Learning Theory and Its Application to At-Risk Programs

For Elementary School Children

Judy K. Statler
Jackson R-2 Public School-Jackson, MO

George J. Petersen
University of Missouri-Columbia

A Paper Presented at the Annual Conference of the
American Educational Research Association

Chicago, IL

April 21-25, 2003
Abstract

One of the most salient problems in our nation's schools has been to educate the students who experience academic difficulties and eventually drop out of school before mastering the skills and knowledge required for successful participation in society. Research literature focused on at-risk/dropout prevention programs indicates that potential dropouts can be identified in elementary school. Yet, the literature is scant with regard to the impact of programs designed for at-risk elementary students. Synthesizing research of effective at-risk/dropout prevention programs and the learning theory articulated in the American Psychological Association's Learner-Centered Principles, this study examined the essential components present in an exemplary at-risk/dropout prevention program for kindergarten through sixth grade students. Specifically, we investigated the perceptions of building administrators, at-risk coordinators, at-risk teachers, regular classroom teachers, and parents of at-risk students regarding the program's ability to reduce at-risk behaviors. Findings of this qualitative case study suggest three major themes were essential to the effectiveness of the at-risk program: (1) shared assumptions about mission; (2) student centered focus; and (3) commitment to creation of an nurturing environment. The findings further suggest that eleven subthemes supported the major themes. Analysis of the findings revealed that features within each of the three broad areas clearly reflected the four domains of the APA Learner-Centered Psychological Principles; however, not every subtheme incorporated the concepts of all four domains. Through in-depth, phenomenological interviews, the participants indicated that their at-risk/dropout program effectively reduced three major at-risk behaviors: (1) improved attendance; (2) improved academics; and (3) improved self-esteem. Not all of the participants regarded the program's effectiveness in reducing at-risk behaviors in each of the major themes. Parents of the at-risk students described impressive changes in the area of improved self-esteem exclusively, while the remaining respondents identified changes in all three major areas.
Learning Theory and Its Application to At-Risk Programs

For Elementary School Children

The American public has become openly concerned about the number of students in danger of not achieving expected standards of education, of dropping out of school before graduating from high school, and of failing to acquire the skills and knowledge to become productive members of society (McCombs & Whistler, 1997; The Center for Education Reform, 2000). Educators and policy makers have conceptualized programs thought to promise enhanced motivation and high achievement, only to discover their tireless efforts produced limited success (Knight & Kneese, 1999; Lambert & McCombs, 1998). Despite these widespread reform efforts, the number of students identified as being at-risk of educational failure has remained the same or actually increased in many urban, economically deprived, or racially and ethically diverse communities (North Central Regional Educational Laboratory, 1997).

Because high dropout rates were reported at the secondary level, reformers associated the at-risk population with secondary schools (Garcia & Walker de Felix, 1992). Therefore, many at-risk programs were designed to address the needs of high school students. However, McDill, Natriello, and Pallas (as cited in Druian & Butler, 1987) suggested that potential dropouts can be identified in elementary school. “When students fail in the early grades, they begin a cycle of poor self-esteem, poor expectations, poor motivation and further poor performance that all too often leads to despair, delinquency and dropout in the later grades” (Slavin, 1996, ¶5). Programs for high school at-risk students were deemed less effective because student behavior patterns had been well established; whereas, early prevention programs for children in elementary schools were considered effective in increasing academic performance at a crucial age (Arman, 2000; Garcia & Walker de Felix, 1992). According to Shanley, longitudinal studies indicate that high-quality at-risk programs for young children “offer more promise of lasting benefits and return on investment than other educational innovations” (1999, p. 35). While studies have documented
successful efforts to meet the needs of at-risk students at the secondary level, little attention has been devoted to examining the impact of programs designed for at-risk elementary students (Rush & Vitale).

Hurdles confronting at-risk students are multifaceted and staggering for both students and educators. "Research indicated that the problems confronting at-risk youth were so diverse and so complex that single approaches to tackling this problem experienced little success" (Garcia & Walker de Felix, 1992, p.53). Dryfoos stated, "no single component, no magic bullet, can significantly change the lives of disadvantaged children, youth, and families. Rather, it is the cumulative impact of a package of interventions that will result in measurable changes in life scripts" (1994, p. 12).

Extant literature reveals systemic features and instructional strategies that have been successful in meeting the divergent needs of at-risk students. These essential components have been grouped into the following categories: organization/administration (Darling-Hammond, 1997; Meier, 1997; Woods, 1995), school climate (Gavin & Greenfield, 1998; Kozol, 1997; Slavin, 1995; Small, et al., 2001; Woods), service delivery/instruction (Druian & Butler, 1987; Putnam, 1998; Slavin; Woods), instructional content/curriculum (Darling-Hammond; Druian & Butler; Woods), and staff/teacher culture (Krovetz, 1999; McPartland, 1994; Schein, 1992; Woods).

In 1990, the American Psychological Association [APA] Presidential Task Force on Psychology in Education examined, synthesized, and summarized more than 100 years of published research and theory about learning, instruction, motivation, and development. The purpose of this task force was twofold:

(1) to determine ways in which the psychological knowledge base related to learning, motivation, and individual differences could contribute directly to improvements in the quality of student achievement and (2) to provide guidance for the design of educational systems that would best support individual student learning and achievement (McCombs & Whisler, 1997, p. 3).
The resulting document, "Learner-Centered Psychological Principles: A Framework for School Reform and Redesign," identified and categorized basic factors essential to providing a quality education for all learners into four domains: cognitive and metacognitive factors, motivational and affective factors, developmental and social factors, and individual differences. These four domains are articulated in the empirically tested and validated APA Psychological Principles (McCombs & Whisler, 1997).

Combining research of effective at-risk/dropout prevention programs and the learning theory articulated in the APA Learner-Centered Principles, this study addressed the following research questions: (1) What essential at-risk prevention components are present in an exemplary at-risk/dropout prevention program, for kindergarten through sixth grade students, in one medium sized Midwestern public school district (1000-4000 students)? (2) Does this select program contain essential components that reflect the four domains articulated in the APA Learner-Centered Psychological Principles? and (3) What are the perceptions of building administrators, at-risk coordinators, at-risk teachers, regular classroom teachers, and parents of at-risk students regarding the program’s ability to reduce at-risk behaviors?

