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Modifying Curriculum and Instruction for Students At-Risk for School Failure: A Program Evaluation

Kathleen M. Bird

University of Nebraska at Omaha

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Modifying Curriculum and Instruction for Students
At-Risk for School Failure:
A Program Evaluation

A Project
Presented to the
Department of Psychology
and the Faculty of the Graduate College
University of Nebraska

In Partial Fulfillment
of the Requirements for the Degree
Educational Specialist
University of Nebraska at Omaha

by
Kathleen M. Bird
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FIELD PROJECT ACCEPTANCE

Accepted for the faculty of the Graduate College,
University of Nebraska, in partial fulfillment of the
requirements for the degree Educational Specialist,
University of Nebraska at Omaha.

Committee	
<u>Robert H. Woody</u>	<u>Psychology</u>
Name	Department
<u>Kenneth E. Smith</u>	<u>TEI</u>
<u>Richard L. Wikoff</u>	<u>Psychology</u>

Robert H. Woody

Chairman

October 14, 1991

Date

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ABSTRACT

The present study focused on the effects of a one year curriculum modification project on the frequency of assigned unsatisfactory grades and student behavioral adjustment. All sixth grade students attending Plattsmouth Middle School during the 1990-1991 school year participated in the study (121 total). A subset of these students were selected for further intervention on the basis of a number of factors which put them at-risk for poor academic performance (30 total). During the spring of the 1989-1990 school year, a curriculum modification project was developed in an attempt to reduce the incidence of unsatisfactory grades and improve student behavior. All sixth grade teachers responsible for the core academic areas of mathematics, language arts, science, reading and social studies were involved in the study. The program consisted of the purchase of new supplemental teaching materials and a two week in-service program which allowed teachers to revise their curriculum and learn alternative teaching methods to better serve the needs of low-achieving students.

The modified curriculum program was implemented during the 1990-1991 school year. Results of the

program evaluation revealed no significant decreases in the frequency of assigned unsatisfactory grades during the year of implementation of the alternative educational program in comparison to the traditional program in place during the 1989-1990 school year. Results for two academic areas indicated program effects that approached significance in the areas of language arts and reading ($p < .10$). Results of a pre and post-test measure of student behavioral adjustment indicated positive results. At-risk students were rated higher on the Behavioral Evaluation Scale - 2 by their core teachers following exposure to the alternative educational program.

Chapter 1

Introduction

For a variety of reasons, more than one-fourth of all students in American schools make less than satisfactory progress (Sartain, 1989). These students have been labeled at-risk for school failure. The impact of poor school performance has far reaching implication for students. The fact is that poor academic performance is typically accompanied by other risk factors. Poor grades is the most frequently reported reason for dropping out of school (Borus & Carpenter, 1983). McDill, Natriello, and Pollas (1986) report that the consistent failure and frustration of low academic achievement leads to increases in truancy, absenteeism, and school-related behavior problems.

Students perform poorly on school-related tasks because of a number of diverse conditions. Included in the population of low achieving students are slow learners or those who exhibit minor handicapping conditions such as learning disabilities or mild mental retardation. Many students perform inadequately because of behavioral or emotional difficulties. Still others are hindered in their level of academic achievement by a broad range of social problems

involving single parent homes, teenage pregnancy, poverty, drug/alcohol abuse, and lack of sensitivity to the increasing population of minority students within our schools. Maguire (1986) states that while little good data about the at-risk population exists, school personnel know who is at-risk. Sartain (1989) states that in an educator's view, students at-risk for school failure are children of school age who, because of one or more factors in a syndrome of disadvantaged traits, behaviors, or circumstances are in danger of being unsuccessful in school. It is estimated that at least 30 percent of elementary and secondary school students in the United States today are educationally at-risk and that the proportion will continue to rise rapidly in the future (Levine, 1988).

Certainly, a number of the students present problems that educators alone can not address or that are outside of the school's ability or responsibility to manage. Nevertheless, some authors have stated that the school is responsible for many of the difficulties at-risk students face (Hargis, 1989; Sartain, 1989; D'Alonzo, 1983; Pressein, 1988). In his book, *Non-Achieving Student At Risk: School, Family and Community Intervention*, Sartain (1989) states that many students

in American schools are caught in a bind and become discouraged about education very early because of unfair competition in graded schools where all are expected to learn at the same rate with equal success. Hargis (1989) contends that lack of student achievement is not a defect in most of the at-risk students. It is a problem brought on by the schools because of institutionalized, organizational, and curricular rigidity. The problem, according to Hargis, lies within the curriculum. Learning problems are imposed upon students because the lock-step curriculum excludes many students from learning and experiencing success. In this author's view, failure is the consequence of an inappropriate curriculum and is the antithesis of achievement.

D'Alonzo (1983) also points to the lack of individualization of instruction as a major cause of school failure, especially in secondary school programs. He states that, secondary teachers in regular classrooms are not taught techniques for meeting the instructional needs of low-achieving students. Sartain (1989) concludes that most schools today, both at the elementary and secondary level, are not very adaptive. Furthermore, teachers dislike the

task of teaching low-ability students. In comparison to average or gifted students, teachers spend less time preparing for low-ability students and schedule less varied, interesting, and challenging activities for these students with academic difficulties during the course of the school day.

Following the release of *Our Nation at Risk* by the National Commission on Excellence in Education (1983), reports have come out to address the issue of at-risk students and how they fit into the recent impetus for national reform of our educational system. In an analysis by Green (1986) of a subsequent report entitled, *Barriers to Excellence, Our Children at Risk*, the author states a number of specific barriers to the education of at-risk students. These include inflexible school structures, misuse of testing, and problems of inequitable and insufficient school funding. The major concern regarding the effects of the reform movement on at-risk students' chances for school success stems from the fear that more students will either drop-out or fail as the result of a uniform, up-graded curriculum and new minimum competency standards.

When reviewing the literature, the problem of school failure appears to be most commonly related to curriculum programs that are not designed to meet the needs of individual students. Typically, all students are expected to perform at a similar level despite wide gaps in ability levels among classmates. Hargis (1989) contends that the curriculum is assigned to the grade and calendar sequence and not to individual students. It is likely, therefore, that poor school performance can be mitigated to a significant degree through the use of educational methods and materials better designed to meet the individual needs of low-achieving students. DeBlois (1989) states that if one want to keep at-risk students in school, then one must proceed on the belief that young persons can be successful and that schools can be the primary place where learning begins. Research suggests that some schools are more successful with low-achieving students than other schools mainly because of how the school is managed. DeBlois further contends that we must focus on the element of structure and curriculum that provide the greatest opportunity for the success of at-risk students.

The objective of this research project was to design such a curriculum for students who are at-risk for school failure. More specifically this project involved the purchase of new and supplemental curriculum materials combined with a two week teacher in-service program specifically designed to provide information and allow teachers the necessary time to modify their existing curriculum for at-risk students. The modifications included high-lighting essential reference material and recording textbooks on tapes for students with reading difficulties, developing accompanying "hands on" activities, adapting tests, substituting parallel materials, and incorporating learning strategies, cooperative student activities, and study skills into the curriculum. The effectiveness of the program hinged on its ability to reduce the incidence of unsatisfactory school performance. It was hypothesized that through the modification of standard curriculum and instructional practices, incidents of failure would be reduced compared to the failure rate obtained previously through traditional educational practices. It was further hypothesized that by development of a comprehensive educational program better designed to

meet these students specific educational needs, overall behavioral adjustment of these students would be enhanced after exposure to the program.

Chapter II

Review of Literature

Introduction

Historically, students who could not keep pace with their peers in regard to classroom expectations were simply removed from regular education classes. Recently though, exclusion through special education and tracking procedures has been criticized on a number of grounds. Hargis (1989) argued that through the rapid emergence of special education and compensatory programs, attention has not been directed toward the cause of the problem and has forestalled needed reforms in regular education involving abolishment of a lock-step school organization and development of an individualized curriculum. Pull-out programs have also been criticized on the grounds of the negative aspects of labeling. Studies on the effectiveness of tracking procedures have shown that students resent their low status and tend to respond defensively by refusing to seriously commit themselves to academic achievement goals (Swartz, 1981). Still, most low-achieving and disadvantaged students fall through the cracks left between special programs and services, resulting in inequities in the educational system. Aksamit (1990)

pointed out that children who are at-risk for school failure because of conditions other than being handicapped deserve the same right to a free and appropriate public education in the least restrictive environment. Nevertheless, Hargis (1989) contended that the negative aspects of labeling in order to get special placement is far less detrimental than the continued failure in rigid regular classroom programs.

Regardless of the relative advantages and disadvantages of "pull-out" programs, exclusion and segregation of students on the basis of minor handicaps or low levels of achievement is becoming less of an option. Through the enactment of Public Law 94-142 and the proposal known as the Regular Education Initiative, the push for regular education to begin the task of educating students with a wide variety of learning and behavior problems has begun. Low-achieving students are now the primary responsibility of regular educators. According to D'Alonzo (1983), there will be a trend in regular education at all levels that will make it similar to special education in programming, orientation, and individualized instruction. "Special needs" will be broadened to include those who experience difficulty in learning as well as the mildly

handicapped who manifest learning and behavior problems. The term "mainstreaming" will disappear from use as it moves from its trend status into accommodation.

A major hurdle to the accommodation and integration of the mildly handicapped and low achievers is the typical lack of individualization of instruction at the secondary level. According to D'Alonzo (1983), in order to accommodate students with special needs, many secondary school programs will have to consider radical modifications in their existing practices. Secondary teachers in regular classrooms are not taught techniques for meeting the instructional needs of students with problems of low achievement. The large variance in these students' academic abilities at the secondary level has also been recognized. Other problems according to D'Alonzo (1983) include the fact that most content area teachers are responsible for 130 to 175 students each day and individualization can be an overwhelming task. Secondary teachers are trained in specific content areas, and not trained to work with low-achieving or handicapped students. According to Hargis (1989), secondary teachers can feel quite bound by their curriculum domains. They present the same

materials in the same sequence year in and year out. Another major obstacle in regard to providing for an appropriate education for individual students is that the reading level in any one class can vary from non-readers to college level. The majority of class content uses reading as the primary source of information gathering. Finally, most secondary school texts have readability levels that exceed most students' grade level in that subject. Others have commented about the negative attitude many secondary teachers display when faced with the prospect of educating students who, for whatever reason, are low-achievers (Bickel & Bickel, 1986).

