University of Northern Iowa UNI ScholarWorks

Dissertations and Theses @ UNI

Student Work

2010

Do pull-out programs create a mirage of long-term results for atrisk youth?

Varotta Mi'Chele Johnson University of Northern Iowa

Let us know how access to this document benefits you

Copyright ©2010 Varotta Mi'Chele Johnson

Follow this and additional works at: https://scholarworks.uni.edu/etd

Part of the Educational Methods Commons, and the Special Education and Teaching Commons

Recommended Citation

Johnson, Varotta Mi'Chele, "Do pull-out programs create a mirage of long-term results for at-risk youth?" (2010). *Dissertations and Theses @ UNI*. 451. https://scholarworks.uni.edu/etd/451

This Open Access Thesis is brought to you for free and open access by the Student Work at UNI ScholarWorks. It has been accepted for inclusion in Dissertations and Theses @ UNI by an authorized administrator of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

Offensive Materials Statement: Materials located in UNI ScholarWorks come from a broad range of sources and time periods. Some of these materials may contain offensive stereotypes, ideas, visuals, or language.

DO PULL-OUT PROGRAMS CREATE A MIRAGE OF LONG-TERM RESULTS

FOR AT-RISK YOUTH?

An Abstract of a Thesis

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Educational Specialist

Varotta Mi'Chele Johnson

University of Northern Iowa

July 2010

ABSTRACT

Educators and researchers cannot afford to ignore the achievement gap between at-risk students and their counterparts. The review examines educational practices for this targeted population. Historically, educational experts have supported the belief that teaching in isolated settings is one of the most effective practices for improving student achievement. Smaller class sizes are proposed as reform methods to substantially impact student performance (Odden, 1990). However, class size reduction must be coupled with research-based instructional strategies proven to further academic development. Traditionally, at-risk students receive instruction through pull-out interventions. A pull-out program in this study shall be defined as the removal of a student at risk of academic failure from the regular classroom to a small self-contained group setting to receive specialized instruction (Haas, 1993). The purpose of this study was to examine the academic and behavioral outcomes for middle school students who were pulled out of the general education setting and taught in a self-contained classroom.

An examination of a pull-out program developed in an urban middle school for students who did not meet state proficiency on the Iowa Test of Basic Skills was conducted in the areas of reading and math. These pull-out classes were created to provide intensive instruction in the content areas of reading, math and language arts. The curriculum focused on basic comprehension, computation, written language and a social skills component to address behavioral concerns. Descriptive data show the percentage of students in each of three cohorts who attained changes in reading and math proficiency levels on the ITBS achieved between grade-level administrations. Some students improved in their proficiency category while others declined. Absence and suspension data suggest students in the at-risk program showed little change in behavior between seventh grade and the first semester of eighth grade. Absences and suspensions increased when students reentered general education classrooms.

Educational decision makers should evaluate the effectiveness of self-contained programming for at-risk students. Educators should align individualized needs with instructional practices that benefit all students. Researchers are challenged to conduct indepth assessment of pull-out programs based on long-term outcomes rather than shortterm results.

DO PULL-OUT PROGRAMS CREATE A MIRAGE OF LONG-TERM RESULTS

FOR AT-RISK YOUTH?

A Thesis

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Educational Specialist

Varotta Mi'Chele Johnson

University of Northern Iowa

July 2010

This Study by: Varotta Mi'Chele Johnson

Entitled: Do Pull-out Programs Create a Mirage of Long-term Results for At-Risk

Youth?

Has been approved as meeting the thesis requirement for the

Degree of Educational Specialist

Dr. Charlotte Haselhuhn, Chair, Thesis Committee

 $\frac{6/11/10}{Date}$ $\frac{6/11/10}{Date}$ $\frac{16-11-10}{Date}$ $\frac{7/14/10}{Date}$

Dr. Radhi Al-Mabuk, Thesis Committee Member

Dr. Barry Walson, Thesis Committee Member

Dr. Sue Joseph, Dean, Graduate College

TABLE OF CONTENTS

LIST OF TABLES	v
LIST OF FIGURES	vi
INTRODUCTION	1
Characteristics of Students at Risk for Academic Failure	1
Failure of Schools to Educate Students at Risk	2
Interventions for Students at Risk of Failure	4
Settings of Programs for Students at Risk	7
Pull-out Programs	8
Research in Program Effectiveness	11
Purpose of Study	19
METHOD	20
Participants and Setting	20
Measures	21
Adventure Team At-Risk Program	22
Selection of Adventure Team participants	22
Curriculum and Instruction	23
Classroom Environment and Culture	25
RESULTS	27
Academic Achievement	27
Behavior	
Absences	
Suspensions	29

DISCUSSION
Program Outcomes
Reasons for Lack of Program Effectiveness
Parental Involvement
Change in Method of Identification of Students
Class Size
Educator Training
Instruction and Curriculum
Transition
Resources41
Successes42
Limitations45
Insufficient Data45
Lack of Comparison Groups45
Broad Outcome Measures46
Recommendations and Implications for Educators47
REFERENCES
APPENDIX: TABLES AND FIGURES

LIST OF TABLES

TABLE

v

1	Frequency Table for Adventure Team Cohorts
2	Percentage of Students Proficient* in Reading and Math by Cohort and Grade Level
3	Percentage of Students Improving from Non-proficient to Proficient in Reading and Math between Seventh and Eighth Grade ITBS Administrations by Subject Area and Cohort
4	Absences in Grades 7, 8, and 9 by Cohort Group
5	Suspensions for Grades 7, 8, and 9 by Cohorts

LIST OF FIGURES

FIGUF	RES	PAGE
1	Mean Absences for Adventure Team Cohorts by Grade Level	60
2	Mean Suspensions for Adventure Team Cohorts by Grade and Semester	61

INTRODUCTION

Lawmakers have increased the reliance on standardized assessment as an accurate measure of students' academic attainment. The No Child Left Behind (NCLB) act focuses on teacher accountability and spotlights failing schools. Students from low socioeconomic backgrounds, many of whom do not perform well on these tests, become categorized as the target students, or "at-risk" students who require interventions. Several types of interventions have been used to enhance student academic achievement and improve classroom behaviors. This study describes the impact of one pull-out program for at-risk students on academics and school behaviors.

Characteristics of Students at Risk for Academic Failure

Students who do not master grade-appropriate curriculum are at risk for academic failure. A child functioning 3 or more years below grade-level peers is less likely to carn a high school diploma. The National At-Risk Education Network (NAREN, 2008) reports that one out of eight students will drop out of school. Students who are at risk for academic failure or dropping out of school share common characteristics such as: functioning significantly below their current grade placement, high absenteeism rates, high levels of in-school and out-of-school suspensions and frequent discipline referrals.

Many students at risk are raised in unfavorable circumstances increasing the likelihood of academic failure (NAREN, 2008). Some students who become labeled atrisk have experienced some form of neglect and/or abuse. Children identified at risk of academic failure come from a variety of cultural backgrounds, but are more likely to include the powerless, the disadvantaged, and those living in poverty. "The educational

1

system in the United States is failing a substantial proportion of students who do not master what is defined as age-appropriate subject matter. Large numbers of children are 'at risk' for academic failure. The 'at-risk' concept is highly elastic and ranges from a focus on a particular child in deleterious circumstances to a generic concern with poor and minority children'' (Lubeck & Garrett, 1990, p. 327). Contributions to academic failure include discrepancies in both academic and behavioral expectations. Underachievement and failure of low-income children arises from disparities between conditions and requirements in the home life compared to the expectations, organization and operating systems within educational settings. Most students at risk of academic failure come from disadvantaged circumstances that heighten the probability that they will not be successful in schools. What may be considered their greatest risk factor is that their teachers and schools contribute to their failure and academic underachievement (Waxman & Padron, 1995).

Failure of Schools to Educate Students at Risk

Behaviors, social practices, and conduct that are in opposition to what is considered typical "appropriate" mannerisms by the majority population imply that behaviors linked to social class differences are inappropriate. Many at-risk students are recipients of detentions, in-school suspensions, behavior referrals for common classroom misbehaviors that lead to out of school suspensions, and harsher punishments and penalties. Raywid (2001) states students who are unsuccessful in school are threatened with intensified punishments such as detention, retention and/or summer school as encouragement to improve academic achievement. Teacher biases and expectations of atrisk students' abilities lead to differential treatment and substandard instructional practices which result in a lower quality educational experience. Gardner and Miranda (2001) reiterate that students at risk for academic failure become trapped in classrooms with poor or non-existent instruction. The intent of educators is to raise student achievement; therefore, curriculum for at-risk students consists of re-teaching and reviewing instead of content instruction (Conderman & Katsiyannis, 2002). Students' perceived lower capabilities results in a watered-down curriculum and an educational experience that does not inspire creativity, lacks motivational components and does not produce higher level thinking skills.

