

## CHAPTER ONE

### Problem

Enhanced learning experiences through innovative instructional strategies (i.e., integrated curriculum, cooperative learning, and team teaching) have been shown to lead to higher student achievement, more positive attitudes toward learning, and increased self esteem (Arhar and Irvin, 1995; Aschbacher, 1991; Boidy, 1994; Greene, 1991; Johnson & Johnson, 1990; Lee & Smith 1993; Newmann & Thompson, 1987; Slavin, 1995; Stevens & Slavin, 1994; Vars, 1965; Vye, 1990).

Yet, despite increased pressure for students to demonstrate high achievement on standardized tests (Johnson & Johnson, 2002) traditional teaching methods remain commonplace. Reasons for this include current state and federal mandates that focus on traditional instructional methodologies (i.e., test taking, memorization, and standards driven assessment). These mandates tend to emphasize student achievement as based on standardized tests rather than on problem-based or constructivist instructional and learning strategies (Borman, Kromry, & Katzenmeyer, 2000) Also, people's thinking remains constrained by taken for granted assumptions about teaching and learning. As a result, efforts at instructional reform are often met with resistance from both parents and teachers (Lubienski, 2002). In addition, despite the current emphasis on reform and improving student achievement, more than half of the research on professional development does not mention the importance of using careful analysis of student learning data to drive professional development activities (Guskey, 2003).

The increase in educational expectations leads teachers to conclude that they must choose between depth and breadth in instructional strategies. The conclusion from *Splintered Vision*,

that math and science curricula in the U.S. are "a mile wide and an inch deep" (Schmidt, McKnight, & Raizen, 1996) demonstrates the choice often made. Also, the traditional class schedule, with subject matter taught in periods that have distinct beginning and ending times tends to make across the curriculum presentations more difficult, if not impossible (Goodlad, 1984). Finally, the architectural design of many schools, with segmented rooms and long hallways presents an additional obstacle to grouping according to criteria other than age or ability or varying grouping during the course of the day (Shore & Bierne, 1997).

Teachers, therefore, face having to make a choice. On one hand, research demonstrates that using innovative instructional strategies is more effective in raising student achievement and in affecting students in other positive ways. On the other hand, government mandates about curriculum, professional development, daily schedule, facilities, and the curricula they are given to teach direct teachers to use more traditional instructional methods. In addition to these forces, pressure from the community (Lubienski, 2002) encourages teaching material in a traditional manner that yields higher scores first and any other benefits second. Because of these factors, teachers often choose traditional approaches over innovative ones (Simon, 1998).

### *Purpose*

These issues are particularly challenging in small, private and parochial, faith-based schools where teachers and administrators must prove sensitive over the long run to the goals of those who pay for their operation (Gardner, 1991). Here, student tuition provides the only source of income, and the gain or loss of a small number of students can be the difference between economic viability and potentially ceasing operation. They need to ensure that they are

providing the kinds of services parents and students want, and that they have the capacity to cater and adjust to their clients' specialized needs and interests (Chubb & Moe, 1990).

There is considerable research demonstrating the benefit to students when teachers implement innovative instructional strategies. There is considerably less on how teachers and school administrators can work together to identify and overcome the obstacles that arise in the implementation of these innovative strategies. The purpose of this study is to show one school principal's and two teacher's efforts as they incrementally implement innovative teaching strategies (e.g., thematic units) in an institution that markets itself as providing a traditional education.

### *Objectives*

Using Eisner's (2002) model of educational criticism, the following objectives and questions will be pursued during the study:

- A. To describe a collaborative inquiry project focused on the implementation of thematic instruction. To achieve this objective, the following questions will be asked:
  1. What was the political, social, and organizational context in which this professional development took place?
  2. What were the experiences of those involved?
  3. What were the outcomes of this professional development project?
  4. What factors served as enablers or inhibitors in this process?
  5. What did the process look like?

- B. To interpret the experiences of those involved by comparing and contrasting data from the collaborative inquiry group.
1. In what ways were the participant experiences similar and different?
  2. To what extent did the outcomes vary from participant to participant?
  3. What factors may have contributed to these differences?
- C. To assess the value of collaborative inquiry as a vehicle of professional development.
1. In what ways did collaborative inquiry and thematic instruction impact teaching and learning activities of the two teachers?
  2. In what ways did collaborative inquiry and thematic instruction impact teaching and learning activities of the principal?
  3. In what ways were other faculty members influenced or impacted by the professional development?
  4. What are the limits and possibilities of collaborative inquiry as a vehicle of professional development?
  5. What recommendations can be made regarding the validity of collaborative inquiry as a vehicle of professional development?

#### *Overview of Study/Preview of Chapters*

To achieve the above objectives, this study will be comprised of two components. The first is a collaborative inquiry group with two teachers and an elementary school principal. This collaborative inquiry group will provide professional development as the teachers implement thematic instruction in their classrooms. The second component uses case study methodology

(Stake, 1991) to examine the impact the collaborative inquiry had on the collaborative inquiry participants, other teachers, and on the school.

Chapter one of the study contains the purpose of the study, its objectives, and this overview. Chapter two contains summary of research relevant to the study with focus on forces impacting the context in which this study will take place. Those forces include the comparison between politically based versus market-based schools, current trends in professional development, forms of participative research, and the benefits of thematic instruction. Chapter three outlines the methodology used in the collaborative inquiry group and the procedures used in the case study of the results. Chapter four will contain findings from the results of the study, and chapter five will contain conclusions and recommendations for further research.