While the obstacles to serving the needs of low-achieving secondary students and reducing the incidence of frustration and failure are significant, several investigators believe that it remains feasible within the regular classroom environment. The focus is on individualizing the curriculum, making it more adaptive and responsive to meet individual needs. Sartain (1989) advocated the use of the multi-ability classroom for increased opportunity for academic participation and success. The emphasis, according to Sartain, should be on maximizing each student's achievement even

when it means maintaining or increasing the range of individual differences in achievement levels among students. Sartain stated that most successful teachers usually combine whole-class work on general concept development with flexible small-group work on skill development. One approach considered to be effective is for the teacher to begin a class with general instruction and an assignment. Small groups then can be pulled aside for ten to fifteen minutes at a time to work at their own level on a skill related to the unit under study or learn something through a particular learning style.

Hargis (1989) also contended that instruction can realistically be individualized to meet each student's needs within the regular classroom environment. Hargis (1989) stated that trying to make all students conform to uniform grade level standards requires much more effort. According to Hargis, if regular education became more accommodating to the student it would necessitate fewer special programs for students and fewer administrative personnel involved in program management, identifying handicapped students, and dealing with the behavioral consequences of the failure necessary to qualify for such programs.

Hargis also advocated a different model of effective teaching for multiple ability levels. According to Hargis, teaching materials should not be assigned to rooms by single grade levels. Neither should a single level of curricular objectives be assigned to a classroom. Rather, there should be a range of grade levels of materials and curricular objectives that reflect the actual range of instructional levels that exist in the room. Cooperative, rather than competitive, organizations should be introduced. These arrangements, according to Hargis, increase both students' academically engaged time and improve the quality of follow-up and drill. Actual achievement is increased when students work at their individual instructional levels. According to Hargis, students can be evaluated in a similar fashion and be graded fairly on a similar scale because academic work suits individual ability level, thus reducing failure.

Brennan (1979) expressed similar opinions in regard to the integration of slow-learning students into mainstreamed educational setting. Even when there is a wide difference in the potential of individual students, this does not necessarily require different

objectives in the curriculum, according to Brennan. Also different objectives for individuals can in practice embrace common curriculum content and involve common learning experiences. Individual differences in regard to specific behavioral outcomes are specified and only the teacher need be aware of these differences.

In contrast to authors offering broad suggestions for accommodation of students, other authors have cited specific instructional techniques for restructuring curriculum to better meet the needs of low-achieving students. Jones (1988) advocated cooperative learning, reciprocal, paired, and team-teaching techniques, and parallel instruction as more promising learning experiences for at-risk students. Grounding her position in the extensive research literature, she cited many of the poor practices that have been commonplace in traditional American schools including student labeling, lock-step curriculum, recitation, and low-level assessment instruments. Willis (1989) also cited a number of effective curricular modifications and educational practices substantiated by research and considered to be effective when used with at-risk, low-achieving students. These include curriculum

integration, peer teaching, cooperative learning, and academic acceleration involving increasing engagement time for students on significant academic tasks. In a discussion of promising practices for high-risk youth, Green (1986) advocated the educational practices of integrated programming, avoiding labels, adding vocational programming, and either adapting the material to specific needs or using a variety of materials and media. All of which she substantiated through literature review.

Still other authors have stressed the importance of providing motivational activities in the classroom which have more immediate relevance and interest to low-achieving students (Brawer, 1982; DeBlois, 1989; Green, 1986; Willis, 1989; Sammuels, 1986). The authors assumed that low-achieving students will increase their on-task learning time through "hands-on" activities which promote active participation. Furthermore, it has been commonly asserted that low-achieving students need these types of activities because they provide a better match to style of learning and are concrete in nature.

Miller, Leinhardt, and Zigmond (1988) present an opposing point of view. These authors argued that

accommodation, although it may keep students from failing, may not only limit adolescents' acquisition of formal knowledge, but may also be a poor model for preparing these students for the world beyond school. According to the authors, believing that there will always be a second chance, learning that you can get through school without challenge and hard work, and being bored may teach students to look for second chances, to not seek challenges or hard work, and to not persist. Certainly different types of accommodation could effect students in a negative fashion, however the purpose of making curriculum accommodations suggested previously are not intended to bore the student nor displace the student's responsibility for completion of work within his or her own ability level.

Despite the general consensus among individuals that the curriculum for at-risk and low-achieving students is in need of reform, there has been little emphasis on curriculum development for these students in the literature. Mann (1986) pointed out that there has been an astonishing array of things being done in terms of at-risk student programming, but very little has been learned about effective methods to address the

problem because so little research has been done to evaluate specific interventions in terms of effects. Smith (1988) argued that programs for at-risk youth tend to over-emphasize student adjustment. According to Smith, programs focus on drawing students into a more embracing educational environment in hopes of improving student self-esteem and encouraging conformity with school regulations regarding attendance, behavior and work-habits. In this process, curricular and academic innovation is often slighted. Again with the focus on adjustment instead of curriculum reform, the student is viewed as having the problem. According to Hargis (1989), the curriculum appears to be an unlikely villain, yet it is largely responsible for the existence and ailments of low-achieving students.

Teaching Strategies

While research on curriculum modification is scant, there is research to support the use of specific teaching strategies and instructional methods discussed previously by authors concerned with modifying educational curriculum to better meet the needs of low-achieving students. Two of these methods include cooperative learning and peer tutoring. According to

Sartain (1989) cooperative methods are especially suitable for use with children at-risk because children of different backgrounds can be mixed together effectively into small, temporary groups. Cooperative arrangements have been cited as rewarding both individual and group success and counteracting the competitive school environment where students are pitted against each other. Research on the effectiveness of cooperative learning strategies have been consistently positive, contributing to higher levels of cooperative behavior and academic achievement in students of varied ability level (Slavin, 1985; Good & Brophy, 1987; Johnson & Johnson, 1985). Likewise, the use of peer tutors has also been substantiated as a powerful tool to enhance students' academic achievement and social skills (Lloyd, Crowley, Kohler, & Strain, 1988).

In regard to student grouping, research has substantiated the use of the multi-ability classroom as opposed to segregating students according to ability for increasing the opportunities for academic participation and success (Cohen, 1982). Students considered to be at-risk do best in structures of small

groups as opposed to whole class instruction, which has been noted to be particularly ineffective with at-risk students (Presseine, 1989). Flexible small groups which change and regroup frequently according to current needs of the students have been found to be the most effective classroom organization, particularly in reading (Barr, 1982) and mathematics (Good & Brophy, 1987).

Individualized instruction has proven to be more effective than traditional programs in general (Good & Brophy, 1987). A classic experiment by Jones (1948) demonstrated the value of differentiated teaching over a single curriculum. In another study the progress of special education students in an individualized program was significantly higher than for students involved in traditional programs (Good & Brophy, 1987). Other studies have demonstrated that outstanding school systems have developed a curriculum that is individualized and not rigid or lock-step in nature (Wayson, Pinnell, & Landis, 1988). Research also has indicated that students spend twice as much time on task and complete three times as much work when it is based on individualized programs (Wang & Wallberg, 1985).

One individualized instructional method that has not demonstrated its effectiveness in improving academic achievement levels is programmed learning (Good & Brophy, 1987). The problems with programmed learning, according to these authors, is that many students find it boring because it requires no social interaction, isolates students from each other, reduces healthy social interaction, and therefore loses its motivational incentive for learning. Other methods such as mastery learning and continuous progress which remain individualized but still promote social interaction progress have proven to be more successful with at-risk students (Levine, 1988; Slavin, et al., 1987).

The notion that at-risk students achieve at a higher level with the addition of classroom activities and learning conditions which better match their learning preferences has some support in the research literature. Students' motivation to learn has been shown to increase by the addition of activities that are meaningful and have personal relevance to the student (Brunner, 1973; Bates, 1979). Booth (1978) found that lower-achieving students placed in an informal classroom environment made significant gains

in achievement in comparison to a control group. This informal environment involved the removal of threat from grades, and students were permitted to make choices of what they wished to study and when in an atmosphere of informality allowing free movement and interaction with others throughout each school day. Smith (1976) assigned students to three different forms of instruction based on their learning style as assessed by the Learning Style Inventory. Outcomes of the study indicated learning style matching can significantly enhance educational outcomes. The correlation between achievement and the learning style variable was .38 and the correlation between the learning style variable and motivation was .23. Other research has not substantiated the relationship between achievement and learning style (Powell, 1987). It may be that because the actual level of instructional difficulty was not changed along with the perceptual format, the results of these efforts have not been as promising as they could have been.

There is further research to support the effectiveness of in-service education to aid in the identification and accommodation of children with learning problems. Wagner, (1973) designed an

educational program to help teachers attain classroom methods and techniques to investigate achievement for high, average, and low achievers. The results of the study strongly indicated more positive teacher attitudes in the experimental group when compared with a control group of teachers. Ability of the teachers in the experimental group to cope with problem learners as well as high, average, and low achievers was enhanced. Five of seven experimental groups of children demonstrated significant achievement gains at the .01 level. Myer, Gersten, and Gutkin, (1983) also reported student gains in achievement as a result of on-going staff development and consultation through a sponsoring agent: university, educational laboratory, or state department of education. There is a general consensus in the literature that in-service programs can be effective and vital if teachers are to help in recognizing the children who have special educational needs and in making suitable provisions for them (Ainscow & Tweddle, 1979).

Classroom Programs for At-Risk Students

Other research is available on classroom programs designed for students who are at-risk for learning problems. Slavin (1988) examined the research on

effective classroom programs to determine how the educational needs of all students can be met by restructuring the regular classroom, as opposed to adding on services outside of the regular classroom. His review of research on programs demonstrated that effective programs accommodated instruction to meet individual needs while maximizing direct instruction and assessing student progress frequently through a structured hierarchy of skills. Two categories of programs emerged as particularly effective: continuous progress and cooperative learning. Green (1986) also attempted to collect information about effective prevention programs. Her literature review showed no widely accepted set of evaluation criteria for judging the effectiveness of specific programs. In a questionnaire sent out to school administrators to identify successful programs their schools used for "high risk" youth, the effective programs shared the following characteristics: (a) qualified, caring staff, (b) relevant, meaningful curriculum based on real life experience and goals, (c) individualized instruction and (d) support and commitment of administrators.

Classroom programs for at-risk students.

