIII) (Woodcock, et al., 2001) is comprised of two subtests measuring Writing Fluency, defined as speeded (automatic) formation of constituent sentence structures requiring fluent access to semantic and syntactic knowledge (Woodcock, et al., 2001), and Writing Samples (the ability to write increasingly sophisticated sentences when given a prompt). Scores are available for each subtest and for the Written Expression Composite. Standard scores (population \( \mu=100; \ \sigma=15 \)) were derived for each student’s pre and post test raw scores for each subtest and for the composite.

Descriptive statistics for the entire sample for the Written Expression composite score are as follows: Pre-test \( M = 81.64; \ SD = 33.392; \ \text{skewness} = -.764 \ \text{and kurtosis} = -.796. \) For the Writing Fluency subtest, \( M = 76.55; \ SD = 26.120; \ \text{skewness} = -.601 \ \text{and kurtosis} = -1.51. \) The skewness value indicates that the responses were close to the mean with some extreme values to the left. For the Writing Samples subtest, \( M = 92.09; \ SD = 34.527; \ \text{skewness} = -.535 \ \text{and kurtosis} = -.930. \) The Written Expression composite post-test \( M = 88.09; \ SD = 30.723; \ \text{skewness} = -.601 \ \text{and kurtosis} = -.151. \) The Writing Fluency post-test \( M = 85.55; \ SD = 26.745; \ \text{skewness} = -.779 \ \text{and kurtosis} = .126. \) The Writing Samples post-test \( M = 93.27; \ SD = 30.057; \ \text{skewness} = -.681 \ \text{and kurtosis} = -.783. \)
Table 1

Means and Standard Deviations for Assessment Instruments

<table>
<thead>
<tr>
<th></th>
<th>Thought Bubbles (TB)</th>
<th>Written Expression Composite (WE)</th>
<th>Writing Fluency Subtest (WF)</th>
<th>Writing Samples Subtest (WS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Condition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Sample (n=11)</td>
<td>.73 (.905)</td>
<td>81.64 (33.392)</td>
<td>76.55 (26.120)</td>
<td>92.09 (34.527)</td>
</tr>
<tr>
<td><strong>Post-Condition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Sample (n=11)</td>
<td>1.09 (.944)</td>
<td>88.09 (30.723)</td>
<td>85.55 (26.745)</td>
<td>93.27 (30.057)</td>
</tr>
<tr>
<td><strong>Pre Control</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 4)</td>
<td>.25 (.50)</td>
<td>87.50 (21.917)</td>
<td>84.25 (12.945)</td>
<td>94.00 (24.729)</td>
</tr>
<tr>
<td><strong>Post Control</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 4)</td>
<td>.50 (1.0)</td>
<td>82.50 (35.707)</td>
<td>89.25 (29.837)</td>
<td>78.25 (35.255)</td>
</tr>
<tr>
<td><strong>Pre Implementation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 7)</td>
<td>1.00 (1.00)</td>
<td>78.29 (39.777)</td>
<td>72.14 (31.482)</td>
<td>91.00 (40.935)</td>
</tr>
<tr>
<td><strong>Post Implementation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n=7)</td>
<td>1.43 (.787)</td>
<td>91.29 (30.723)</td>
<td>83.43 (27.067)</td>
<td>101.86 (25.452)</td>
</tr>
</tbody>
</table>
To answer the research questions a repeated measures analyses of variance (ANOVAs) with one between subjects factor – (condition) and one within subjects factor (pre-post) was used to analyze each of the variables. Although repeated measures ANOVAs typically are used with larger sample sizes, they were utilized in this study because this technique is designed to answer the research questions and the data, though from a small sample, were roughly normally distributed. The research questions are restated, followed by the data analysis.

1. Do students in a secondary alternative school setting who participate in the W&SC process view writing more favorably than peers who do not participate in the W&SC process, as indicated by pre and post test responses to Thought Bubbles (Zambo, 2006)?

A repeated measures analyses of variance (ANOVAs) with one between subjects factor – (condition) and one within subjects factor (pre-post) was conducted for the Thought Bubbles (TB) dependent variables: TB1 and TB2. These ANOVAs included post-hoc tests for the main effects (condition and pre-post) and their interaction (pre-post*condition). Results indicate no significant differences between pre and post testing for the entire group $f(10) = 4.281, p = .068$ with an effect size of $\eta^2_p = .322$; or between the W&SC versus the control group from pre to post; $f(10) = .296, p = .599$. Effect size $\eta^2_p = .032$. Though the difference for pre to post scores on Thought Bubbles for the entire group was not significant, the effect size is small to medium (Cohen, 1988).

2. Does the writing output of students in a secondary alternative school setting who participate in the W&SC process improve more than the writing of peers who do not participate in the W&SC process, as indicated by the Woodcock Johnson III
(WJ III) Written Expression Composite and Writing Fluency and Writing Samples subtests?

A repeated measures ANOVA with one between subjects factor (condition) and one within subjects factor (pre-post) was conducted for the written expression dependent variables: Written Expression composite (WEss1) and (WEss2) pre (1) and post (2); Writing Fluency pre (1) and post (2) (WFss1) (WFss2); and Writing Samples (WSss1) and (WSss2). These ANOVAs included post-hoc tests for the main effects (condition and pre-post) and their interaction (pre-post*condition). Results indicate no significant differences from pre to post for the WE composite score; $f(10)=.448, p=.520$, effect size of $\eta^2=.047$, or for the W&SC versus the control group from pre to post; $f(10)=2.270, p=.166$; effect size $\eta^2=.201$. Similar results were found for the Writing Fluency from pre to post; $f(10)=1.994, p=.192$, effect size $\eta^2=.101$, and for the W&SC versus control group form pre to post $f(10)=.297, p=.599$; effect size $\eta^2=.032$. Finally, similar results were also found for the Writing Samples pre to post; $f(10)=.136, p=.721$; effect size $\eta^2=.015$, and for the W&SC versus control group pre to post; $f(10)=4.029, p=.076, \eta^2=.309$. Though participants in the W&SC group did not perform significantly stronger than those in the control group, as a group they made larger gains on all three writing measures (Written Expression Composite and the two subtests); the effect size of the difference in the Composite was .201, a small effect per Cohen (1988) and the effect size for the difference in Writing Samples was .309 (between small and medium (per Cohen).