## CHAPTER TWO – RELEVANT RESEARCH REVIEW

In this chapter, I begin with an examination of several types of schools. The first are the politically based public schools, those governed by the democratic process. From there I examine market-based schools that encompass private and parochial schools. In contrast to the public schools, which are governed by the democratic process, these are governed by the market and the forces it exerts. A group within this market-based sector of schools is the faith-based parochial, Christian schools, of which, most notably are the Catholic schools. Finally, I examine the schools of the Lutheran Church – Missouri Synod, one of which will serve as the site for this research project.

The second section of this chapter deals with professional development. The section begins with discussion how professional development has become an item garnering much research in the field of education. There is contrast between what is the generally held notion of professional development, which is a presenter talking to teachers for a period on a particular subject and teachers being involved in their own professional development through regular collaboration with other teachers. There is then brief discussion of the principal's role in the professional development of teachers.

The third section deals with the similarities and differences between the various forms participative action research. It concludes with a more in-depth look at collaborative inquiry with focus on how collaborative inquiry mirrors the way people learn.

The fourth and final section contains discussion on thematic instruction/integrated curriculum. These are not contrasting terms but rather synonyms for an instructional strategy that

links various subject areas around a particular topic. This contrasts with traditional instruction in which blocks of time are set aside for particular subject areas.

### Contextual Factors

Throughout America, democratic control and the marketplace are the two ways that societal decisions are made and social resources disbursed (Chubb & Moe, 1990). These two also form the distinction between the public and private sectors. Government and the public school system rely heavily on democratic control, while in the private sector virtually all decisions are made by the influence of the market. In this market-driven sector, where consumers are free to choose among suppliers, competition for consumers creates incentives to offer high quality outcomes at a low price (Ladd, 2002). Schools that operate within this private, market-driven sector – private and faith-based parochial schools – are subject to these market forces. In private sector schools, the people who run each school decide what they will teach, how they will teach it, who will do the teaching, how much to charge for their services, and virtually everything else about how education will be organized and supplied. However, while private sector schools are free to make more decisions regarding the operation of the school, teachers and administrators must prove sensitive over the long run to the goals of those who pay for their operation (Gardner, 1991).

### *Bureaucratic, Political, and Economic Forces in Public and Private Education*

*Bureaucratic forces.* According to Weber's (1978) analysis, bureaucracy is a way of organizing work through an administrative structure under legal-rational principles of legitimacy. Central to bureaucratic management is the specialized professional knowledge possessed by the person holding a particular office, including knowledge about the organization itself. The term

*bureaucracy* appears frequently in discussions about school reform, usually as something to be against (Wong, 2001). In a survey of principals and superintendents, both cited bureaucracy as the primary reason for leaving the profession (Johnson, 2002). The bureaucracy of the school system is seen as a large part of the reason that public schools are slow to make changes in instructional strategies (Levine, 1970). Similarly, advocates for school choice identify excessive regulation in a bloated bureaucracy as a major cause for the decline of student performance (Chubb & Moe, 1990; Coleman, Hoffer, & Kilgore, 1982).

Ladd (2002) suggests that the failure of educational systems to meet the needs of significant segments of the population provides support for the view that school systems run by large professional bureaucracies lose touch with the communities they serve. Increase in bureaucratic complexity means that principals of public schools must necessarily take some direction from state departments of education, local school boards, and districts staff rather than from community members.

Bryk, Lee, and Holland (1993) indicate that many reform proposals for public schools look to schools in the private sector for models to emulate. On-site decision-making was among the traits seen in private education that might benefit public schools. This decentralization of authority and commensurate elimination of levels of bureaucracy has taken several forms under the heading of school-based or site-based management. In some models, authority shifts to communities in the form of parent and community representatives (Ladd & Hansen, 1999). Another form shifted power to on-site school councils who had significant control over budget, management, and personnel including the right to hire and fire principals (Shipps, Kahne, & Smylie, 1998).

The Los Angeles school system adopted a site-based management model in order to make schools and school staffs more accountable to their constituents while providing more authority to the school level (Marcus, 2000). An additional goal of this was to reduce or eliminate bureaucracy in an effort to become more responsive to schools and improve support for instruction (Johnson, 2001). This increased sensitivity and accountability to the community and constituents of the local public school is an effort to implement a “market-based reform strategy” (Ladd, 2002, p. 14), thereby allowing public schools to be influenced by forces previously exerted only on schools in the private sector. These “market-based reform strategies” include school choice and voucher initiatives which allow parental choice regarding where children attend school. Choice options such as these exert market pressure on politically based schools such that school leaders seek to implement programs and strategies that are responsive to market issues.

In spite of the negative perception of bureaucracy and the efforts of schools to reduce or eliminate it, virtually all organizations regardless of size are in some way or another bureaucratic. They rely on hierarchy, division of labor, specialization, and formal rules to move members to a common goal. So, a certain amount of bureaucracy is often needed for effective social action (Weber, 1947). In addition, bureaucracy provides structure and fairness to the educational system (Corwin, 1993).

A comparison of bureaucracy between the public and private schools is not found in its presence, but rather in its level of complexity. Kennedy (2004) notes that the private school organization typically has the following upward path: Staff > Department Head > Head of School > Board. In Hawaii, Cooper and Ouchi (2003) reported that during the 2002-2003 school

year forty-nine cents of every education dollar reached the classroom. The rest of the money is spent on non-teaching staff who are located in schools, plus additional administrative and centrally directed staffs at the area and central office.