Elementary Programs

An examination of the literature on the efficacy of specific intervention programs at the elementary level have demonstrated positive results. One of the most comprehensive attempts to deal with at-risk elementary students at the national level is Project Follow Through, a program for economically disadvantaged youth in the primary grades with research sites in 180 communities across the nation. These included both rural and urban sites. For one particular site reported by Myer, Gesten, and Gutkin (1983), a number of favorable results were reported. The program consisted of a direct instruction model involving (a) consistent focus on academic objectives, (b) high allocations of class time to small group instruction, (c) tight, carefully sequenced Distar curriculum, (d) on-going teacher in-service and pre-service training that offers concrete "hands on" solutions to problems and (e) a comprehensive system for monitoring student progress through the curriculum. High-risk students served by the program attained achievement levels similar to middle-class peers despite multiple educational handicaps both at home and

school.

Other studies cited in the literature also reported favorable results for programs utilizing elementary students as subjects. Vochko (1975) reported on the success of a program entitled, "Schools Without Failure". This program involved learning experiences in group interaction, building curriculum to ensure success for all students, helping students seek out relevance between in and out of school experiences, and developing an atmosphere of friendliness and acceptance in the classroom. There was a significant difference in the achievement gains made by students in the Schools Without Failure program as compared with students in traditional elementary schools programs in both language arts and mathematics. There was also a significant difference in the students' gain in self-image and attitude in favor of the students in the School Without Failure program.

A program entitled "Project Success" also received favorable support from the teachers who were exposed to the program (Haun, 1979). This program was aimed at preventing the educational failure of learning disabled students in mainstreamed educational settings. It consisted of structured teaching of language skills,

training in motor perception, a multi-sensory approach to teaching, and curriculum modifications in the form of suggested methods for mainstream teachers.

Unfortunately, no data was provided on the ability of the program to prevent educational failure. In an attempt to determine the effectiveness of the program, an opinionaire was administered to teachers in the adoptive schools. Major findings included: 85% of respondents agreed that Project Success was an effective model for mainstreaming learning disabled students, 74% indicated that mainstreaming did not result in undesirable labeling, but only 52% perceived that the use of the project's teaching material and strategies would prevent educational failure.

Eckhardt (1974) did not find gains in achievement for underachieving fourth, fifth, and sixth grade students who were exposed to an experimental program of 64 sessions of individual remediation of skill deficits outside of the classroom and group counseling. A control group which did not participate in the program was matched according to sex, grade placement and in functioning at least one year and four months below grade level. A comparison group of learning disabled students which received regular forms of remediation

outside of the regular classroom also participated in the study. After three months of intervention, the control group obtained significantly higher means than either the experimental or comparison group, both of which were removed from the mainstream for remediation. This study lends support to the notion of provided services for low-achieving students within the regular classroom environment.

Secondary Programs

A variety of educational programs have been adopted at the secondary level to prevent academic failure, only some of which have supporting research to substantiate their effectiveness. In regard to specific content areas, a number of studies have supported the effectiveness of programs which involve alternative methods and materials, particularly in the areas of science and mathematics. Fullmer (1978) implemented a mathematics program for low-achievers at the junior high level using alternative math texts to increase motivation. The effect of special materials on mathematics attitude was not as unfavorable as that of traditional texts by comparison of pre- and post tests. Larcomb (1977) found favorable achievement gains using math materials modified for use with slow-

learning pupils. Wood (1975) also described favorable results from the use of objectives to structure a science course to make it more relevant to less able pupils. Another account of objectives being used successfully to adapt a science curriculum is reported by Mitchell and Kellington (1978).

There are several federally funded demonstration programs offering alternative programming for mainstreamed secondary students. Research on their effectiveness in reducing incidents of school failure, however, is not currently available. One of the programs widely used to accommodate students is entitled "Parallel Alternative Curriculum" (D'Alonzo, 1983). The program is designed to provide secondary teachers with alternative methods for meeting the educational needs of all students regardless of reading ability. Teachers can substitute or supplement the students' reading and information-gathering requirements through a variety of other communication vehicles. Four options include (a) all assignments in a non-reading format, (b) only low-achieving students using PAC materials in regular class, (c) particular units presented in PAC format or (d) allowing students to choose instructional procedures through classroom

stations with either a reading, discussion, or listening format. The rationale for use of such a program is that if reading is the primary source of gaining information, failure will continue to play a devastating role with low-achieving students because of their low reading levels.

One project that has a substantive research base is a program designed to teach strategies to secondary students to learn more efficiently in the regular classroom (Learner, 1988). The rationale behind the program is based on the assumption that since many secondary regular education teachers resist altering their curriculum to meet the needs of learning disabled students, it is hypothesized that teaching coping skills would help these students compete successfully in regular course work. Close interaction with the regular teacher assists the specialist in identifying defective learning skills and teaching each specific learning strategy. This research project developed in Lawrence, Kansas entitled Project Strategies to Increase Learner Efficiency, showed that learning disabled students did improve their performance after instruction (Wong, 1986). While these strategies improve the students' chances for success in

mainstreamed settings, it places the sole responsibility on the students as opposed to the teacher having to modify the curriculum to make it more appropriate for these students.

Secondary programs which focus on drop-out prevention appear to have relevance to the topic of school failure and low achievement, since low achievement is the primary cause of students leaving school early. Favorable results from a number of prevention programs are cited in the literature. Ruby and Law (1982) reported success from an experimental program for potential drop-outs entitled Positive Learning Program. The program consisted of individual help with assignments and social support during study hall periods. The results showed significant improvement in academic performance. Significant improvement was not realized for the other variables under the study which included both attendance and behavior. The effects of a twelve week drop-out program was reported by Caliste (1984). An intervention was provided for at-risk secondary students consisting of additional, individual help with assignments and group counseling. This drop-out prevention program was effective in reducing both

absenteeism and rate of dropping out. Four affective variables including self-concept, study habits, teacher attitudes, and attitude toward learning remained unchanged in comparison to a control group.

Voss (1976) studied the long-term effects of a drop-out prevention program entitled Project HOLD for junior and senior high school students. Fifty students identified on the basis of low grade point average, excessive number of absences, and a large number of disciplinary referrals were assigned to either an experimental or control group. The project consisted of individual help with school work, close monitoring of progress, and group counseling. A series of analyses of variance showed that the Project Hold group had a higher grade point average and a lower incidence of disruptive behavior than the control group. In summary, these students demonstrated improved academic performance and ability to remain in school through the use of individualized help and group counseling.

Programs Emphasizing Student Adjustment

Educational programs focusing solely on personal adjustment and social skills training in the absence of altering the curriculum or providing individualized assistance with academics have not demonstrated their

effectiveness in improving academic performance according to the available literature. Berenberg (1977) sought to improve academic achievement by providing for better student adjustment through a humanistic, attentive classroom program. Results indicated that exposure to the experimental or control treatment had no significant effect upon achievement, absenteeism, discipline, or self-concept. Rotherman (1982) attempted to determine the effects of a social skill program on the achievement and behavior of 4th, 5th, and 6th grade underachievers. The results of the study indicated no differences in achievement in comparison to a control group who did not receive the social skills training program. Underachievers did, however, improve their social relationships.

Summary

The issues that have been discussed in this review of literature have included a rationale for the use of a modified curriculum better suited to meet the educational needs of low-achieving students along with some of the difficulties in implementation of such a program. At this point, specific teacher strategies and more comprehensive programs which have attempted to

meet the educational needs of at-risk students were reviewed.

It may be concluded from this review of literature is that there is research available to support the effectiveness of specific teaching strategies including cooperative learning, peer tutoring, team teaching, parallel instruction, curriculum integration, and adding "hands on" classroom activities in increasing on-task learning time and student achievement levels. There is also ample research evidence to support the effectiveness of individualization of classroom instructional materials. There is less research evidence regarding the effectiveness of more comprehensive educational programs which attempt to increase at-risk students' level of academic achievement. Many of the programs reviewed were descriptive in nature. Two of three studies involving comprehensive programs designed for at-risk elementary students reported gains in academic achievement (Vochko, 1975; Myer, Gesten, & Gutkin, 1983). At the secondary level, research was scant in regard to comprehensive programs designed to increase at-risk students' academic performance. Available research from secondary drop-out prevention programs indicated

improved academic performance as a result of individual help with assignments, group counseling, and social support (Caliste, 1984; Ruby & Law, 1982; Voss, 1976) which has some relevance to the topic of reducing unsatisfactory academic performance through curriculum modification.

As stated previously the purpose of the proposed study is two-fold. The first is to provide resources including time, money, and expertise for teachers to design a modified curriculum in combination with alternative teaching strategies for sixth grade students. This program will be designed specifically for secondary students considered to be at-risk for poor academic performance in a mainstreamed educational setting. The second is to evaluate the effectiveness of such a program in terms of its ability to reduce incidents of poor academic performance. It is hypothesized that poor academic performance is largely a result of an inadequate curriculum and that academic failure can be mitigated to a significant degree by developing a modified curriculum for such students in conjunction with alternative teaching strategies. It is further hypothesized that through the use of modified curriculum and teaching strategies, low-

achieving students' behavioral adjustment in the school setting will be enhanced.

Chapter III

Method

Subjects

The subjects consisted of 121 sixth grade students enrolled for class at Plattsmouth Middle School in Plattsmouth, Nebraska during the 1990-1991 school year. A subset of 30 of these students was chosen for further intervention in regard to curriculum modification and evaluation of their classroom behavioral adjustment. Seventeen males and thirteen females were included in the smaller experimental group. These students were identified by a consensus of their core teachers as displaying one or more characteristics that put them at-risk for poor academic performance. These characteristics were derived from a list of factors related to unsuccessful school performance according to Sartain (1989). These include:

1. Limited educational background involving lack of prerequisite skills and below grade level academic skills. Included in this group were students who had not been advanced to the next grade because of poor academic achievement, were two or more years below grade level in language, reading, writing and mathematical skills based on

test scores, had performed at or below the 35th percentile on achievement tests, or were classified as slow learners on the basis of a full scale I.Q. score between 75 and 90.

2. Handicapping conditions such as learning disabilities or mild mental retardation. These were students who had been tested previously, were currently eligible for special education services as a result of a specific educational handicap, and were mainstreamed into at least one of the regular education core classes.

3. Behavioral or emotional difficulties. Included in this at-risk category were students who, in general, demonstrated anti-social tendencies, hyperactivity, attentional problems, depression, and/or social withdrawal. Also included in this grouping were students who were consistently disruptive and demonstrated rebellious attitudes toward authority figures or who had two or more in-school or out-of-school suspensions.