The result of at-risk students' concerns being inappropriately treated or untreated is continued school failure and a widening achievement gap. Townsend (2002) contended that demographic profiles of low performing schools show that they tend to be composed in large part of students from impoverished backgrounds. Identifying these common qualities of failing schools does not address how at-risk students cope with a reality that their social class influences their learning and behavior in school. Traditional interventions treat academic failure as a solitary experience and fail to capture the underlying effects of low socioeconomic status (McEvoy & Welker, 2000).

The literature in this area identifies a limited number of efficient ways to help students eliminate the continuous cycle of school failure where living in poverty situations is the root of the problem. Rozycki (2004) points out that educators do offer effective interventions to address academic concerns, but some interventions fail to recognize that some conditions contributing to academic failure have a social component embedded in poverty. As a consequence, educators are only able to manage academic interventions, leaving social factors that alter the educational experience unchanged and unaddressed.

The result is that these students learn and further develop maladaptive attitudes and behaviors in order to survive in the educational environment. These circumstances perpetuate the probability of continued drop-outs and academic failure. Waxman and Padron (1995) suggest that improving the quality of instruction in schools may be the first step towards reversing the cycle of educational failure. Progress of all students is likely to be enhanced if schools are regarded as a caring learning environment—a place where students feel validated and growth is made towards academic attainment for future sustainability. Waxman and Padron (1995) have found when students are exposed to various instructional strategies and empowered with thinking skills they are able to recognize and address their academic and social needs. The main purpose of identifying an at-risk student should be to devise a program fitted to the student's needs. Also the identification should ensure that significant time is spent teaching applicable learning skills and that the retention of these skills be assessed. Researchers have identified characteristics of programs designed to meet the needs of at-risk students.

Interventions for Students at Risk of Failure

The overall objective of school-based interventions should be to "design remedial programs to assist low-achieving students in attaining academic parity with their gradelevel counterparts" (Alawiye & Williams, 2005, p. 98). Essential components of educational interventions for at-risk students have been identified. Scott and ShearerLingo (2002) state effective interventions must have clearly stated objectives and instructional practices that result in the desired outcomes with ample time for students to practice and internalize the skills. Specifically, successful outcomes appear to be related to factors such as: curriculum at the student's ability level, effective instruction, direct teacher-student engagement, monitoring of progress and an increase in on-task behaviors. The program must also contain a consistent monitoring system that allows the educator, and more importantly the student, to constantly track progress. Lastly, an evaluative component is required based on long term retention of skills rather than short term effectiveness. Assessing the change that has taken place within the intervention group is necessary to obtain an indication of whether or not the intervention was effective in achieving the desired results.

Manning (1993) identified essential components of effective programs. Programs that have proven to be successful share seven essentials that can be incorporated into any at-risk program: (a) comprehensive approaches; (b) an emphasis on self-concept; (c) high expectations; (d) improving social skills; (e) teachers and learners agreeing on objectives, methods, and materials; (f) involvement of parents and families; and (g) a recognition of the relationship between motivation and success. Educators in effective programs emphasize the bond connecting accomplishment and internal motivation along with allocating considerable responsibility on the pupil (Manning, 1993). A way to increase the chances that at-risk students will become more actively engaged in their learning is to design educational interventions with curriculum options that are closely matched to their needs, interests, learning styles, and instructional levels. Students may experience a

higher success rate if instruction is presented at a level comparable to their cognitive ability.

Effective programs recognize the significant relationship between student selfconcept and overall achievement which has a powerful impact on improving the learner's academic attainment (Manning, 1993). High classroom expectations are mandatory in an effort to guide students toward personal ownership of academic achievement. Simply changing the grouping of students without altering the curriculum and teaching methods is not likely to make a significant difference in the educational experience of at-risk students. Odden (1990) states that changes in the school and classroom organization, the willingness to develop a context conducive to effective teaching and learning, is a necessity when developing a learning culture for all students to achieve academic success.

Rather than implementing interventions in isolation, low-achieving schools should consider school-wide solutions. "The children live in impoverished communities, they attend schools that do not meet their needs, schools that have high drop-out rates, provide few incentives for academic success, and frequently have gang activities in the school" (Gardner & Miranda, 2001, p.258). Students are less attached and committed to schools with inadequate resources, high behavioral concerns, and low building-wide academic achievement. Gardner and Miranda (2001) further state that students forced to accept these harsh realities can suffer negative impact both socially and academically. Manning (1993) points out that effective programming provides comprehensive approaches that address more than one at-risk condition. Low-achieving schools have multiple problems, yet limited financial resources for proper remediation. Hartzler and Jones (2002) state most intervention programs are governmentally funded; however, successful implementation of these programs is determined by the ability of district and building leaders to allocate adequate funding.

Settings of Programs for Students at Risk

Interventions can appear in a variety of formats and settings and are designed to address multiple concerns for students at risk of failing in the traditional school setting. The at-risk student population is students who require a more intense instructional model due to learning needs which are significantly different from their grade-level peers. Some interventions require students to be removed from the regular classroom for the entire day and given specialized instruction. Other interventions may take students from the regular education setting for only a portion of the day. Hartzler and Jones (2002) state some students have the option to receive instructional services in the form of independent study as an intervention. Additionally, students may have access to individualized assistance for a particular class that may be difficult and return to the general education classroom for the remainder of their school day.

Other interventions are provided in programs outside of the traditional school day. After-school programming, summer programs and tutoring sessions are methods that focus upon academic achievement on a continuous basis. Extended year programs that are aligned with district standards and benchmarks are another way to further develop atrisk students' educational attainment. As indicated by Hartzler and Jones (2002) the common thread of most interventions simply recognizes the need for a smaller learning environment.

Pull-out programs. A pull-out program is an example of an intervention designed to provide assistance to at-risk students with the goal of meeting academic needs and improving the student's skills to a proficiency level comparable to their peers. Haas (1993) defines the pull-out model, which is commonly used, as the removal of a student at risk of academic failure from the regular classroom to a small self-contained group setting to receive specialized instruction. At-risk students may have focused instruction for a portion of their school day to work on specific deficit areas. As noted by Hartzler and Jones (2002), one of the common goals of intervention programs is to provide instruction in a small-class setting. The use of pull-out programs rather than interventions in a general education setting often assumes a benefit of smaller class size. However, reduced class size without additional modifications may not improve student achievement. New, costly, state policies that reduce class size to under 20 students do not of themselves produce large gains in student performance. Smaller classes at least provide several opportunities for use of instructional strategies shown by research to increase student performance, but researchers should question these results considering the minor impact class size has on student learning and achievement (Odden, 1990).

If the central goal is to help students avoid academic failure and enable them to function in everyday society, they need to be immersed in many diverse situations offered in the school setting rather than segregated from their peers all day. Manning (1993) states that at-risk learners need opportunities to develop positive social interactions. He further states that perceptive educators provide developmentally appropriate opportunities for young adolescents to form relationships, work on social skills, participate in various organizations and community service projects, and learn positive conflict resolution. It seems unlikely that a pull-out program can exist to resolve the diverse problems affecting the academic progress of at-risk students. However, the real purpose is to equip these students with the necessary skills to adapt and apply to any given situation.

Rothstein (2004) holds that pull-out programs for at-risk students may not be working because they do not address the root causes of student failure. He further states that fundamental changes in the instructional delivery model and strategies are needed to increase the academic accomplishments of at-risk students. Then the assumption is that there are a combination of factors within at-risk schools which contribute to the evolvement of achievement gaps such as exclusive school policies and curricula designed to meet the needs of students proficient in academic skills, or educators who are not highly qualified to teach in their subject area, or that classroom management and school discipline procedures are inconsistent or non-existent, or that school leadership is focused on other building concerns rather than student achievement (Rothstein, 2004). Without fundamental changes in instructional methods, students may return to the general population with the same academic problems.

The question remains, why are pull-out programs consistently used in educational systems to help at-risk students achieve academic success? Presently, schools still have self-contained classes. A pull-out model is more readily used than other interventions due to the ease of implementation. Conderman and Katsiyannis (2002) make note that many

teachers implement commonly used instructional practices or strategies that are familiar to them rather than teaching methods linked to effectiveness. Many interventions are selected based on the effortlessness required by the general education teacher to implement, monitor, and assess the progress. It is also easier to remove a student from a general education classroom rather than alter curriculum, change the environment, or modify instruction. Educators may believe that removing the student from the setting is solving the problem. Although pull-out programs continue to be used in a variety of formats, some research data suggests this may be an ineffective method for educating students at risk of educational failure. Alawiye and Williams (2005) state even if students make significant gains in isolated settings, it limits the educational effectiveness when they return to the general education setting, because they have not reached the equivalence of their grade-level counterparts. Studies of pull-out programs show nonsignificant trends toward improvement, and there is repeated acknowledgement that research on the relative efficacy of full-time placement of students in self-contained environments is scarce, methodologically flawed and/or inconclusive. But most significantly, there is limited progress made by many students who are assigned to pullout programs. Odden (1990) states that class size reduction essentially has little to no impact on student achievement. Student performance is enhanced by other factors such as the educator's opportunity to teach using researched instructional strategies, which contributes to the rise in academic attainment. Smaller class sizes coupled with other changes in school and classroom organization are the necessary components to produce changes in student performance (Odden, 1990).