Theoretical Framework

Having identified essential components of effective at-risk/dropout prevention programs, educators yearn to embrace a program that will successfully maximize the learning of the at-risk population. However, a thorough review of the literature suggests that no packaged program will meet the needs of all at-risk students (Darling-Hammond, 1997). Nevertheless, the need for a clear conceptual framework for the development of effective programs is evident (Jones, 1991). According to Lambert and McCombs, the learner-centered psychological principles, derived from research in education and psychology, provide the framework needed to “ensure that educational decisions will be responsive to the student, thereby avoiding issues of alienation, boredom,
perceptions of irrelevancy, and other current issues students express with the traditional educational system ",(1998, p.7). This framework involves a transformation in the way of thinking, a paradigm shift, a change in beliefs and assumptions about learners, learning, and teaching (McCombs & Whisler, 1997).

*Paradigm Shift about Learning and the Learner*

The APA Presidential Task Force found that research focused on learning inspired educators to place increased emphasis on high standards, effective instructional practices, and improved assessment methods (McCombs & Whisler, 1997). As a result of this emphasis, technical and organizational changes were made to enable students to achieve higher levels of learning (McCombs & Whisler). However, these educators and researchers overlooked the impact of the changes on the students in areas other than in the area of academic achievement. The diverse personal, motivational, learning, and interpersonal needs of individual learners had been ignored. Consequently, educational systems were not structured to provide support for the complex needs of the students (McCombs & Whisler).

When educators and researchers began to devote equal attention to motivation, learning, and achievement, as well as, to the multifaceted needs of the learner, as suggested in the APA Learner-Centered Psychological Principles, a shift in beliefs and assumptions about learners, learning, and teaching emerged (McCombs & Whisler, 1997). Although not all educators acknowledged the need for change, traditionally held belief systems were challenged. The empirically tested and validated psychological principles encouraged teachers to abandon the assumption that they were fonts of knowledge to fill the empty vessels of their students (Bruffee, 1999; Speaker, 2001). “Educators are being asked to adopt thinking that holds that ‘all students can learn’ and to see education as a ‘shared responsibility’ among all constituencies – students, teachers, administrators, parents, and community members” (McCombs & Whisler, p. 16). The shift toward a learner-centered perspective suggests that schools need to emphasize a sense of
community, as well as, academic learning. In a learner-centered classroom, students and teachers share knowledge, experiences of reality, and interests as they work together to set goals, plan learning tasks, and assess progress (McCombs, 2000).

The APA Learner-Centered Psychological Principles

The central understanding of the fourteen learner-centered principles is that in order for educational systems to effectively meet the needs of all learners, “it is essential to have a focus on the individual learner as well as an understanding of the learning process and the essential knowledge and skills to be learned” (McCombs, 2000, p. 31). These learner-centered principles provide a comprehensive and integrated theoretical framework for maximizing learning, motivation, and achievement for all learners rather than a prescribed method of instruction and set of practices. The principles of this holistic perspective are categorized into four domains: cognitive and metacognitive factors, motivational and affective factors, developmental and social factors, and individual differences (McCombs & Whisler, 1997).

Cognitive and metacognitive factors. The principles in this domain describe learning as a natural process, involving discovery and the construction of meaning from information and experience as viewed from the learner’s unique perspective. Additionally, the goal of the learning process is for the learner to make sense of new knowledge. Next, the learner constructs meaning by linking new information with existing knowledge in ways unique to the individual learner. Furthermore, the learner is capable of creative and critical thinking by being able to think about thinking (McCombs & Whisler, 1997). Finally, learning is influenced by “environmental factors, including culture, technology, and instructional practices” (Lambert & McCombs, 1998, p. 18).

Motivational and affective factors. Thoughts, beliefs, goals, interests, and expectations for success or failure either enhance or interfere with the learning process (Lambert & McCombs, 1998). Individual learners are also found to be naturally curious and motivated by tasks perceived to be personally relevant and meaningful. Although all individuals possess intrinsic motivation to
learn, negative emotions such as fear, worry, and insecurity interfered with natural enthusiasm. Meaningful, engaging, relevant learning activities elicited student creativity and higher-order thinking skills (Marshall, 1998). Equally important is the awareness that the learner is required to invest considerable energy and needs guided practice when attempting to master complex knowledge and skills (Lambert & McCombs).

Developmental and social factor. Differential stages of physical, intellectual, emotional, and social development are found to influence learning. Learning is enhanced when methods of instruction were interesting and materials were appropriate (APA, 1997). Interaction and collaboration with others on instructional tasks provides learners with the opportunity to achieve higher levels of social development and self-esteem. The positive interpersonal relationships that can result from collaborative instructional contexts have the potential to offset negative emotions, beliefs, and expectations that frequently interfere with learning (Lambert & McCombs, 1998).

Individual differences. Students demonstrate inherent differences, in approaches and capabilities for learning, and also acquired differences, through learning and social acculturation. Learners are able to achieve higher levels of thinking when they experience a sense of belonging, an acceptance of their uniqueness, and an appreciation of their talents. Individual differences, such as ethnicity, race, gender, and/or socioeconomic status are a function of environment, culture, and heredity. These differences are key factors in the individual's capabilities and preferred learning styles. Cultural beliefs and understandings filter the learners' concept of reality and interpretation of experiences. Social interactions and communication with others in diverse and adaptive instructional settings facilitate learning (APA, 1997). The establishment of high standards for the individual learner and ongoing assessments of the learner's progress toward attaining the established goals provide valuable feedback for the learner and the teacher (Lambert & McCombs, 1998).
Strategies constructed from the learner-centered knowledge base effectively undergirded reform efforts across PreK-12 systems (McCombs, 2000). Increased achievement levels in all student groups and the creation of new cultures, such as cultures of caring, community, and meaningful learning among all those involved, resulted when the learner-centered approaches were applied (McCombs). Therefore, according to McCombs and Whistler, “The learner-centered model best serves as a lens through which to view and plan for schooling - from student-adult relationships to curriculum, instruction, and assessment to policies, procedures, and structures in classrooms, buildings, and districts” (McCombs & Whisler, 1997, p. 14).