Given the significant attrition and resulting small sample size, it is potentially instructive to examine trends in individual student performance. Descriptive data for the seven students in the implementation group and the four students in the control group are
presented in Tables 2 and 3. Scrutiny of individual student performance indicates three of the seven students in the W&SC students showed a gain in their Thought Bubble score from pre to post and the scores of four stayed the same; one of the four in the control group showed a gain and the scores of the other three remained the same. The average gain in the Thought Bubble from pre to post for the implementation group was .42, while the average gain for the control group was .25. Of the seven students in the W&SC group, five made gains in their Written Expression composite score; of the four in the control group, two made gains. On the Written Expression composite, students in the implementation group on the average made a gain of 13 standard score points from pre to post while students in the control group on the average lost 5 standard score points from pre to post.

Table 2

*Descriptive Data for W&SC Participant Group for All Assessment Instruments*

<table>
<thead>
<tr>
<th>Participants</th>
<th>Gender</th>
<th>Identified Disability</th>
<th>Age</th>
<th>(TB_1)</th>
<th>(WE_1)</th>
<th>(WF_1)</th>
<th>(WS_1)</th>
<th>(TB_2)</th>
<th>(WE_2)</th>
<th>(WF_2)</th>
<th>(WS_2)</th>
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<tbody>
<tr>
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<td>15</td>
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<td>83</td>
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<td>100</td>
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<td>109</td>
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<tr>
<td>2</td>
<td>Male</td>
<td>Emotional Disturbance</td>
<td>15</td>
<td>2</td>
<td>42</td>
<td>26</td>
<td>80</td>
<td>2</td>
<td>76</td>
<td>62</td>
<td>101</td>
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<td>3</td>
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<td>17</td>
<td>2</td>
<td>104</td>
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<td>96</td>
</tr>
<tr>
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<td>0</td>
<td>112</td>
<td>93</td>
<td>127</td>
<td>1</td>
<td>100</td>
<td>99</td>
<td>101</td>
</tr>
<tr>
<td>5</td>
<td>Male</td>
<td>Intellectual Disability</td>
<td>18</td>
<td>2</td>
<td>6</td>
<td>30</td>
<td>4</td>
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<td>18</td>
<td>0</td>
<td>92</td>
<td>82</td>
<td>105</td>
<td>1</td>
<td>108</td>
<td>91</td>
<td>122</td>
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</table>

*Note: N=7*
Table 3

Descriptive Data for W&SC Control Group for All Assessment Instruments

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>None</th>
<th>15</th>
<th>0</th>
<th>67</th>
<th>71</th>
<th>73</th>
<th>0</th>
<th>81</th>
<th>102</th>
<th>60</th>
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<tbody>
<tr>
<td>10</td>
<td>Male</td>
<td>None</td>
<td>15</td>
<td>0</td>
<td>67</td>
<td>71</td>
<td>73</td>
<td>0</td>
<td>81</td>
<td>102</td>
<td>60</td>
</tr>
<tr>
<td>11</td>
<td>Male</td>
<td>None</td>
<td>16</td>
<td>0</td>
<td>87</td>
<td>81</td>
<td>99</td>
<td>0</td>
<td>78</td>
<td>78</td>
<td>86</td>
</tr>
<tr>
<td>12</td>
<td>Male</td>
<td>None</td>
<td>17</td>
<td>0</td>
<td>78</td>
<td>83</td>
<td>77</td>
<td>0</td>
<td>42</td>
<td>54</td>
<td>43</td>
</tr>
</tbody>
</table>

*Note: N=4*

Post Hoc Analysis

Though findings were not significant (presumably due to small sample sizes), obtained effect sizes support the idea of more positive change in the W&SC group than the control group on the Written Expression composite and the Writing Samples subtest. The Writing Samples subtest captures the ability to compose sentences and requires some critical and inferential thinking. After reviewing the data, it became clear that a closer look at students’ writing was needed. The participants did make gains in their writing abilities, as shown in Table 2. The trend line associated with the Written Expression and Writing Samples gains for W&SC versus control is graphically demonstrated in Figures 2 and 3. In order to more fully understand this development a closer examination of the artifacts generated from the study was indicated.
Figure 2
Estimated Marginal Means of the Written Expression Composite
Figure 3
Estimated Marginal Means of the Writing Samples Subtest
Three W&SC participants’ artifacts were examined post hoc. The three participants were selected after reviewing the artifacts and noting the increase in complexity of their connections and their timeline pieces. Two of the participants selected were students identified as requiring special education services, because as a special educator my first interest is always with marginalized students. The first participant selected was Participant Seven, referred to hereafter as Cole. The second participant selected was Participant Two, hereafter called Ethan. The third participant selected is Participant Five, known as Dylan. All of the participants were given pseudonyms so that their identities are protected.