The result of a less complex bureaucracy is that private school teachers and principals are more likely than their public school counterparts to believe they have a great deal of influence, particularly in setting discipline policy and establishing curriculum (Apodaka-Tucker & Slate, 2002). This influence allows the principal and teachers to align curriculum and school policy with the needs of the students they know and the community, or market, they serve (Chubb & Moe, 1990).

*Political forces.* Public schools are political in that they are affected and ultimately controlled by the democratic process. They are governed through uniform institutions of democratic control. Here the public allocates decision-making authority to those elected to positions of government – for example, School Board members (Chubb & Moe, 1990). However, should the School Board enact policies and procedures which the public does not support, its members will not be re-elected when their terms are fulfilled, and in their places will be Board members who support the policies which the public wants to see (Wirt & Kirst, 1989). Because the public elects people who make decisions regarding policy and procedure, and because they are elected to carry out the wishes of the public who elected them, it can be said that schools have no “immutable or transcendent purpose” such as teaching children essential information about the world or giving them an understanding of citizenship in a democracy. What they are supposed to be doing depends upon who controls them and what the controllers want them to do (Chubb & Moe, 1999).

In the public sector, approval of performance is given by election or re-election in the democratic process. In private schools, those who own and operate the school – an individual, a non-profit organization, a church – have the legal right to make all decisions regarding the operation of the school. Decisions that in the public sector might be decided by the people or their elected officials. Approval of performance in private schools occurs when parents choose to send their children to the school. Since those who send their children to a particular private school also have the freedom to attend a different school whose offerings better meet their needs (Hirschman, 1970), their child's attendance constitutes an approval of performance. Should parents choose to have their child attend a different school; it is the equivalent of the school losing a vote. If a private school loses enough of these votes, it is forced to examine its policies and educational practices (Chubb & Moe, 1990) and respond to this threatened loss of income (King, 2002).

*Economic forces.* Most adults can remember walking to school (Older adults recall walking through miles of snow when they talk about how “easy kids today have it.”). Even with boundary exemptions and easy transportation with cars, a majority of American children attend what is known as the neighborhood public school. Most students have access to a single type of supplier, a public school that has little autonomy (Ladd, 2002). In a survey of parents asking why they chose the school they did, half responded that distance from the school was their first consideration (Schmidt, 2004). With this model, as long as there are children in a neighborhood, a school has students attending. By monitoring student population in a community, a school can accurately assess its student population and the income the school receives. School income is predicated on a per capita basis known as average daily attendance (ADA).

This model is compared to that of private schools where the neighborhood has no real boundaries and where student tuition provides the only source of real income, covering some eighty percent of the annual budget (Sikkink, 2001). The gain or loss of a small number of students can be the difference between economic viability and potentially ceasing operation. These schools often have limited budgets and depend on “word of mouth” and satisfied clientele as primary forms of advertising and recruiting of new students. They also need to ensure that they are providing the kinds of services parents and students want, and that they have the capacity to cater and adjust to their clients’ specialized needs and interests (Chubb & Moe, 1990). In private schools, this ability to cater and adjust to clients’ needs generally translates into increased student enrollment, which leads to increased revenue. However, the inverse is also true; schools that fail to satisfy a sufficiently large clientele will go out of business (Chubb & Moe, 1990; Ladd, 2002).

Although private schools use several approaches to market themselves, the one easiest for them to use and for potential clients to understand is standardized test scores. In order to make comparison with local public schools, recruitment efforts often focus on test scores, which, in some cases, are higher. Because of the cost differential, the perceived value of private schools must far outweigh that of public schools if they are to win students (Chubb & Moe, 1990; Ladd, 2002). Therefore, in private schools, there is a very real link between test scores and the economics of the school.

Traditionally, the neighborhood public school model did not have a connection between student achievement, enrollment, and revenue. However, the No Child Left Behind legislation (U.S. Congress, 2001) provides financial consequences for failure. To wit, the “Secretary of

Education will be authorized to reduce federal funds available to state for administrative expenses if a state fails to meet their performance objectives and demonstrate results in academic achievement” (p. 5). Consequently, publicizing standardized test scores is increasingly used to make comparison among public schools.

In addition, when a school fails to meet standards for educating disadvantaged students for three consecutive years, the disadvantaged student may apply to attend a different school (*No Child Left Behind*, U.S Congress, 2001). As is the case in private schools, this places a link between student achievement and the economics of the school. However, in private schools, excelling on standardized tests can result in additional students and, therefore, additional income while public schools do not receive additional funding when student achievement excels. *No Child Left Behind* makes provisions only for schools where student achievement does not meet standards.

#### *Parochial, Faith-Based, Christian Schools*

Parochial, faith-based, Christian schools benefit somewhat by providing an environment in which faith can be expressed and demonstrated. There are at least four types of parochial, faith-based, Christian schools. The first, and largest, group is the Catholic school system, makes up of nearly twenty-five percent of the private schools and fifty percent of the private school students nation-wide (Council for American Private Education, 2003). The second category of Christian schools contains those affiliated with evangelical movements such as the Southern Baptist or Christian Reformed Churches. The third category is the Fundamentalist schools, and the fourth category includes those schools affiliated with the Lutheran Church – Missouri Synod (LCMS).

The day-to-day governance of faith-based Christian schools is very different from that of public schools, in large part because control over such things as hiring practices and curricular policies is vested entirely at the local school site. However, because almost all Christian schools are financially precarious, they cannot afford to lose too many tuition-paying students, so market forces often soften the hard religious edges as these schools seek to attract students and financial support they bring (Sikkink, 2001).