4. Non-scholarly tendencies involving poor study skills or lack of motivation and interest in school. Includes in this at-risk group were students who had excessive tardies or absences, a

GPA lower than achievement levels on standardized tests, a dislike of school in general, very limited extra-curricular participation, an inability to tolerate structured classroom activities, and/or a desire for alternative learning modes.

5. Alcohol or drug problem. No students were identified on the basis of alcohol or drug addiction in this study, yet Sartain (1989) did identify substance addiction as a significant at-risk factor.

6. Family difficulties. Included in this group were students who had been the victims of abuse or neglect or family disturbances such as separation or violence. Sartain (1989) also lists other types of at-risk students in this category. In this grouping were students who demonstrated familial traits involving low educational level of parent, single parent home, frequent family moves, and low family income.

A comparison group of all students who attended the sixth grade in Plattsmouth Middle School during the 1989-1990 school year was also included in the study.

Description of Intervention Program

In the spring of 1990, a grant proposal was written to provide the necessary funding to implement the aforementioned program in the 6th grade at Plattsmouth Middle School for the 1990-1991 school year. The proposal evolved out of a concern for the number of students who were unsuccessful in the regular education curriculum and the belief that it was quite feasible to make the necessary changes so that more students could experience academic success. The funding was appropriated through the school's federal Chapter II funds specifically designed for the development of programs for at-risk students. The grant was designed to enable teachers to purchase new books and other educational materials to better meet the needs of low-achieving students within the regular educational mainstream. Funding was also allocated for a two week summer in-service program to give teachers the necessary time to rewrite their curriculum and redesign their classroom and teaching strategies.

Five teachers volunteered for the curriculum modification project. These teachers included all of those who were responsible for the core academic areas including mathematics, science, reading, language arts,

and social studies. Also included in the at-risk team were two school psychologists and one special education teacher.

In the first phase of the project, all core teachers were asked to select a number of new educational materials to purchase for the following 1990-1991 school year. Materials included lower level reading textbooks and pamphlets, many new "hands on" materials such as cards, games, and manipulatives; and a variety of audio cassettes and video tapes.

Purchased curriculum materials varied according to specific academic area. Materials purchased for the social studies area involved several maps, video tapes, one board game, and companion work sheets for geography units. Materials purchased for the new science curriculum were activity workbooks and numerous scientific manipulatives for experimentation and center activities. Materials for the academic area of reading involved the purchase of two new high interest reading series, blank cassettes for recording reading materials, and activity boxes. New math materials included video tapes and many types of manipulative, "hands-on" items. New materials for the language arts curriculum were lower level language and spelling

series along with activity cards to reinforce specific language skills. All of the parallel materials selected and requested by the teachers were able to be purchased through the grant.

The second phase of the project involved a two week in-service program for the teachers and other team members. This in-service program consisted of three activities. In the first days of the in-service program, the teachers were provided with a general overview of at-risk students including characteristics, effective teaching strategies, and common curricular modifications necessary for student success. During this discussion teachers were introduced to cooperative learning, study skill development, learning strategies, parallel curriculum, and alternative testing procedures. In the later half of the first week, teachers spent time aligning their curriculum to cover similar objectives. For example, there is a specific point in the year when all core teachers will be teaching activities related to South America and another point in the year when all teachers will teach a specific learning strategy. In the second week of the in-service program, teachers were allotted individual time to rewrite their own curriculum.

Consultation in regard to curriculum modifications was made available. This included a wide variety of modifications. Specific modifications differed according to subject area and naturally not all teachers made the same modifications. See the attached questionnaires in Appendix A to determine specific course modifications that were planned for the 1990-1991 school year.

The final phase of the intervention took place at the beginning of the 1990-1991 school year. Two weeks following the start of the school year, teachers and consultants met to identify those students considered to be at-risk for poor academic performance. Also at this time, the five core teachers filled out a behavioral questionnaire on each of these students (Behavioral Evaluation Scale - 2). Teachers were then ready to begin implementing the curriculum modifications prepared during the two week in-service program for the remainder of the school year. On-going consultation was provided by both the school psychologist and resource teacher assigned to the district.

Description of Intervention Program

Assessment of Academic Performance

The primary determination of the program's effectiveness stemmed from its ability or inability to reduce incidents of poor academic performance, thereby increasing student chances for success within the regular mainstream educational environment. During the 1989-1990 school year, 1200 sixth grade students attended Plattsmouth Middle School. Quite a number of these students received poor grades. The overall number of failing grades assigned was 78 out of a total of 120 (See Table 1). The overall number of grades assigned as "D" or below was 261 (22% of total). Assigned grades can be further categorized according to semester and specific subject area. Depending upon specific core subject and quarter, incidents of failure rate was as high as 13% in social studies and as low as less than 1% in mathematics. Students receiving a grade of "D" or below for a specific subject and semester ranged from a high of 33% in reading and social studies during the second semester to a low of 8% in mathematics during the first semester. It would appear that some type of curriculum or grading modifications was necessary considering approximately

Table 1

Total Number of "D" and "F" Grades Assigned to Sixth Graders
during the 1989-1990 School Year

	1st Semester		2nd Semester		Total for Two Semester		
	"D"	"F"	"D"	"F"	"D"	"F"	"D" or "F"
Science/Health	21	5	24	6	45	11	56
Social Studies	18	11	25	14	43	25	68
Reading	22	9	24	14	46	23	69
Mathematics	6	4	7	5	13	9	22
Language Arts	17	8	19	2	36	10	46
Total	84	37	99	41	183	78	261

Note. Class size was 120 students.

25% to 30% of all students received a "D" or below in at least one semester of science, reading, and social studies. Poor academic performance was less of a problem in mathematics and language arts during the 1989-1990 school year. Nevertheless in the second semester, 18% of all students received a "D" or below in language arts and 10% of all students received a "D" or below in mathematics.

In order to determine the effectiveness of the program, the number of students who received grades of "D" or below during the 1990-1991 school year in all core subjects were compared to rates compiled during the 1989-1990 school year. The five teachers and two consultants participating were not aware that grades were being collected or utilized as part of the study design. There were, of course, significant limitations to the study because of the two class comparison, however the lack of an available control group left few other options. It was postulated that if a large discrepancy was noted in the number of unsatisfactory grades assigned during the 1990-1991 school year, it is possible that the new curriculum program was responsible. Other possible factors responsible for a discrepancy in assigned unsatisfactory grades not

directly related to the experimental program could include differences in student body composition, changes in the rate of absences, or change in teacher attitude alone. Within the past five years, the assignment of unsatisfactory and failing grades for Plattsmouth 6th grades has been quite consistent in the five subject areas under study. Grades for the past 5 years for all Plattsmouth sixth graders in core subjects can be made available upon request.

Assessment of Behavioral Adjustment

As stated previously, it was hypothesized that many of the behavioral difficulties students display in school are a direct result of the frustration and boredom encountered because of an inadequate curriculum, ill-equipped to meet individual educational needs. The Behavior Evaluation Scale - 2 (McCarney & Leigh, 1990) was utilized to test the hypothesis that a modified curriculum better designed to meet student needs coupled with alternative teaching techniques has the potential to improve behavioral adjustment.

Core teachers spent the first two weeks of the school year observing the behavior of their new sixth grade students in the classroom. Two weeks following the start of the school year, teachers were asked to

individually record the behavior of the 30 students labeled as at-risk using the 76 items on the Behavior Evaluation Scale - 2 (See Appendix B for a listing of the 76 items comprising the BES-2). This measure was considered to be a pre-test of the student behavioral adjustment prior to initiation of the aforementioned treatment program. Core teachers completed the scale again at the end of the school year to measure school behavioral adjustment after exposure to the experimental treatment program. The results of the teacher's individual ratings were averaged and pre- and post-test means were compared for all of the five subscales including learning problems, interpersonal difficulties, inappropriate behavior, unhappiness/depression, and physical symptoms/fears as well as the overall Behavior Quotient. It was hypothesized that students would demonstrate the most significant improvement after exposure to the experimental program in the individual scales measuring learning problems, interpersonal difficulties, and inappropriate behaviors.

Chapter IV

RESULTS

Analysis of Assigned Grades

The total number of "D" and "F" grades were collected for all sixth grade students during both the 1989-1990 and 1990-1991 school year (See table 1 and table 2). A chi-square analysis was then computed using the frequency of assigned unsatisfactory grades ("D" or "F") during both the first semester and second semester of the two school years. This analysis was used to test the hypothesis that students exposed to the revised educational programming would differ in regard to the assignment of unsatisfactory ("D" or "F") grades in comparison to students who did not receive the experimental programs during the 1989-1990 school year.

More specifically, a 2x2 contingency table was

Figure 1. Contingency table.

	Year 1	Year 2
Semester 1		
Semester 2		

Table 1

Total Number of "D" and "F" Grades Assigned to Sixth Graders
during the 1989-1990 School Year

	1st Semester		2nd Semester		Total for Two Semester		
	"D"	"F"	"D"	"F"	"D"	"F"	"D" or "F"
Science/Health	21	5	24	6	45	11	56
Social Studies	18	11	25	14	43	25	68
Reading	22	9	24	14	46	23	69
Mathematics	6	4	7	5	13	9	22
Language Arts	17	8	19	2	36	10	46
Total	84	37	99	41	183	78	261

Note. Class size was 120 students.

Table 2

Total Number of "D" and "F" Grades Assigned to Sixth Graders
during the 1990-1991 School Year

	1st Semester		2nd Semester		Total for Two Semester		
	"D"	"F"	"D"	"F"	"D"	"F"	"D" or "F"
Science/Health	23	13	23	6	46	19	65
Social Studies	16	11	23	6	39	17	56
Reading	17	5	31	12	49	17	65
Mathematics	8	2	6	6	14	8	22
Language Arts	16	12	9	1	25	13	38
Total	80	43	92	31	172	74	246

Note. Class size was 121 students.

constructed using year and semester as variables (see figure 1 for table configuration). A separate contingency table was constructed for each of the five core subjects and for the total of all subjects combined. The frequency of assigned unsatisfactory grades were computed for each cell in the contingency table.