The students were selected for the post hoc analyses based on their gains throughout the process. Each student increased their writing ability as demonstrated by their scores on the Written Expression Composite and the Writing Samples Subtest. A rubric, created by Dr. Deborah A. Wooten, was used to more closely examine and score the connections for each of the three participants. The participants created between eight to 12 connections and each generated at least one Timeline piece. For this post hoc analysis, two connections and one Timeline piece were analyzed for each participant.

**Overview of W&SC**

In order to understand how each of the students progressed, the basic steps for the W&SC process are listed below. In each session these steps were followed and the students presented their connections. The students chose the book to be read aloud, and guessed the birth year if it was a biographical text. The person who guessed the date correctly had the option of writing the categories and students’ names on the 25 X 30 inch chart paper, as well as affixing the connections with tape.
**Basic Steps for Writing and Sharing Connections:**

1. Introduce biographical/historical picture book
2. Implement timeline activity
3. Provide students access to 3x3 sticky notes
4. Read-aloud biographical/historical picture book
5. Write Connections (students’ responses to book read aloud)
6. Each student stands next to the instructor and shares his or her connection with the class
7. Before students return to their seats, each connection is categorized (e.g., self, book, famous person, family). The connections are added to the chart paper and labeled according to their specific category.
8. A student volunteers to create a timeline piece to be hung on the classroom timeline. These pieces include the name of the person and their birth and death years or event from the book that was read aloud.

**W&SC Rubric**

The W&SC rubric has four categories and students can score a maximum of four points in each category, making 16 the highest score. The categories are Content, Writing Style/Organization, Mechanics, and Presentation/Sharing. The scoring is as follows: Exemplary, Good, Needs Improvement, and Does Not Meet the Standard. In order for a student to score as exemplary, the student must explain why the connection is made and must also move beyond self or family and connect to another book or subject area content. The connection must also be well organized and written with rich vocabulary,
## Table 4

**W&SC Process Rubric**

<table>
<thead>
<tr>
<th>Category</th>
<th>4 Points</th>
<th>3 Points</th>
<th>2 Points</th>
<th>1 Point</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content (Writing)</strong></td>
<td>Exemplary</td>
<td>Good</td>
<td>Needs Improvement</td>
<td>Does not meet the standard</td>
</tr>
<tr>
<td></td>
<td>Student’s connection explains “why” or “because” while containing one or two connections. Connections should be about history, famous people, books, or other content. Student includes “because” in addition to “just like” or other words similar words to convey their connection. (Basic sample based on the book <em>Sequoyah</em> by Rumford: Sequoyah reminds me of Noah Webster because he created the dictionary to help people learn about words just like Sequoyah invented the Cherokee alphabet that helped people learn to read and write too.</td>
<td>Student’s connection explains “why” or “because” Student connects beyond self and family.</td>
<td>Student has at least one connection, but does not explain “why” or “because” fully.</td>
<td>Student connects to the book in a manner that the listener would have to know the book in order to realize that the student has connected to the book.</td>
</tr>
<tr>
<td><strong>Writing Style/Organization</strong></td>
<td>Connection is well organized and clearly written (articulate) with rich vocabulary.</td>
<td>Connection is understandable and organized.</td>
<td>Connection is understandable, but the student’s thoughts are not organized</td>
<td>Connection is not understandable or organized.</td>
</tr>
<tr>
<td><strong>Mechanics</strong></td>
<td>Student uses correct punctuation, spelling, and grammar.</td>
<td>Student makes minor errors in punctuation, spelling, and/or grammar.</td>
<td>Student made 3 errors in punctuation, spelling, and/or grammar.</td>
<td>The student made no attempt to punctuate or use correct grammar, spelling errors occurred throughout the student’s writing. It is difficult to reread and understand the connection.</td>
</tr>
</tbody>
</table>
use correct punctuation, spelling and grammar. Finally, the student must share the connection in a clear voice that reflects understanding and pride in his or her work. The last category is somewhat subjective, but when working with students, it is generally apparent who is proud of their work and who is not.

**Post Hoc Analysis Steps**

In order to more thoroughly understand the gains in students’ WJIII Written Expression Composite Scores and their Writing Samples score, three students were selected for further analyses. These students, Cole, Ethan, and Dylan, produced artifacts over the course of the study period. Two connections and a Timeline piece for each student were examined. The connections were scored using the W&SC’s rubric and the Timeline pieces were examined for content. Below are the findings.

**Cole**

Cole is a Caucasian male who was 17 years old when the study began, but turned 18 before the conclusion of the study. He appeared to have average intelligence and was sent to the alternative school due to a zero tolerance infraction at his base school. At the beginning he was not enthusiastic about participating in the study, but when he discovered that he could interact with his classmates he became more eager.

From the beginning his connections were of higher quality than those of many of his classmates. Cole’s first connection was based on *Wilma Unlimited: How Wilma Rudolph Became the World’s Fastest Woman* (Krull, 2000). In this connection he related Wilma Rudolph to the movie, “Forrest Gump,” as can be seen in Figure 4.

Using the W&SC rubric, Cole’s connection scores 13 out of a possible 16 points. In content writing, he scores three out of four points because he explains “why” or
“because” and connects beyond self and family. In Writing and Style, he also scores a three out of four because his connection is understandable and organized. In the Mechanics category, he scores a four because he uses correct punctuation, spelling, and grammar. Finally, in Presentation, Cole scores a three out of four. In this category he used appropriate voice level and spoke clearly.

Figure 4
Cole’s First Connection

Cole’s connection states,

“This story reminds me of Forest Gump because she wore leg braces like he did when he was a kid. Also she became a runner like Forest ran across the country.”

