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The effects of professional development on student performance of at-risk students

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THE EFFECTS OF PROFESSIONAL DEVELOPMENT ON STUDENT PERFORMANCE OF AT-RISK STUDENTS

by
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ABSTRACT

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The Effects of Professional Development on Student Performance of At-Risk Students
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Dr. Theodore Johnson
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The study focused on effective instructional strategies that could be used to improve student performance in the classroom and result in a classroom failure rate of less than 25%. The effects of a professional development workshop presented on instructional strategies were examined as they related to student performance.

The sample of this research consisted of eleven teachers who were required to attend a district-developed instructional strategies workshop based on a midterm failure rate more than 24% during the 1997-98 school year. Four methods of data collection were used: evaluation form, participant observations, interviews, and review of students' grades. The data analysis presented information about the effects of professional development on improving student achievement, as obtained from students' grades from the midyear marking period, as well as informal interviews.

Of the eleven teachers who participated in this study, six had a classroom failure rate of more than 24% in at least one class for the third marking period for the 1998-99 school year. The data from this study indicate that professional development does have an effect on teaching practices. Schools must provide on-going professional development and support for its faculty to insure the success of its students.

MINI-ABSTRACT

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Table of Contents

Chapter 1

Introduction: Focus of the Study

The intern wishes to learn about effective instructional strategies that could be used to improve student performance in the classroom and result in a classroom failure rate of less than 25%. Whether a student is headed for post-secondary education or the workplace, higher level thinking skills are requisites of successful performance by all students. Unfortunately, those children who are labeled "at-risk" have been unsuccessful at achieving this contemporary goal of education. In light of this serious need to serve the at-risk population, and in the interest of better preparing all children for a competitive, changing future that demands that learners be able to use their mental capacities to their fullest, educators must promote higher order thinking in all content areas through updated instructional strategies supported by current research. Providing staff development is crucial to assist teachers in improving student performance. Multiple, authentic assessments of students' performance that demonstrate the result of their thinking must also be incorporated to ensure improved student performance.

Purpose of the Study:

This research intends to answer the following questions: What effective instructional strategies improve student performance of at-risk students? How do we deal with those teachers that are resistant to changing their current method of teaching? How can student-centered classrooms improve student performance? What strategies do we employ to get students to function on higher level thinking skills? In terms of

leadership development, the purposes of this study include, but are not limited to, helping teachers design innovative units, including a range of activities for various ability levels, helping teachers adapt lesson plans, assignments, and unit plans for individual differences, reviewing and evaluating lesson plans with teachers, using non-directive techniques to assist teachers in identifying areas for improvement, using direct feedback techniques to explain areas in which teachers need to improve, demonstrating the use of equipment appropriate to teachers' instructional situation, conducting teaching demonstrations for teachers needing instruction in a new teaching technique or approach, meeting with a teaching team or cluster to discuss areas of mutual concern for improving teaching, helping teachers verbalize and record their own professional goals, specifying criteria with teachers for evaluating objectives that will improve teaching, collecting data on staff training needs, planning a workshop training session, including writing objectives and specifying outcomes of the session, adapting simulations and other training exercised to a particular training situation, previewing and proofreading readings, films, and other materials for a training session, coordinating with other personnel responsible for in-service, developing an evaluation instrument for the training session, notifying training session presenters and others of the results of the evaluation, using evaluative data to modify the training session, deigning follow-up activities for the training session based on evaluative data gathered at the session, conducting a briefing session with training session assistants, and presenting training sessions as designed.

In terms of the intended organizational change, the purpose of this study includes individual approaches, as well as, pressure and resistance to change. After receiving

staff development training, teachers will be expected to modify their current instructional strategies and adapt new ones. These expectations will most likely produce pressure as well as resistance. It is hoped, however, that personal and organizational satisfaction will be achieved despite the pressure and resistance to the change.

The purpose of this study is to explore effective instructional strategies to improve student performance of at-risk students using an ethnographic design. The study will result in a report to the assistant superintendent for curriculum and instruction and building principals as to the effectiveness of the workshop.

Definitions:

Effective instructional strategies will be defined generally as expanding paradigms and redefining goals. The most promising alternative approaches focus on students' assets, varied teaching strategies, and meaningful learning in collaborative settings. Also of critical importance is the emphasis on high expectations. (Costello, 1996)

In the past, students who were "at-risk" were primarily those whose appearance, language, culture, values, and communities did not match those of the dominant white culture. These students, primarily minorities, the poor, and immigrants, were considered culturally or educationally disadvantaged. Society creates schools in certain ways to meet its goals and expectations, thus creating environments in which certain children are at risk.

An "ecological" approach to the definition recognizes education as a process that takes place both inside and outside the school itself, and is therefore affected by the

social and academic organization of the school, the personal and background characteristics and circumstances of the students and their families, the community contexts within which students, families, and schools exist, and the relationship of these factors to the others. (Hixson and Tinzmann, 1990)

If schools redesign curricula to include higher level thinking skills and promote higher-level collaborative learning among students, assessment instruments must also be redesigned to evaluate and promote higher-order thinking, use of learning strategies and multiple intelligences traditionally ignored in schools. These new assessments recognize the value of assessing real performances in real contexts, resulting in improved student performance.

Limitations of the Study:

The Professional Improvement Plan for 1998-1999 for instructors with midterm failure rate more than 24% states:

> By June, 1999, the failure rate for students in my teaching area will either be reduced by 25% from the failure rate for the 1997-98 school year or not exceed a total of 25%. Multiple strategies for reducing the rate and the current status will be discussed in conferences with the division head at the end of the second, fourth and sixth marking periods. The instructor will attend a district-developed workshop on Instructional Techniques as scheduled by the division head. (personal communication, April 1998)

Limitations of this study include the fact that the teachers who will participate in this workshop will be required to attend. This study will not include data on student achievement from any teacher who does not attend this workshop. The students whose

failing grade was contributory to the teachers' obligation to attend this workshop will not be the group who will be participating in this study. The conclusions of this study cannot be generalized to the entire school district.

Setting of the Study:

Camden County Technical Schools is a public school system and anyone who lives in Camden County is eligible for tuition free admission. There are two campuses in the school district: Pennsauken and Gloucester Township. Currently about 1500 students are enrolled. The majority of the student population comes from the city of Camden and Gloucester Township. Students attend school for the entire day; half of the day is spent in career training, and the other half is spent in academic classes. Approximately two-thirds of the teaching staff currently holds an academic bachelors degree with an additional fifteen credits or a shop/related permanent certificate. The remaining one-third of the staff holds a masters degree plus additional credits, or a shop/related bachelors degree or masters degree.

Significance of the Study:

This is an important study because teachers in high-poverty classrooms have traditionally emphasized learning deficits, tightly controlled direct instruction, repetitive practice, and mastery of basic skills. Recently, educators have questioned the effectiveness of these approaches.