Research in Program Effectiveness

Interventions may be temporary solutions intended to remedy a long-term problem, ideally with the result of lifelong progress. Researchers have studied a variety of possibilities for effecting change in at-risk students. The results are consistent: there is an abundance of studies which document favorable short-term outcomes. Four studies of pull-out programs for middle school students provide examples of research involving short-term outcomes.

In a study conducted by Alawiye and Williams (2005) on Chapter I, a supplementary reading pull-out program, the researchers evaluated whether or not middle school students receiving pull-out instruction made reading gains comparable to gradelevel peers. The purpose of this study was to determine if offering instruction in a pullout reading course over a 4-year time period was effective for increasing student achievement to proficiency on standardized assessments. Achievement of the treatment group was compared with the achievement of 10 students who did not participate in Chapter I. Ten students from the eighth grade who had received Chapter I reading instruction since fourth grade were selected as the treatment group. Treatment group students were reading below grade level while the general education students were at average achievement levels before the intervention. The Chapter I students worked on word, sentence, or paragraph tasks although their counterparts received a comprehensive reading curriculum that promoted higher order thinking skills with an organization system for simultaneously acquiring new knowledge and experiences. The students in the treatment group received 45 minutes of remedial instruction per day throughout the

academic school year(s) since grade 4. The students' academic growth was measured across 4 years using the Reading Stanford Achievement Test scores in grades 4 and 8.

The findings indicated that the eighth grade students who received Chapter I instruction made considerable reading gains on the Stanford Achievement test, but did not reach parity with their general education peers. The control group made less significant reading gains, yet scored higher on the standardized assessment in eighth grade than the Chapter I students.

A study by Scott and Shearer-Lingo (2002), examined the effects of reading fluency instruction on academic and behavioral success of middle school students in a self-contained environment. The authors evaluated two reading programs, Teach Your Child to Read in 100 Easy Lessons and Great Leaps, to determine the impact individualized direct instructional strategies have on increasing academic achievement and decreasing misbehaviors of at-risk students. This study evaluated seventh grade boys in a self-contained middle school classroom who were at-risk of academic failure due to reading levels a minimum of 3 years below grade level and behavior difficulties. The two reading programs, Teach Your Child to Read and Great Leaps, were based on individualized direct instructional strategies. Each program promotes phonics, yet the basic distinction between the two programs is delivery of instruction. Teach Your Child to Read is a daily lesson for approximately 10-15 minutes and requires the teacher to use the same passage to model letter-sound correspondences, provide guidance and practice with sounds, and finally to test the student's progress. As the students' reading evolves and they demonstrate progress with a lesson, the curriculum contains sentences and

stories. Great Leaps also has a 10-minute daily instruction component that involves review and pre-correcting errors from the previous lesson; daily 1-minute timed segments that assess phonic sounds, sight phrases and a brief story. The programs were introduced sequentially starting with the Teach Your Child to Read because the Great Leaps program requires students to have a basic understanding of alphabetic symbol-sound relationships, which is a component embedded in the Teach Your Child to Read model. Students received instructional reading services outlined by the Teach Your Child to Read for only 2 weeks. This program was discontinued because none of the students met the criteria to move up to the next reading probe. Students experienced some reading gains from use of the *Great Leaps* program and it was used for the remainder of the 10-week intervention period. Once a week each researcher used a partial-interval instrument that they developed to observe, monitor and record students' on-task behavior (every 6 seconds) during the reading intervention. A multiple baseline design was developed specifically for this research project. Baseline data determined student placement in the reading programs. On a daily basis students read passages, their fluency and progress were measured in accordance with criteria outlined in the *Great Leaps* program manual.

The results of the Scott and Shearer-Lingo (2002) study showed that curriculum tasks, although limited to oral reading fluency in this study, produced academic achievement simultaneously improved time on-task behaviors. The intervention program provided opportunities for students to control their learning. The findings for these evaluations revealed characteristics of student-preferred curricula such as "instruction delivered at the student's level, provides repeated practice opportunities, maintains direct teacher-student interaction, and actively involves students in monitoring their progress" (Scott & Shearer-Lingo, 2002, p. 172). The overall conclusion of this study suggests that research-based interventions with fundamental principles linked to strategies for enhancing student academic abilities produce higher achievement.

A study of a pull-out intervention conducted by Woodward and Brown (2006) sought to determine if curricular needs of academically low-achieving middle school students were being met through teacher-created math curriculum. The main focus was to examine if a standardized, research-based curriculum that was structured and scripted was more effective than curriculum designed by educators for raising mathematical achievement.

The participants in this study were students in two middle schools with similar socio-economic status, percentage of students receiving specialized education, absentee rate, and average academic achievement. The comparison group was composed of four middle school teachers and 28 sixth-grade students from a medium-sized, suburban school district. The intervention group was two teachers and 25 sixth-grade students from a lower middle-class suburban school. All of the students in the intervention group received specialized instruction and had an Individualized Education Program (IEP); however, none of the students identified had IEPs in the area of mathematics.

The students in the comparison group received daily instruction in an 80-minute class period from the *Connected Mathematics Program* which was coupled with teacherdetermined curriculum. The *Connected Mathematics Program* encouraged student engagement by having students discover how to correctly arrive at a mathematical solution, then discuss the various strategies. Students in the intervention group received 55 minutes of daily instruction with the *Transitional Mathematics* curriculum which is scripted, focused on research-based instruction, and provided more time for teacher-guided instruction with teacher-led exploration of how to systematically solve a math problem.

The CTB Terra Nova assessment was used to evaluate student achievement because it measured growth over a period of time and provided comparability of the two groups on grade-level skills and concepts. A cumulative Core Concepts test was administered and data were used to indicate the effectiveness and equity of mathematic curriculum for students at risk of academic failure. When student results were compared on CTB Terra Nova, the intervention group which received research-based curriculum instruction made significant gains in mathematics. The results of the post-test indicate that the intervention group had a higher mean score and made a larger growth mean. The comparison group had a higher pre-test mean, but made smaller gains on the post-test. The intervention group averaged 58% correct on core math concepts, while the control group averaged 36% correct.

Lane (2007) conducted a study analyzing the impact of using a systematic selection process to identify at-risk students for empirically-validated interventions in the secondary setting. Lane (2007) believed that a systematic screening selection would help target students with similar needs. The screening process preceded implementation of an intervention designed to address the students' needs. The objective was to determine if students' knowledge of study skills and conflict resolution would transfer to improve overall school performance. A secondary purpose of the study was to determine the relationship between academic underachievement and developmental problem behaviors.

A screening process and school-wide data that were routinely collected were used to identify students displaying behavioral and academic difficulties. Seventy-four students were selected and randomly divided into three core sections: study skills instruction, conflict resolution and the control group. Students selected to participate in the study skills group received instruction in strategies acquiring knowledge from text, note-taking, class discussions, graphic organizers, test-taking skills, writing skills, and organization tools such as goal setting. Students in the conflict resolution group received explicit instruction guided by the Productive Conflict Resolution Program. Some of the content topics included understanding conflict, cooperation, conflict styles, listening skills, problem-solving, and reconciliation. The control group did not receive any formal instruction, but worked on homework and self-advocated for assistance. Over a 9-week period students in the intervention groups were pulled out of the general classroom and received direct instruction for 30 minutes and applied practice for 20 minutes daily.

Approximately 8 weeks following the intervention completion, Lane (2007) evaluated the effectiveness of the intervention from pre-intervention, post-intervention, and maintenance data. Students who received instruction in study skills improved in their knowledge of study skills. Students who received direct instruction in conflict resolution increased their knowledge of ways to resolve conflicts. The students who participated in these skill groups increased their knowledge specific to the instructional teachings, their absolute level of knowledge remained low and scores did not project significant academic improvements when compared to students in the control group. Despite increased knowledge of study skills and conflict resolution, students' final performance levels were still far below mastery and did not reflect any considerable progression when compared to students in the control conditions (Lane, 2007). Students who did not receive formal instruction but were allowed to work on assignments, ask questions as needed, and continued to achieve higher than students who were in the intervention classes. Post-intervention data revealed decreasing scores for both intervention groups. The interventions did not produce the desired effects, and the author concluded that valuable instruction is lost when coupled with invalid practices (Lane, 2007).