Cole’s Timeline piece was created entirely on the computer and was based on Susan B. Anthony. The W&SC session featured the book, *What To Do About Alice?: How Alice Roosevelt Broke the Rules, Charmed the World, and Drove Her Father Teddy*
She was brought up in a Quaker family with long activist traditions.

After teaching for fifteen years, she became active in temperance. This experience, and her acquaintance with Elizabeth Cady Stanton, led her to join the women's rights movement in 1852.

Ignoring opposition and abuse, Anthony traveled, lectured, and canvassed across the nation for the vote. She also campaigned for the abolition of slavery, the right for women to own their own property and retain their earnings, and she advocated for women's labor organizations.

In 1900, Anthony persuaded the University of Rochester to admit women.

**Figure 5**
*Cole’s Timeline Piece*
Crazy! (Kerley, 2008). Because Alice Roosevelt was a suffragette, feminism was one of the categories the class created. If famous people were mentioned during the sharing process, then a student would make a Timeline piece for that person. In this instance, Cole found a picture with the dates of Anthony’s life and listed some of her accomplishments. The inside included where she was born, her religion, her work with temperance, and Elizabeth Cady Stanton, as well as her campaigns for abolition, labor unions, educational reform, and women’s rights. While there is no rubric for the Timeline pieces, Cole’s piece was thorough, informative, and well written, as can be seen in Figure 5.

As can be seen, Cole’s Timeline piece fulfilled the expectations that were originally given to the class. The same can be said of Cole’s final connections. The participants were encouraged to write more than one connection as the sessions progressed. In the final meeting for our sessions, Cole produced two connections that earn scores of 14 out of 16 on the W&SC rubric for his first connection and 16 out of 16 for the second. Each of the connections related why he connected to the story and fully explained the connection. The connections were about history or famous people, so he was thinking beyond himself and his immediate family, all the connections were written with correct spelling, punctuation, and grammar. And finally, all three were presented in a clear voice, which denoted pride in his work. See Figure 6.

When examining at Cole’s WJII results, his standard score improved from a 92 to a 108 on the Written Expression Composite. On the Writing Samples subtest his score improved from 105 to 122. While this gain is not as dramatic as some of the other participants, it was clear from the outset that he did not have as far to go to remediate
This story reminds me of Noah's Arc because nobody believed Noah of his beliefs like how nobody believed Christopher Columbus of his.

This story reminds me of the pilgrims because they came over to America for the Columbus.

Figure 6
Cole’s Final Connections
academic deficits. Still, he did make a 16 point standard score gain on the Written Expression Composite and a 17 point gain for the Writing Samples.

Cole’s connections state,

“This story reminds me of Noah’s Arc because nobody believed Noah of his belief like how nobody believed Christopher Columbus of his.”

And,

“This story reminds me of the Pilgrims because they came over to America too like Columbus.”

Figure 7
Cole’s Score
Ethan

Ethan is a Caucasian male identified as having an emotional disturbance. At the time of the study, he was 15 years of age. At the outset, he had no interest in participating in the W&SC sessions, but his teacher had sent the IRB permission letter home and his parents wanted him to participate. He took the pre tests, but obviously did not feel comfortable during the first few sessions. For this reason, while he was present for all sessions, he did not actively participate until the third week. He was withdrawn and did not volunteer, so the class carried on until he felt comfortable enough to join.

After just a few weeks, he seemed to have decided it was a safe environment and no one would ridicule any of his responses. He became an active part of the group and enjoyed choosing the books that were read, as well as guessing the year that the person was born. While he never progressed too far in the sophistication of his connections, the fact that he felt safe enough to participate indicated he had made great gains.

Ethan’s first connection was to *Starry Messenger: The Story of Galileo Galilei*, (Sis, 1990). He scores eight out of 16 on the rubric His content did not explain why he connected, he had spelling and grammar mistakes, his thoughts were unorganized, and when he presented his connection he lacked pride in his work. See Figure 8.
Ethan’s first connections states, “This story reminds me of astronomy.”

Ethan did not join in the creation of Timeline pieces as enthusiastically as others in his class did. In going through the artifacts, only one Timeline piece was created by him. Yet, he did follow the basic expectations that the class had been given. He found information for the Timeline piece for Erika’s Story (Zee, 2003). He focused on the Holocaust and found facts that were informative and interesting. It was clear that using the W&SC process had helped him to explore an area of interest. In addition, this process strengthened his self-confidence so that he was comfortable to share his research about the Holocaust with his peers. See Figure 9.
Ethan’s final connection was to *Sarah Emma Edmonds was a Great Pretender: The True Story of a Civil War Spy*, (Jones, 2011). Even after developing a more positive attitude about the W&SC process, Ethan did not develop a more holistic view of education and seemed to have difficulty connecting new information to previously learned subject matter. His connection categories only centered on his family, media, or himself. Using the rubric, Ethan’s final score is a 12. While he did explain his reasoning, his connection was about his family. He had several mechanical errors, although his thought was organized and his presentation was in a normal speaking voice, and reflected pride in his work. See Figure 10.
Ethan’s connection states,

“This story reminds me of a story that my mom told me and the reason is because this girl’s parents tried to force her to marry a man she didn’t want.”

While Ethan did grow in self-confidence, became a more independent thinker and started learning how to validate his ideas, he took time to adjust to learning in a community that fostered respect and encouraged creative thought. This transition occurred over time because his contributions were valued and validated by himself and his peers. His first reaction to the W&SC process was not positive, but he slowly came
around once he saw that it was a safe, constructive environment where everyone’s
contributions were accepted.