> By concentrating on assets rather than deficits, these scholars argue, teachers are predisposed to see more potential in the children they are teaching and are able to treat the children's experiences and backgrounds as resources for learning rather than constraints on it. By developing more varied instructional routines, which

> by stages increase student control over learning activities, teaches can decrease learners' dependence on their teachers and broaden the range of learning experiences children have. The argument goes on to assert that, by de-emphasizing (though not eliminating) repetitive practice of discrete skills, teachers may limit the monotony and lack of meaning that attends much instruction in high-poverty classrooms and elsewhere. Finally, by concentrating early on 'advanced' skills of reasoning, problem solving, comprehension, and composition, teachers can engage children from the beginning in academic learning that has meaning and application in their lives both inside and outside of school. (Knapp, Shields, and Turnbull, 1995, p. 184)

This study will make a contribution to scholarly research. In addition, the stakeholders of this project, the community, the Board of Education, the administration, the teachers, and most importantly the students, will benefit from this study.

Organization of the Study:

Chapter 1 of the study will serve as an introduction to the study and include insight into the focus and purpose of the study. This chapter will also define terminology germane to the study, as well as the limitations and setting of the study. Justification will be given to the significance of the study in this chapter. A review of the literature will be the focus of chapter 2. A general description of the design of thstudy will be discussed in chapter 3, along with a description of the development and design of the research instruments used. A description of the sample and the sampling technique will be also discussed in this chapter. A description of the data collection approach and a description of the data analysis plan will conclude this chapter. Chapter

4 will present the research findings. Chapter 5, the final chapter of the thesis, will describe the study's major conclusions and the analogous implications, as well as the implications on this intern's leadership development. It will also address how the organization changed as a result of the study. The need for further study will also be included in this final chapter.

Chapter 2

Traditionally, schools have responded to students who are labeled "at-risk" due to poverty, race, ethnicity, language or other factors, by placing them in programs such as ability grouping, grade retention, special education, and pull-out programs. After years of such practices, however, researchers and educators now believe these approaches may actually reduce student engagement and learning opportunities while stigmatizing the students. (Costello, 1996) The most promising alternatives focus on student assets, including their backgrounds and prior experiences, providing varied teaching strategies and meaningful learning in collaborative settings. High expectations for all students are also of critical importance. Research on successful school programs for youth at risk of academic failure has clearly demonstrated that high expectations, along with support, is a critical factor in decreasing the number of students who drop out and increasing in the number of students who go on to college. (Costello) By concentrating on assets rather than deficits, teachers are predisposed to see more potential in the children they are teaching and are able to treat the children's experiences and backgrounds as resources to learning rather than as constraints. By developing more varied instructional routines, which by stages increase student control over learning activities, teachers can decrease learners' dependence on their teachers and broaden the range of learning experiences children have. In addition, by de-emphasizing the repetitive practice of discrete skills, teachers may limit the monotony and lack of meaning that attends much instruction in high-poverty classrooms. Finally, by concentrating early on advanced skills of reasoning, problem solving, comprehension, and composition, teachers can engage children from the

beginning in academic learning that has meaning and application in their lives both inside and outside of school. (Costello)

Research on programs for at-risk students, particularly Title I funded programs, has raised some questions about approaches to learning and the content and delivery of educational support efforts. Teachers need to develop strategies for engaging students in active learning instead of expecting them to sit and listen for long periods of time. (Ogle, 1997)

American education is dictated by student scores on a battery of intelligence tests, from kindergarten through college. Students should not be judged by what they cannot do, but what they can do, and education should focus on bringing out the individual's potential. The theory of multiple intelligences has made many educators reconsider the pedagogical methods of the last few decades. Arguing that reasoning, intelligence, logic, and knowledge are not synonymous, Howard Gardner (1983, 1993) proposed this new view of intelligence that is rapidly being incorporated into school curricula. Gardner's theory of multiple intelligences provides a theoretical foundation for recognizing the different abilities and talents of students. This theory acknowledges that while students may not be verbally or mathematically gifted, children may have an expertise in other areas, such as music, spatial relations or interpersonal knowledge. Approaching and assessing learning in this manner allows a wider range of students to successfully participate in classroom learning.

Recent advances in cognitive science, developmental psychology, and neuroscience suggest that each person's level of intelligence is actually made up of autonomous faculties capable of working individually or in conjunction with other

faculties. Howard Gardner originally identified seven such faculties, which he labeled as intelligences:

- musical intelligence
- bodily-kinesthetic intelligence
- logical mathematical intelligence
- linguistic intelligence
- spatial intelligence
- interpersonal intelligence
- intrapersonal intelligence

Recently he has added an eighth intelligence to the list, the naturalist intelligence. There is also some consideration for a ninth intelligence, existential intelligence. Gardner claims that the seven intelligences rarely operate independently. They are used concurrently and typically complement each other. (Brualdi, 1996)

There is both a biological and cultural basis for multiple intelligences. Neurobiological research indicates that learning is an outcome of modifications in the synaptic connections between cells. Primary elements of different types of learning are found in particular areas of the brain where corresponding transformations have occurred. Thus, various types of learning result in synaptic connections of the brain. In addition to biology, Gardner argues that culture also plays a large role in the development of the intelligences. While particular intelligences may be highly evolved in one culture, those same intelligences may not be developed in the individuals of another.

The standard view of intelligence is that it is something you are born with; you have only a certain amount of it; you cannot do much about how much of that

intelligence you have. (Checkley, 1997) The theory of multiple intelligences challenges that view. In his book, Frames of Mind: The Theory of Multiple Intelligences, Howard Gardner suggests that we each have multiple intelligences. He describes intelligence as

> a set of problem-solving skills, enabling the individual to resolve genuine problems or difficulties that he or she encounters and, when appropriate, to create an effective product; it also entails the potential for finding or creating problems, thereby laying the groundwork for the acquisition of new knowledge.

Gardner theorizes that each of these intelligences is independent of the others, with its own timetable for development, peak growth, and a sensitive period. Each operates in a different part of the brain.

Writing and implementing integrated thematic curriculum using the multiple intelligences ensures choice for learners. "Allow students to choose their way of problem solving because what is being learned is the same; it is the how it is learned that varies." (Gardner, 1995) To grasp the power of this theory, one must distinguish between how students input information through the senses (what in the past has been referred to as the visual, auditory, kinesthetic, and tactile modalities), versus how students process information once inside their brain to first make meaning of the input and then use that meaning. Gardner's focus is how information gets processed.

> Although there is no single MI route, it's very important that a teacher take individual differences among kids very seriously. You cannot be a good MI teacher if you don't want to know each child and try to gear how you teach each child. The bottom line is a deep interest in children and how their minds are

different from one another, and in helping them use their minds well. (Gardner, 1997)

Some educators believe that the multiple intelligences theory works well with younger children, but when students reach middle or high school age, they need to get "serious" about learning. According to Thomas Armstrong (1994), children should not leave their multiple intelligences behind when they reach puberty. At that time, the intelligences become even more intense, especially bodily-kinesthetic and the personal intelligences.