The studies conducted by Alawiye and Williams (2005), Scott and Shearer-Lingo (2002), and Woodward and Brown (2006) show some of the weaknesses associated with research in this area. One of the studies that demonstrated academic gains for students who were pulled out of the regular classroom did not include comparison or control groups (Scott & Shearer-Lingo, 2002). The treatment group in the Alawiye and Williams (2005) study also demonstrated gains, but the treatment group was compared with a group of students in general education who were not identified as at risk of failure. Lane (2007) is the only study described in which students were randomly assigned to groups, and she found no effect of treatment. Lane (2007) reiterates that a screening process must precede the intervention process enabling the results to be accurate when evaluating the effects of the intervention.

Although there are numerous studies that examine the short-term effects of pullout programs, empirical studies showcasing long-term effects of temporary interventions are scarce. Short-term favorable results are generally more prevalent following the intervention process and most likely occur as a result of environmental or instructional modifications which incite a change in student behavior. Long-term application and retention of skills is lost when resources and supports provided during the intervention period are removed. Consistency in allocating resources and following specific procedures are removed when the intervention period has expired. After the intervention is no longer being implemented, removal of instructional, academic and behavior supports may lead to a decline in the student's academic progress. "The longitudinal period is important because often first-year gains erode in the second year" (Odden, 1990, p. 218). For an accurate indication of student progress the real test is what happens in the year(s) following the intervention.

As a final point, one of the weaknesses of current research in effectiveness of programs for at-risk students is the lack of direct measures of long-term educational outcomes. A fault of some research models is the failure to use reliable measures to accurately assess the effectiveness of intervention outcomes. In some cases baseline data aligned with intervention goals is absent, therefore, giving the impression that any growth during the intervention period is a result of a valid intervention strategy. Another mistake of research conclusions is determining that an intervention was effective because there are some visible improvements in students' academic progress or behavior. An invalid measuring system or projecting academic growth rates that are not stimulated by implementation of the intervention also creates a false sense of program effectiveness.

Continued research must be conducted to pinpoint the key factors that lead to long-term retention of skills and abilities resulting in prolonged academic achievement. An at-risk student may be facing academic failure due to factors associated with homelife conditions. Generally schools are only equipped to address academic concerns and for some students it is difficult to improve educational circumstances until problems in the home situation can be remedied. Many interventions do not take into account the underlying conditions that have a larger impact on educational progress. It seems impossible to solve academic problems when the leading factors contributing to the deficient behaviors are unknown. Essentially, if the underlying or root causes of the academic problems are not addressed, how can we reasonably expect to correct or change behaviors or even anticipate long-term results?

Purpose of Study

The purpose of the current study was to examine the effectiveness of a pull-out program for students at risk of failure in an urban middle school. Participants' achievement and behavioral performance were assessed when students participated in the program, and behavior was assessed one year after program completion. After a period of intervention in which expectations are gradually and consistently raised, do students at risk of failure show academic and behavioral gains?

METHOD

This study is a longitudinal study of the changes in academic and behavioral characteristics of three cohorts of at-risk students served in a middle school pull-out program known as the "Adventure Team."

Participants and Setting

The study included 81 students attending an urban middle school in the Midwest, who were selected to receive reading and math interventions in the form of a pull-out program. Students attended the intervention program during the second semester of seventh grade through the first semester of eighth grade. Three consecutive cohorts are represented in the sample, the first beginning the program in the spring of 2003 (n=24), the second in the spring of 2004 (n=22), and the third in the spring of 2005 (n=35). Analyses included 42 students for whom complete data were available (n = 13, n = 19, and n = 10 for the 2003, 2004, and 2005 cohorts, respectively). Students in the first two cohorts attended the Adventure Team program for both subjects and students in the third cohort attended the program only for instruction in reading and/or math. Demographic characteristics of the Adventure Team students are reported in Table 1.

For three consecutive years, from 2000 through the 2003 academic year, this middle school was labeled a School In Need of Improvement (SINI) and failed to make adequate improvements building-wide towards state-determined proficiency levels on a standardized measure of students' reading and mathematics achievement. The school serves students in grades 6, 7, and 8, and has an annual student enrollment averaging about 440 students. The student population is 35% Caucasian, 60% African American,

5% Hispanic, and less than 1% other minorities. Class sizes range from 20-23 students. On average, about 80% of the students receive free and reduced lunch services. The mobility rate of students within the school district is 21.9% which is comparable to the school with 26.9% mobility. Student daily attendance is 91.9% and is similar to the 93.5% district attendance.

Achievement is routinely assessed by determining students' levels of proficiency on a standardized test of achievement, the Iowa Test of Basic Skills (ITBS). According to state standards, a student is considered proficient if he or she scored at or above the 41st percentile on national norms. Overall proficiency in math and reading for students in this middle school was significantly below the district average. In this building 35.6% were proficient readers in contrast to a district average of 52.6%, and 33.1% were proficient in math in contrast to a district average of 51.8%. Following three successive years without adequate student progress, the school was identified as a School in Need of Improvement. At the time the at-risk program was developed state officials were working with the school to implement an academic program to close the achievement gap. In this facility the Governor's Task Force, district leaders, school administration and staff members designed and began a pilot intervention program for at-risk students to increase reading and math proficiency scores on the ITBS.

Measures

Information used for evaluation of the program included achievement and behavior data routinely collected by the district for all middle school students. Achievement data collected before and during the intervention, and behavioral data collected before, during, and after the intervention were used to investigate progress and retention of skills learned in the program. Achievement was assessed for each cohort in the fall of the sixth, seventh, and eighth grade years using the Iowa Tests of Basic Skills.

Behavior was assessed using attendance and suspension data from seventh grade through ninth grade for each cohort. Attendance information was available only for the total school year, but suspension information was available for first and second semesters of each year.

Adventure Team At-Risk Program

Because of the low proficiency rates building-wide, interventions were discussed and preparations were made in fall 2003 to implement an innovative pull-out program entitled "Adventure Team." The program was not created to be a permanent placement, but a short-term intervention to increase students' math and reading skills. During the first two years, the cohort groups were pulled out of the general education setting and received instruction all day in a self-contained environment. The third cohort group only received specialized instruction in reading and/or math as a course in their schedule.

Selection of Adventure Team Participants

Students entered Adventure Team at the beginning of second semester in seventh grade and remained in the program until the beginning of second semester in eighth grade. If the students made steadily, consistent academic improvements, they were chosen to return to the general education setting at the beginning of the second quarter of their eighth grade year. Students who remained in the program until second semester of eighth grade received intensive remedial academic assistance and more individualized assistance, due to fewer students being served in the program.

Students were selected by seventh grade staff based on ITBS percentile rank, expected benefit from a self-contained program, and work ethic. The state defines proficiency as performance at or above the 41st percentile on the ITBS. In order to reduce the proportion of students in this middle school who were not considered proficient, students identified for the Adventure Team program had ITBS scores ranging between the 35th to 40th percentiles. For the first two cohorts, the staff members deliberated about individuals who would profit from a pull-out program and identified a list of 21 students to receive services, with 3 alternates. In the third year of the program, students could be recommended for only reading intervention or only math intervention, although some students were recommended for both subjects. The majority of the students served in the Adventure Team program was African-American and reflected the proportion of total enrollment in the building. The main purpose of the intervention was to provide academic services to students who would most likely bump their scores up into the proficiency range. During the first year, students with significant behaviors were not placed in the program. By the second year, the pull-out placement became more accessible to students with behavior problems.

Curriculum and Instruction

For cohorts served in the first two years, the program curriculum followed the guides in reading and mathematics prepared by the district for all middle schools. The class work that was required in the regular education classrooms was duplicated in the self-contained environment. There was no change in the level of work; however, there were some notable differences in the way instruction was presented. The reading instruction in this pull-out program was geared towards improving decoding strategies, sight word recognition, and reading comprehension. A portion of the math program was built on constant review of basic math skills and concentration on enhancing students' understanding of grade-level concepts and content. Pacing of instruction was a major change from the regular classroom as students in the Adventure Team were scheduled into two 94-minute block periods for reading and math. The slower pace of instruction allowed time for thorough discussions, multiple levels of understanding, personal interpretations, and collaborative teachings, which is usually not permitted in regular classrooms due to limited time constraints. Within these 94 minutes, students were assigned two individual weekly sessions with the para-educator (15-20 minutes) for constant review of various basic skills related to reading and math content.

