This study examined the effectiveness of Reflections: A Systemic Change Model, a staff development model based on the concepts of systemic change, constructivism, and paradigm shift. A pilot study was conducted to determine whether the model was realistic, feasible, and effective. It occurred during 1998 in a 6-week summer school supervision course at Chicago State University. A convenience sample of 22 graduate-level students participated. All participants worked full-time in area schools. The study utilized constructivist teaching approaches and gathered information through both Likert scales and open-ended questions, hypothesizing that students taught using the Reflections model as a framework would learn as much as they would in a course taught using conventional methods. Results supported the hypothesis. Students considered the model effective and rewarding as a teaching mechanism. They believed that similar constructivist approaches could be equally as effective when transferred to a staff development situation. Students indicated that the model was not as effective as other methods in imparting knowledge about discrete pieces of various theories or in informing them about legal and bureaucratic steps involved in screening and selecting staff and in terminating teachers who fail to meet standards. (Contains 27 references.) (SM)
Abstract

The objective of this study was to investigate the effectiveness of Reflections, a constructivist staff development model designed to support systemic change. The introduction to the article explicates the concepts undergirding Reflections, namely, systemic change, constructivism, and the paradigm shift. The model was tested during a 1998 school supervision course offered in a 6-week summer term at Chicago State University. A convenience sample consisting of twenty-two (22) graduate-level students participated in the project. This descriptive research study utilized constructivist teaching approaches and gathered information through both Likert scales and open-ended questions. The hypothesis that students taught using the model as a framework for instruction would learn as much as they would in a course using conventional methods was generally supported by the data, both qualitative and quantitative.
Reflections: A Systemic Change Model for Staff Development

As we stand literally on the threshold to the 21st century, emphasis is being placed on the need for caring, dedicated, and competent teachers who are capable of helping students discover ways to succeed in life as well as in the classroom. Success in life is a concept whose definition appears to be evolving against a backdrop of postmodernism. While many educators say they believe that students must be able to do such things as make reasonably wise choices from among ambiguous options, create solutions to novel problems, and reconcile differences in the face of diversity, an immediate paradox arises. Neither our classroom practices (e.g., curriculum, pedagogy, and assessment) nor our staff development efforts, generally speaking, have supported in a unified manner what educators say they value for students. Instead, classroom practices in many settings are not “programs” at all (in the sense that a program has a unifying theme, a beginning, middle, and end, and pieces that fit together to support the theme). Rather, they are fragmented, incoherent collections of strategy that have been loaded on top of an already full agenda. This segmentation and overload have led to teacher frustration and apathy, not to speak of the inability of students to hit a target with no bulls eye.

A growing body of literature (see, for example, Glickman, 1992; Gordon, 1992; Grimmett, Rostad, & Ford, 1992; Rallis and Zajano, 1997; Sparks & Hirsh, 1997) is beginning to point the educational community in the direction of unity. Grimmett, Rostad, and Ford (1992) suggest that effective educational practice involves supervisors working together with teachers to build collaborative cultures that encourage the seeds of change to “take root and grow” (p. 185).

In their recent treatise on staff development, Sparks and Hirsch (1997) have voiced support for shifting the manner in which we deliver staff development from one in which teachers
are passive recipients of sagacity to one in which teachers take active responsibility for their own growth and improvement. Sparks and Hirsch remind us that widespread, sustained implementation of educational practices that support current perspectives on what we value as a progressive society (i.e., problem solving, critical thinking) will require teachers to socially construct their own meaning by engaging in inquiry, dialoguing among themselves, and exploring open-ended questions. This new kind of staff development, they suggest, is essential as a way of encouraging all students to achieve at high levels. Furthermore, “[t]his staff development not only must affect the knowledge, attitudes, and practices of individual teachers, administrators, and other school employees, but it also must alter the cultures and structures of the organizations in which those individuals work” (Sparks & Hirsch, 1997, p. 1-2).

This article will describe Reflections: A Systemic Change Model developed in collaboration with the Center for Urban Research and Education (CURE) at Chicago State University. First, the article will describe the theoretical concepts underlying Reflections, namely, systemic change, constructivism, and the nature of the paradigm shift. Next, the article will detail components of the ideological framework that gives substance to the model (those components being structure, culture, and capacity building). The article will conclude with results of a preliminary test of the model in a graduate level course designed to prepare practicing, veteran teachers to perform supervisory responsibilities in schools.

What is Reflections?

Reflections: A Systemic Change Model has its roots in three big concepts, those being systemic change, constructivism, and the paradigm shift as described by Thomas Kuhn. These ideas crystallize on a three-tiered framework consisting of structure, culture, and capacity
Systemic Change

Schools, in an open system, are complex organizations with sensitive interdependencies (Fullan, 1993; Leithwood, 1992). Change in one component of the organization, therefore, will have an impact upon everything else in the system. Unless this complexity is acknowledged and addressed, forward momentum prompted by changing discrete pieces of the system is likely to cease or be reversed by other discrete pieces of the system that defy change or which have not been addressed. Consequently, neglected pieces of the system will tend to drag the entire system toward the old way of doing things (O’Neil, 1993). Such dynamic interactions involved in change lie at the heart of systems thinking.