Gardner's theory has several implications for teachers in the classroom. Since the theory states that all seven intelligences are needed to productively function in society, teachers should think of all intelligences as equally important. This is in strong contrast to traditional education systems that generally place an emphasis on the development and use of verbal and mathematical intelligence. Educators should recognize and teach to a broader range of talents and skills. Another implication is that teachers should structure the presentation of material in a style that engages most of the intelligences. Activating a wide assortment of intelligences can facilitate a deeper understanding of the subject material. (Gardner, 1995)

The theory of multiple intelligences helps to understand how cultures and disciplines shape human potential. Learning style theory, first noted by Carl Jung in 1927, emphasizes the different ways people think and feel as they solve problems, create products, and interact. (Silver, Strong, and Perini, 1997) Both theories, however, combine aspects of biology, anthropology, psychology, and medical case studies. Though both theories claim that dominant ideologies of intelligence inhibit our

understanding of human differences, learning styles are concerned with differences in the process of learning, whereas multiple intelligences center on the content and products of learning. "We believe that the integration of learning styles and multiple intelligence theory may minimize their respective limitations and enhance their strengths..." (Silver, et al) Educators must consider differences at the individual level. Learning styles, with their emphasis on differences in individual thought and feeling, are the tools needed to describe and teach to those differences. Learning styles' emphasis on the individual learning process and Gardner's model of content-oriented model of multiple intelligences complement each other.

> Without multiple intelligence theory, style is rather abstract, and it generally undervalues context. Without learning styles, multiple intelligences theory proves unable to describe different processes of thought and feeling. Each theory responds to the weaknesses of the other; together, they form an integrated picture of intelligence and difference. (Silver, et al.)

Successful learning involves an interaction of the learner, the materials, the teacher, and the context. Effective communication and collaboration are essential to becoming a successful learner. Collaborative learning affords students the opportunity to accomplish meaningful learning and solve problems better than traditional instruction. This focus on the collective knowledge and thinking of the group changes the roles of students and teachers. (Tinzman, 1990)

In the traditional classroom, knowledge flows from teacher to student. In contrast, the collaborative classroom provides an opportunity for shared knowledge. The teacher still provides the vital knowledge about content skills and instruction; however,

collaborative teachers also build upon the knowledge, personal experiences, language, strategies, and culture that students bring to the learning situation. Shared authority exists among teachers and students in the collaborative classroom.

Research of the brain has resulted in a great amount of research on teaching and learning, all stressing a number of factors:

- Children learn in a variety of ways.
- Students should actively participate in learning.
- Students should connect not only intellectually, but also physically and emotionally with topics they are studying.

Brain-based learning requires the understanding of four basic principles:

- Millions of patterns in the brain form huge amounts of input.
- Millions of programs in the brain result from learning by doing.
- Feedback fine-tunes the brain's patterns and programs.
- For maximum learning, people must feel safe and secure. (Blue Earth Area Schools, 1998)

Learning has always been brain-based. Understanding how educators interact with the brains of their students has largely been a matter of guesswork. Technological advances in recent years have allowed scientists literally to see how the brain works. One result is an attempt to put brain research to use in the classroom. "Teachers basically have an understanding of the brain," says Robert Sylwester. "When you start to get a biological understanding, you can begin to say, Oh, this is why this works." (Cohen, 1995) Implication from brain research for educators range from general to specific.

Sylwester (1995) offers examples of recent discoveries that have specific implications for educators:

- Learning to read requires a child to develop new connections between brain regions that process oral versus written language.
- Children develop strategies for doing arithmetic problems very early. They learn a new strategy best when they are presented with problems that fit the strategy.

Both of these findings follow from a general understanding of brain plasticity, or the brain's ability to grow and adapt in response to environmental stimuli. "Researchers see the brain as genetically prepared at birth to learn almost anything," Sylwester says. "The brain then uses emotion, experience, and learning to strengthen the useful connections, and then prune away the unused and inefficient." Some plasticity remains throughout life, allowing the brain to continue adapting. In other words, the physiological architecture of the brain changes in response to life experience.

The finding of plasticity suggests that education should broaden its scope to integrate the entire school experience into the learning program. "The complexity of the brain's learning means that educators should orchestrate complex experiences. This is where the gap is. It's between the holistic or complex view of learning, and the more specific, direct-intervention type of approach." (R. A. Caine and G. Caine, 1995) Caine and Caine state that the complex experience method is more effective than the narrow focus on the disciplinary subjects in the hopes of some educators that students will accumulate facts and skills.

That means that children have hands-on experiences. They have the potential to

engage in dialogue with other people. They have the opportunity to express something orally, the opportunity to express something in written form, the opportunity to touch, to recreate. (R. A. Caine and Caine)

Brain-based learning stresses the importance of patterning; the brain does not easily learn things that are not logical or have no meaning. Brain-based learning also stresses the principle that the brain is a parallel processor; it performs many functions simultaneously. All meaningful learning is complex and linear. Teachers must use all available resources to coordinate vital learning environments. After three years of immersion in brain-based learning theory and practice, Dry Creek Elementary School, a K-6 elementary school in Rio Linda, California, where most children in this Chapter 1 school come from low socioeconomic and often dysfunctional families, proved that this theory works with average teachers and students. (R. A. Caine and Caine)

Evolutionary psychology argues that each success enhances the level of the neurotransmitter serotonin in the brain, as well as our motor coordination and self-esteem. Failure and negative social feedback inhibit the effects of serotonin and lead to lower self-esteem. If positive social feedback is nature's way of regulating the serotonin system, then positive feedback in the classroom is a powerful social device for helping to assess and define self-concept and self-esteem. Serotonin research adds biological support to some educational practices that enhance self-esteem:

- Portfolio assessments, creative journals, creative artwork, and other forms of reflective thought enhance student self-concept and self-esteem.

- Positive self-esteem can develop at any level in group work, if the problem is challenging and the group values the contributions of all. This also supports the concept of collaborative learning. (Sylwester, 1997)

Interdisciplinary instruction is a centerpiece of brain-based education reform, proponents argue. "What has to go are the curriculum pieces we've clung to for centuries," says Susan Kovalik, an educational consultant and developer of the integrated thematic instruction model. "Disciplines have to go; the textbooks have to go; the worksheets have to go - because they have nothing to do with how the brain works." Students in an integrated thematic instruction classroom know what they are studying and why. They possess a conceptual understanding of the content, the basic skills and the foresight to know when to use them, the ability to apply what is learned to real world situations, the capability to work collaboratively with others, and a vision of themselves as contributing members of society. (Kovalik with Olsen, 1997)

Although the implications of brain research for education goes against traditional school practices, they are in line with some current reforms, experts agree. For example, educators can now argue the tendency of the brain to consider the entire experience, and to search for meaningful patterns, calls for thematic instruction. Sylwester believes that scientific support is beneficial in promoting such advances as cooperative learning, portfolio assessment, and thematic curriculum.