Methods

The qualitative research strategy of case study best fit the exploratory purpose of this study because we sought an in-depth understanding of the essential components of an at-risk program and the meaning of this program for those involved (Merriam, 1998). Empirical data included observations, official documents, newsletters, informants’ remarks, and personal writings (Hamel, Dufour, & Fortin, 1993).

The single case study design involves a clearly defined unit of analysis, such as the components of an exemplary at-risk/dropout prevention program for elementary students (Yin, 1997). We chose the embedded single case study design to increase the focus and sensitivity of data collection by identifying a set of subunits within the main unit of analysis. The perceptions of building administrators, at-risk coordinators, at-risk teachers, regular classroom teachers, and parents of at-risk students regarding the program’s ability to reduce at-risk behaviors represented the subunits. Analyses of these subunits enhanced our understanding of the components of the exemplary at-risk/dropout prevention program (Yin, 1994).

Study Design

The design of this study was a flexible plan of research procedures identifying the participants, setting, sources of data, and data collection (Mernam, 1998). Research methods,
strategies, and timelines were dependent upon ongoing data collection and analysis (Taylor & Bogdan, 1998).

Participants. The case selection process requires the investigator to “collect preliminary information from a large number of preliminary candidates, and then perform a screening analysis, to determine the final candidates” (Yin, 1993, p. 34). Adhering to this selection process, we consulted educational experts at the state and local levels in an effort to discover, understand, and gain insight in selecting the case that would provide rich information (Merriam, 1998). Based upon the knowledge and recommendations of these experts, candidate participants were contacted to verify the relevance of the characteristics of their at-risk programs to the purpose of the study, to confirm potential richness of data, and to establish feasibility and access of the study.

The participants in this study were selected from a suburban Midwestern school district. The director of curriculum and at-risk programs acted as gatekeeper by authorizing us to collect data from building administrators, at-risk coordinators, at-risk teachers, regular classroom teachers, and parents of at-risk students (Taylor & Bogdan, 1998). Snowball sampling was utilized to identify key informants, respected and knowledgeable people to provide deep understanding of the history of the program and the themes that emerged (Bogdan & Biklen, 1998; Merriam, 1998; Taylor & Bogdan, 1998; Yin, 1989). The selected participants exhibited diversity in the areas of role responsibilities, years of experience in the educational field, location of classroom/office, and gender.

Setting. A medium-sized school district, pseudonymously named Rockford School District, was selected as an ideal site for this study for the following reasons: (a) the school district has demonstrated increases in third grade standardized test reading scores from 1998-2001, (b) the dropout rate of 10.04% in 1995 was reduced to 2.84% in 2001, (c) the state accredited review team indicated that the at-risk program initiated by this district was exemplary, (d) the school district is located within close proximity to the researchers, and (e) the
administration was willing to cooperate with a study of their elementary at-risk program.

Educators in this district face the challenge of meeting the needs of students who are exposed to multiple risk factors. In 1999, the annual wage and salary pay was $23,117. Statistics for the year 2000 are as follows: 12.5% of the children received food stamps; 18.9% of the children were enrolled in Medicaid; and 23.1% of the students were enrolled in free/reduced lunches. Although limited, student ethnic and racial diversity is evident in the following demographic data, from a 2000 census: 97.9% White, 0.3% African American, 0.4% American Indian, 0.3% Asian, 0.9% Hispanic, and 0.9% Multi Race (University of Missouri Outreach & Extension, 2000).

Sources of Data

According to qualitative research methods, we collected multiple sources of relevant data over an extended period of time. We conducted a total of 54 in-depth semi-structured and open-ended interviews to identify essential components of the elementary at-risk/dropout prevention program and to determine participants' perceptions regarding the program's ability to reduce at-risk behaviors. Whenever possible, efforts were made to arrange three interviews with the informants before, after, and/or during the school day, over a six-month period of time. The interviews, ranging in length from 20 to 50 minutes, were spaced from one day to one month apart. Most of the interviews were held in the place where the participant worked, although some were conducted in other areas for the convenience of the participant. All face-to-face interviews took place on school property and were tape recorded and transcribed verbatim to ensure that all the information was available for analysis.

In accordance with Seidman's model of in-depth, phenomenological interviewing, the first interview focused on the history of involvement with the at-risk/dropout prevention program. The second interview concentrated on the concrete details of the informants' present experiences with the at-risk/dropout prevention program. The final interview addressed the intellectual and
emotional connections of the participants to their experiences with the elementary at-risk program (1998). Some participants were not interviewed three times due to time restrictions and availability. When this occurred the interview structure was maintained to explore the participants’ experiences and meaningful connections with the at-risk program.

A series of three interviews were conducted with one district level administrator, one retired at-risk coordinator, two at-risk coordinators, six at-risk teachers, one regular classroom teacher, and one counselor. The following people were interviewed two times: four building administrators, one at-risk teacher, and one regular classroom teacher. Seven people were interviewed one time: four parents of students identified as being at-risk, one parent who was president of a club that supplied resources for the at-risk program, and two regular classroom teachers. A total of 25 people were interviewed.

Additional sources of relevant data included: direct observations recorded in field notes; archival records; and documents, including agendas and minutes from meetings, memos, newsletters, and policy statements. All sources of evidence were used in a converging manner to enhance understanding and discovery (Yin, 1997). Multiple sources enabled us to gain a more holistic view of the setting by using different “lenses” or perspectives (Morse, 1994).

Data Analysis

Consistent with advice for trustworthiness and soundness of data (Marshall & Rossman, 1995), we (1) used multiple sources of evidence over an extended period of time; (2) tested personal biases; (3) reflected on interpretations of findings; (4) maintained a detailed audit trail; (5) recorded rich, thick descriptions of data; (6) authenticated the findings through triangulation of multiple sources of data; and (7) utilized the methods of member checking and peer examination.