This 94-minute block also affected the content that was being taught in Adventure Team. Students only received direct instruction in reading, math, and language arts. Students received social studies and science content indirectly during reading instruction.

In addition to the curriculum and instruction described, an incentive to the Adventure Team program was weekly activities and educational field trips into the community to build awareness and introduce students to volunteer and career opportunities.

Classroom Environment and Culture

Students in the first two cohorts remained in the same classroom all day with the exception of their exploratory classes (e.g. physical education or art). Students were given ample time to work on assignments and develop peer relationships as part teaching and learning. A student-led class meeting time was incorporated into the Adventure Team framework, which allowed students to discuss social and behavioral issues. Students discussed and agreed upon disciplinary consequences; which was strengthened by consistent teacher follow-through. The teacher structured the class expectations; however, the students created the culture of the classroom and started developing ownership and responsibility for their education. Weekly field trips generated the idea that learning can occur anywhere and connected classroom instruction to real life. Monthly research projects were focused on ways to inform students about current events that shaped their lives.

An indirect factor which had the potential to create a significant impact on student achievement was the development of relationships within the classroom. The bond amongst peers and interactions between teacher and students was expected to produce positive attitudes towards academic progress which could raise achievement levels. Students were recognized for the individual cultural experiences and knowledge that they brought to the classroom. Instruction was presented in a non-threatening fashion to encourage learning. Students were made aware of the teacher's determination to educate them. In addition to receiving instruction, students were allowed to teach lessons through partner work. The students in Adventure Team created reading partnerships with elementary students. These relationships helped the students identify the importance of reading skills and gain confidence in their own academic abilities. A teacher-created social skills component was provided as a preventive measure to improve Adventure Team students' school behaviors. Some students began to recognize how their behaviors and language could become hindrances for obtaining higher level education. Students were encouraged to participate in school events and engage in volunteer projects to apply the knowledge they learned.

RESULTS

Descriptive data in the areas of academic skills and behaviors are presented. Data were not analyzed for statistical significance of any differences because of the small number of participants for whom complete data was available. Results are described separately for cohort groups because of the differences between cohorts in selection criteria and full day or partial day intervention. Data were analyzed only for students with complete ITBS achievement absence, and suspension data (N = 13, 19, and 10 for the 03/04, 04/05, and 05/06 cohorts, respectively).

Academic Achievement

Data were collected to investigate academic achievement for the three Adventure Team cohorts, including ITBS reading and math scores in grades 6, 7, and 8. Changes from non-proficient to proficient status between seventh and eighth grade was also investigated. ITBS reading and math proficiency measured in the fall of seventh grade was used to identify students expected to benefit from participation in the Adventure Team program. Students were considered below proficiency if their national percentile rank in reading or math was at the 40th percentile or below, at proficiency if the percentile rank was between the 41st and 89th percentiles, and highly proficient if the percentile rank was at the 90th percentile or above. Students took the ITBS again in the fall of eighth grade at the time they were participating in the Adventure Team Program. Proficiency levels by cohort for grades 6, 7, and 8 are presented in Table 2. The differences in the percentages of students attaining proficiency between the fall of eighth grade (at the time students were enrolled in the Adventure Team program) were of particular interest. The descriptive data show that a greater proportion of students in each cohort were proficient in math in the eighth grade than in seventh grade, but changes in reading proficiency were less consistent.

Among the Adventure Team cohorts, 5% to 33% of individual students improved by a proficiency level between seventh and eight grade in reading and 15% to 33% improved by a proficiency level in math. It should be noted, however, that a number of students in Adventure Team declined in proficiency level in the same time period. Changes in proficiency levels are presented in Table 3.

Behavior

The number of absences for the academic year in grades 7, 8, and 9 were collected for the Adventure Team cohorts, and the number of suspensions at grades 7, 8, and 9 for first and second semesters were collected for each cohort.

Absences

The mean number of absences per year ranged from 10.76 to 12.51 at the middle school level and from 18.32 to 19.71 at the ninth grade level. There was considerable range in the number of absences within cohort groups, with some students absent less than a day, and others absent 45 or more days per year (one student had over 80 absences in ninth grade). For the Adventure Team cohorts, there was a tendency for the mean number of absences to remain steady or decline slightly between the seventh and eighth grade years and then show an increase between the eighth and ninth grades. Mean absences are listed in Table 4 and are displayed by cohort and grade level in Figure 1.

Suspensions

Suspension data were available for Adventure Team cohorts for each semester in grades 7, 8, and 9. Mean number of suspensions per semester in middle school varied from 0.68 to 3.20 and mean suspensions in ninth grade varied from 2.00 to 6.90 per semester. In general, the mean number of suspensions stayed steady or showed small increases from the first semester of seventh grade through the first semester of eighth grade and then showed larger increases in the second semester of eighth grade. The highest mean number of suspensions was in the first semester of ninth grade, followed by a decline in the second semester of that year. There was a considerable range in the number of suspensions within each cohort, with a general increase in variability with grade level. The range in the number of suspensions varied from a low of 0 to 4 for the 04/05 cohort in the second semester of seventh grade, to a high of 0 to 26 for the same cohort in the first semester of ninth grade. Ranges and mean number of suspensions are reported by cohort in Table 5. Mean numbers of suspensions by semester and cohort are displayed in Figure 2.

DISCUSSION

The purpose of this study was to examine the effects of a middle school pull-out program for students at risk of academic failure. A pilot program titled the Adventure Team was examined to determine the effectiveness of a pull-out program on academic achievement and behavioral improvements. For many students, the program did not produce the desired results of improving performance on the standardized assessment. The goal of the program was to increase student ITBS scores to the proficiency category, yet several students' scores declined while in the program. Since the data showed that minimal academic gains were made during the intervention period, it is doubtful that any long-term academic gains would be retained.

Factors contributing to program failure need to be considered. Ineffective practices such as not using the same criteria for selecting students to participate in the program, absence of a structured curriculum, lack of teacher training, and inadequate academic and financial resources may have contributed to the marginal gains made by the students in this pull-out program. There are several reasons why this program may not have produced the desired outcomes, yet these major components mentioned above should have been discussed and planned by the program designers prior to implementation. The program should have been developed using research-based data concerning class size along with cognitive and behavioral interventions proven to increase student achievement. Classroom objectives not aligned with goal outcomes and unintended circumstances such as transition and recourse plans may also have been casual factors in the program's failure. Lastly, the Adventure Team produced successes that were not readily seen from the data that was collected. Since the primary focus of this pull-out program was to increase student scores to proficiency on the ITBS, data were not gathered to reflect student growth in the areas of self-esteem, sense of belonging, and the value of team work. Nor did the data emphasize the effects that a student-led classroom, volunteerism, and community service have on academic and behavior growth. Manning (1993) suggested that an emphasis on self-concept, improving on social skills, teachers and learners agreeing on objectives, and recognition of the relationship between motivation and success are essentials that should be incorporated into any at-risk program. These arc equally important aspects of education that were not highlighted, but are significant qualities that cach student was expected to have possessed.

Program Outcomes

Although results must be interpreted with caution because of a lack of control groups or statistical comparisons, the results of this study suggest that the intervention had minimal impact on formal measures of student academic achievement during the intervention. Beneficial academic outcomes of a self-contained pull-out intervention were not supported in this study because overall group growth in academics was not substantial or consistent enough to indicate improved student academic progress. Even though a few students showed improvement in academic proficiency as measured by ITBS scores, the majority showed no change or a decline. Among the three cohorts with a combined total of 42 students, 5 improved on ITBS proficiency standards in reading and 7 improved on proficiency standards in math, but 3 students declined in reading and 4

31

students declined in math. The intervention program failed to produce the goal outcome of increasing the number of students proficient in reading and math on the ITBS.

It is possible that Adventure Team motivated students to attend school and engage in appropriate behaviors while they participated in the program, but there is no evidence of long-term gains. These cohorts had high absenteeism rates prior to participation in the Adventure Team, yet absences did not increase once in the program. Student attendance improved or remained steady during the intervention period, but absences went up following exit from the program. Suspensions also remained steady between the second semester of seventh grade and the first semester of eighth grade, but rose sharply for two semesters following completion of the program before falling in the second semester of ninth grade. It cannot be concluded that the program affected behavior even during the intervention due to the lack of control groups.

Reasons for Lack of Program Effectiveness

Results indicated this pull-out program was not as effective as intended in terms of the outcome measures used. The lack of effectiveness may be due to characteristics of this particular intervention. The first problem is defining a pull-out program and its purpose. Due to the ease of implementation, many schools use various forms of pull-out designs to provide specialized instruction which may not adhere to an established curriculum. When teachers are not provided instructional strategies and are allowed to adopt a social skills curriculum not proven to increase student achievement in the pull-out setting, documentation to identify the frequency, rate of progress and effectiveness of these 'quick fix' strategies may be insufficient. Therefore, this study could neither prove nor disprove the validity of the statement that pull-out programs are effective measures for improving students' academic achievement long term because of a lack of essential data.