Educators who believe in the concepts of learning styles, brain-based education, and multiple intelligences focus on how students learn and the unique qualities each learner possesses. Each of these theories offers a comprehensive approach to learning

and teaching. Pat Burke Guild (1997) proposes six areas of commonalities of brain-based education, learning styles, and multiple intelligences:

- Each of the theories is learning and learner centered.
- The teacher is a reflective practitioner and decision-maker.
- The student is also a reflective practitioner.
- The whole person is educated.
- The curriculum has substance, depth, and quality.
- Each of the theories promotes diversity.

She offers some cautions, as well.

- None pretends to be the single panacea to educational dilemmas.
- Each theory cautions against simplistic applications of its specific terms, labels and vocabulary.
- None of the original theories should turn into a standardized program.

Daniel Goleman, author of Emotional Intelligence: Why It Can Matter More Than IQ, argues that developing students' emotional smarts is just as important. Emotional intelligence is a different way of being smart. Both types of intelligence are important, but they're important in different ways. According to Goleman, IQ contributes approximately 20% to the factors that determine life success. That leaves 80% to everything else. A relationship exists between these emotional skills and academic success. Skills such as being able to resist impulsivity, or to delay gratification in pursuit of a long-term goal are beneficial in academia.

Emotional intelligence is learned. The best data on this comes from a study by Jerome Kagan. His work with a group of shy children suggested that the brain is

extremely malleable during childhood. The brain's regulatory centers for emotional response are among the last parts to become anatomically mature. They continue to grow into adolescence. This is important because research has found that the repeated emotional lessons of a child's life literally shape the brain circuits for that response. If a child learns to manage his anger well, for example, that becomes a lifelong strength. That's why it's crucial to develop the skills of emotional intelligence. (O'Neill, 1996)

In the late 1960's, James Comer founded the Comer model, based on the belief that "the relationship between school and family is at the heart of a child's success or lack of it." (Goldberg, 1990) The major purpose of school, according to Comer, is to advance students' social, emotional, and academic development toward the goal of becoming successful citizens. The model advocates a collaborative, no-fault approach to problem solving.

Magruder Elementary School, an inner city school in Newport News, Virginia, has an enrollment of 525 students, 80% of who are considered at risk, with more than 50% living in low-income housing. The Comer model was the catalyst that helped turn the school around. "With high expectations and everyone working together, the potential for success has become an attitude, a way of learning, and an education for life at Magruder Primary School." (Ramirez-Smith, 1995)

Studies to date suggest that small classes create a more personalized environment for both the teacher and the student, that small classes are more efficient by reducing the need for discipline and classroom management and delivering effective instruction in a shorter amount of time. Teachers are able to use techniques to increase the participation of each individual student in classroom interactions. (Finn, 1998)

In seeking ways to improve student performance, teachers' performance cannot be overlooked. A study conducted in 1995 in the United Kingdom established a three-way link, connecting whole school improvement, teacher professional development, and classroom improvement in an effort to improve student performance. Opportunities were provided for the teachers to work together, lead development, and to try out new ideas. Teachers are now more focused in their planning for different levels of ability in their classes, and they have raised their levels of expectation of what their students are capable of achieving. This project not only promoted teachers' professional development, it improved the achievement level of all students. (MacGilchrist, 1996)

The ultimate worth of professional development for teachers is the role it plays in the improvement of student learning and achievement. Educators must pay attention to the results of professional development on job performance, as well as the success of all students. Educational reform requires teachers not only to update their skills and knowledge, but also to transform their roles as educators. It establishes new expectations for teachers, as well as students. (Cook, 1997)

Several issues need to be addressed as schools move to provide a richer learning experience for at-risk students:

- Many parents, teachers, and administrators still maintain the traditional concepts of education.
- Schools traditionally have not worked as focused units. Deliberate attention to teacher cooperation may be needed if teachers are unaccustomed to teaming and working together.

- At-risk students often present challenges to teachers in terms of classroom order and management. Teachers need to develop strategies for engaging students in active learning. Teachers need to develop better classroom management systems in an effort to achieve more meaningful instruction. (Ogle)

As educators, we face a very serious challenge in serving at-risk students. We must continue to provide research for the connection between instructional strategies and student performance and for the level of effectiveness of those "promising" programs. Program implementation and goals must be realistic, and most importantly, a concerted effort between administrators and teachers must be made for these programs to have a successful outcome: improved student performance.

Chapter 3

General Description of the Research Design:

In order for pupils to improve, schools must establish a link connecting whole-school improvement, teacher professional development, and classroom improvement. (MacGilchrist) Concerns about at-risk students cannot be addressed without teachers who are prepared to meet the diverse needs of students with varying learning styles. In a field-based study, the intern attempted a study of effective instructional strategies that could be used to improve student performance in the classroom and result in a classroom failure rate of less than 25%. Using an ethnographic design, an attempt was made to find if a correlation existed between improved student performance and the strategies presented during a district-developed workshop. No hypothesis was given at the onset of the study. The intern was open to any concepts and patterns indicated by the qualitative data obtained during the study. Was there a link between students' learning and teachers' learning?

Development and Design of the Research Instruments Used in the Study:

Based on a discussion with the workshop participants, the intern felt it was in their best interest to use the district approved evaluation instrument for any informal observation requested by a workshop participant, with modifications (see Appendix A for research instruments). The intern, during an informal observation, would complete only part II, Instruction. A narrative would also be written to provide the teacher with specific feedback on the instructional strategies that were observed during the lesson.

Workshop evaluation forms provided insight into the usefulness of the material presented in the instructional strategies workshop. The evaluation form consisted of eight questions (see Appendix A for research instruments). The first question utilized a selected response of 'very useful,' 'moderately useful,' or 'of little benefit.' Question 2 was broken into five sub-questions, each with a forced-choice item rating of 'excellent, 'very good,' 'fair,' 'poor,' or 'N/A.' Questions 3, 4, and 5 were open-ended; question 6 used a four-point selected response rating system: 'excellent,' 'very good,' 'fair,' and 'poor.' Either a 'yes' or 'no' response was required for questions number 7 and 8. Additionally, there was a space for other comments and/or suggestions.

Students' grades from the third (midyear) marking period were used in the data interpretation. It should be noted that the students whose grades were analyzed were not the same students who contributed to the failure rate from the previous school year. The intern intentionally kept the interviews spontaneous because of the antagonistic conditions that already existed. The examination of students' grades and informal interviews provided for triangulation of the data.

Sample and Sampling Technique Used:

The sample of this research consisted of eleven teachers who were required to attend a district-developed instructional strategies workshop based on a midterm failure rate more than 24% during the 1997-98 school year. Teachers from both the Gloucester Township and Pennsauken campus of Camden County Technical Schools were included in the study. Disciplines represented by the participants included English, math, social studies, and vocational education.

Data Collection Approach:

Four methods of data collection were used:

1. evaluation form
2. participant observations
3. interviews
4. review of students' grades.