Data analysis consisted of examining, collating, and organizing massive amounts of data to convey a holistic understanding of the case (Merriam, 1998; Yin, 1994). Data analysis was
done simultaneously with data collection throughout this study, in an effort to bring order, structure, and meaning to the accumulated data (Marshall & Rossman, 1995; Merriam). We examined field notes, transcripts, documents, and other materials to identify themes and develop discrete concepts (Bogdan & Biklen, 1998).

The ongoing discovery of emerging themes and developing concepts influenced the focus and direction of future interviews (Taylor & Bogdan, 1998). Furthermore, we tested emergent hypotheses by evaluating the relevance and significance of the data to the research questions and triangulating plausible data (Marshall & Rossman, 1995). Next, informants were asked to comment on our interpretations to establish credibility and refinement of the findings (Taylor & Bogdan). Additionally, the four domains articulated in the APA Learner-Centered Psychological Principles were used as a template against which to analyze the empirical findings of this case study (Yin, 1994). Finally, a checklist of the Characteristics of Learner-Centered Classrooms, developed by Mid-continent Regional Educational Laboratory, was the framework for comparative analysis of classroom observations employed to prepare a unified description of patterns and themes (Merriam, 1998).

Each embedded unit of analysis in this study was treated as a comprehensive case in and of itself; however, the primary focus of attention was the larger case (Merriam, 1998; Yin, 1989). Through the process of category construction, we identified recurring patterns and themes in the participants' perceptions regarding the program's ability to reduce at-risk behaviors. These emerging themes enhanced the conceptual overview of the primary unit of analysis (Merriam).

Results

Initial open coding of voluminous raw data collected in this exploratory study revealed components that fit into thematic categories described in the literature. However, after reassembling and reconceptualizing the data and the phenomena they represent and searching for causal conditions through the process of axial coding, three basic underlying themes emerged.
The themes that appear to be essential to understanding the effectiveness of Rockford’s elementary at-risk program include (a) shared assumptions about mission; (b) student-centered focus; and (c) commitment to creation of nurturing environment. It should be noted that not all of the data fit into every theme. Nevertheless, many commonalities provided evidence to support the interpretation of the findings.

**Shared Assumptions About Mission.**

The first theme revealed in this study is shared assumptions about mission. Schein describes shared assumptions about mission as a shared concept of the reason for existence (1992). Data from documents, interviews, and observations suggested that the people involved in the at-risk program share the core concept that the manifest purpose of the program is to enable at-risk students to experience success at school. Clearly, having the students achieve academic success is the primary mission. Superintendent notes of board of education meetings reported discussions of improved standardized test scores and academic gains (Superintendent notes, October 8, 2001; December 10, 2001; May 13, 2002). At-risk coordinators acknowledged the primary mission of academic success. “Our job is to do whatever we can to assist student, teacher, family, so that the student can succeed academically” (Interview 2, p. 1; henceforth will be identified as I2).

Shared assumptions define what we pay attention to, our emotional reactions, and the actions we take in different circumstances according to Schein (1992). Four subthemes emerged to define the major theme: (a) demonstrated interest and concern for the whole child; (b) intracultural sensitivity; (c) early identification and prevention programs; and (d) involvement of parents and grandparents.

*Demonstrated interest and concern for the whole child.* The participants shared a deep concern for the individual student’s physiological, psychological, developmental, and
environmental needs. A fifth grade regular classroom teacher communicated concern when she described how she pays close attention to her students to identify conditions that may interfere with learning. She said,

If they [the students] come in with oily hair and clothes that they’ve been wearing for three days, . . . I sit down and ask them if mom does the laundry. Did she wash that last night? Who’s in the household? There are certain things that I might look for – smells – possibly dog feces – or cat urine on clothing – possibly a smell of marijuana on a coat - could lead to problems in a household. If they have repeated head lice, there are cleanliness issues that need to be taken care of - chiggers that are never taken care of or if they’re just eaten up by chiggers or bites of some kind. There’s a lot of times when I get involved (141, p. 2).

Intracultural sensitivity. Given the large percentage of Caucasian students in this study, cultural diversity based on race and ethnicity issues is very limited. However, cultural diversity in this investigation refers to the different values, attitudes, and expectations of students raised in foster care, unstable homes, poverty, and mobile families. The literature defines culture as shared values, beliefs, knowledge, skills, and practices that underpin behavior of members of a group (Schein, 1992; The World Bank Group, 2002). Educators in this study expressed an interest in dealing with the issues, problems, and needs arising out of their relationship with students raised in environments with differing values, methods of interacting with each other, and habits of thinking (Schein). Several participants indicated compassion for students who were in foster care and/or unstable families. One at-risk teacher stated,

Like at the beginning of the year, we had a lot of foster kids come in. They had missed a lot of school. Their attendance had been very, very poor before. We really couldn’t say it [their lack of academic skills] was a learning problem or not because they hadn’t been in school long enough for us to know. (13, p. 2-3).

Not only did the participants indicate sensitivity to diversified family structures, but they also described an acceptance of differences due to low economic status. A building administrator explained that underprivileged, poverty students often do not learn the importance of education in their homes because parents do not have the time or energy to consider schooling a top priority. Speaking from the parent’s perspective, he stated,
The important thing right now is that I'm a single parent and I'm trying to hold down two jobs so I can pay for food and rent and everything else for my family. I get home at night and my kids are already there. I'm tired and I want to get them fed and in bed rather than sit and do homework with them (143, p. 5).

**Early identification and prevention programs.** Building administrators stressed the importance of preventing student failure. We try to stop things before they happen" (I6 p. 1). "We want to plan an intervention as early as possible" (I3 p. 4). "The sooner you identify the problems, the more likely you can reach some solutions " (I39, p. 4). One principal promoted the philosophy of William Glasser, M.D., in an effort to prevent students from being at-risk. "Prevention is the key. One way to solve at-risk problems is to stop them before they happen. How can you do that? It is to take a proactive approach, which means like [following] Glasser [principles].