A major factor that limited evaluation of this program's success was data collection. Several variables were manipulated at one time; however, data were not collected and monitored to determine whether individual factors had a greater impact on students' academic progress. Students were removed from the general education setting to a self-contained environment, only received instruction in three core subject areas, received a block schedule (90 minutes per subject), did not have homework, participated in monthly group projects, were allowed to go on weekly field trips and lastly the instructor's classroom management and instructional styles were different from the typical classroom teacher. These changes alone could have impacted student achievement; however, measures used to assess student progress did not include data collection in any of these areas. Baseline data was focused on improvement on standardized assessments; therefore, any environmental or external changes were not documented as factors promoting academic and/or behavioral progress. The measures program designers selected to reflect academic and behavioral growth were not sensitive enough to show student progress.

Lane (2007) encourages use of a screening process in an effort to align a focused intervention aligned with student needs, resulting in comparison conditions for specific evaluative data of the intervention. A specific set of objective criteria should have been consistently used as a screening procedure for student selection in the Adventure Team program. The common thread for student selection was ITBS scores below proficiency, yet behavioral components, homework completion/failing grades, absenteeism, teacher input, disruptive behaviors, and office disciplines became factors of consideration for placement in the Adventure Team program. A screening process should align baseline data with goal outcomes otherwise progress can not be obtained. A portion of the students selected for the program was based on subjective criteria which mainly consisted of teacher judgment. Characteristics should have been identified of students who would most likely make academic gains from instructional strategies provided in a pull-out setting.

Other external factors contributing to academic failure were not considered when selecting students to participate in the program. Program designers should have evaluated the types of student academic/behavioral profiles that are most affected by the Adventure Team instructional practices and classroom setting (Scott & Shearer-Lingo, 2002). Program creators would have been wise to analyze individual outcomes to determine which type of student benefitted from a self-contained environment and use this data for future student selection. The criteria used for students chosen to participate in the program were not aligned with the criteria used for program evaluation. The program was considered ineffective, based on the insignificant number of students whose scores improved to proficiency in reading and math on ITBS. If a survey would have been conducted to target specific behaviors that contributed to academic failure, then clearly designed goals could have been developed to work towards student proficiency. If the program focus was simply to improve student scores on ITBS, instructional practices and

34

strategies geared toward attaining this goal should have been provided. Explicit criteria should have been established so that clear progress toward goal attainment could have been determined.

Parental Involvement

Although the Adventure Team program included several of the essential components identified by Manning (1993), additional aspects of successful programs were not included. Parental involvement was a key element missing from the Adventure Team design. Although parental involvement was strongly encouraged, parents rarely visited the classroom nor attended field trips with the students. Through conversations, it was evident that parents were supportive of the classroom and challenges it was helping their child overcome; however, they weren't able to spend the necessary quality time in the classroom. Many middle school students may give the impression that they do not want their parents involved in their school lives, but the few students' whose parents were able to make time to visit the classroom relished in the fact that their parents were a part of the activities. Parental involvement is reassurance to students of the support that they have at home and establishes a stronger home-school relationship.

Change in Method for Identification of Students

Over time, the focus of Adventure Team switched from an academic stance to a heavy spotlight on the behavioral aspect. Therefore it might not be expected to see a dramatic increase in academic measures, especially for the third cohort. The fact that suspensions and absences did not increase while students participated in the Adventure Team program, but increased after exit from the program may confirm the value of creating a sense of belonging within the classroom. Results may be more favorable in the behavioral area, possibly because of the efforts put forth to build caring relationships. Class Size

Many researchers identify a smaller learning environment as an essential piece to effective pull-out programming (Hartzler & Jones, 2002). It is the perceived notion that a smaller class size is effective for having a substantial impact on student achievement (Odden, 1990). Initial discussions about the ideal class size for the Adventure Team were 15 students and a maximum of 18 (total). However, when the class actually began the list expanded to 21 students with 3 alternates, in hopes of reaching more students. At this point, the class size for the Adventure Team was comparable and even larger than some of the general education classes. In hindsight, this large size class may have been a contributor of new problems, because Adventure Team students with academic struggles and behavioral problems were simply grouped together in a different setting meaning chances are their educational difficulties would continue.

Educator Training

Along with the class size requirements, teacher training was never provided. It was assumed that the teacher would deliver instruction in a similar fashion as the general education instructors. That was a huge misconception and detrimental factor affecting the success of the program. First of all, the program designers had not taken into account that the length of reading and math classes' time was doubled, meaning additional instructional support would need to be provided. Secondly, it is vital to train the educators in proper techniques such as differentiated instruction, program/curriculum modification, and behavioral management. When the student selection criteria shifted to include behavioral students, a social skills curriculum was not incorporated into the program design. It is essential to provide additional teaching resources that teachers may need.

Comprehensive instructional approaches were attempted, yet the curriculum was not modified and the general education task requirements remained the same for students in the Adventure Team program. In the research, Manning (1993) emphasizes the importance that at-risk youth need expectations, methods, and materials that differ from students in the general education classroom as a contribution to create a successful pullout program. Due to pressure from the Governor's Task Force to implement a program to change student academic achievement on Iowa Test of Basic Skills, district decision makers worked with a sense of urgency to get the program up and running.

Instruction and Curriculum

One of the essential components of a successful program is identification of clear, specific objectives (Manning, 1993). The program goals were not aligned with the initial plan of improving students' ITBS performance. No direct work with ITBS content was completed nor was specific strategies taught to improve students' test taking skills. The focus of the intervention shifted from the original goal. As Lane (2007) suggests the intervention did not produce the desired effects, because instruction was coupled with invalid practices. There was no research-based intervention strategies used in this program. The concept of block scheduling, simply adding additional time to teach the

content was looked upon as the most significant factor for improving students' academic achievement. Curriculum requirements, instructional strategies, classroom procedures and how to obtain desired (program/intervention) outcomes were not rooted in best practices or structured formats known to produce positive results.

Ideally the program included high expectations for students with the goal of teaching the same curriculum which is taught in the regular education classroom. Clearly stated instructional practices agreed upon by program stakeholders is another essential component (Manning, 1993), but were not identified for this program. No specific instructional changes from the regular classroom were enforced in the self-contained environment. The educator was simply allowed more time to teach the same lessons that were being taught in the general education classroom. Since this was an intervention for academically at-risk students, a direct instructional approach or scripted/modified curriculum should have been used to improve students' academic achievement. The teachers were not provided nor sent to any special trainings focused on instruction within the self-contained environment. The para-educator was designated to work daily with individual students on basic skills. This was not completed as planned.

Transition

One unexpected result was mayhem that arose from failure to plan effective transition efforts. At the beginning of second quarter in their eighth grade year, if students demonstrated academic and/or behavioral improvements they were selected to return to the regular education setting. At the start of second semester all of the eighth grade students remaining in the Adventure Team program were returned to the general education setting and the new seventh graders began. There was no formal transition plan from the general education classroom to the Adventure Team or from the self-contained setting back to the general education environment. After spending approximately nine months in a pull-out setting with atypical instructional practices and classroom structure, students would require a transition period to become acclimated to the new environment and adjust to different expectations.

In the Adventure Team, students received academic support in various formats such as individualized, pairs or small group assistance. Behavior supports were in place. For example students conducted peer mediations, held class meetings, were elected for individualized classroom responsibilities and received instruction in a classroom built on principles of working together as a team. As they left the Adventure Team these resources were not always present in their general education classrooms. The assumption was once students were able to do well academically and display appropriate classroom behaviors in the isolated environment, they would continue to exhibit these learned behaviors in the general education setting. Relationships and a sense of belonging were key components to maintaining classroom management in the Adventure Team program. Therefore it can be implied that a loss of this support system is one aspect which contributed to a breakdown in class conduct once students returned to the general education classroom. Some students reverted back to disruptive behaviors in hopes of returning to the Adventure Team.

The loss of their support systems, limited teacher assistance, and faster paced instruction sparked rebellion. Some students began to do poorly, caused major 39

disruptions to the learning environment or stopped attending on a regular basis. Yet, other students used their advocacy skills and requested to be returned to the Adventure Team, expressing a dislike of teaching styles in the general education classrooms compared to instructional methods used in the Adventure Team. Students may have become frustrated because they became accustomed to an environment with structure and expectations that allowed them to experience academic success. The removal of these classroom supports contributed to the program failure as well, because it appeared the students had not changed, therefore insinuating that the Adventure Team program was ineffective. Transition to the regular educational environment might have been more successful if students had been specifically prepared by the Adventure Team program and if Adventure Team teachers and general education teachers had been able to collaborate more effectively.