The study, though reliable both internally and externally, lacked validity, based on the fact that this was an obligatory workshop for the eleven participants. The root of the data collection was observation, with the intern assuming the role of a privileged observer. The primary form of data collection was field notes. Informal, unstructured interviews focused on the teachers' perceptions of the improved student performance, if applicable.

Data Analysis Plan:

The analysis presented information about the effects of professional development on improving student achievement, as obtained from the students' grades from the midyear marking period. The informal interviews provided insight into the attitudes, motivation, and expectations of the workshop participants, as well as student expectations, behavior, and performance. The analysis included results provided in a descriptive manner, including actual comments.

Chapter 4

What information was found?

The intern proposed to learn about effective instructional strategies that could be used to improve student performance and result in a classroom failure rate of less than 25%. The major findings generated from this study were attained from three sources:

1. the evaluation form used at the conclusion of the instructional strategies workshops
2. observations
3. interviews

The evaluation forms furnished to the participants of the instructional strategies workshop by the workshop presenters provided the intern with insight into how, if at all, the presented strategies would be utilized in the classroom. Only one participant of the eleven required to attend this workshop rated it, in terms of usefulness, "of little benefit." The other participants felt the workshop was very useful, or at least, moderately useful for them. (See Appendix B for chart.) All but one of the participants responded "yes" when asked if "you would recommend this course to others if it were repeated." The "no" response came from the same participant who rated the workshop as having very little benefit in terms of usefulness. (See Appendix B for chart.)

The intern was one of the presenters of the workshop, which afforded her the opportunity to assume the role of a privileged observer. Tensions ran high for the

participants of this workshop; they felt they were unfairly singled out because they had given students the grades that they (the students) had earned. The workshop facilitators were sympathetic to the participants concerns, another fact that was duly noted on the evaluation form by a majority of the participants. The workshop presenters attempted to lower the level of concern for the participants and presented the workshop in an informal tone and setting. The intern believes that this informal presentation, as noted by some of the participants on the evaluation form, resulted in a willingness to, at the very least, experiment with some of the techniques and strategies presented.

Observations were conducted by this intern following the workshops, as requested by the participants. Ten of the eleven participants responded "yes" on the evaluation form to the question, "Have you learned new skills or techniques that you can apply on your job?" However, only two of the eleven teachers asked for a follow-up classroom observation to see how the strategies and techniques presented at the workshops were being used. Since the intern at this time does not serve in a supervisory capacity, observations by this intern were on a voluntary basis.

The two classroom observations that this intern made were arranged cooperatively between intern and the teacher. The teachers were both from the English department, each unaware that the other had asked for a follow-up observation. Both teachers were from the same campus, albeit a voluntary decision, in the observation process. The intern was invited into each classroom during a period when each teacher was presenting a lesson using multiple intelligences, one of the instructional strategies presented during the workshop. Using the information provided during the workshop, each teacher prepared a esson modeling Gardner's Theory of Multiple Intelligences. In this intern's opinion, each

lesson was well prepared, and presented effectively. The students were very receptive to the lessons, each of which was literature-based. The assignments modeled Gardner's theory: the students were asked to respond to an objective in one of a number of ways. One teacher used all seven intelligences; the other teacher presented the students with four of the seven intelligences as an alternative to completing the assignment. Since the students had several days to complete the assignment, the intern made a subsequent visit to each class to follow-up on the outcome. The students' projects were well done, and each teacher was elated by the creativity of the students, and the time each student spent on his or her project. It was evident to this intern that the teachers were obviously delighted by the work produced by these students, who by these teachers' own admissions, were "unmotivated, and willing to do only what was absolutely necessary to achieve a minimal grade."

Informal interviews provided an additional source of data collection for insight into the research problem. Though some participants were more willing than others to discuss the effects that the workshop had on his or her teaching, all were willing to talk to the intern to some degree. Most agreed that the workshop did provide some beneficial information, which should also be made available to the other faculty members as well. A few had admitted that they did try some of the strategies presented at the workshop, specifically, cooperative learning, with some degree of success. The participant who stated in her workshop evaluation form that the workshop was of little benefit felt that the workshop did not address the problem of student failures during the second and fourth marking periods.

"The students fail the second and fourth marking periods because of absenteeism or suspensions, or because they take a rest after initially doing well. An easy way for teachers to access parents about our concerns would be helpful. It's not easy for us to get student addressees and phone numbers. There is no prepared form like an academic report to send out."

Another teacher believed that although the workshop did present some good ideas, "they just wouldn't work here. Our students don't care how we teach; they just don't want to learn." Another participant also felt that many of the techniques presented deserved merit; his concern, however, was that the administration would not view these techniques as favorable as the more 'traditional' ones.

"I'm concerned that if I'm teaching a lesson using the theory of multiple intelligences, and I have my students working in different parts of the rooms, in less than traditional ways, for example, drawing, or making a recording, an administrator who might be evaluating me at that time might not see this as teaching, or learning for that matter, and that would give me an unsatisfactory observation. If I do give in to this because I see that it can really help my students improve their grades and maybe even their attitudes, there has to also be a buy-in from the administration. We have to know they are supportive of these new strategies."

Many of the other comments centered on a common theme: time. With all that is expected of teachers, and now with the increased demands of the Core Curriculum Content Standards and the HSPA, "Where do we find the time needed to effectively plan and teach these lessons?" Another stated, "We barely have time to cover what we

absolutely need to. Where does all this new stuff fit in?"

A review of students' grades was used as part of the data collection approach in the research, with little weight, however, since these were not the same students whose grades resulted in a mid-year (third marking period) failure rate year more than 24% during the 1997-98 school year. Of the eleven teachers who participated in this study, six of them had a classroom failure rate of more than 24% in at least one class for the third marking period of the 1998-99 school year. Of these six teachers, three of them had a failure rate of more than 24% in half their class periods. One of the two teachers who had voluntarily agreed to an observation had a classroom failure rate of more than 24% in three of his six class periods.

What did it mean?

Students who are placed at risk due to poverty, race, ethnicity, language, or other factors are rarely well served by their schools. They often attend schools where they are tracked into inferior courses and programs holding low expectations for learning. High expectations are being recognized as the key to success of all students, especially those considered at risk. "Schools that establish high expectations for all students – and provide the support necessary to achieve these expectations – have high rates of academic success." (Costello) It was obvious to this intern that the majority of the participants in this study do not hold high expectations for their students. "Their skills are low when they come to us; how can we be expected to raise them to the standard that the state holds for all students?" "They've come from a school district where little is expected of them; how can we change that at this point?" If teachers are to achieve the desired goal of success for their students, they must hold high expectations for them. This was not the

case of the majority of participants in this study.