    Ethan’s pre test Written Expression Composite score was 42 and post test score
was 76, a gain of 34 standard score points. His pre-test Writing Samples score was 80 and
he scored 101 on the post-test, a gain of 21 standard score points.

![Figure 11](image)

**Figure 11**

*Ethan’s Scores*

**Dylan**

Dylan, identified as having an intellectual disability, is a Caucasian and was 18
years old at the time of the study. His pre-test data shows that he scored a 06 on the
Written Expression Composite, with a 04 on the Writing Samples subtest.

    When the study began, not only were his pre test responses difficult to interpret,
but also the connections at the outset of the study. The first book that was read was,

*Moses: When Harriet Tubman Led Her People to Freedom* (Weatherford, 2006). As can
be seen in Figure 12, it is almost impossible to understand his connection when looking at the written text. His writing skills were minimal. His spelling and knowledge of grammatical conventions were almost non-existent. He had difficulty forming the simplest sentences.

When spoken his connection was,

“Harriet Tubman, she forded the river. She stood with them because she loved her God and she would share her God with them.”

The category for this connection is religion. Dylan scores a four for presentation on the W&SC rubric. Without the opportunity to share his connection, no would have understood what he was saying. Yet, he was the student who was the most excited to participate in the W&SC sessions when we began.
Dylan’s specialty became creating Timeline pieces. As was mentioned in Chapter 3, each Timeline piece was to have a picture and the birth and death dates on the front and the inside was to have five facts. These pieces were prepared after the book had been read, during free time before the next session. At the beginning of each session, the students responsible for creating the pieces would present them to the class, including the facts they had found, and hang them on the timeline. While Dylan’s writing skills were minimal, his ability to research and find facts became a point of pride. As can be seen in Figure 12, he still had some problems in his writing, but over time he did improve.

In Figure 13, Dylan created his Timeline piece based on the book, *Benjamin Franklin: Writer, Inventor, Statesman* (Hill, 2004). He included pertinent facts about Franklin, as well as including some of his inventions.

![Dylan’s Timeline Piece](image-url)
Most of what Dylan had written on his Timeline piece was copied from information he found on the Internet; over time he became more confident and expanded the number of facts he found. He was able to help his classmates find facts for their pieces and became more assured of his abilities and shared more during the W&SC process. Although Dylan’s scores are low according to the W&SC rubric, it seemed important to include him because of his intellectual disability and the gains he did make. When based on where he started, Dylan’s gains were worth noting because of the brief number of weeks in the study. His Written Expression Composite rose to 32, compared to 06 during on the pre test. His Writing Samples Score went from 04 to 52.

Dylan’s last connection was based on the book, *The Brothers Kennedy: John, Robert, and Edward* (Krull, 2011). As can be seen in Figure 15, his connection category was family. He scores a five on the W&SC rubric because he received a four for presentation and a one for explaining his reasoning.

![Dylan’s Last Connection](image-url)
When Dylan verbally presented his connection, he said

“This story reminds me of my dad brought me home. We were seasick and still he told me to keep my cool and tow the boat.”

While this connection is still lacking in terms of grammatical mechanics, spelling, and sophistication of the category it is still several steps further along than where Dylan began. Because the intervention took place over a two-month period, the time spent was worthwhile, especially when considering his first connection, which was incomprehensible.

![Rubric Score Graph]

**Figure 15**
*Dylan’s Scores*

**Post Hoc Summary**

As has been stated the statistical analyses yielded disappointing results, but the Post Hoc analyses indicates that students did make advances in their abilities to effectively communication through writing. Dylan, with a diagnosis of intellectual
disability, was the lowest performing student in the group, but was able to raise his scores and become more competent with the written word. His ability to research topics and create Timeline pieces gave him a sense of efficacy and helped him find a niche where he truly excelled. Dylan’s growth, while not as great as some, was strong when one considers the amount of time the process was used and where he started. His identification as a student with an intellectual disability needing special education services means that his intelligence quotient is significantly below average. From the example of his first connection it is obvious that he could not write comparably, nor make the progress one would expect for an 18 year old.

Ethan’s progress, while not as considerable as Danny’s, was still impressive when one considers the lack of motivation he displayed at the onset. Ethan did not become an excited student, but there were signs that if the process had been continued he might have begun to take a more active approach to his schoolwork. His diagnosis of having an emotional disability points to his lack of motivation and academic success being intertwined. For him to have overcome his reluctance to participate in a group activity where he had to speak in front of a group was significant. While his rubric scores were not stellar, when one considers where he began, it is obvious that some improvement occurred.

Cole’s academic journey had not been as fraught with obstacles as the other two students. While he was a capable student who had made a mistake, his participation in the process did seem to enhance his ability to see education more holistically and to improve his ability to write expressively. While he may have been skeptical at the beginning of the process, by the end he was a willing participant who contributed a great deal to the group.
Overall, the students who participated in the W&SC process did make gains that will stand them in good stead in the future. The ability to think in a more logical fashion and to question ideas more thoroughly will help them as they move through secondary school and beyond. While it is doubtful that Dylan could have filled a job application before the process, there is hope that with continued work, he could become self-supporting. The point of the intervention and this study was to help secondary alternative school students gain choices to avoid the school to prison pipeline. In the case of these students, it appears that the W&SC process was a success.
Chapter 5

Discussion

The purpose of this study was to investigate the effects of implementation of an academic intervention (W&SC) with secondary students in an alternative school setting. The W&SC process was chosen because previous research indicates it tends to engage students and has the potential to foster critical thinking, higher order thinking and to develop writing skills (Wooten, 2009). The rationale for this study includes the lack of academic research with students in alternative school settings population (Griffith, et. el., 2009; Lane & Menzies, 2010), the growing number of students who have been classified in this population (Carver, Lewis, & Tice, 2010), the societal repercussions (Carson, 2014), and the hope of establishing effective remediation for students who already in the ‘school to prison pipeline” (Wald & Losen, 2003). In order to determine if implementation of W&SC was successful, the research instruments chosen were Thought Bubbles (Zambo, 2006) and the Woodcock Johnson III (Woodcock, et al., 2001) Written Expression Composite, which consisted of the Writing Fluency subtest and Writing Samples subtest.