Parents whose children attend faith-based schools often cite religious reasons for sending their children to the school and making the associated financial sacrifice. Because of declining religious order membership, the number of parents who share that faith and are both willing and able to make the monetary commitment necessary to send their children to faith-based schools is not enough to provide the income for these schools to cover rising costs (Rist, 1991).

In these parochial, faith based, Christian schools there is recognition that students who attend often do so because their parents are seeking an alternative to public education and are willing to make a financial commitment to achieve that. Parents undoubtedly consider numerous factors when choosing between public and private education as well as when selecting from among the many private school options. Among these factors are the religious, educational, cultural and social values that may be incorporated into an integral part of the school's mission (Ross, 2001).

Parochial school leaders consequently capitalize on these and other marketing issues to generate interest in the school. Other strategies include maintaining smaller class sizes within a school that has a smaller student population. Parochial school leaders choose these marketing issues because many people think that small school produce better results (Gladden, 1998;

Gottfredson, 1995), and research demonstrates that small classes do lead to higher achievement (Finn & Achilles, 1999). Other marketing issues include a safe environment, and that the school provides a traditional education. The benefit of these is demonstrated in test scores that are often published because they are, in some cases, higher than those of the local public school. So, parents who do not share the faith component of the school, often choose to send their children to the school because they see the school as providing the type of education they believe to be more effective (Hofman, Hofman, & Guldemond, 2002). King (2002) suggests that “student-leaving from public schools was at least in some significant part influenced by the school’s reluctance or inability to listen to expressions of parental concerns” (p. 7). King notes that parents “did not like the teaching approaches that were used in my child’s previous public school,” (p. 5) which led them to seek an alternative.

#### *Lutheran Church – Missouri Synod Schools*

Lutheran schools began in the late nineteenth century when German Lutherans of the Midwest felt that they were not welcomed in the growing public school system. With conservative religious beliefs, students were often treated with ridicule. As a result, they began their own schools. This school system has the largest number of private, religious schools outside of the Catholic Church. Struggles over the definition of Lutheranism have led these schools to become tightly integrated with individual local churches. The importance of that connection is evidenced by the substantial tuition discounts given to the members of the local church.

As a result, Lutheran schools are, traditionally, not independent; they are owned and operated by the local congregation who usually shares both the campus and the facilities. While a particular school is not independent, the church is. Lutheran churches and schools have no

organizational entity comparable to the Catholic diocese or the public school district. The reason for this political structure is historical in nature. During the Lutheran Reformation of the mid-fourteen hundreds, Martin Luther – the founder of the Lutheran Church - was forced to break away from the Catholic Church. In forming a new church, he noted the hierarchical structure of the Catholic Church with the Pope as the head and a broadening number of people under his authority, ending with the laity at the base. The newly founded church took a diametrically opposite political structure. While the Pope is the undisputed head of the Catholic Church, the individual congregation in the Lutheran Church possesses nearly complete autonomy and is, therefore, able to exercise self-governance in a manner unknown in the Catholic Church either then or now.

Even though the individual congregation is autonomous, leadership for the school is hierarchical in nature. The principal is responsible for the day-to-day smooth operation of the school, teacher performance, tuition collection, and monitoring of school related expenditures. The principal is accountable to the School Board who decides matters of policy and sets tuition based upon projected expenses.

When school matters have effect beyond the school entity, church leadership enters the decision making process. The first of two groups that can be involved in this process is the church council, which is comprised of the corporate officers and leadership representatives from all the church programs. This group meets regularly and has decision-making authority. However, both the School Board and the church council have authority limits. Neither has the authority to borrow money, and any decision either makes can be reviewed and overturned by the church body as a whole. The church body as a whole is known as the voters' assembly; they

are the final decision making body in the organization. The church has a large financial interest in the school through facility and personnel costs, so there is careful monitoring of school activities and anything perceived as having the potential of diminishing school success is questioned.

It should be noted that while the School Board and principal are accountable to the church council and the voters' assembly, neither of those overseeing bodies chooses to exert influence in the matters of curriculum and instruction outside the area of religion. In the area of religious instruction, the church does two things to ensure that the doctrine and theology of the LCMS are presented faithfully. The first is that the majority of teachers in LCMS schools were trained in LCMS colleges (Sikkink, 2001). The second is the religion curriculum taught is one designed and published by the LCMS.

In all other academic areas, the principal has nearly complete autonomy and is allowed to determine instructional philosophy and the curriculum necessary to facilitate that philosophy. However, as noted previously, that instructional philosophy and the results it yields need to be attractive so that there are enough students to generate sufficient income to cover expenses. Should a time arise that school enrollment falls short of budget projections and the instructional philosophy was suspected as the cause for this, the church council and the voters call on the principal and the School Board to devise an instructional strategy that attracts more students to the school and, therefore, alleviate the budget shortfall. From the church perspective, success of the school is measured not in student achievement, but rather in the school's ability to maintain financial viability. As long as the school meets its enrollment and resultant financial projections, the instructional philosophy used to attract that enrollment is not called into question.

As was noted above, the principal has near complete autonomy in the area of instructional philosophy. This autonomy is similar to that of other principals in non-public schools. Based upon the results of “Administrator and Teacher Survey” given to 500 of the *High School and Beyond* schools, Chubb & Moe (1990) determined that in private sector schools – Catholic, other religious, and non-sectarian – the strongest outside influence (whatever that may be for each school) was found to be less influential than in the public sector. They also found that in the private sector, the strongest outside influence from an outside authority is weaker than the influence of the principal.