The absolute worth of professional development for teachers is the essential role it plays in the improvement of student learning. (Cook) "Creating a profession of teaching in which teachers have the opportunity for continual learning is the likeliest way to inspire greater achievements for children, especially those for whom education is the only pathway to survival." (Darling-Hammond, 1998) Though follow-up staff development opportunities were provided to the participants after the obligatory workshop, only two of the eleven teachers (5.5%) took advantage. The teachers perceived the failure problem as a student-centered problem. At no time did this intern hear any one of the participants suggest that student achievement could possibly be attained through a change in their teaching. Part of educational reform requires teachers to not only update their skills and knowledge, but to transform their roles as educators. The teachers in this study, for the most part, were not amenable to accept this transition.

The purpose of this research in terms of the intended organizational change included individual approaches to change, as well as pressure and resistance to change. After receiving staff development training, teachers were expected to modify their current instructional strategies and adopt and adapt new ones. The researcher, anticipating that these expectations would produce pressure as well as resistance, was optimistic, however, that personal and organizational satisfaction would be achieved despite the pressure and resistance to the change. Such was not the case.

Many teachers in this study believed that their students could not and/or did not want to learn. As a result, they did not expect their students to succeed. Teachers need to establish and communicate high expectations and create successful learning

environments for all students to have high rates of academic success.

Chapter 5

Major Conclusions and Corresponding Implications:

The intern conducted an ethnographic study of the effective instructional strategies that could be used to improve student performance in the classroom and result in a classroom failure rate of less than 25%. The effects of a professional development workshop presented on instructional strategies were examined as they related to student performance. Eleven teachers, whose midyear failure rates for the 1997-98 school year exceeded 24%, were required to attend a district-developed workshop on instructional techniques. Conclusions were based on the findings from evaluation forms, observations, and interviews.

The ultimate worth of professional development is the essential role it plays in the improvement of student learning. Growing evidence suggests that ongoing professional development not only makes teachers feel better about their practice, but it also procures learning gains for students. The data from this study indicate that professional development does have a significant effect on teaching practices. Schools must continue to provide on-going professional development and support for its faculty to insure the success of its students.

Traditional approaches failed to change substantively overall patterns of student achievement. One strategic initiative would be to refocus the content, methods, and priorities of the current instructional program and incorporate contemporary research on teaching and learning.

Research on successful programs for at-risk students of academic failure has demonstrated that high expectations are a critical factor in improving student performance. Schools can communicate this expectation in the way they structure and organize learning. Teachers who teach to a broad range of learning styles and multiple intelligences communicate that the school values the unique strengths and intelligences of each student. (Gardner) The focus of our efforts should be on enhancing our professional capacity and responsiveness, rather than categorizing and penalizing our students for being who and what they are.

Staff developers commonly ask for feedback immediately following a professional development program, but that response rarely accounts for the long-term impact of the experience. A follow-up evaluation, completed after teachers have had time to understand and implement what they learned in a professional development activity, would provide more useful information in assessing changes in teacher practice and student learning.

Conclusions and Implications on the Intern's Leadership Development:

This action research provided the intern with an opportunity to devise and implement a plan of action for solving a specific problem within the district. It provided information that was used to formulate educational decisions.

Leadership competencies developed during this study included:

1. designing instructional units
2. supervising in a clinical mode
3. designing in-service training sessions
4. conducting in-service training sessions.

Organizational Changes as a Result of the Study:

The Camden County Technical School District's Professional Improvement Plan for the 1999-2000 school year will emphasize professional improvement and/or personal growth plan that support the task of enabling students to achieve high academic standards. The content of these plans will be student-centered and based on effective instruction. It is designed to focus on the instructional process and to result in the incorporation of a greater variety of student-centered instructional strategies in the 'teacher action' section of the daily lesson plans.

Teachers will choose a focus for their professional improvement that will include activities that provide opportunities to learn about the selected focus. Professional development foci include cooperative learning, multiple intelligences, using a variety of student learning activities, and writing in the content areas.

The teacher must also select methods that will be utilized to incorporate the focus for professional development into his/her classroom or career area program. Professional development activities include participation in selected staff development, in-service, and/or ETTC workshops.

The teacher will arrange to observe the professional development focus modeled in an authentic instructional setting, or work with the staff development specialist to design a lesson that incorporates the professional development focus. The staff development specialist will observe the teacher employing the professional development focus and provide feedback and assistance, as necessary.

Need for Further Study:

Future research should attempt to further investigate the following questions:

1. Do student-centered classrooms improve student performance?
2. What instructional strategies are effective in improving student performance?
3. What role does on-going professional development play in the academic success of students?

Because of the complexity of current changes in education, ethnographic research should be extended over time in order to describe and give value to the correlation between individual change and systemic change in education.

References

Armstrong, T. (1994). Multiple intelligences: seven ways to approach a curriculum. Educational Leadership, 52, 26-28.

Blue Earth Area Schools. (1998). Brain-based learning. [On-line]. Available: http://www.blueearth.k12.mn.us/dist/brain.based.html

Brualdi, A. C. (1996). Multiple intelligences: Gardner's theory. (ERIC Document Reproduction Service No. ED 410 226).

Caine, R. N. , & Caine, G. (1995). Reinventing schools through brain-based learning. Educational Leadership, 52, 43-47.

Checkley, K. (1997). The first seven ... and the eighth. Educational Leadership, 55, 8-13.

Cohen, P. (1995, September). Understanding the brain: educators seek to apply brain-based research. Education Update [On-line] , 37. Available: http://www.ascd.org/pubs/eu/septu95.html

Cook, C. J. (1997). Critical issue: evaluating professional growth and development. [On-line]. Available: http://www.ncrel.org/sdrs/areas/issues/educatrs/profdevl/pd500.htm

Costello, M. (1996). Critical issue: providing effective schooling for students at-risk. [On-line]. Available: http://www.ncrel.org/sdrs/areas/issues/students/atrisk/at600.htm

Darling-Hammond, L. (1998). Teacher learning that supports student learning. Educational Leadership, 55, 6-11.

Finn, J. D. (1998). Class size and students at-risk: what is known?...what is next? [On-line]. Available: http://www.ed.gov/pubs/ClassSize/research.html

Gardner, H. (1993). Frames of mind: The theory of multiple intelligences. (10th anniv. ed.). New York: BasicBooks.

Gardner, H. (1995). Reflections on multiple intelligences: myths and messages. Phi Delta Kappan, 77, 200-209.

Gardner, H. (1997). Multiple intelligences as a partner in school improvement. Educational Leadership, 55, 20-21.

Golberg, M. F. (1990). Portrait of James P. Comer. Educational Leadership, 48, 40-42.

Guild, P. B. (1997). Where do learning theories overlap? Educational Leadership, 55, 30-31.

Hixson, J. & Tinzmann, M.B. (1990) Who are the at-risk students of the 1990s? [On-line]. Available: http://ncrel.org/sdrs/areas/rpl_esys/equity.htm

Kovalik, S. , with Olsen, K. Integrated thematic instruction: the model. (3rd ed.). New York: BasicBooks.

MacGilchrist, B. (1996). Linking staff development with childen's learning. Educational Leadership, 53, 72-75.