As can be observed from tables 1 and 2, the total number of assigned unsatisfactory grades declined in frequency in the predicted direction during the 1990-1991 school year for all subjects, with the exception of science. The total number of assigned unsatisfactory grades for all subjects combined dropped from a total of 261 (1200 grades assigned overall) during the 1989-1990 school year to a total of 246 (1210 grades total) during the 1990-1991 school year. These differences, however, were not statistically significant at the .05 probability level ($E2 = 3.84$). Computed chi-square values ranged from a low of .09 in mathematics to a high of 3.15 in language arts. Chi square values for both reading ($E2 = 2.81$) and language arts ($E2 = 3.15$) were significant at the .10 probability level.

Analysis of Behavioral Measures

The 30 at-risk students were rated by their five core teachers on the 76 items comprising the BES-2, both at the beginning and ending of the 1990-1991 school year. The mean teacher ratings for each individual student on the pre- and post-test are presented in tables 3 and 4. Mean score totals for all students combined on pre- and post-testing are provided in table 5. As can be observed from table 5, there was an increase in the test scores on the post-testing in the hypothesized direction. Students were rated higher by their core teachers on all of the five individual scales and overall in regard to the combined behavioral quotient score on the post-test.

In order to test the significance of these differences between both the individual scale scores and the quotient on the BES-2 pre- and post-test, a two way repeated measures analysis of variance was conducted. Table 6 provides a detailed summary of this analysis. The results of the analysis indicated a significant main effect for the test, using pre-test and post-test as the two levels ($F = 34.24, p < .001$). A significant main effect was also found for scale, using the BES-2 sub-scales as the five levels ($F =$

23.39, $p < .001$). The test by scale interaction effect was significant ($F = 3.54$, $p = .009$), although this interaction effect was not of research interest in this particular study.

Because the repeated analysis of variance design indicated significance, differences between the BES-2 individual sub-scales and quotients on the pre- and post-test measures were further analyzed using separate t Tests. A significant difference was found between the overall behavioral quotient on the BES-2 when comparing pre- and post-test means ($t(29) = 6.53$, $p < .001$). A significant difference was also found between pre and post-test means for each of the five individual sub-scales including Scale 1 - Learning Problems ($t(29) = 6.53$, $p < .001$), Scale 2 - Interpersonal Relations ($t(29) = 2.78$, $p < .01$), Scale 3 - Inappropriate Behavior ($t(29) = 3.55$, $p < .01$), Scale 4 - Unhappiness/ Depression ($t(29) = 3.20$, $p < .01$), and Scale 5 - Physical Symptoms/Fears ($t(29) = 2.77$, $p < .01$). All six of these individual comparisons indicated significantly higher mean teacher ratings on the post-test in relationship to pre-test ratings. The most significant differences between pre- and post-test ratings were indicated for Scale 1 involving learning

Table 3
Average Teacher Ratings for Students on the BES-2
Pre-Test Results

Student Number	Scale 1	Scale 2	Scale 3	Scale 4	Scale 5	Quotient
1	5	9	9	7	9	85
2	7	12	9	12	10	100
3	5	10	7	6	4	75
4	4	9	7	9	10	85
5	7	12	10	9	10	97
6	7	10	8	9	11	93
7	7	8	7	9	9	86
8	7	9	8	8	9	88
9	4	10	8	9	10	88
10	9	10	11	10	11	101
11	7	10	8	11	11	96
12	7	9	7	12	8	90
13	6	6	7	8	8	79
14	8	12	9	9	11	98
15	7	6	6	9	10	85
16	6	7	7	9	8	82
17	7	6	6	9	9	82
18	7	8	6	10	7	83
19	7	7	7	10	11	89
20	9	12	10	12	10	104
21	9	12	11	12	9	104
22	6	12	9	9	11	96
23	7	7	9	9	7	85
24	7	10	7	9	7	86
25	7	10	9	10	10	94
26	7	9	9	6	10	85
27	7	11	9	12	11	100
28	6	7	6	12	7	83
29	7	7	7	9	8	83
30	8	11	10	10	10	98

Table 4

Average Teacher Ratings for Students on the BES-2
Post-Test Results

Student Number	Scale 1	Scale 2	Scale 3	Scale 4	Scale 5	Quotient
1	9	12	10	9	11	101
2	13	12	11	12	8	108
3	7	8	8	12	4	85
4	10	9	9	11	11	100
5	8	11	9	12	11	101
6	9	12	12	12	11	108
7	9	7	8	10	9	90
8	9	6	6	8	11	86
9	9	11	11	11	11	104
10	9	11	11	11	11	104
11	11	12	12	12	10	109
12	10	11	9	12	8	100
13	5	6	6	6	9	75
14	8	11	9	9	9	94
15	10	9	9	12	11	101
16	6	11	7	10	10	92
17	12	11	11	12	11	109
18	8	11	9	12	9	98
19	8	10	8	9	11	94
20	10	12	11	12	11	108
21	11	12	12	12	11	111
22	9	12	11	10	11	104
23	8	8	7	8	8	85
24	10	12	11	12	11	108
25	9	9	9	7	11	93
26	7	10	8	8	7	86
27	8	12	9	12	11	103
28	8	9	7	9	11	92
29	8	9	7	11	11	94
30	10	10	11	12	11	105

Table 5

Mean Scores for BES-2 Subscales and Quotient

	Scale 1	Scale 2	Scale 3	Scale 4	Scale 5	Total	Quotient
Pre-Test	6.80	9.27	8.10	9.50	9.20	8.57	90.00
Post-Test	8.93	10.20	9.27	10.50	10.00	9.78	98.27
Total	7.87	9.74	8.69	9.75	9.60	9.18	94.14

Table 6

Repeated Measures of Analysis of BES-2 DATA

Variables	Sum of Squares	Degrees of Freedom	Mean Square	F Value
A	109.20	1	109.20	34.24
B	187.58	4	46.90	22.39
S	351.54	29	12.12	
AB	17.15	4	4.29	3.54
AS	92.50	29	3.19	
BS	243.01	116	2.09	
ABS	140.65	116	1.21	

Note. A refers to the pre-test, post-test variable.
 B refers to the scale variable.
 S refers to the subject variable.

difficulties and for the overall behavioral quotient. Differences between Scales 2 through 5 on pre- and post- test ratings were similar in their level of significance.

Chapter V

Discussion

Grading Results

The results of this study did not lend support for the hypothesis that an attempt to individualize and modify standard curriculum practices can reduce the number of students who receive unsatisfactory grades. A decline in the total number of unsatisfactory grades during the 1990-1991 school year was not found to be statistically significant. It is interesting to note that all academic areas, with the exception of science, did show a trend in the direction of a declining number of assigned unsatisfactory grades during the year of the experimental program. Of further interest is the fact that while assigned unsatisfactory grades were higher during the first semester of the 1990-1991 school year, unsatisfactory grades declined to a number that was lower in the second semester in comparison to the 1989-1990 school year. Therefore, even though unsatisfactory performance was higher in the first semester of the 1990-1991 school year, it declined in the second semester to a lower level than the 1989-1990 school figures. In the five years prior to the study, assigned unsatisfactory grades were higher during the

second semester in comparison to first semester grades. It is feasible that the modifications may take some time to begin demonstrating a significant effect. This hypothesis remains to be answered.

In regard to specific academic areas, a marginally significant grading effect was found for reading and language arts ($p < .10$) in this study. Upon examining the data in regard to the specific type of modifications employed, it appeared that these two academic areas had similar modifications. The science and social studies curriculum changes focused their major efforts on making the curriculum more interesting and adding "hands on" activities for all students. The reading and language arts teachers focused more on rewriting tests and providing alternative assignments for low-achieving students. The mathematics subject area, which has demonstrated a consistently low frequency of unsatisfactory grades in past years, has a history of providing individualized instruction to match each student's ability level. It may also be easier to modify curriculum in the reading, math, and language arts areas which focus more on basic skill acquisition. The content areas of science and social studies may not be as amenable to changes which allow

low-achieving students to experience success in regard to concept attainment.

Anecdotal information received from the teachers and consultants involved in the program provide some plausible reasons for the failure of the experimental curriculum modification program to significantly reduce the incidence of unsatisfactory school performance. According to the teachers, the program had the most success with students who were low-achievers, yet had the motivation to do well when work was adjusted accordingly. Other at-risk students, identified as having a poor attendance record, behavioral difficulties, or low motivation to succeed, simply refused to complete work regardless of the type (i.e. "hands on") or difficulty level. The consultants, in addition to the previous concerns, felt that while the teachers were beginning to make the necessary classroom modifications, additional modifications for individual students were necessary before academic performance could be improved. It was noted that, in some instances, teachers had difficulty with changing expectations for low-achieving students feeling that making changes for them was unfair to other students.

Behavioral Results

The results obtained from administration of the BES-2 pre-test and post-test lend support to the hypothesis that a revised educational curriculum can improve teacher ratings of student behavior in the classroom. It is of interest to note that Scale 1 on the BES-2 demonstrated the most significant effect of the intervention program. This is not surprising considering this specific scale measures learning difficulties which was the major reason for the identification of the student as being at-risk and what the intervention program was designed to address. Of further interest is the fact that all of the sub-scales on the BES-2 showed significant increases on the post-test not as directly related to the curriculum modification program. While less significant, teachers rated the at-risk students' adjustment to be improved in the areas of behavioral difficulties, interpersonal relationships, unhappiness/depression, and physical symptoms/fears.

Other hypotheses for the observed increase in teacher behavioral ratings on the BES-2 post-test are possible. First, teachers could have rated the at-risk students' behavior higher overall based on the

expectation of improved behavior following the intervention program. Although the teachers were not directly informed in regard to the purpose of the BES-2 ratings, it would have been quite feasible for the teachers involved to have guessed the nature of the behavioral evaluation. Secondly, student behavior typically improves with the passage of time. Older students, in general, demonstrate better adjustment. Consequently, the at-risk students' behavior could have been rated higher at the end of the year simply because of maturation. Nevertheless, it is also typical for students to demonstrate a "honeymoon" period at the beginning of the year in a new school setting with new teachers. At years end, teachers are frequently bombarded by numerous student behavior problems, resulting in frustration and loss of patience. These factors make it unlikely that teachers would rate the students' behavior more positively at the end of the year without any genuine progress noted.

Conclusion

The results of the study did not provide substantive evidence to support the hypothesis that modification of educational curriculum alone can improve the academic performance of secondary at-risk

students. Perhaps with an increase in the amount of modifications made by teachers or evaluation over a longer period of time, a decline in unsatisfactory academic performance could have been realized. This study did demonstrate some evidence of improvements in student behavior as a correlate of a modified educational program. It is possible that the students' behavioral progress noted in the study was a result of a number of other factors listed previously. It is also possible that the at-risk students' behavior improved as a result of changes in teacher attitude. While this was one of the goals of the curriculum project, it is unclear whether the attitude change, curriculum modifications, or other factors were responsible.