#### Traditional and Innovative Instructional Strategies

There is considerable research demonstrating the benefit to students when teachers implement innovative instructional strategies over traditional strategies. While there is general understanding of what comprises traditional strategies, considerably less research identifies what the components of traditional instruction are.

##### *Traditional strategies*

However, in traditional approaches to instruction, there is a focus on teacher-centered instruction, usually involving lecture or explanation of an activity or concept (Costello, 2002). It involves the teacher telling rather than the students discovering (Jensen, 2000). The lecture covers an activity or concept that is explained and segmented into component parts for student understanding (Kovalik, 1994). Generally, questions asked have a single response with either a right or wrong answer (Katz, 2002). Because questions have a right or wrong answer, there is little emphasis on critical thinking skills (Astleitner, 2002). Student activities and learning experiences generally involve the whole class rather than small groups. When students work,

they do so independently having little interaction with other students (Katz, 2002). Teachers conduct student activities with a particular outcome in mind (Whitaker, 2002), and assessment is accomplished by the administration of objective tests (Hendrix, 1991).

### *Innovative strategies*

Teachers often hear students say, “When will I ever need to use this in real life?” or “Why do I need to know all of this information?” These questions portray a disconnect students see between what happens in school and what happens outside of it. Innovative instructional strategies allow students to find ways to connect their lives to their education (Scheer, 1997; Senge, 2000; Sprenger, 1999). Many students demonstrated an increased rate of retention when teachers used methods such as cooperative learning (students teaching students), questioning, summarizing, or role-playing. These methods encourage students to connect concepts with their meanings that allow their learning to become long term (Sprenger, 1999). Androjna (2000) suggests that cooperative learning can also assist students in the development of social skills.

Innovative strategies tend to promote self-directed or student-directed learning activities rather than teacher-directed activities. Garrison (1997) asserts that self-directed learners demonstrate a greater awareness of their responsibility in making learning meaningful and monitoring themselves. They are curious and willing to try new things, view problems as challenges, desire change, and enjoy learning (Taylor, 1995). Taylor also found them to be motivated and persistent, independent, self-disciplined, self-confident and goal-oriented.

Innovative strategies tend to be collaborative in that learners collaborate with teachers and peers in (Guthrie, Solomon, & Rinehart; 1997; Temple & Rodero, 1995) the learning process. Brown (2002) reports that students who collaborate with teachers regarding curriculum,

study methods, and assessments demonstrate increased positive attitudes towards learning and appear to be able to discuss topics at a more sophisticated level. This collaboration tends to view learners as responsible owners and managers of their own learning process (Bolhuis, 1996) and gradually shifts control of learning from teachers to learners (Morrow, Sharkey, & Firestone, 1993).

### *Thematic education/integrated curriculum*

It is taken for granted, apparently, that in time students will see for themselves how things fit together. Unfortunately, the reality of the situation is that they tend to learn what we teach. If we teach connectedness and integration, they learn that. If we teach separation and discontinuity, that is what they learn. To suppose otherwise would be incongruous. (Humphreys, 1981, p. xi)

The subject of integrated curriculum has been under discussion for over fifty years, with a renewed interest coming over the last ten. Jacobs (1989) contributes this rise in interest to the explosion of knowledge, the increase of state mandates, fragmented teaching schedules, concerns over curriculum relevancy, and a lack of connections among the academic disciplines. Benjamin (1989) adds trends towards global independence, the increased pace and complexity of the twenty-first century, the expanding body of knowledge, and the need for workers to have the ability to draw from many fields and solve problems that involve interrelated factors.

Principals and teachers alike experience the feeling that “there isn’t enough time to get it all in” or “the school day isn’t long enough to cover what I’m supposed to” or “every year something new gets added to the curriculum.” This feeling of frustration is one of the motivations behind the development of an integrated curriculum. Teachers see this as part of the solution to the requirements they see pulling them in a multitude of directions (Lake, 1994).

The move towards integrated curriculum is move away from memorization and the recitation of isolated facts – the activities associated with a traditional education – to more meaningful concepts and connections or patterns between concepts. According to Hart (1983), learning is the extraction, from confusion, of meaningful patterns. As students move into the work field of the twenty-first century, they will be faced with a requirement for a flexible use of knowledge that goes beyond memorization and recitation and moves into insight that is developed through learning that is connected. Perkins talks about that kind of learning when he states:

A concern with connecting things up, with integrating ideas, within and across subject matters, and with elements of out-of-school life, inherently is a concern with understanding in a broader and a deeper sense. Accordingly, there is a natural alliance between those making a special effort to teach for understanding and those making a special effort toward integrative education. (1991, p. 13)

Support for an integrated curriculum also comes from the body of research on the brain and how children learn. Caine and Caine (1991) and Shoemaker (1991) note that the search for patterns is a basic process of the human brain. Caine and Caine expand this by stating that, in fact, the brain may actually resist learning fragmented facts that are presented in isolation. Cromwell (1989) echoes this when he states that holistic experiences are recalled quickly and easily. In his book, *Human brain and Human Learning*, Hart (1983) states that the recognition of patterns accounts largely for what is called insight, and facilitates transfer of learning to new situations or needs, which may be called creativity. So learning subject matter in time chunks and periods separates the patterns the brain seeks in learning.