Teachers reported that early identification and prevention are essential to student success because failure in the early grades eroded motivation. "They [the students] sit in the second grade classroom and learn right away they can't keep up with the rest of the kids. They try and try and pretty soon - how hard can you try and get beaten down before you just quit?" (I24, p. 5)

**Involvement of parents and grandparents.** Several participants discussed the value of establishing partnerships with parents and custodial grandparents through communication, collaboration, and involvement in classroom activities. An at-risk teacher perceived parent involvement to be the most important feature of their at-risk program in promoting learning. She stated,

The initial prompting that the at-risk program gives parents to tie them into [the educational process], to help them see the importance of where they fit into the learning spectrum, and how important it is to set the example and make sure their children are there and that sort of thing, is very important (I34, p. 3).

**Student-Centered Focus.**

The data revealed that the second major theme, a student-centered focus, involved tailoring instructional delivery, assessment, and curriculum to the needs of the students. One
participant described how he was guided by what was best for the students.

One of the things they've [the at-risk students] taught me is you don't have to get across the finish line. It's the race that's important. Spend your time concentrating on these kids, developing what they know, developing their ability to find information, to work with each other. If you give them the tools, they'll do the work (133, p. 3).

Three subthemes emerged from the factors that influenced this major theme: flexibility regarding academic programs, schedules, strategies, and assessments; real life/meaningful curriculum; and extended day and summer instructional programs.

*Flexibility regarding programs, schedules, strategies, and assessments.* Structures within this school district were created to maximize learning by meeting the students' individual needs. These structures include transition classrooms, multi-age classrooms, and push-in language arts instruction.

A transition classroom between kindergarten and first grade and another transition classroom between first and second grade were designed for students who lack the skills necessary for promotion to the next grade level. "They [the students] either lack the maturity, or the background, or the parents didn't have time to work with them at home, or they didn't have the things they needed, and they just need a little extra time to get started in school" (114 p. 2).

Participants described a variety of strategies required to accommodate different learning styles in the transition rooms. "If I'm teaching fractions in math, I may prepare seven different ways to teach it because these children all learn - every child learns in their own way" (113, p. 4).

"Maybe I'll teach three or four [students] one way and teach the same skill to three or four others a different way. There's a lot of individualization, a lot of one on one, in small group, or small partner work" (120, p. 2). An at-risk parent appeared to confirm the teachers' student-centered focus. "Instead of cramming his brain with everything, you know, he [my son] was able to take his time and learn each thing. He does excellent. Now he's finishing up the grade and he does great" (18, p. 3).
Three kindergarten, three first, and three second grade classrooms are involved in a multi-age classroom instructional program. Students spend mornings with grade level peers for reading and language and an hour and a half in the afternoon in mixed aged groups for science and social studies. Students with different experiences, ages, and abilities are encouraged to work together on concrete hands-on, learning experiences planned by the teachers.

Flexibility is also prevalent in a push-in language instruction program for all fifth and sixth grade students. A special language arts instructor spends 40 minutes in each regular classroom teaching writing skills and reinforcing reading skills. The regular classroom teacher determines if this special instruction is individualized or given to groups of students.

The participants in this study reported that district and building level administrators endorsed flexibility of schedules and teaching strategies. “[Our principal] gave us flexibility in our schedules (142, p. 4). “I’m able to jump in and try new things. I have an administration that is very supportive. They don’t care if you jump in and try new things within reason of course” (124, p. 1).

Further evidence of flexibility was found in diverse methods of assessing students, such as, written assessment, oral testing, self-evaluation, and measurement of interpersonal skills. “We do a lot of oral type of testing. But I also do paper – pencil testing’’ (120, p. 4). Students conducted self-evaluations in one of the at-risk classrooms. “I let them do self-evaluations. I send weekly evaluations home on their progress on behavior, grades, and things that we need to work on. They’re really hard on themselves (130, p. 4).

Real life/meaningful curriculum. The second subtheme affecting the major theme of student-centered focus was the use of real life/meaningful curriculum to enable students to connect learning with everyday experiences. “You have to find material that interests them. If you just pull a story out and they’re not interested at all, they’re not going to follow you” (136, p. 1).
"I call it reality teaching. Basically you teach concepts that are real. It all can’t be fun, but the thing is that’s it’s relevant. Kids don’t get busy work. You don’t give busy work. You make it active” (145, p. 5-6).

*Extended day and summer instructional programs.* The third subtheme supporting the major theme of student-centered focus is extended day and summer instructional programs. Instruction in the areas of reading and math is delivered both before and after the regular school day to students who attend tutoring sessions. The school district’s summer school program was designed to provide instruction with well-specified goals for 24 days (Superintendent’s notes, December 10, 2001).

*Commitment to Creation of a Nurturing Environment.*

Interviews, documents, and observations suggested that the participants, motivated by shared assumption of mission and focused on individual student needs, set personal standards of responsibility, respect, self-discipline, compassion, and perseverance in the creation of a supportive, nurturing climate. “We just really try to make our students love coming here every day and most of them do” (121, p. 4). “We want children to experience success in school, to like learning, because these children do not like learning when they’re failing all the time” (114, p. 1). “We have to be patient and do the very best job we can and you always go home thinking what about this kid and what about that kid. How can we make it better?” (143 p. 6) “Never give up. You know there is always hope and you have to have faith” (132, p. 2).

I think the one thing, and it’s not just for at-risk students, it is to never give up on the child. I don’t care if they give up on themselves, or if their parents give up on them, you’ve got to keep pulling them along and encouraging them and showing them you care. You’ve got to love them and listen to them. I think the one thing and it’s taken me years to learn this is, give them the very best you can give them here at school, because a lot of them don’t get it at home (124, p. 3).

The perceptions of an at-risk parent appeared to validate the staff’s commitment to the creation of a nurturing environment. “They [my children] just love the atmosphere and the
teachers that talk to them. They [the teachers] aren't trying to overlook just to push a kid ahead either - a lot of school districts do that” (18, p. 1).