Some of the limitations of the study are as follows. First, of primary concern is the lack of an available control group which, for comparison purposes, makes all conclusions tentative. A group of students within the same year who did not receive any changes in their educational programming would have allowed for more convincing conclusions. Secondly, more control over specific classroom modifications would have been better for research purposes. Because of the number of

,

different kinds of modifications attempted by the teachers, it is difficult to ascertain which of the modifications, if any, were helpful in reducing unsatisfactory school performance. Lastly, there is the issue of subject classification. Because not all of the classroom modifications were designed specifically for the at-risk students, there were essentially two groups of subjects. Unsatisfactory grades were compared for all students, who received some but not all modifications, because an at-risk comparison group was not available. It was assumed that the 30 at-risk students would be the individuals who would demonstrate poor academic performance and a reduction in total numbers of unsatisfactory grades would reflect positively on this group.

It is difficult to directly relate this study with others presented in the literature review because of the number of different types of modifications utilized. While a number of previous investigators have reported positive academic results from individual teaching methods, there are fewer comprehensive educational programs which focus on curriculum modifications designed for at-risk students cited in the literature. This study was in contrast to the two

other elementary at-risk programs discussed previously where achievement gains were realized as a result of a modified curriculum (Myer, et al. 1983; Vochko, 1983). At the secondary level, this study was also at odds with two studies where changes in the science curriculum affected positive student achievement to a significant degree (Mitchell & Kellington, 1978; Wood, 1975). Studies of the drop-out prevention programs at the secondary level indicated improvements in academic performance (Caliste, 1984; Ruby & Law, 1982; Voss, 1976) which again was not realized in this study.

The positive change noted in student adjustment as a result of a revised educational program is supported to some degree in the literature. The literature, in regard to this topic is, however, sparse. Vochko (1975) reported gains in student adjustment after exposure to an at-risk educational program of revised curriculum at the primary level. At the secondary level, Caliste (1984) and Voss (1976) reported gains in student adjustment as a result of a drop-out prevention program focusing on individualized help with assignments. Conversely, Ruby and Law (1982) found no gains in behavior or attendance as a result of a similar program of individualized help with classroom

assignments. Direct comparison is difficult because all of these programs were quite different in content with the present study. Many of these authors described pull-out programs in contrast to this program which was implemented in the regular classroom environment. There does, however, appear to be some evidence of improvement in student behavioral adjustment when schools make an effort to individualize curriculum and teaching methods.

Suggestions for Future Programming and Research

Because the Plattsmouth Middle School is in the process of adding an at-risk teacher and continuing with an at-risk program and yearly teacher in-service program, it is important to consider which elements of programming have the best chances of improving student behavior and academic performance. First, it would appear to be of value to examine each of the specific modifications made during the 1990-1991 school year to pinpoint which of these were most successful. It may also be helpful to divide at-risk students into specific categories such as those who have behavioral difficulties and those whose primary difficulty is academic in nature and design modifications to suit each type of learning difficulty. Because the subject

area of language arts and reading had the most significant gains in reducing unsatisfactory grades, this may be a starting point. Also, each teacher could examine the individual aspects of their curriculum which proved to be of most success during the 1990-1991 school year. Secondly, there was a specific problem with students who remained poorly motivated and simply did not complete work. Specific techniques to reach these students need to be developed such as implementing reward systems, changing attendance policies, increasing monitoring of progress, soliciting parental support, or requiring study periods. Lastly, because the program is currently designed for sixth grade students, there are adjustment issues to be considered in programming. Because of the move to middle school from the elementary program, the students may require increased daily structure, changes in teacher assignments, or help in the development of study skills and self-monitoring.

In regard to research issues, it may be interesting to continue to monitor the failure rate of the sixth grade students participating in the program. The failure rate remains fairly high and it would be of value to observe if this rate declines further with

program refinements. It may also be of interest to compare the Plattsmouth Middle School's failure rate of sixth graders with other neighboring school districts who have not implemented such a program for low-achieving students. Other research variables to be considered include student attitude, student self concept, and other measures of academic achievement other than grades. One variable not considered directly in this study was teacher attitude in regard to specific teaching methods and toward at-risk students in general. It was apparent in this study that teachers differed in their view of appropriate modifications for these students and choice of educational materials. Teacher attitude may have a significant effect upon the success or failure of at-risk educational programming and should be investigated further.

Chapter VI

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Program Title: MODIFYING CURRICULUM FOR AT RISK STUDENTS

Program Date: July 16-27, 1990

Your Name: _____ - Reading

80

Your reaction to this program is important to our efforts to provide quality and worthwhile educational development programming.

	LOW				HIGH
1. Appropriateness of instruction to program objectives	1	2	3	(4)	5
2. Appropriateness of program to my needs	1	2	3	(4)	5
3. Appropriateness of time allowed for questions/discussion	1	2	3	4	(5)
4. Appropriateness of time allowed for curriculum development	1	2	3	4	(5)

5. General comments about program: *Felt it was very worthwhile. It was great having the time to work on materials that should benefit students.*

6. Suggestions for improving this program would be:

7. If a choice was necessary because of limited funding would you prefer: (circle one)

(A) time to prepare material

(B) funds to purchase new materials

8. At this point, what can we do to be of further assistance to you and to aid "at risk" students?

9. Please list the specific changes in your curriculum that you are planning for the next school year.

1. Stories recorded on tape
2. Flashcards for Vocabulary cards
3. Study Questions to Guide Reading
4. System set up to help students organize materials and to help them get assignments completed and

10. Other comments and suggestions. *handed in*

5. Re-write parts of Unit Tests so it would be easier for AT RISK student to succeed.

for assignments
→ *check off sheet divisions for each area - ie Vocabulary.*
bonus points for each section

Program Title: MODIFYING CURRICULUM FOR AT RISK STUDENTS

Program Date: July 16-27, 1990

Your Name: _____

Math

81

Your reaction to this program is important to our efforts to provide quality and worthwhile educational development programming.

	LOW				HIGH
1. Appropriateness of instruction to program objectives	1	2	3	4	(5)
2. Appropriateness of program to my needs	1	2	3	4	(5)
3. Appropriateness of time allowed for questions/discussion	1	2	3	4	(5)
4. Appropriateness of time allowed for curriculum development	1	2	3	4	(5)

5. General comments about program:

It was great to have this opportunity.

6. Suggestions for improving this program would be:

It would be great to do this program every summer. Even in a shortened form - time and money.

7. If a choice was necessary because of limited funding would you prefer: (circle one)

(A) time to prepare materials

(B) funds to purchase new materials

8. At this point, what can we do to be of further assistance to you and to aid "at risk" students?

Keep communication open during school year. Probably will have questions or need suggestions along the way.

9. Please list the specific changes in your curriculum that you are planning for the next school year.

Use of calculators.

Implement cooperative learning.

Use Mortenson Math manipulatives.

Use Cuisenaire materials for Problem solving, fractions, & decimals.

Adapted test questions and story problems.

10. Other comments and suggestions.

I need an aide during first hour.

Program Title: MODERN CURRICULUM FOR AT RISK STUDENTS

Program Date: July 16-27, 1990

Your Name: _____

Social Studies

82

Your reaction to this program is important to our efforts to provide quality and worthwhile educational development programming.

	LOW				HIGH
1. Appropriateness of instruction to program objectives	1	2	3	4	(5)
2. Appropriateness of program to my needs	1	2	3	4	(5)
3. Appropriateness of time allowed for questions/discussion	1	2	3	4	(5)
4. Appropriateness of time allowed for curriculum development	1	2	3	4	(5)

5. General comments about program: *Great! Somebody is finally listening to us!*

6. Suggestions for improving this program would be:

7. If a choice was necessary because of limited funding would you prefer: (circle one)

(A) time to prepare materials

(B) funds to purchase new materials

8. At this point, what can we do to be of further assistance to you and to aid "at risk" students?

Keep in touch. Most of our work won't be tested until we see how it goes in actual use.

9. Please list the specific changes in your curriculum that you are planning for the next school year.

Less textbook work. More multimedia/hands on type activities. My goal is to experience Latin America and Canada, as best we can, rather than just study it. Quizzes and worksheets were re-written to accomodate the at risk student.

10. Other comments and suggestions.

Several of the games, materials, etc. had pre and post tests provided. Would you like to have copies of these results?

Thanks!

Program Title: MODIFYING CURRICULUM FOR AT-RISK STUDENTS

Program Date: July 16-27, 1990

Your Name: Science

83

Your reaction to this program is important to our efforts to provide quality and worthwhile educational development programming.

	LOW				HIGH
1. Appropriateness of instruction to program objectives	1	2	3	④	5
2. Appropriateness of program to my needs	1	2	3	④	5
3. Appropriateness of time allowed for questions/discussion	1	2	3	④	5
4. Appropriateness of time allowed for curriculum development.	1	2	3	④	5

5. General comments about program:

Well-planned, freedom to pursue goals without hassle
was appreciated

6. Suggestions for improving this program would be:

7. If a choice was necessary because of limited funding
would you prefer: (circle one)

(A) time to prepare materials

(B) funds to purchase new materials

8. At this point, what can we do to be of further assistance
to you and to aid "at risk" students?

Provide follow up after the program has been operational
for six weeks. Reevaluate what we are doing and
provide suggestions for improvement

9. Please list the specific changes in your curriculum that
you are planning for the next school year.

Every other science unit will be a learning center
with contracts. Students will progress at their own
rates, take pre-post tests and complete activities
all modalities and levels of Bloom's taxonomy.
Using

~~10. Other comments and suggestions.~~

All tests will be adapted for these students
There will be fewer items on each test. If necessary
tests will be taken orally or by listening to it on
a tape recorder. Every chapter in the book has
companion materials. These are in outline form. Many at-
risk students will have additional companion materials
Beginning to use cooperative learning

Program Title: MODIFYING CURRICULUM FOR AT RISK STUDENTS

Program Date: July 16-27, 1990

Your Name: _____

Language Arts

84

Your reaction to this program is important to our efforts to provide quality and worthwhile educational development programming.