The Dictionary of Education defines this term as “a curriculum organization which cuts across subject-matter lines to focus upon comprehensive life problems or broad based areas of

study that brings together the various segments of the curriculum into meaningful association” (Good, 1973, p. 158). Humphreys puts forth a basic definition of integrated curriculum when he states, “An integrated study is one in which children broadly explore knowledge in various subjects related to certain aspects of their environment” (Humphreys, 1981, p.11).

Concerns about national achievement levels and high dropout rates have put the spotlight on any educational change that can lead to increased student success. Research demonstrates that an integrated curriculum strategy has a positive impact on student achievement and student content knowledge (Aschbacher, 1991; Boidy, 1994; Greene, 1991; Vars, 1965; Vye, 1990). Integrated curriculum has also been shown to have positive impact on student attitudes. MacIver (1990) found that integrated program students developed improved attitudes and work habits. Jacobs (1999) reports that an integrated curriculum is associated with higher levels of student attendance, higher levels of homework completion, and better attitudes towards school. These results appear to give support to the theories describing that the brain learns better when subject matter is connected rather than disjointed

### Professional Development Implications

#### *Professional development*

The education reforms of the past decade have brought the role of professional development to the fore. School policy makers have recognized that schools can be no better than the teachers and administrators who work in them and have, therefore, made professional development a key part of every school improvement plan (Guskey, 2003). Fallon (1999) suggests that “teacher quality is the most important variable in producing student achievement” (p. 1). This is echoed in the *No Child Left Behind* legislation (U.S. Congress, 2001) which

stresses the importance of high quality professional development to guarantee that all teachers are “highly qualified” (p. 14) and that all students reach high levels of achievement. In their school reform frameworks, both *Breaking Ranks: Changing an American Institution* (1996) and *Turning Points: Preparing American Youth for the 21<sup>st</sup> Century* (1989) include teacher professional development as one of the key elements to successful middle and high school reform. In addition, Payne (2000) notes that “principals must work to ensure that all teachers are able to address the many challenges the contemporary classroom present by helping to provide meaningful and effective professional development opportunities” (para. 1). This professional development should also be “a process” (American Federation of Teachers, 1995, p. 7) and not a “one shot” deal” (Payne, 2000, p. 4)

With this increased focus came increased scrutiny. Professional development was seen as ineffective, with the much-maligned “single session workshop” used as the example of how and why professional development failed to promote meaningful school reform and increases in student achievement. In this single session workshop model, topics could vary from district-initiated programs on instructional methods to teacher wellness and school climate (Alexander, 1995). In addition, a lack of clear consensus about what constitutes effective professional development, led those same policy makers to demand assurances of quality in the professional development activities. This, in turn, led those same policy makers, and many others, to publish “lists” that describe the components of high quality, effective professional development.

Guskey’s (2003) analysis of these lists found no characteristic of effective professional development that appeared on all of them. However, that analysis did find that the most frequently mentioned characteristic of effective professional development to be the enhancement

of teachers' content and pedagogic knowledge (American Federation of Teachers, 1995; Dougherty, 1998). Helping teachers understand more deeply what they teach and how students learn what they are teaching appears to be an important component of effective professional development. The analysis also found "another consistently noted characteristic is the promotion of collegiality and collaborative exchange." Educators value the opportunity to work together and exchange ideas. This collaboration also helps build a sense of community (Supovitz, 2002). However, for collaboration to bring its intended benefit, it must be structured and purposeful, with efforts guided by clear goals for improving student learning (DuFour, 2001; Guskey, 2003). Creating a collaborative environment has been described as "the single most important factor" for successful school improvement initiatives, "the first order of business" for those seeking to enhance their school's effectiveness, and essential requirement for improving schools, the critical element in reform issues, and the most promising strategy for substantive school improvement (Eastwood and Louis, 1992; Fullan, 1993; Newmann and Wehlage, 1995; and McLaughlin, 1995).

In the right environment, even flawed activities can be a catalyst for professional growth (DuFour, 2001). Conversely, in the wrong environment, even programs with powerful training strategies can prove ineffective (DuFour, 1998). So, to increase the likelihood that professional development has a positive impact on student achievement and school improvement, principals first create an environment in which there are opportunities for teachers and staff to work together, engage in collective inquiry, and learn from one another. In doing so, professional development is structured into the routine practices and becomes a part of the normal workday (American Federation of Teachers, 1995). Second they shift focus from what teachers are

teaching and how to help them teach more effectively to a focus on what students are learning and how they can be enabled to learn more (DuFour, 2001). Shifting focus in this manner represents a change from when principals were thought to be primarily instructional leaders. Principals foster this shift when they change their emphasis from helping individual teachers improve their instruction to helping teams of teachers ensure that students achieve the intended outcomes of the school.

Principals can also facilitate professional development through alternate, informal activities such as conversations among teachers about common concerns, ideas for classroom lessons, and formal and informal observations of interactions between teachers and students. The principal also can orchestrate teacher learning through strategic room and lunch period assignments and informal conversations with teachers based upon observation (Payne, 2000).