The program designers also failed to discuss a follow-up plan for students who were not successful following a year of instruction in a pull-out program. There was no discussion of offering special education services to a student who failed to make academic or behavior progress. The Adventure Team decision-makers did not address how to recoup student knowledge for the missed instruction in the two core subjects (science and social studies) while participating in the program. Nor did they plan how teachers would assess the student work after coming back into the general education setting without having any content instruction for a year. Not having a recourse plan contributed to the failure of this program as well.

Resources

As a final point, lack of adequate resources, funding and district support were some of the major contributors to the failure of this program. To reiterate the point by Hartzler and Jones (2002), most intervention programs are federally funded and only destined to succeed to the point that the district and school leadership fully support them with the necessary resources. In year one of the program, funding, academic support and resources were considered plentiful. Ideas for the program were innovative and thinking outside of the norm was encouraged. In year two when the desired results were not immediately seen, academic progress was not increasing at a steady pace, and behaviors were still surfacing in other classrooms; some teachers began to complain about the equity of "rewarding" the low-achieving behavior students and program support faded. The district leaders who were instrumental in developing the program appeared to put their involvement in the program on the bottom of the list of importance and overall support began to decline. This sent a message that the Adventure Team had lost its value or was simply viewed as a quick fix to a complex situation.

Although not identified by Scott and Shearer-Lingo (2002) and Manning (1993) as an essential piece of a successful program, it seems obvious that adequate building and district support is necessary. The initial plan was for students to have a 4-day work week and a field trip every Friday to expand on learning opportunities within the community. Contact numbers, academic support from district employees, and transportation costs were the only resources supplied. Materials for projects, field trips, additional monies for activities were financed by fundraisers, students, parents, and teachers of the Adventure Team.

After the first year of the program, resources were limited and support services for the students and staff in the Adventure Team became nearly extinct. Program expectations remained high, but how to accomplish those goals with even fewer resources became a major obstacle. Field trips were incorporated into the program as way to expand student learning; however, transportation and funding were no longer available. This change in resources made it very difficult to maintain student activities/field trips to local community agencies. With the absence of field trips and activities, the students became less engaged and less interested in being in the Adventure Team program.

Successes

Data did not reflect any of the successes experienced in the Adventure Team program. Many students succeeded in changing their self-concepts, were taught to mediate conflicts, took ownership for their education and learned the value of team work, community service and volunteering. Manning (1993) states that a successful pull-out program provides at-risk learners' opportunities for positive social interactions, time to form friendships, work in groups, participate in various community service projects, assist at different organizations, and learn positive ways of settling disagreements. The Adventure Team was successful in making these essential components available to the students. These experiences were critical for students' behavioral improvement and academic involvement. Teachers and learners agreeing on objectives, methods, and materials was a key factor in the success of the Adventure Team program. This is a new concept in the world of education, because curriculum is generally dictated by the district benchmarks and state standards. Yet allowing students to have an opportunity to voice what and how they were taught creates a unique learning experience. Under these conditions, a diverse culture of learning was developed within the group and students gained a sense of ownership for their education.

Another component from Manning's (1993) seven keys to a successful pull-out program that was incorporated into the Adventure Team program was emphasis on selfconcept. Students were advised to put forth their best effort, risk-taking was encouraged and each student was viewed as a valuable resource to the classroom. Strangers became acquaintances, and over time developed into family. The family concept was embedded in the classroom culture and each of the students' distinctive experiences helped build a bond and friendships that were safeguarded by every member of the Adventure Team. There was a united code of conduct and protection amongst the Adventure Team students. From this connection, respect, tolerance and acceptance of differences grew into a union that cannot be mistaken.

The class unity was evident in the bonds that the students developed in and out of the classroom. The important life skills that were learned are not documented by the standardized and formal measures used in this study, which is unfortunate, because several students learned a lot about themselves and the importance of treating people with respect. The culture in the classroom allowed students to speak freely, give advice, express themselves openly, and cultivate characteristics to become productive citizens. The internal and personal growth of the students was not evaluated. The effects of incorporating the concepts of self-esteem, belief systems, and self-worth and how these factors affect academic achievement are worthy of being studied in future research.

Lastly, Manning (1993) stressed the significance of recognizing the relationship between motivation and success. Instructors were constantly challenged to come up with materials, assignments and field trips that motivated the students to work towards improving their academic achievement. In accordance with Scott and Shearer-Lingo's (2002) guidelines, Adventure Team lessons were constructed and taught in a manner to facilitate immediate and consistent success, therefore, students had an incentive to continue those successful behaviors. Activities, volunteer experiences, classroom participation, praise, community and school recognition were huge motivators for these students. There is neither evidence nor documentation to support this claim, yet as Adventure Team students started being associated with positive praise and leadership roles within the school, behaviors declined and daily attendance improved. Woodward and Brown (2006) state that interventions need to be continually refined to address the increasingly unique characteristics of students receiving specially designed instruction. Student growth, maturity and academic progress required lessons, experiences and classroom activities to evolve simultaneously. As the students' higher order thinking skills expanded; new educational perspectives developed. The journey and experiences these students gained from participation in Adventure Team became the links in their

character to be more confident in their abilities and a motivating factor to continue striving towards educational success.

Limitations

Insufficient Data

Data that are routinely compiled by the district were used to evaluate the program's effectiveness. The data collection process presented a problem in gathering sufficient data to provide evidence of the program's success. The time frame for retrieving data was delayed, therefore creating incomplete data points. When accumulating the information to obtain the results of the evaluation it was discovered that data were missing, information was not communicated in the same fashion as previously collected, and the accuracy of the data was questionable. At the outset of this study, the researcher planned to collect data for comparison groups consisting of students who were recommended for the Adventure Team program but did not participate. District employees designated to provide the data became busy and were not able to give the researcher all of the information requested. Frequent, direct communication with the person designated to provide that data might have resulted in more complete information. It may have been more effective to engage in face-to-face or telephone conversations as opposed to relying on email communication.

Lack of Comparison Groups

The lack of comparison groups in this study disallows any conclusions about actual effects of the program. Although there were students on a waiting list for the

program, it was not possible to obtain outcome information on enough students to make useful comparisons.

Broad Outcome Measures

Use of standardized assessments for measuring academic progress was also a limitation to this study. The test results may not have contained information sensitive enough to document actual student improvement. Student attitudes, self-concept, and a sense of belonging might have been more sensitive to change.

Student improvement on ITBS was the determining factor as to whether or not the program was successful. Just reviewing percentile rank it is evident that the program failed to accomplish the goal of improving students' ITBS scores to proficient levels. However, the resultant data do not capture other factors that are just as detrimental to improving scores on standardized assessments. There are other reasons students may not have shown desired progress on standardized tests. Some students have test anxiety, or do not see the significance of why they should do well on the test. Other students with lower cognitive abilities or students who have not been identified for special education services may require accommodations when taking district-wide assessments. The data that were used to measure student and program success does not regard nor eliminate the causal factors that directly prevent demonstration of academic achievement on standardized tests.

The data did not reflect student growth in the areas of self-concepts, belief systems, self-esteem, socialization and team building, which tend to enhance academic and behavioral improvement. Students were provided opportunities to learn valuable lessons in an environment where the teacher took on the role of a facilitator rather than a direct instructor. Students were able to brainstorm and problem-solve solutions as a team, however, data was not collected to determine how these factors contributed to academic and behavioral growth. The broad measures used for collecting, monitoring and reporting out the data, only highlighted the deficiencies in the Adventure Team participants.

Recommendations and Implications for Educators

The pull-out Adventure Team program did not generate impressive academic or behavioral results; therefore, educators should be wary of initiating programs that are not research-based. Pull-out programs are traditional interventions commonly used in school districts, however, with limited documentation of favorable results, especially long-term results; educators should question the efficacy of pull-out programs for at-risk students. Educational funding for at-risk programs is limited, so resources should be allocated to implement research-based interventions that are verified to improve student academic achievement.

Additional areas that require further examination along with adequate funding, are educational resources and need for teacher training prior to implementing the intervention. Some intervention programs are put into practice without complete integrity or do not adhere strictly to the program design. In an effort to generate the desired outcomes from an intervention the proper supports and resources need to be available in order to duplicate the positive results. It is better to create a structurally sound program and have all the components in place, setting it up to succeed, rather than haphazardly throw together a makeshift program, that is destined to fail.