	LOW				HIGH
1. Appropriateness of instruction to program objectives	1	2	3	4	(5)
2. Appropriateness of program to my needs	1	2	3	4	(5)
3. Appropriateness of time allowed for questions/discussion	1	2	3	4	(5)
4. Appropriateness of time allowed for curriculum development	1	2	3	4	(5)

5. General comments about program:

I feel like I accomplished a lot that I would not have had time to do during the school year.

6. Suggestions for improving this program would be:

I was very satisfied

7. If a choice was necessary because of limited funding would you prefer: (circle one)

(A) time to prepare materials

(B) funds to purchase new materials

8. At this point, what can we do to be of further assistance to you and to aid "at risk" students?

Possibly help with suggestions as need arises.

9. Please list the specific changes in your curriculum that you are planning for the next school year.

Adapting both English and Spelling curriculum. We have correlated materials for "at risk" students to the regular English curriculum. We have adjusted the Spelling curriculum and created additional materials to use with "at risk" students.

10. Other comments and suggestions.

Rewrote tests for English by limiting number of items and rewriting items to a ~~low~~ level where more success should be possible. Spelling - made crosswords for each unit; limited units to 10 words. We will begin to use cooperative learning ← (over)

Program Title: MODIFYING CURRICULUM FOR AT RISK STUDENT

Program Date: July 16-27, 1990

Your Name: _____ School Psychologist
Consultant 85

Your reaction to this program is important to our efforts to provide quality and worthwhile educational development programming.

	LOW				HIGH
1. Appropriateness of instruction to program objectives	1	2	3	(4)	5
2. Appropriateness of program to my needs	1	2	3	4	(5)
3. Appropriateness of time allowed for questions/discussion	1	2	3	4	(5)
4. Appropriateness of time allowed for curriculum development	1	2	3	4	(5)

5. General comments about program: people worked very hard and were very enthusiastic. May have been 1 or 2 days too long.

6. Suggestions for improving this program would be: a few more speakers - ex: Cooperative learning with specific teaching techniques.

7. If a choice was necessary because of limited funding would you prefer: (circle one)

(A) time to prepare materials

(B) funds to purchase new materials

8. At this point, what can we do to be of further assistance to you and to aid "at risk" students?

want to set up a homework time after school which these students can and will attend

9. Please list the specific changes in your curriculum that you are planning for the next school year.

1. Actually teach a structured class of social skills - wrote out the social skills for each student
2. have practice of the social skills outside the classroom
3. try to have field trips coordinated hands-on activities with each social skill

10. Other comments and suggestions.

- coordinated media materials for each social skill

Program Title: MODIFYING CURRICULUM FOR AT RISK STUDENTS

Program Date: July 16-27, 1990

Your Name: _____

Special Education
Consultant

86

Your reaction to this program is important to our efforts to provide quality and worthwhile educational development programming.

	LOW				HIGH
1. Appropriateness of instruction to program objectives	1	2	3	4	(5)
2. Appropriateness of program to my needs	1	2	3	4	(5)
3. Appropriateness of time allowed for questions/discussion	1	2	3	4	(5)
4. Appropriateness of time allowed for curriculum development	1	2	3	4	(5)

5. General comments about program:

The group worked as a team at times, locating information for others and brainstorming ideas - very helpful

6. Suggestions for improving this program would be:

Resource personnel used in assisting teachers was appreciated

7. If a choice was necessary because of limited funding would you prefer: (circle one)

(A) time to prepare materials

(B) funds to purchase new materials

8. At this point, what can we do to be of further assistance to you and to aid "at risk" students?

Check in with teachers periodically to see progress made or if further adjustments are needed

9. Please list the specific changes in your curriculum that you are planning for the next school year.

*- highlighted textbooks
- modified tests ← listed answers, fewer items, simplified vocab.
- modified spelling list - reduced list from 20 to 10
- correlated regular classroom materials and adapted materials - will make use of adapted materials for each unit taught as needed*

10. Other comments and suggestions.

Behavior Evaluation Scale - 2

87

Stephen B. McCarney, Ed.D.
James E. Leigh, Ph.D.

STUDENT RECORD FORM

Name of Student: _____

School: _____

Class: _____ Grade: _____

City: _____ State: _____

Date of Rating: _____
(year) (month) (day)

Date of Birth: _____
(year) (month) (day)

Age at Rating: _____
(year) (month) (day)

Rated by: (Observer's name): _____

Dates during which observation of student occurred:

From _____ To _____

Amount of time spent with student:

Per day _____ Per week _____

SUMMARY OF SCORES

Subscales

	RS	SS (Table A)	SEm (Table 6)	%ile (Table A)
1. Learning Problems	_____	_____	_____	_____
2. Interpersonal Difficulties	_____	_____	_____	_____
3. Inappropriate Behavior	_____	_____	_____	_____
4. Unhappiness/Depression	_____	_____	_____	_____
5. Physical Symptoms/Fears	_____	_____	_____	_____

Total Scale

Sum of Subscale SS	Quotient (Table B)	SEm (Table 6)	%ile (Table B)
-----------------------	-----------------------	------------------	-------------------

Total Scale _____

BES-2 PROFILE

Quotients	Behavior Quotient	Standard Scores	Subscale 1 Learning Problems	Subscale 2 Interpersonal Difficulties	Subscale 3 Inappropriate Behavior	Subscale 4 Unhappiness/ Depression	Subscale 5 Physical Symptoms/Fears	Standard Scores
150	•	20	•	•	•	•	•	20
145	•	19	•	•	•	•	•	19
140	•	18	•	•	•	•	•	18
135	•	17	•	•	•	•	•	17
130	•	16	•	•	•	•	•	16
125	•	15	•	•	•	•	•	15
120	•	14	•	•	•	•	•	14
115	•	13	•	•	•	•	•	13
110	•	12	•	•	•	•	•	12
105	•	11	•	•	•	•	•	11
100	•	10	•	•	•	•	•	10
95	•	9	•	•	•	•	•	9
90	•	8	•	•	•	•	•	8
85	•	7	•	•	•	•	•	7
80	•	6	•	•	•	•	•	6
75	•	5	•	•	•	•	•	5
70	•	4	•	•	•	•	•	4
65	•	3	•	•	•	•	•	3
60	•	2	•	•	•	•	•	2
55	•	1	•	•	•	•	•	1
50	•	0	•	•	•	•	•	0

ITEMS

88

DIRECTIONS FOR RATING: Rate the student relative to the behavior you have personally observed during the time the student has been in your class. Using the following scale, place a number from 1 to 7 next to each item to represent the frequency of occurrence of the behavior.

NEVER OR NOT OBSERVED	LESS THAN ONCE A MONTH	APPROXIMATELY ONCE A MONTH	APPROXIMATELY ONCE A WEEK	MORE THAN ONCE A WEEK	DAILY AT VARIOUS TIMES	CONTINUOUSLY THROUGHOUT THE DAY
1	2	3	4	5	6	7
<input type="checkbox"/> 1. Disrupts the work of others in class						<input type="checkbox"/> 20. Blames other persons or materials for own failure or difficulty
<input type="checkbox"/> 2. Absent or tardy without legitimate reason						<input type="checkbox"/> 21. Physically runs away from personal or school experiences
<input type="checkbox"/> 3. Has difficulty attending to academic tasks						<input type="checkbox"/> 22. Does not obey teachers' directives or classroom rules
<input type="checkbox"/> 4. Fails classroom tests or quizzes						<input type="checkbox"/> 23. Deliberately makes false statements
<input type="checkbox"/> 5. Exhibits physical problems related to eating (e.g., extreme weight loss or gain, eats non-food items, etc.)						<input type="checkbox"/> 24. Performs daily academic tasks or homework at a failing level
<input type="checkbox"/> 6. Creates imaginary or fantasy situations in an attempt to escape from or avoid reality						<input type="checkbox"/> 25. Makes inappropriate noises
<input type="checkbox"/> 7. Fails to participate verbally or physically in group situations						<input type="checkbox"/> 26. Draws pictures that reflect fears or concerns about school, home, or personal situations
<input type="checkbox"/> 8. Verbally or physically threatens other students or teachers						<input type="checkbox"/> 27. Fails to consider or disregards consequences of own behavior
<input type="checkbox"/> 9. Demonstrates sudden or dramatic mood changes						<input type="checkbox"/> 28. Is not able to concentrate, eat, or sleep because of personal or school experiences
<input type="checkbox"/> 10. Engages in self-destructive behavior (e.g., hits, scratches, or bites self)						<input type="checkbox"/> 29. Acts impulsively without apparent self-control
<input type="checkbox"/> 11. Demonstrates facial expression of sadness or displeasure (e.g., frowning)						<input type="checkbox"/> 30. Refuses to share or allow others to participate
<input type="checkbox"/> 12. Engages in inappropriate sexually related behaviors						<input type="checkbox"/> 31. Must have immediate rewards or gratification
<input type="checkbox"/> 13. Avoids or has difficulty discussing personal problems (school or non-school related)						<input type="checkbox"/> 32. Does not follow directions, written or verbal, related to academic tasks
<input type="checkbox"/> 14. Exhibits excessive fatigue (e.g., seems tired or listless)						<input type="checkbox"/> 33. Exhibits overly pessimistic or negative attitude (e.g., interprets most situations in a negative manner, fails to acknowledge positive circumstances, etc.)
<input type="checkbox"/> 15. Tries to interact with other students but is not accepted by them due to his/her behavior						<input type="checkbox"/> 34. Exhibits unwarranted self-blame or self-criticism (e.g., expresses feelings of guilt, blames self for things he/she could not control, etc.)
<input type="checkbox"/> 16. Demonstrates behaviors not related to immediate situations (e.g., laughs or cries without reason)						<input type="checkbox"/> 35. Expresses fears or concerns in writing (i.e., notes, letters, written assignments, etc.)
<input type="checkbox"/> 17. Verbalizes fears or concerns about school, home, or personal situations (e.g., afraid of being hurt by other students, afraid to be alone, etc.)						<input type="checkbox"/> 36. Seems unable or unwilling to communicate feelings or emotions to others
<input type="checkbox"/> 18. Does not recognize or respond appropriately to non-verbal cues (e.g., gestures, facial expressions, body movements, etc.) in social situations						<input type="checkbox"/> 37. Requires excessive assistance from others (e.g., teacher, aide, peer tutor) when performing academic tasks
<input type="checkbox"/> 19. Does not grasp basic concepts or information related to academic tasks						