### *Participative Action Research*

There is an increased interest in the processes of action-oriented research in the field of adult education. There are a number of participatory action-oriented inquiry methods that are popular in the field of adult education, yet each has distinguishing characteristics. But they all share a dual focus. The first is on an interaction between action and reflection that produces learning that, in turn, changes the world of those who live in it and the second focus is a basic truism that learning is essentially a social experience (Bray, 2000). Elden and Gjersvik (1994) suggest that they have indications that utilizing participants as co-researchers provides “much more valid data and useful interpretations” (p. 39)

Reason (1994) identifies three approaches to participative inquiry: cooperative inquiry, participatory action research, and action science and action inquiry. The author notes that the list

is not exhaustive and gives several approaches not included. Bray (2000) omits cooperative inquiry from the inquiries listed but adds collaborative inquiry. Brooks and Watkins (1994) give action science, action learning, and collaborative inquiry. The purpose here is not to provide a thorough and complete listing of all forms of participatory inquiry, but rather to note that there are numerous forms and then to examine traits of similarity and difference between them.

The foundation for all participatory action research is the constructivist theory of learning. In constructivism knowledge is discovered rather than absorbed. It is then transformed into concepts that a person can relate to. Learning consists of active participation rather than passive acceptance of knowledge presented by a lecturer. Learning then occurs through transactions and dialogue among those involved in the experience.

Brooks and Watkins (1994) identify four major dimensions that are common to action inquiry technologies. The first dimension is “the construction of new knowledge on which new forms of action can be based” (p. 11). The second component is that the people who comprise the population of the research setting should be “central to the research process” (p. 11) as active participants in the inquiry process. Third, “the data used in the research process are systematically collected and come from the experience of the participants” (p. 12). The fourth component is a focus on generating change in the form of “improvements in professional practice, organizational outcomes, or social democracy” (p. 12).

Brooks and Watkins (1994) also identify four major dimensions of difference as well. The first listed is the political dimension. In this dimension, there is a paradoxical quality in that those who condone and fund the research could find that their privilege in the social order at stake. A second dimension is whether “they work more as a social version of the scientific

experimental method or as a form of critical reflection on the part of the researchers and co-researchers” (p. 13). A third dimension is the degree to which to researcher and the co-researcher share power. All models use data generated by co-researchers; however, the amount of decision-making authority varies. The fourth dimension they are different is how the knowledge generated by the process is used.

### *Collaborative Inquiry*

In his early work on cooperative inquiry, Heron (1985) described cooperative inquiry as a way of systematically deriving learning from individual and shared experience as people engage in a refined experiential learning cycle. Heron (1996, p. 7) also noted that, unlike other forms of action inquiry, this form views “the full range of human sensibilities as an instrument of research.” At the heart of this form of inquiry is the assumption that learning resides in the experience of inquirers (Bray, 2000).

Collaborative inquiry is a form of participatory action research that is the least hierarchical of all the action strategies. In this process, the distinction between the researcher and subject is erased. Rowan (1981) suggests that the decision to initiate inquiry is likely to begin when individuals experience an imbalance or disequilibrium in their state of being. He describes this imbalance as moving from resting on one’s own experience to a sense of dissatisfaction with one’s own practice (Rowan, cited in Reason, 1988, p.7). When this happens, a part of one’s life-world becomes negated, but instead of retreating into feelings of defensiveness and displacement, curiosity is aroused. What Rowan describes as disequilibrium or imbalance, Bray (2000) identifies as being uncomfortable with some aspect of experience and wishing to explore this sense of discomfort.

Although the inquiry is collaborative in nature, the process begins with a person experiencing the above described disequilibrium or discomfort and who also has what Bray (2000) calls “a burning desire for new knowledge and a willingness to work with others to find new avenues of meaning” (p. 51) Bray then notes that this person joins others with a similar sense of discomfort. Many of those who join in the collaborative process do so because they see it as “a way of obtaining answers to troubling or compelling questions” (Bray, 2000, p. 29).

The collaborative inquiry group stands in contrast to much of the research and writing being done on the topic of leadership. The collaborative group is truly leaderless. For the person who initiated the inquiry process, the movement from a position of leading the initiation process to one of being co-researcher can be difficult. Bray (2000) notes “some of our most difficult feelings as initiators have centered on this issue of transitioning from initiator to co-inquirer” (p. 69). As a result, it is important for individuals who are initiators of a collaborative inquiry to think through the implications of being a coequal. While that transition may be difficult it does, however, highlight the equality of co-inquirers within the group and how collaborative inquiry groups function.

Members of the group meet together as a co-operative group, define their common area of interest and move through cycles of action and reflection, meeting regularly to review progress (Reason, 1998). It is the process of reflection that becomes one of the defining characteristics of collaborative inquiry. “Only when changes made through action are reflected upon and involve a change in the person in the form of learning is activity transformed into significant experience” (Bray, 2000, p.21). Reflection is reactive in that thought is given to what has happened and how that has impact upon one’s life. But it is also proactive. Dewey was

critical of the unreflected individualism that he saw pervading American life. Dewey (quoted in McDermott, 1973, p.50) said,

“...it does not insist upon antecedent phenomena but upon consequent phenomena; not upon the precedents but upon the possibilities of action...Under these conditions the world will be different from what it would have been had thought not intervened. This consideration confirms the human and moral importance of thought and its reflective operation in experience.”

In collaborative inquiry, learning takes place for the duration of the group's existence, not just at the conclusion. This is due to the fact that during the inquiry process, group members engage in critical reflection, a process of examining their underlying assumptions and the activities that generate them. Dewey (1933) refers to reflective thinking as “...the kind that consists of turning a subject over in the mind and giving it serious and consecutive consideration” (Dewey, 1933, p. 3). Mezirow (1991) describes this process of reflection as learning that “involves assessment or reassessment of assumptions” (p. 6). As the group goes through the repeated cycles of action and reflection, nascent meaning emerges and is further tested, with new meaning continually emerging from the process (Bray, 2000). As they make meaning from their experience, their personal horizons and the horizons of the life- world under investigation become merged into a new understanding of their world.