Significant attrition resulted in very small samples size and reduced the power of the study. Upon reflection, though the findings are disappointing in some respects, some positive behaviors were noted during the implementation period. While the students began with a decided lack of interest, as we progressed in the W&SC process the participants became engaged and enthusiastic about each session. The students in the control group began to ask when it would be their turn to participate, indicating positive comments were being expressed by those students who were participating. While their
interest was encouraging, there was a possibility that the control group knowing about the process could taint the outcome. This idea is explored more thoroughly in the Limitations section. For the participants the ability to work with their peers, the choice of subject matter, the contributions each student could provide to their learning community, and the encouragement each student received apparently bolstered their desire to participate.

**Findings**

As has been noted the research questions were answered using various quantitative instrumentation. Mean difference comparisons indicated no differences in attitudes about writing from pre to post for the W&SC versus comparison groups. The small effect size indicates a small but potentially meaningful change in attitudes from pre to post for the participant group, however. Given that there are very limited reliability data and no validity data for the Thought Bubbles, we cannot conclude if any meaningful change in attitudes occurred, though student attitudes toward writing across both groups improved slightly and this could be a function of alternative school attendance. As was noted in the previous chapter, three of the seven W&SC students’ writing attitudes scores improved and amount of improvement was greater for the W&SC group versus the control group.

Mean difference analyses indicated no significant differences in writing skills from pre to post for the entire group, nor as a function of participation in W&SC. However, the small (Written Expression Composite) and small to medium (Writing Samples subtest) effect sizes indicate a gain in writing skills from pre to post for those in the W&SC group versus those in the control group (who actually lost ground in writing from pre to post). Of the two WJ III subtests that make up the Written Expression
Composite, Writing Samples requires students to think critically, to make inferences, and, in some cases, to connect two ideas.

The actual written artifacts of the process seem to show a different outcome than what can be seen in the statistical analysis. Also, the W&SC participants’ results indicated a gain of pre to post of 13 standard score points on the Written Expression Composite.

With the disappointing outcome of the statistical analyses, one might assume that this study has no relevance and that the findings will not offer new insights that could lead to remediation with alternative school students. However, different instrumentation or a larger sample set might show a different outcome, so it would seem that the lessons learned from this study have more to do with study design than with the actual intervention.

Based on post hoc findings and anecdotal observation, the increase in student interest, their improved ability to connect curriculum content to the books read aloud, and the number of written connections made with increasing sophistication show that students can and will learn when presented with content that allows them to explore it in a meaningful way. The students demonstrated this by the artifacts that were produced during the implementation of W&SC.

When looking at the artifacts produced by Cole, Ethan, and Dylan and the pre and post standard scores associated with each, there is evidence that the W&SC process did engage their attention and that their writing ability was improved as a result. While the skill levels of each of the students was very different, this process was able to meet each at their own level and support their learning. While the W&SC process might not be ideal
for more advanced secondary students of the same age, for students that are at grade level or below it could be beneficial by helping students increase their critical thinking skills, seeing how to use each classes’ skill sets in a more holistic way, and connecting the curriculum in ways that the students had not considered in their previous educational experiences.

Summary

The three students who were examined in the post hoc analyses all made gains that are attributable to the W&SC process. The process is designed to activate background knowledge, build and strengthen community/self-confidence, and develop higher level thinking skills. It can be seen from the gains made that these goals were realized. Another benefit of the process is that it can be differentiated so that all students are actively involved in the learning process, including student receiving special education services. The process meets students where they are and supports their learning in such a way that the skill deficits will not appear to be as obvious to their peers. Other benefits that the process offers are that it employs students’ imagination, encourages students to learn about one another, exercises memory skills, and supports content area learning. The wide range of high interest books that are fact-based means that almost any academic area can be highlighted and explored. The book options to support student interest as well as academic attainment are wide and being expanded with the publication of each new fact-based text.

There are other benefits that are derived from the process, but the most important aspect for this population is that it allows them an opportunity to exercise choice and validates their thinking in a non-threatening environment. Secondary alternative schools
are institutions that are designed to punish students for infractions at their base schools. With the emphasis on behavior management, most alternative school models do not encourage group activity, nor freedom of choice for the students. The use of an intervention like the W&SC process, which provides scaffolding for all learners, also provides an opportunity for social interaction while learning. The ability to safely stand in front of their peers and present their thoughts in this way may be an experience that none of the students had ever had before. This type of experience validates the student’s feeling of efficacy and can help students improve their self-concepts, if used on a consistent basis.

When looking at Figures 2 and 3 included in Chapter 4, it can be seen that students who participated in the W&SC process made gains that their counterparts in the control group did not. Because the control group and the implementation group came from the same pool of students, sharing the same teachers, it must be concluded that the difference was the implementation of the W&SC process. While this intervention is not a panacea for all students in alternative schools, it seems clear that real learning did take place in the classrooms where the W&SC process was implemented.