Four subthemes emerged from the factors that influenced the major theme of commitment to a nurturing environment. These variables include collaboration with peers, support services provided by the school district, enlistment of community resources, and design of physical environment.

Collaboration with peers. The participants cited examples of formal and informal collaborations with peers. During a meeting of the Teacher Support Team, we observed formal collaboration between peers to develop strategies to enable students to overcome academic difficulties. One at-risk coordinator referred to frequent informal collaboration with peers. “Almost every day is going to have like several informal teacher conferences, whether it’s real quick in the hallway or them coming in to see us before or after school. That happens on a daily basis” (147, p. 1).

Support services provided by the school district. The second subtheme influencing the commitment to the creation of a nurturing environment is an organized system of support services provided by the school district. Responding to critical issues faced by the students and their families, the at-risk coordinators “dispense clothes, medicine, whatever it takes that at-risk families need” (13, p. 1). The at-risk coordinators searched for affordable housing for a family living in a house without running water. When parents are jobless, the at-risk coordinators try to find them employment. “I mean they really do everything” (121, p. 2).

The continuum of support services provided by the school district extends from services provided within the school system to services purchased from an outside counseling agency through a Student Assistance Program. These purchased services are available to all students, their parents, and staff members for short term counseling needs.
Enlistment of community resources. Territorial barriers between the school and community appear to have been overcome in order to improve the well being of the students and their families. Comprehensive and cohesive services are available to at-risk children and their families as a result of collaborative efforts between the school district and numerous community organizations and agencies. Collected data provided evidence of enlisted resources from the Kiwanis Club, the Lion's Club, local sororities, churches, individual donors, community businesses, Division of Family Services, state mental health agency, and the county juvenile office.

Design of physical environment. Observation and documentation provide evidence of the commitment of the administration and school board to designing a physical environment conducive to maximize learning. Financial restrictions have limited the district's ability to provide modern facilities in all of its buildings; however, the primary building constructed in 1990 is designed to suit the needs of the children. Learning areas are arranged in the classrooms, as well as, in selected hallways architecturally designed to accommodate small group activities. The outdoor setting provides adequate space and equipment for play, exploration, and social interaction.

Ways Themes and Subthemes Reflect Four Domains

An analysis of the findings revealed that features within each of the three broad areas clearly reflected the four domains of the APA Learner-Centered Psychological Principles; however, not every subtheme incorporated the concepts of all four domains, as shown in Table 1.

Shared Assumption of Mission. The major theme of shared assumption of mission was not explicitly set forth in the four domains of the learner-centered principles. However, even though the participants engaged in diverse activities to promote learning, the data revealed a common and consistent understanding that "learners learn best when they are an integral part of the learning equation" (McCombs & Whistler, 1997, p. 14). The participants' understanding of the way to empower students to be successful is characteristic of a learner-centered school.
<table>
<thead>
<tr>
<th>Reflection of Four Domains in Themes and Subthemes</th>
<th>Cognitive &amp; Metacognitive</th>
<th>Motivational &amp; Affective</th>
<th>Developmental &amp; Social</th>
<th>Individual Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Assumption of Mission</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Demonstrated interest/concern</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Intracultural sensitivity</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Early identification</td>
<td>-</td>
<td>++</td>
<td>++</td>
<td>--</td>
</tr>
<tr>
<td>Involvement of parents/grandparents</td>
<td>-</td>
<td>++</td>
<td>++</td>
<td>--</td>
</tr>
<tr>
<td>Student-Centered Focus</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Flexibility re: programs/schedules/etc</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Real life/meaningful curriculum</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Extended day and summer program</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>++</td>
</tr>
<tr>
<td>Commitment to Creation of Nurturing Environment</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Collaboration with peers</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Support services provided by district</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Enlistment of community resources</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Design of physical environment</td>
<td>-</td>
<td>++</td>
<td>++</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. (++) = reflection of domain, (--) = no reflection of domain

Nevertheless, the concept of shared assumption, unity of spirit and energy, is not explicitly set forth in the four domains of the learner-centered principles. The subthemes of demonstrated interest and concern for the whole child and intracultural sensitivity appear to reflect the four domains: cognitive and metacognitive, motivational and affective, developmental and social, and individual differences. Analysis of the subtheme of early identification and prevention identified the reflection of two domains: motivational and affective, in addition to, developmental and
social. Finally, the subtheme of involvement of parents and grandparents reflected principles in the motivational and affective domain, as well as, in the developmental and social domain.

*Student-centered focus.* Interview data, documents, and observations suggest that Rockford educators endeavor to tailor aspects of instruction and support services to meet the needs of its students. This theme of student-centered focus is an integral part of the four domains articulated in the APA principles. The principles that underlie the learner-centered model “logically lead to the integration of learner and learning perspectives as well as promote a view that puts the learner focus in the forefront”. (Lambert & McCombs, 1998, p. 12).

Reflecting knowledge of the nature of the learning process in the cognitive and metacognitive domain, administrators encourage teacher flexibility to provide opportunities for students to express innate capabilities and pursue meaningful learning goals. Motivational and affective factors were considered when the framework for the elementary at-risk program was created. Structures, such as attendance monitoring, multi-age classrooms, and tutoring, were designed to replace negative student experiences of alienation and boredom with services that students would recognize as responsive and meaningful. Developmental and social factors of individual students were also addressed when the multi-age classrooms were initiated in the primary building. The main intent of these classrooms was that children with different experiences, ages and abilities would work together in small groups in learning activities planned by teachers. Appreciation of the factors in the individual differences domain was reflected when the administration designed structures, programs, and policies that valued diversity.

The subthemes of flexibility regarding programs, schedules, strategies, and assessments and real life/meaningful curriculum also reflected the four domains articulated in the APA principles. The subtheme of extended day and summer programs reflected the principles described in the individual differences domain.

*Commitment to creation of a nurturing environment.* Viewed through the learner-centered theoretical lens, this theme is a commitment to the establishment of an atmosphere
where students feel welcome, respected, comfortable, and encouraged to pursue personal goals (McCombs & Whisler, 1997). The four domains of the learner-centered principles are reflected in the process of creating a nurturing environment.