### CHAPTER THREE--PROCEDURES

The purpose of this study is to show one school principal's and two teacher's efforts as they incrementally implement innovative teaching strategies (e.g., thematic units) in an institution that markets itself as providing a traditional education. To accomplish this, the study contains two components. The first is a professional development activity in thematic instruction, and the second is a case study examining the outcomes of that professional development.

#### *Methodology*

The Case Study Methodology (Stake, 1991) will be used to describe and analyze the outcomes and results of professional development activity that used collaborative inquiry to facilitate the implementation of thematic instruction.

*Site.* The professional development in thematic instruction took place in two classrooms within a suburban, Lutheran Church – Missouri Synod elementary school in the southwestern part of the United States. The classrooms were homeroom for grades four and six. The fourth grade had eighteen students, and the sixth grade had ten students.

*Participants.* The participants were two classroom teachers and a supervising school principal who participate in collaborative inquiry. Collaborative inquiry was used as a vehicle to provide professional development to assist these two teachers in the implementation of thematic instruction. The collaborative inquiry group met six times to discuss results and plan future actions. Each of those meetings lasted approximately forty-five minutes and took place over a four month period during the first semester of the school year.

*Informants*

Four informants will be selected and interviewed to help contextualize the experience of the participants. These informants will be the senior pastor of the church, the first chairperson of the School Board, and the first two teachers hired to teach at the school.

During the first year of the school's operation, Kindergarten was the only grade offered. First grade was added for the second year of operation, second grade during the third year, and so forth until the addition of eighth grade. These two informants provide contextual reference with regard to the implementation of curriculum and instructional philosophy at the inception of the school. Since the first principal was not hired until after the school's third year of operation, these two teachers also provide unique perspective in that, for a period of time, they were the only teachers on the campus. The senior pastor and the School Board chair provide contextual reference with regard to the establishment and opening of the elementary school and to the church's vision and reasons for starting the school.

*Data sources and collection.*

Naturalistic inquiry (Lincoln & Guba, 1985) will be used to collect and analyze data. Specifically, the regular meetings of the collaborative inquiry group were tape recorded for transcription. Reflective journals from the three participants were kept and collected. In addition to the reflective journals of the three collaborative inquiry participants, the principal maintained a reflexive journal. This reflexive journal contains the principal's emerging insights, concerns, and discoveries during and following the collaborative inquiry. In addition, notes from supervisory classroom observations were kept as were the results from informal, impromptu meetings conducted individually with the participants. Also included in this data will be notes from School

Board meetings where presentations and decisions regarding curriculum and instructional philosophy were made.

Data for this study will also include end-of-the-year teacher performance reviews. For these reviews, the principals asked teachers to conduct an in-depth critical reflection of their own instructional practices revolving around the answers to several questions given to them by the principal. After review and reflection, the principal met with each teacher. During those meetings, the reflections as well as previous formal and informal classroom observations provided basis for discussing instructional improvement and goal setting.

In addition, data will include foundational documents from the school including its articles of faith and mission statement. Likewise, a visual trace analysis conducted by the principal will be included. This analysis will be documented in over forty-five pictures of the school's classrooms, hallways, and public spaces.

#### *Data analysis*

A secondary data analysis will be performed of the collaborative inquiry meeting transcriptions, the participants' reflective journals, the principal's reflexive journal, and the interview transcriptions and notes with the informants. In addition, secondary analysis will also be conducted on the notes from the supervisory classroom observations performed during the collaborative inquiry, the informal teacher meetings, and the School Board meetings.

A document analysis looking for patterns and themes will be conducted on the school's articles of faith and mission statement, the end-of-the-year performance reviews and previous formal and informal classroom observations. Patterns and themes emerging from these analyses

will be periodically shared with the collaborative inquiry participants during member check feedback on issues of accuracy, representativeness, and confidentiality.

Additionally, a secondary data analysis will be applied to the pictures taken for the visual trace.

### *Trustworthiness*

*Credibility.* Triangulation, one means of establishing credibility (Lincoln & Guba, 1985; Stake, 1991), will be achieved by collecting and analyzing multiple sources of data including participant journals, informant interviews, and trace analysis. A second means of establishing credibility is prolonged engagement (Lincoln and Guba). To achieve this second means, the collaborative inquiry group met regularly over a four-month period, which was the duration of the first semester of the school year.

*Confirmability.* Meeting the criterion of confirmability will be achieved by the use of member checks of peer debriefing sessions. Lincoln and Guba (1985) suggest that the “debriefers should be neither junior – lest his or her inputs are disregarded – nor senior – lest his or her inputs be considered as mandates, or lest the inquirer ‘hold back’ for fear of being judged incompetent” (p. 309). To meet these criteria, peer debriefers will consist of fellow doctoral students. Both the inquirer and the debriefer will keep written records of each debriefing session (Lincoln & Guba, 1985) with the results of those sessions forming the basis for further analysis and data collection.

An audit trail will be established through the inclusion of forms used in the projects (ie consent form, interview guide), transcriptions of collaborative inquiry group meetings, discussion with peer debriefers and regular member checks.

*Dependability.* To achieve dependability, examined data will be written – the participant journals, the informant interviews, the principal’s reflexive journal – or in picture form – the trace analysis of the school facilities.

*Transferability.* Transferability will be achieved through thick description and inductive analysis via constant comparative analysis (Glaser & Strauss, 1967).

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