Ogle, D. M. (1997). Critical issue: rethinking learning for students at-risk. [On-line]. Available: http://www.ncrel.org/sdrs/areas/issues/students/atrisk/at700.htm

O'Neill, John. (1996). On emotional intelligence: a conversation with Daniel Goleman. Educational Leadership, 53, 6-11.

Ramirez-Smith, C. (1995). Stopping the cycle of failure: The Comer model. Educational Leadership, 52, 14-19.

Silver, H. , Strong, R. , & Perini, M. (1997). Integrating learning styles and multiple intelligences. Educational Leadership, 55, 22-27.

Sylwester, R. (1995). A celebration of neurons: An educator's guide to the human brain. Alexandria, VA: Association for Supervision and Curriculum Development.

Sylwester, R. (1997). The neurobiology of self-esteem and aggression. Educational Leadership. 54, 75-79.

Tinzmann, M. B. , Jones, B. F. , Fennimore, T. F. , Bakker, C. , Fine, C. , & Pierce, J. (1990). What is the collaborative classroom? [On-line]. Available: http://www.ncrel.org/sdrs/areas/rpl_esys/collab.htm

Appendix A

Research Instruments

CAMDEN COUNTY TECHNICAL SCHOOLS

✍Workshop Evaluation Form✎

Name of Workshop:

Name of Presenter/s:

Today's Date:

1. How do you rate the course as to usefulness to you? Please place a ☒ check mark in the appropriate box:
   ☐Very useful ☐Moderately useful ☐Of little benefit

2. Please rate the following elements of the workshop by placing a ☒ check mark in the appropriate box:

		Excellent	**Very Good**	**Fair**	**Poor**	**n/a**
a)	Overall (How well did it meet your expectations?)	☐	☐	☐	☐	☐
b)	Content (Was the subject thoroughly covered?)	☐	☐	☐	☐	☐
c)	Method of presentation (Clear, interesting, and well organized)	☐	☐	☐	☐	☐
d)	As a source of new ideas	☐	☐	☐	☐	☐
e)	Handouts	☐	☐	☐	☐	☐
f)	Balance between lecture and class activities	☐	☐	☐	☐	☐

3. Would you have preferred more discussion of any of the subjects covered during the course? Less?

4. We would like constructive criticism. Mention any aspects of the course which you feel should be changed:

5. What did you like best about the course?

6. How do you rate the instructor/s of this course relative to other courses you have taken. Please place a ⊠ check mark in the appropriate box:
□Excellent □Very Good □Fair □Poor

7. Would you recommend this course to others if it were repeated? Please place a ⊠ check mark in the appropriate box: □Yes □No

8. Have you learned new skills or techniques that you can apply on your job?
□Yes □No

Other Comments/Suggestions:

Thank you!! ☺

Name: _____ (optional)

School: _____

CAMDEN COUNTY TECHNICAL SCHOOLS

Teacher Evaluation Form

Teacher_____ Employee Number_____

Evaluator _____

Date_____ Time _____ Group_____

Check Campus: _X_ Gloucester _____ Pennsauken

Check Division: _____ Apprentice _____ Evening School

_X_ Day High School _____ Special Needs

_____ Technical Institute

Evaluator's Signature _____

*Teacher's Signature _____

Date _____

*The signature indicates that this was read by the teacher but does not necessarily indicate agreement.

Revised 5/90

cc: R.S. Haldeman,S. Smith, V. Edmunds, E. Donahue

Yes = performance is currently acceptable
N/I = performance is marginally acceptable, improvement is needed
No = performance is currently not acceptable
N/A = non applicable

I. PREPARATION

A. Lesson plans included the following required elements:
___ 1. Instructional Objective(s)
(a) Academic - Daily
(b) Shop - Daily and/or weekly
___ 2. Teacher Action (Lecture, demonstration, etc.)
___ 3. Student Action (Guided and/or Independent Practices)
___ 4. Evaluation

____ B. Lesson was planned in accordance with long term and short term objectives in the curriculum.
____ C. Audio-visual instructional materials, textbook pages and/or software used in the lesson were listed in plans.
____ D. Lesson plans were complete for the entire week in progress. (Monday - Friday)
____ E. Diagnostic and other evaluative measures were used to guide planning.
____ F. Individual Educational Plan (IEP) or Individual Student Improvement Plan (ISIP) were used and implemented where appropriate.
____ G. Plans included at least one formal teacher lesson each week for shops.
____ H. Weekly safety lesson was included in the lesson plans for shops.

_____ I. Plans included maximum use of technicians.

_____ J. Other _____

II. INSTRUCTION

____ A. The instructional objective was presented.
B. Motivation techniques:
_____ 1. Adjusted the level of concern as needed by (circle) silence/proximity/eye contact/voice/called student by name/other _____.
_____ 2. Provided opportunities for all students to be successful.
_____ 3. Maintained positive learning atmosphere.
_____ 4. Gave knowledge of results that was specific and timely.

C. Gave attention to the following when asking questions:

____ 1. Addressed questions to whole class.
____ 2. Provided wait time.
____ 3. Called on both volunteers and non-volunteers.
____ 4. Dignified incorrect responses.
____ 5. Asked questions at various thinking levels: Knowledge/Comprehension/Application/Analysis/ Synthesis/Evaluation.

_____ D. Used a variety of well-timed teaching strategies/activities: (Circle) lecture/inquiry/role plays/group discussions/ student input/demonstration/other_____.

E. Gave attention to the following regarding guided practice:

_____ 1. Gave opportunity for students to practice new learning.
_____ 2. Made sure all students knew what to do and how to do it correctly.
_____ 3. Monitored practice and gave help and encouragement.

_____ 4. Assigned independent practice which appropriately reinforced the lesson.
_____ 5. Taught to the objective.

_____ 6. Provided for summarization of the lesson.

_____ F. Other _____.

III. CLASS MANAGEMENT

_____ A. Maintained records and files.
_____ B. Maintained up to date emergency lesson plans.
_____ C. Tools, equipment and school supplies were properly and safely used by all students and by the instructor.
_____ D. Maintained discipline in shop and/or classroom.
_____ E. Differentiated between undesirable behaviors which are symptomatic of classified students and those which are overt disciplinary infractions.
_____ F. Managed the time and presentation appropriately.
_____ G. Managed the classroom/shop appropriately.
_____ H. Organized live work to meet goals of curriculum.
_____ I. Performed final check for approval on work leaving the shop.
_____ J. Reported safety violations which could not be corrected by teacher to division head or designee.
_____ K. Other _____.

IV. PROFESSIONAL QUALITIES

_____ A. Makes inputs for IEP, ISIP, or prescriptive programs as appropriate.
_____ B. Provides students with career guidance, shop and/or shop placement when appropriate, directs them to proper personnel when necessary for further assistance.
_____ C. Participates in advisory councils.

_____ D. Promotes cooperative education programs and recommends students for placement.
_____ E. Promotes vocational student organizations.