47

In this study of the Adventure Team, future research should have included investigation of restructuring the curriculum to focus on more intensive instruction rather than fewer skill strategies to facilitate mastery (Lane, 2007). The intervention curriculum should be comparable to grade-level content, however, simply moving students to a different setting and extending the time spent working on a specific content area, does not guarantee positive results. Additional research needs to be followed up in the possibility of adopting school wide interventions, rather than pull-out programs (Alawiye & Williams, 2005). All students could benefit from use of various instructional strategies in the classroom.

In addition to curriculum needs, researchers should conduct further examination into qualitative studies and the effects that creating a positive classroom culture may have on academic achievement. Although data were not collected in this study to determine how a sense of belonging and student-centered curriculum affect academic progress, it is worthy of future investigation. Most students at risk of academic failure require an instructional social skills component, high expectations, hands-on experiences and opportunities to apply these skills. Following implementation of these strategies as interventions, then research and data can show how much these non-academic factors influence academic growth.

Educators and lawmakers cannot afford to continuously expend educational resources on interventions that do not produce desired results. Stakeholders need to devote adequate planning, time and research to implement best practice solutions in an

effort to efficiently and positively impact student achievement. Since research data supporting the long-term effects of pull-out programs is limited, the question remains: Why do school systems readily and continuously use strategies that have proven to only produce minimal short-term effects?

REFERENCES

- Alawiye, O., & Williams, H. (2005). A comparative reading gains of African American students in a Chapter I pull out program. *Reading Improvement*, 42, 98-104.
- Conderman, G., & Katsiyannis, A. (2002). Instructional issues and practices in secondary special education. *Remedial and Special Education*, 23, 169-179.
- Gardner, III, R., & Miranda, A. H. (2001). Improving outcomes for urban African American students. *The Journal of Negro Education*, 70, 255-263.
- Haas, D. (1993). Inclusion is happening in the classroom. Children Today, 22, 34-35.
- Hartzler, L., & Jones, M. (2002). One size doesn't fit all. Leadership, 31, 8-11.
- Lane, K. (2007). Identifying and supporting student at risk for emotional and behavioral disorders within multi-level models. *Education and Treatment of Children*, 30, 135-164.
- Lubeck, S., & Garrett, P. (1990). The social construction of the 'at-risk' child. *British* Journal of Sociology of Education, 11, 327-340.
- Manning, L. M. (1993). Seven essentials of effective at-risk programs. *The Clearing House*, *66*, 135-138.
- McEvoy, A., & Welker, R. (2000). Antisocial behavior, academic failure, and school climate: A critical review. *Journal of Emotional & Behavioral Disorders*, 8, 130-141.
- National At-Risk Education Network (2008). Retrieved July 09, 2009, from www.atriskeducation.net
- Odden, A. (1990). Class size and student achievement: Research-based policy alternatives. *Educational Evaluation and Policy Analysis*, 12, 213-227.
- Raywid, M. (2001). What to do with students who are not succeeding. *Phi Delta Kappan*, 82, 582-584.
- Rothstein, R. (2004). A wider lens on the black-white achievement gap. *Phi Delta Kappan, 86*, 104-110.
- Rozycki, E. (2004). At-risk students: What exactly is the threat? How imminent is it? *Educational Horizons*, *82*, 174-179.

- Scott, T, & Shearer-Lingo, A. (2002). The effects of reading fluency instruction on the academic and behavioral success of middle school students in a self-contained EBD classroom. *Preventing School Failure*, 46, 167-173.
- Townsend, B. L. (2002). "Testing while black": Standards-based school reform and African American learners. *Remedial and Special Education, 23*, 222-230.
- Waxman, H. C., & Padron, Y. N. (1995). Improving the quality of classroom instruction for students at risk of failure in urban schools. *Peabody Journal of Education*, 70, 44-65.
- Woodward, J., & Brown, C. (2006). Meeting the curricular needs of academically lowachieving students in middle grade mathematics. *The Journal of Special Education, 40,* 151-159.

APPENDIX

TABLES AND FIGURES

	Students in	Analyses	Students in Cohorts		
Group	Ν	%	Ν	%	
03/04 Adv Team					
African-American	9	69.2	17	70.8	
Hispanic	0	0	1	4.2	
Caucasian	4	30.8	6	25.0	
Total cohort	13		24		
04/05 Adv Team					
African-American	13	68.4	14	63.6	
Hispanic	1	5.3	1	4.5	
Caucasian	5	26.3	7	31.8	
Total cohort	19		22		
05/06 Adv Team*					
African-American	5	50.0	20	57.1	
Hispanic	0	0.0	2	5.7	
Caucasian	5	50.0	13	37.1	
Total cohort	10		35		
Total participants	42		81		

Frequency Table for Adventure Team Cohorts

(table continues)

*1 African American student and 3 Caucasian students participated in Adventure Team reading only; 3 African American students and 1 Caucasian student participated in Adventure Team math only; 1 African American student and 1 Caucasian student participated in Adventure team for reading and math.

١

			Coh	lort			
	03/	04	04/	<u>05</u>	05/06		
	% Adventure rade and subject Team % Building		% Adventure		% Adventure		
Grade and subject			Team % Building		Team	% Building	
Grade 8	nan an					4. 4.4	
Reading	15.4	31.5	15.8	58.3	20.0	32.4	
Math	15.4	38.6	21.1	44.4	30.0	39.4	

Note. Lack of data for a grade and year is indicated by "na." Proficiency is defined as a or above 40th percentile on national

norms

Percentage of Students Proficient* in Reading and Math by Cohort and Grade Level

	Cohort							
	03/	04	<u>04/</u>	05	05/06			
	% Adventure		% Adventure		% Adventure			
Grade and subject	Team	% Building	Team	% Building	Team	% Building		
Grade 6								
Reading	0.0	na	15.8	na	30.0	28.6		
Math	0.0	na	10.5	na	40.0	25.0		
Grade 7								
Reading	0.0	na	15.8	34.7	40.0	43.2		
Math	7.7	na	15.8	33.1	10.0	37.0		

(table continues)

4

Percentage of Students Improving from Non-proficient to Proficient in Reading and Math between Seventh and Eighth Grade ITBS Administrations by Subject Area and Cohort

			Coł	nort			
	03/	04	04/	05	<u>05/06</u>		
N imp			N imp		N imp		
Subject	(N = 13)	% imp	(n = 19)	% imp	(n = 6***)	% imp	
Reading	2	15.4	*1	5.3	**2	33.3	
Math	*2	15.4	**3	15.8	*2	33.3	

* 1 student declined in proficiency level

** 2 students declined in proficiency level

*** Not all students were in both groups. N = 6 for each group.

	Cohort							
	<u>03/04</u> <u>04/05</u> <u>05/0</u>							
Grade	М	SD	М	SD	М	SD		
7	14.68	12.66	12.78	11.05	10.76	7.96		
8	12.51	9.38	12.35	7.81	11.93	7.45		
9	18.32	13.95	19.34	11.59	19.71*	7.87		

Absences in Grades 7, 8, and 9 by Cohort Group

* 2 outliers, 1 with over 80 absences and 1 with over 60 absences were dropped from this analysis. With outliers included, M = 30.11, SD = 23.33

,

	Adventure Team Cohort								
	03/04			04/05			<u>05/06</u>		
Semester	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range
Grade 7									
Sem 1	1.69	3.17	0-10	0.74	1.45	0-5	1.10	1.91	0-6
Sem 2	1.92	2.93	0-9	0.68	1.25	0-4	0.90	1.29	0-4
Grade 8									
Sem 1	1.00	2.12	0-7	1.32	2.36	0-9	1.50	2.01	0-5
Sem 2	3.85	5.00	0-15	2.89	3.78	0-12	3.20	4.08	0-13
Grade 9									
Sem 1	4.77	6.65	0-21	5.21	7.08	0-26	6.90	6.94	0-21
Sem 2	2.31	2.69	0-9	4.42	6.25	0-23	2.00	2.26	0-7

Suspensions for Grades 7, 8, and 9 by Cohort

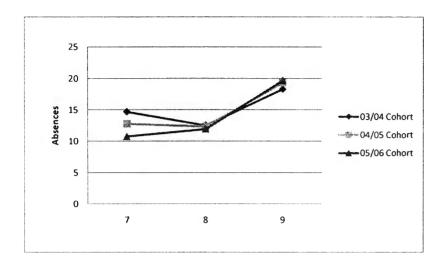
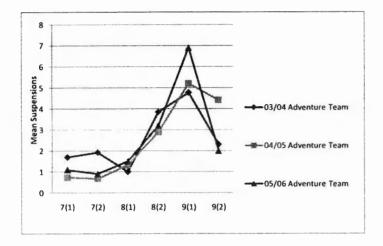




Figure 1. Mean Absences for Adventure Team Cohorts by Grade Level



Grade (Semester)

Figure 2. Mean Suspensions for Adventure Team Cohorts by Grade and Semester