**Limitations**

The limitations of this study are most apparent in the number of actual participants ($N=7$) in the intervention and also the control group ($N=4$). During the pre-testing portion of the study 60 students were tested. Students entered and withdrew during the time W&SC was implemented. At post-test, only 12 complete sets of data were available, $N=4$ control and $N=8$ implementation participants. However, one of the W&SC participants had to be excluded due to his evident lack of interest during the pre
test period; that is, he earned standard scores of 0 on the writing tests, due to lack of compliance when taking the pre-test. While administrators and teachers at the alternative school were cooperative and encouraging during the study, the routine operation of this type of institution means that the population is fluid. The number of students who participated in both groups exemplifies the transient nature of the population.

Another limitation was how the intervention was administered. The original intent of the researcher was to instruct the teachers responsible for these classes on how to use the intervention and then to ensure that the intervention was used with fidelity. Due to the health concerns of one of the teachers, this was not possible, so it was necessary to adjust how the intervention was implemented. Fidelity checks were employed (by Dr. Deborah Wooten) to ensure the intervention was presented correctly at 99%. Still, part of the goal was to allow the teachers to add the intervention to their arsenal of strategies and this was not possible.

Another potential limitation was that while the enthusiasm of the participating students can be considered a plus, there was the possibility that students who were part of the control group could have increased their efforts in order to compete with those students who were participants. As has been mentioned the students in the control group asked when it would be their turn to participate, so in fact the participating students and the control group students did discuss the process. If the groups had been larger, the different members of the groups could have become competitive leading to skewed data. This, in fact, did not seem to occur, but the possibility was present and has to be seen as a limitation.
Finally, another limitation was the sensitivity of the instruments chosen to measure the data. While these instruments would have been acceptable for a larger population, the final outcome shows that when working with this population it is extremely important to verify how long each student is supposed to stay at the school in order to adjust how the material is presented and also when testing should take place.

**Implications for Educators**

The W&SC process is an intervention that, when used with fidelity, appears to increase students’ expressive writing ability. The safe, respectful environment that is cultivated in the W&SC process, allows students, who normally are reluctant to share, an opportunity to become more comfortable in academic situations. The process promotes engagement and has built in scaffolding to support student growth in making connections, critical thinking, and articulating these in writing. This includes supports for students whose academic achievement is not always commensurate with others that share their classrooms. In this way, not only students who receive special education services, but also students who are low achieving but do not reach the threshold of need that is necessary to obtain special education eligibility, can see growth and become more motivated to achieve.

For administrators, this process enhances cross-curricular instruction, which can augment the students’ abilities to understand that while the subjects taught are in discrete academic areas that the content can and should be used in a more holistic way. In other words, students will begin to see that the skills taught in one subject area are also needed to successfully master content in the other classes in which they participate. With the heavy emphasis on testing and accountability that is currently dominating the educational
landscape, this would support progress for all students. Since the primary responsibility of administrators is to support the learning of the students in the buildings in which they lead, the use of the W&SC process could encourage learners who are less motivated due to their self-perceived inadequacies.

**Future Research**

While the statistical results of this study were not promising, it can be supposed that the main reason was the lack of a large enough sample size. For this reason, any future research conducted with this population needs to occur in more than one school and may need to be looked at on a regional or statewide level. Another option would be to ensure that each student who took the pre-test would have a post test given before he or she left the school. This would require better communication with administration about the actual amount of time the student was required to attend the alternative school. In this way, the researcher could plan the intervention and testing sessions to accommodate those students whose stay at the alternative school was of shorter duration.

If a researcher is unable to find more than one school, different testing methods and instrumentation should be considered. Single subject design, maybe using changing criteria, could be more sensitive to changes that a participant might experience. If qualitative data were to be utilized then narrowing the focus to case study participants might yield more information, although this type of research is not generally considered as conclusive as quantitative data, especially to those governmental agencies, Institute of Educational Sciences (IES) or National Science Foundation (NSF), that award grants for research (U.S. Department of Education, 2014).
Another area to be examined would be the difference between rural and urban students. While the location of the alternative school was mentioned as a rural setting, this was not a primary concern of the researcher. Yet, there is a difference between populations in rural and urban settings, so it would be an area of interest. These differences could be explored due to the different ethnic, socioeconomic, and cultural make-up of the populations.

While looking at the impact of the intervention on a larger scale would be desirable, another aspect would be the impact on student behavior and how, if the students were successful, this would affect their transition back to their base schools. This could be viewed through the lens of student behavior, recidivism, teachers’ perception of the students or simply looking at the number of office referrals once returned to their home schools.

Another avenue of research could be the amount of time the intervention was used with the population. If the invention was used for a school year, rather than for a semester the number of participants might be increased, as well as an opportunity to gather more useful data as to its’ efficacy. This would also demand more sensitive instrumentation to assess any changes or the development of an instrument to quantify what is found in the connections and/or Timeline pieces.

There is also the possibility of examining students’ ability to connect different areas of the curriculum so that their motivation is increased. Since the W&SC process builds upon itself, as well as accessing prior student knowledge this could be an avenue to explore in order to increase interest in all subject areas. This specific population is generally assumed to have low motivation, but the ability to successfully complete the
required artifacts could increase students’ perception of their own efficacy, which could be generalized to other parts of the curriculum. This would require more sensitive instrumentation to measure student motivation, as well as careful attention to the connections and Timeline pieces and would need to be cross-curricular in order to measure any perceived gains.

Finally, it might be possible to develop a more comprehensive rubric that would measure the gains or lack thereof in the different connections and/or the Timeline pieces. This could be used in conjunction with a single subject design with changing criteria.