_____ F. Other _____.

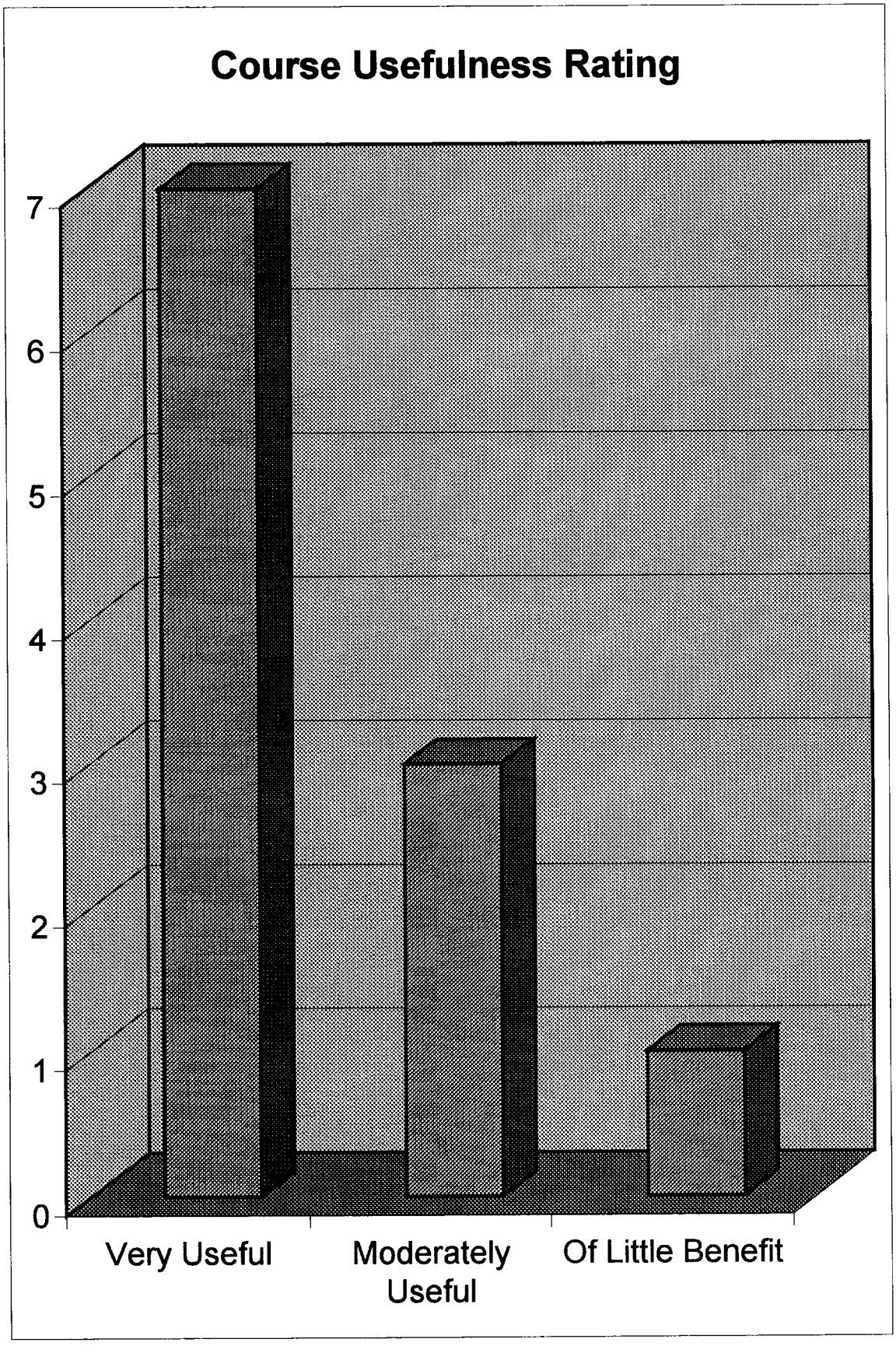
FOLLOW-UP

_____ Implemented previous recommendations.

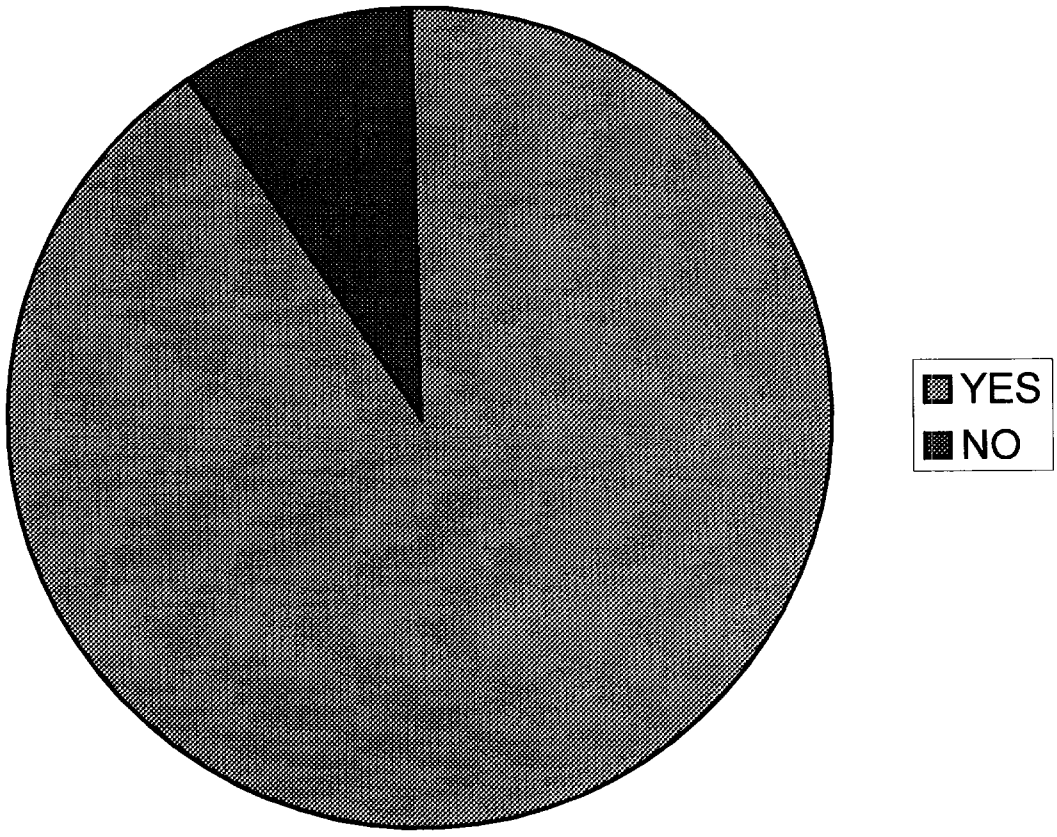
NARRATIVE

Appendix B

Charts and Graphs


Course Usefulness Rating
7
6
5
4
3
2
1
0
Very Useful
Moderately Useful
Of Little Benefit

Course Recommendation



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