The literature describing systemic change in education is vast (see, for example, Anderson, 1993; Fullan, 1993; O’Neil, 1993; Wagner, 1993; and others). The term **systemic change** is being used with variation in the educational community (O’Neil, 1993). As it relates to the Reflections Model, systemic change is defined as holistic self-examination, redefinition, renewal and/or reformulation of fundamental principles and beliefs that drive educational practices of an entire organization. To be effective and enduring, change must take place at all levels within an organization; otherwise it will resemble the fragmented, additive, short-lived, ineffective adjustments that have taken place in the past. Moreover, the components of systemic change must be addressed **simultaneously** and must be mutually supportive.

In applying this idea to schools, Fullan (1993), O’Neil (1993), Goodlad (1984), and others believe that any strategy for systemic reform must emphasize building the capacity of schools to renew themselves. Systemic reform of schools emphasizes the emergence of new
accountabilities and outcome-based policies that support self-renewal. For example, “[n]ew content standards mean little ... if teacher preparation and staff development programs are not revamped to address them” (O’Neil, 1993, p. 11).

The Reflections Model does not presume to prescribe certain capacity building models over others. Rather, the particular model used emanates from strategic planning and from the shared beliefs that exist in each educational organization. As a facilitative mechanism, the Reflections Model will help educational organizations identify those curricular programs, methods of teaching, and systems of assessment that best fit the organization’s shared pattern of beliefs.

**Constructivism**

Constructivism, according to Brooks and Brooks (1993), is a “theory about knowledge and learning. Drawing on a synthesis of current work in cognitive psychology, philosophy, and anthropology, the theory defines knowledge as temporary, developmental, socially and culturally mediated, and thus, non-objective. Learning from this perspective is understood as a self-regulated process of resolving inner cognitive conflicts that often become apparent through concrete experience, collaborative discourse, and reflection” (Brook & Brooks, 1993, p. vii.). Stated in another way, constructivism suggests that learning is most effective when learners create personal meaning from new information; that is, they attempt to create a comfortable cognitive niche for the new information based on what they believe to be real and true in the world.

While the theory has been advocated as a promising framework for organizing student educational experiences, constructivism translates well to adult learners. It suggests that teachers will utilize pedagogy corresponding with what works best for themselves as learners. In that sense, constructivists view teachers not as a passive recipients of information but as active
participants in a process in which teachers as learners develop understanding or meaning through thinking in a problem-solving mode, evoke meaning through interpretation of what is presented, and factor in the social context in which the information is relevant (Myers & Myers, 1995). By orienting themselves in the same strategies they demand of students, teachers will be better equipped to implement strategies they understand and know on a personal level. This, in turn, will increase the likelihood that more teachers will join the ranks of capable, dedicated, and competent practitioners.

Constructivism as a means for staff development, just like any other initiative designed to change teacher behavior, works best when safeguards are put into place to control for factors that tend to frustrate school people. These factors include fragmentation, overload, and incoherence (Sparks & Hirsch, 1997). The Reflections Model attempts to provide these controls by instilling in the school environment a unity of purpose that reconciles with practice.

Paradigm Shifts

The literal definition of paradigm, as written in Webster's Ninth New Collegiate Dictionary (1985) is "an outstandingly clear or typical example or archetype" (p. 153). When viewing this definition, some educators immediately encounter a paradox as they attempt to apply the denotation to what they do on a daily basis. We have but to scan the educational horizon to see that when it comes to students, teachers, administrators, and other stakeholders associated with the educational enterprise, very little is outstandingly clear or typical. On one level Hodgkinson (1991), in his periodic analyses of school demographic data, reminds us that the characteristics of students we serve are marked by diversity. What is typical in one school community may be totally anomalous in another. Where direct teaching may work well in one
school culture, that same practice may be ineffective in a different culture (see Mitchell & Tucker, 1992). Archetypes, then, are relative when the concept of the paradigm is applied to schools. This effect intensifies in the face of postmodernism, where central, guiding theories no longer direct our attention to what is "real," "true," or even "most likely."

As with many buzz words and phrases originating outside the field of education, educators and others have cannibalized the term paradigm, lending to it connotations that were never intended. (The ultimate vulgarization -- trivialization -- of the term appeared in a 1998 television commercial for a major overnight package carrier. This commercial suggests that the way this company does business has brought about a "paradigm shift" in the package delivery industry.) For this discussion, we return to the denotation of the term, and in doing so, restore its power to explain what occurs when exceptions to any phenomenon begin to outnumber the rules.