NEVER
OR NOT
OBSERVED

1

LESS THAN
ONCE A
MONTH

2

APPROXIMATELY
ONCE A
MONTH

3

APPROXIMATELY
ONCE A
WEEK

4

MORE THAN
ONCE A
WEEK

5

DAILY AT
VARIOUS
TIMES

6

CONTINUOUSLY
THROUGHOUT
THE DAY

7

- | | |
|---|---|
| <input type="checkbox"/> 38. Seems to be upset by or afraid of new situations or changes in routine | <input type="checkbox"/> 58. Performs school work in a careless manner (e.g., illegible, messy) |
| <input type="checkbox"/> 39. Engages in excessive or unnecessary body movements (e.g., rocking motions, running) | <input type="checkbox"/> 59. Makes derogatory or critical remarks about other people |
| <input type="checkbox"/> 40. Physically hurts other students or teachers | <input type="checkbox"/> 60. Responds too quickly and impulsively to questions about academic material |
| <input type="checkbox"/> 41. Has difficulty organizing or appropriately using necessary work materials (e.g., paper, pencil, books) | <input type="checkbox"/> 61. Takes things that belong to others |
| <input type="checkbox"/> 42. Seeks excessive physical attention from others | <input type="checkbox"/> 62. Makes derogatory comments about self (e.g., "I'm dumb/ ugly, etc.") |
| <input type="checkbox"/> 43. Appears to be generally bored with or disinterested in daily activities (e.g., says he/she does not care what happens, etc.) | <input type="checkbox"/> 63. Indicates that he/she is not happy through verbal expression (e.g., talks about being unhappy, yells, complains, etc.) |
| <input type="checkbox"/> 44. Responds inappropriately to constructive criticism or comments from others | <input type="checkbox"/> 64. Makes comments or writes notes about suicide |
| <input type="checkbox"/> 45. Engages in self-stimulating behavior (e.g., hair twisting, nail biting, twirling objects, etc.) | <input type="checkbox"/> 65. Demonstrates inappropriate physical or verbal responses to other students' or teachers' attempts to interact |
| <input type="checkbox"/> 46. Indicates that he/she is not happy through physical expression (e.g., temper tantrums, etc.) | <input type="checkbox"/> 66. Fails to participate in or demonstrate an interest in special events or interesting activities |
| <input type="checkbox"/> 47. Cries in response to personal or school situations | <input type="checkbox"/> 67. Destroys property (e.g., books, lockers, etc.) |
| <input type="checkbox"/> 48. Avoids interaction with other students or teachers | <input type="checkbox"/> 68. Talks at inappropriate times or makes irrelevant comments |
| <input type="checkbox"/> 49. Makes derogatory comments or inappropriate gestures to other students or teachers | <input type="checkbox"/> 69. Responds inappropriately to praise or recognition from other students or teachers |
| <input type="checkbox"/> 50. Exhibits off-task behaviors (e.g., stares away from task, will not make eye contact, remains on task for only brief periods of time) | <input type="checkbox"/> 70. Makes statements that he/she feels helpless |
| <input type="checkbox"/> 51. Fails to demonstrate a sense of humor when appropriate (e.g., smiling or laughing) | <input type="checkbox"/> 71. Uses obscene or profane language |
| <input type="checkbox"/> 52. Refuses or fails to complete class assignments or homework | <input type="checkbox"/> 72. Demonstrates difficulty or reluctance in beginning tasks |
| <input type="checkbox"/> 53. Makes comments or writes notes indicating that others do not like him/her | <input type="checkbox"/> 73. Does not generalize or apply academic skills to new or different tasks or situations |
| <input type="checkbox"/> 54. Performs obsessive or compulsive behaviors (e.g., excessive hand-washing, habitual or repetitious movements, etc.) | <input type="checkbox"/> 74. Demonstrates involuntary physical reactions (e.g., shaking, twitching, fainting, etc.) in response to personal or school experiences |
| <input type="checkbox"/> 55. Complains of physical discomfort (e.g., headaches, stomach aches, minor injuries) | <input type="checkbox"/> 75. Makes comments that others are disappointed in him/her |
| <input type="checkbox"/> 56. Continues to engage in a behavior when it is no longer appropriate (e.g., fails to adapt or modify behavior to different situations) | <input type="checkbox"/> 76. Is preoccupied (as demonstrated by words or pictures) with drugs or alcohol or possesses or uses drugs or alcohol at school |
| <input type="checkbox"/> 57. Demonstrates no emotions (e.g., has fixed facial expression, does not react to events that normally would provoke emotional responses, etc.) | |

For more information or to place an order, write to:

Behavior Evaluation Scale-2
Educational Services
P.O. Box 1835
Columbia, MO 65205

DATA SUMMARY SECTION

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Characteristic/Subscale	Ratings	Weighted Score	Ratings	Weighted Score	Raw Score
1. An inability to learn which cannot be explained by intellectual, sensory, or health factors.	3.	_____ × 3 = _____	41.	_____ × 3 = _____	_____
	4.	_____ × 3 = _____	52.	_____ × 3 = _____	
	19.	_____ × 3 = _____	58.	_____ × 1 = _____	
	24.	_____ × 3 = _____	60.	_____ × 1 = _____	
	32.	_____ × 3 = _____	72.	_____ × 3 = _____	
	37.	_____ × 3 = _____	73.	_____ × 3 = _____	
2. An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.	1.	_____ × 5 = _____	42.	_____ × 3 = _____	_____
	8.	_____ × 5 = _____	44.	_____ × 3 = _____	
	15.	_____ × 3 = _____	48.	_____ × 3 = _____	
	18.	_____ × 1 = _____	49.	_____ × 3 = _____	
	30.	_____ × 3 = _____	59.	_____ × 3 = _____	
	36.	_____ × 3 = _____	65.	_____ × 3 = _____	
	40.	_____ × 5 = _____	69.	_____ × 3 = _____	
3. Inappropriate types of behavior or feelings under normal circumstances.	2.	_____ × 3 = _____	29.	_____ × 5 = _____	_____
	7.	_____ × 3 = _____	31.	_____ × 1 = _____	
	9.	_____ × 3 = _____	50.	_____ × 3 = _____	
	12.	_____ × 5 = _____	56.	_____ × 3 = _____	
	16.	_____ × 3 = _____	61.	_____ × 5 = _____	
	20.	_____ × 3 = _____	67.	_____ × 5 = _____	
	22.	_____ × 5 = _____	68.	_____ × 3 = _____	
	23.	_____ × 3 = _____	71.	_____ × 3 = _____	
	25.	_____ × 3 = _____	76.	_____ × 5 = _____	
4. A general pervasive mood of unhappiness or depression.	6.	_____ × 3 = _____	53.	_____ × 3 = _____	_____
	11.	_____ × 1 = _____	57.	_____ × 3 = _____	
	13.	_____ × 1 = _____	62.	_____ × 3 = _____	
	33.	_____ × 3 = _____	63.	_____ × 3 = _____	
	34.	_____ × 3 = _____	64.	_____ × 5 = _____	
	43.	_____ × 3 = _____	66.	_____ × 3 = _____	
	46.	_____ × 3 = _____	70.	_____ × 3 = _____	
	47.	_____ × 3 = _____	75.	_____ × 3 = _____	
	51.	_____ × 1 = _____			
5. A tendency to develop physical symptoms or fears associated with personal or school problems.	5.	_____ × 3 = _____	35.	_____ × 3 = _____	_____
	10.	_____ × 5 = _____	38.	_____ × 1 = _____	
	14.	_____ × 3 = _____	39.	_____ × 3 = _____	
	17.	_____ × 3 = _____	45.	_____ × 1 = _____	
	21.	_____ × 3 = _____	54.	_____ × 3 = _____	
	26.	_____ × 3 = _____	55.	_____ × 3 = _____	
	28.	_____ × 3 = _____	74.	_____ × 3 = _____	

GUIDELINES FOR ADMINISTERING THE BES-2

BES-2 ratings should be assigned by the classroom teacher or school personnel who have primary instructional responsibilities with the student. It is recommended that the teacher observe the student for at least one month prior to using the BES-2. If behavioral concerns require evaluation as soon as possible during the school year, the observation period can be reduced somewhat if the teacher feels confident that enough observation has occurred to permit accurate responses to items on the scale.

1. After becoming thoroughly familiar with the information in the BES-2 Manual, particularly Chapter 3, begin the assessment. Start with the first item and proceed in sequence through the remaining items.
2. Based upon your prior knowledge of the student, select the rating that most closely describes the frequency of occurrence of each behavior on the scale. Record ratings in the boxes next to each item number on the Student Record Form.
3. If you do not know which rating to assign to a behavior, do not mark the item until such time as you have collected sufficient information through further observation to make a judgment.
4. It is not necessary to complete all items at one time, since it may be desirable to conduct further observation before rating certain behaviors. However, once begun, the scale should be completed as soon as feasible.
5. Since the BES-2 does not require direct and continuous measurement of behavior, the scale may be completed at your convenience; that is, you may fill out the Student Record Form for a student either at school or at other locations.
6. All items on the scale should be completed for each student. If a behavior has not been observed for a student, a rating of 1 (NEVER OR NOT OBSERVED) should be assigned to the item.
7. Ratings assigned to behaviors should reflect your observations of the student's behavior. At your discretion, it is permissible to consult with other school personnel or even students themselves to obtain reliable confirmatory information relative to certain behaviors. However, secondary sources should not provide a significant portion of the information obtained.
8. When completing the scale, circle the item numbers of behaviors that, in your opinion, are of greatest concern, regardless of the size of the numerical rating you assign.
9. After completing the scale, it is advisable to check back through your assigned ratings to make certain that you have selected the best descriptor for each behavior.
10. Use the section on the Student Record Form entitled "Comments" to provide additional information regarding behaviors that are of greatest concern or other information that may be useful when interpreting the results of the BES-2.

FOR SECONDARY LEVEL TEACHERS: It is appropriate and desirable to have more than one teacher complete separate BES-2 Student Record Forms for a secondary level student. Secondary level teachers, or other specialized area personnel who may not have students in a self-contained program for an entire day, should select the rating that most accurately describes the student's behavior during the period of time the student is in the program each week. For example, if a secondary level student is typically absent or late for a social studies class three times per week, even though the class meets only one hour per day, the teacher would assign a rating of 5 (MORE THAN ONCE A WEEK). Since the rater indicates the amount of time spent with the student each week, interpretation of ratings can be made relative to actual observation periods.