The learning principle in the cognitive and metacognitive domain is concerned with opportunities for students to pursue personally meaningful goals (McCombs & Whisler, 1997). Participants in this study spoke of their efforts to be informed of the student’s academic and family backgrounds to plan meaningful learning tasks. An at-risk teacher stated, “We may even go back to the third grade teacher and say, ‘Did you have any difficulty with this student last year or is it something new?’” (I21, p. 5). Educators who appreciate the role of motivational and affective influences on learning devote time and energy creating a climate “in which positive beliefs, attitudes, perceptions, and feelings are developed and nurtured” (McCombs & Whisler, 1997, p. 74). An at-risk teacher appeared to create this positive climate when he expressed confidence in his students’ abilities to present a report on the United States president of their choice, using diorama, oral report, puppet show, play, or whatever form of presentation they preferred. Commitment to the creation of a nurturing environment also reflects the developmental and social domain, which states that “individuals learn best when material is appropriate to their developmental level and is presented in an enjoyable and interesting way” (Lambert & McCombs, 1998, p. 20). An at-risk teacher used small group activities to enable one of her students to develop social skills. “I only have one who was socially lacking, but I tried to really boost confidence and build it up so he’s not as he was at the beginning of the year. He’s okay working in groups now” (I30, p. 3). Participants in this study also created a nurturing environment by recognizing factors in the individual differences domain, which state that culture, socioeconomic status, religion, developmental stages, and the like influence learning and motivation (McCombs & Whisler). A transition classroom teacher creates an encouraging climate by individualizing instruction. Sensitive to the students’ negative experiences from the previous
year, she refrains from pulling students out of her classroom for instruction. Rather, she plans "a lot of one on one, in small group, or small partner work" (I20, p. 2) in the classroom.

Principles in the four domains are also reflected in the subthemes of collaboration with peers, support services provided by the school district, and enlistment of community resources. The subtheme of design of physical environment reflects APA principles in the motivational and affective domain, as well as, in the developmental and social domain.

A caveat was noted based upon observations and interviews. Not all of the educators in this school district operate in accordance with the themes and subthemes that reflect the learner-centered perspective. This seven-year-old elementary at-risk program appears to be in a transformational stage where its mission is being fueled by the commitment of caring individuals and the needs of the students and the community. Some of the teachers who used more traditional methods of instruction are retiring and being replaced with teachers who have a student-centered focus and practice instructional methods to encourage motivation, self-expression, and imagination. Other traditional teachers appear to be noticing the benefits of being learner-centered and are making gradual changes toward a new way of teaching and learning (I45).

Perceptions Regarding Program's Ability to Reduce At-Risk Behaviors

Analysis of the participants' perceptions regarding the program's ability to reduce at-risk behaviors revealed emergent themes in three major areas: (a) improved attendance; (b) improved academics, and (c) improved self-concept. Not all of the participants regarded the program's effectiveness in reducing at-risk behaviors in each of the major themes. The parents of the at-risk students identified impressive changes in the area of improved self-esteem exclusively, while the remaining respondents identified changes in all three major areas as shown in Table 2.

Improved attendance. Researchers have identified a variety of student outcome measures as indicators of the effectiveness of at-risk/dropout prevention programs. One of the measures was improved attendance (Knight & Kneese, 1999). For example, improved attendance was the outcome measure of attendance monitoring in programs for educating homeless children.
Table 2

**Participants' Perceptions of Indicators of Effectiveness**

<table>
<thead>
<tr>
<th>Participant Groups</th>
<th>Improved Attendance</th>
<th>Improved Academics</th>
<th>Improved Self-Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four Building Administrators</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Three At-Risk Coordinators</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Seven At-Risk Teachers</td>
<td>4</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Four Regular Classroom Teachers</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Four Parents</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
</tbody>
</table>

*Note. Arabic number = frequency mentioned (-) = not mentioned* (Stronge, 1993). According to Dryfoos, improvement in attendance was one of the student outcomes of school districts that provided health and social services for children and their families (1994).

Perceptions of the participants in this study revealed that improved student attendance was a direct outcome of the Rockford at-risk program because the at-risk coordinators closely monitor absenteeism, notify parents, and make home visits to bring the students to school. One regular classroom teacher stated in reference to one of her students, “He missed a lot of days the first quarter. She [the at-risk coordinator] got involved and it really helped. It really improved his attendance” (I37, p. 5). An at-risk teacher also noted improved attendance when the at-risk coordinators got involved. “They make home visits to people who don’t attend. As soon as that home visit is made, he’s in the next day with a note from a doctor or something instead of just calling in” (I35, p. 1). A building principal said, “[The at-risk coordinators help] in a lot of ways and some of those families just receiving letters from the at-risk people or phone calls improves their attendance and tardiness” (I38, p. 3).
Improved academics. Improved academic performance was also found to be student outcome of effective at-risk programs (Bauer, Sapp, & Johnson, 1999/2000; Garcia & Walker de Felix, 1992; Levin & Hopfenberg, 1991; Meyer, 1997; Vance, Fernandez, & Biber, 1998; Welch & Richards, 1995). Slavin and Fashola (1998) reviewed research on whole-school at-risk programs and identified effective programs based upon student outcome measures of academic performance. An indicator of the effectiveness of a dropout prevention program initiated in a middle school in New York City was a substantial gain in courses passed by targeted students (Grannis, 1992). Vadasy, Jenkins, Antil, Wayne, and O'Connor (1997) measured the effectiveness of one-to-one tutoring by community tutors for at-risk first grade readers by student improvement in reading skills.

Perceptions of the participants in this study denote that student-centered structures within the at-risk program are integral to improved student academic performance. Transition classroom teachers have witnessed dramatic academic progress. “I just got my achievement tests back and they’re [the students] all except one at grade level, where they should be to go into first grade next year” (127, p. 3). “They [the students] didn’t know the alphabet and now they’re reading chapter books. I mean miracles do happen you know. They just needed to be exposed. They just needed someone to show them what they could do” (113, p. 6). The multi-age classroom teacher also discussed her students’ academic progress. “It’s beneficial to all of the students. I have seen all of my students progress this year with multi-age, but with my little ones that struggle, I think it’s very beneficial for them” (137, p. 5).