**Conclusions**

In conclusion, alternative school students comprise a truly difficult population to work with and to research. The transitory nature of the population makes it difficult to research interventions that would help remediate their academic deficits. Still, the effort is worthwhile and the lack of quantitative results, while off-putting, does not mean that efforts should not be used to improve the populations’ opportunities and ability to become productive citizens. While the statistical output does not show unequivocally expected results, what cannot be seen was the enjoyment the participants felt during the sessions, nor the effort the students put into their connections. The growth of the students’ levels of connection and their ability to relate to other subject matter were not measured directly. Their involvement in developing the timeline and the work done to enhance their timeline pieces were also not noted, but should be mentioned because this population of students is not known for their motivation and enthusiasm. During the intervention many of the least willing to participate at the beginning became eager to contribute while the process was occurring. While not statistically significant, a real
measure of success was the impact the learning experience had on the students. This could be observed in the depth and sophistication that the connections came to contain and with the complexity of some of the Timeline pieces. These tasks required skills that many of the students did not have, but acquired throughout the implementation period. The growth that Cole, Ethan, and Dylan exemplified demonstrates that like all students, secondary alternative school students want to learn. When presented with engaging material, offered in a way that respects their abilities and does not emphasize their academic deficits, these students can and will make gains.
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Children’s Literature Cited


Appendices
## Appendix B

### W&SC Procedural Fidelity

Date: ________________________________   Time: ________________________________

Teacher: ______________________________   Observer: ______________________________

### Notes/Comments

<table>
<thead>
<tr>
<th>Step</th>
<th>Observer Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teacher introduces book to students</td>
<td></td>
</tr>
<tr>
<td>2. Teacher reads book aloud to students</td>
<td></td>
</tr>
<tr>
<td>3. Teacher shares timeline entry and assigns a student to personalize it</td>
<td></td>
</tr>
<tr>
<td>4. Teacher shares their connection with students</td>
<td></td>
</tr>
<tr>
<td>5. Teacher or student pass out sticky notes</td>
<td></td>
</tr>
<tr>
<td>6. Teacher directs students to write down their connections</td>
<td></td>
</tr>
<tr>
<td>7. Teacher reminds the students to include supportive language such as “because” and “just like”</td>
<td></td>
</tr>
<tr>
<td>8. Teacher provides time for students to complete connections</td>
<td></td>
</tr>
<tr>
<td>9. Teacher calls on each student to come to the chart paper to share his/her connection</td>
<td></td>
</tr>
<tr>
<td>10. During connection sharing, teacher provides guidance and reinforcement for each student</td>
<td></td>
</tr>
<tr>
<td>11. Teacher guides each student to categorize his/her connection</td>
<td></td>
</tr>
<tr>
<td>12. Teacher directs students to create entries for the Student Driven Timeline</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>% of procedural fidelity:</td>
</tr>
</tbody>
</table>

Notes/Comments
### Appendix C

#### Valued Voices: Writing & Sharing Connections Scoring Rubric

<table>
<thead>
<tr>
<th>Category</th>
<th>4 Points Exemplary</th>
<th>3 Points Good</th>
<th>2 Points Needs Improvement</th>
<th>1 Point Does not meet the standard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content (Writing)</strong></td>
<td>Student’s connection explains “why” or “because” while containing one or two connections. Connections should be about history, famous people, books, or other content. Student includes “because” in addition to “just like” or other words similar to convey their connection. (Basic sample based on the book <em>Sequoyah</em> by Rumford: Sequoyah reminds me of Noah Webster because he created the dictionary to help people learn about words just like Sequoyah invented the Cherokee alphabet that helped people learn to read and write too.</td>
<td>Student’s connection explains “why” or “because” Student connects beyond self and family.</td>
<td>Student has at least one connection, but does not explain “why” or “because” fully.</td>
<td>Student connects to the book in a manner that the listener would have to know the book in order to realize that the student has connected to the book. Student makes a comment about the story.</td>
</tr>
<tr>
<td><strong>Writing Style/Organization</strong></td>
<td>Connection is well organized and clearly written (articulate) with rich vocabulary.</td>
<td>Connection is understandable and organized.</td>
<td>Connection is understandable, but the student’s thoughts are not organized</td>
<td>Connection is not understandable or organized.</td>
</tr>
<tr>
<td><strong>Mechanics</strong></td>
<td>Student uses correct punctuation, spelling, and grammar.</td>
<td>Student makes minor errors in punctuation, spelling, and/or grammar.</td>
<td>Student made 3 errors in punctuation, spelling, and grammar.</td>
<td>The student made no attempt to punctuate or use correct grammar, spelling errors occurred throughout the student’s writing. It is difficult to reread and understand the connection.</td>
</tr>
<tr>
<td><strong>Presentation/ Sharing</strong></td>
<td>Student speaks fluently, using appropriate voice level, shows pride in work.</td>
<td>Student speaks clearly, uses appropriate voice level.</td>
<td>Inaudible voice level and/or not fluid. Needs support when reading their connection aloud.</td>
<td>Student refuses to share his/her connection (even when aided by the teacher).</td>
</tr>
<tr>
<td><em>(When applicable)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Vita

Laura K. Kildare was born in Burlingame, California to John R and Peggie H. Kildare. At the age of three, she and her mother returned to Tennessee where they settled in the Knoxville environs. Laura graduated from Central High School in Knoxville and moved to Nashville and attended Middle Tennessee State University graduating in 2000. Although she had planned to go to law school, that changed after she spent several months teaching in South Korea. After returning to the United States, Laura once again moved back to Knoxville in order to pursue a teaching career. She entered the University of Tennessee to become certified and obtained her Master’s of Science degree in Special Education in 2007. After a few years teaching, Laura realized that she wanted to pursue a doctorate in Special Education and returned to The University of Tennessee.