Improved self-concept. Researchers have found that improved academic self-concept resulted when at-risk programs responded constructively to students’ fundamental needs (Knight & Kneese, 1999). Additionally, social interaction of at-risk students and other students through cooperative learning experiences produced significant gains in academic achievement, improved self-esteem, and peer acceptance and friendship (Druian & Butler, 1987; McLaughlin & Vacha, 1992; Putnam, 1998; Slavin, 1995).
The theme of improved self-concept resonated throughout the perceptions of all categories of participants. The parents of at-risk students perceived improved self-concept as the most important outcome of the at-risk program. One parent appreciated her daughter’s ability to select used clothing at a Family Shopping Night sponsored by the school district. She stated, “Like she has more confidence when she can wear new stuff to school” (110, p.2). Two of the parents indicated that the at-risk program had effectively reduced their students’ levels of distress. “He is more calmer here. He’s more settled than when at the other school. He knows that if he needs something, that all I have to do is call one of the ladies [at-risk coordinators] and they will see that he gets it” (19, p. 2). “He’s a very nervous child . . . and the [transition] teacher works with him to calm him down. ‘Don’t take everything so seriously, you’re a kid’. She’s really calmed him down as far as taking life more simple as a child” (18, p. 3).

Interview data from school personnel also revealed perceptions of improved self-concept. According to the building administrator who promotes the Glasser philosophy, encouragement and recognition of achievement have contributed to his at-risk students’ ability to develop an increased feeling of belonging and satisfaction with oneself. “Sometimes what you do may not have an effect for three or four years. Sometimes, it’s right away. You see miracles. Sometimes you’ll see a kid just change overnight” (145, p. 2).

**Conclusions**

The purpose of this study was to examine essential components present in an exemplary at-risk/dropout prevention program for kindergarten through sixth grade students. Secondly, we analyzed the findings to determine if these essential components reflected the four domains articulated in the APA Learner-Centered Psychological Principles. Finally, we investigated the perceptions of building administrators, at-risk coordinators, at-risk teachers, regular classroom teachers, and parents of at-risk students regarding the program’s ability to reduce at-risk behaviors.
Results of this investigation provide empirical evidence that may illustrate effective systemic features, instructional strategies, and perceived impact of exemplary at-risk programs for elementary students. The lens of APA Learner-Centered Psychological is useful in illuminating how the learner-centered perspective may be effective in different school settings and contexts. The findings of this study led to three major conclusions.

First, as our findings suggested, three essential components were evident in the exemplary at-risk program for elementary school children at Rockford School District. Fundamental to the success of an elementary school at-risk program may be a shared assumption of mission. The participants in this study shared concepts, beliefs, values, and meanings, which propelled the mission of enabling at-risk students to experience success in school. For this reason, a leader who wants to implement an effective at-risk program for elementary students may need to carefully study the basic assumptions of the teachers toward at-risk students. Knowledge of methods to change traditionally held assumptions, embed, and transmit a new perspective about learners, learning, and teaching may also be essential (Shein, 1992).

This embedded single case study also underscored the significance of a student-centered focus. Implications for practice suggest the importance of flexibility of teaching practices, the value of establishing relationships with students, and the critical need to be knowledgeable of the learner and the learning process (McCombs & Whisler, 1997). Learning must be relevant and meaningful to the learner. At-risk students often fail to see the link between what they are learning and what is important to them.

Furthermore, this study shows that commitment to the creation of a nurturing environment may be an essential component for elementary school at-risk programs. This commitment emphasizes the need to provide comprehensive support services for at-risk students and their families. The educational system cannot attend to all of the needs of the students and respond to the demand for a quality education without enlisting community resources (Dryfoos,
Therefore, this study implies that a correlation may exist between available support services and quality education for elementary at-risk children.

The second major conclusion relates to the analysis of the essential components through the lens of the APA Learner-Centered Psychological Principles. Features within each of the three broad areas clearly reflected the four domains of the learner-centered principles; however, not every subtheme incorporated the concepts of all four domains. The findings of this study may enhance the understanding of powerful and feasible approaches involved in successful educational practices and contribute to the ongoing review and revision of the learner-centered principles.

Finally, our findings suggest that the shared concepts of diverse people in defining their perceptions of the at-risk program's ability to reduce at-risk behaviors may result in the creation of more meaningful educational practices and policies. In this study, the most important outcome of an effective elementary school at-risk program as perceived by parents of at-risk children is improved self-concept. Whereas, school administrators, teachers, and at-risk coordinators perceived the program's effectiveness in terms of improved attendance, academic performance, and self-concept. Valuing and respecting parental perspective may promote a sense of joining together in partnership to foster quality education for all learners.

This embedded single case study was conducted in accordance with qualitative research methods. Adherence to the procedures recommended by research experts ensured trustworthiness and soundness of data. However, this study was limited in scope of coverage to one medium-sized Midwestern public school district (1000-4000 students), which narrows the inferences and generalizations that can be made. In addition, the collection of data depended upon the participants' availability and willingness to share their perceptions and basic information about the subject. Finally, because the researcher is the primary instrument in qualitative research, bias is assumed to be present in the findings because all data is collected and analyzed through the
researcher's frame of reference, worldview, values, and basic philosophical assumptions (Cowger & Menon, 2001; Merriam, 1998). All sources of data are filtered through the researcher's selective lens (Taylor & Bogdan, 1998). It is for this reason, that we continuously engaged in critical self-reflection and recorded personal feelings and assumptions in observer's comments throughout this study.

Although, little attention has been devoted to the study of systemic features, instructional strategies, and impact of at-risk programs for elementary students, the findings of this exploratory study appear to buttress much of the previous research that examined effective elementary at-risk programs. Research efforts are needed to continue the identification and documentation of successful at-risk/dropout prevention programs for elementary school children.
References