Thomas Kuhn, in his classic work, The Structure of Scientific Revolutions (1970), has attempted to delineate how a paradigm shifts using the context of growth in scientific knowledge, which, for the most part, is driven by theories and laws and is supported by scientific research programs. Paradigms represent the central ideological core of any endeavor and serve to define associated research and practice. In the eyes of its adherents, the paradigm accounts for most of the observations and contingencies associated with their practice. Typically, these adherents engage in efforts to support and develop the paradigm (i.e., formulation of esoteric vocabulary, acquisition of specialized skills, refinement of concepts that clarify and strengthen the core beliefs, and support for workshops, conferences, and publications embracing the core). In doing so, these adherents tend to focus only on paradigm-supported instances of any given phenomenon under investigation. Furthermore, what paradigm adherents see is what their conditioning through
experiences with the paradigm has taught them to see (Kuhn, 1970, p. 113).

**Crisis.** From time to time, a paradigm no longer possesses the power, breadth, or depth to explain certain phenomena. Consequently, anomaly results, and this "[anomaly] appears only against the backdrop provided by the paradigm" (Kuhn, 1970, p. 65). A crisis ensues as adherents become aware that phenomenal experiences no longer conform to "paradigm-induced" expectations. In addressing the crisis, adherents begin to explore the area of anomaly. All crises are resolved in one of three ways:

- Sometimes normal science ultimately proves able to handle the crisis-provoking problem despite the despair of those who have seen it as the end of an existing paradigm. On other occasions the problem resists even apparently radical new approaches. Then scientists may conclude that no solution will be forthcoming in the present state of their field. The problem is labeled and set aside for a future generation with more developed tools. Or, finally, the case that will most concern us here, a crisis may end with the emergence of a new candidate for paradigm and with the ensuring battle over its acceptance. The transition from a paradigm in crisis to a new one from which a new tradition of normal science can emerge is far from a cumulative process. ... Rather it is a reconstruction of the field from new fundamentals, a reconstruction that changes some of the field's most elementary theoretical generalizations as well as many of its paradigm methods and applications. During the
transition period there will be a large but never complete overlap between the problems that can be solved by the old and by the new paradigm. But there will also be a decisive difference in the modes of solution. When the transition is complete, the profession will have changed its view of the field, its methods, and its goals (Kuhn, 1970, p. 85).

According to Kuhn, this exploration ends only when the paradigm theory has been adjusted so that the anomalous has become the expected. In other words, adherents have experienced a gestalt switch.

Though adherents may begin to consider alternative explanations because they have lost faith, they do not utterly and immediately renounce the paradigm causing the crisis. On the contrary, after having achieved the status of paradigm, a theory is declared invalid only when (and if) an alternate candidate becomes available to take its place. “The decision to reject one paradigm is always simultaneously the decision to accept another, and the judgment leading to that decision involves the comparison of both paradigms with nature and with each other” (Kuhn, 1970, p. 77).

Normal science. In his discussion, Kuhn defines the term normal science as “research firmly based upon one or more past scientific achievements, achievements that some particular scientific community acknowledges for a time as supplying the foundation for its further practice” (Kuhn, 1970, p. 10). During periods of normal science, that is periods marked by the absence of crisis, the paradigm defines for adherents what is relevant, which research questions will be investigated, and what will be written in textbooks and subsequently emphasized in classrooms.
In essence, normal science consists of extending the knowledge base supporting the paradigm, encouraging discovery of “facts” that are particularly revealing with respect to the paradigm, increasing the match between “facts” and predictions emanating from the paradigm, and by further articulating the paradigm itself. The practice of so-called normal science does not attempt to elicit new phenomena; rather, it encourages adherents to frame problems and examine solutions in the context supplied by the paradigm.

Normal science and the Reflections model. In many ways, Reflections: A Systemic Change Model serves as a metaphor for the practice of normal science. After having assessed their needs, having grappled with establishing a common vision, and having been transformed by the concomitant gestalt switch, adherents of the vision (in this case public school educators) alter their organizational structures, school-community cultures, and staff development practices to accommodate and support the shared vision (gestalt). This vision, then, frames what is relevant in the school setting and demands that practices not supportive of the vision be omitted while those that advance movement toward the vision are embraced. (This filtering process obviates the problems mentioned at the outset of this article, problems associated with fragmentation, incoherence, overload, and maladies arising from such segmentation.)

Scientific revolutions. The Reflections metaphor diverges from the notion of normal science and begins to resemble what Kuhn refers to as “scientific revolution” at this point. After the vision has been established, the Reflections Model promotes constant self-examination, problem solving, inquiry, and often re-visioning in an attempt to make practice conform to what is appropriate for children according the core beliefs expressed by the vision. Obviously, under such scrutiny, the vision itself may change. Activities in which adherents engage, then, are aimed
at “perfecting” practice with the acknowledgment that “perfection” is neither absolute nor stagnant.

How Do These Big Ideas Relate to the Reflections Model?

Concepts imbedded in the Reflections Model are not new. On the contrary, they represent an articulated set of prescriptions promulgated by the scholarly community in educational journals, workshops, and research. From what we have read in the scholarly literature, however, the Reflections Model represents an initial attempt to juxtapose three important ideas, namely, structure, culture, and capacity building, into a single model with potential to bring about effective whole-school change. Read the literature. The pieces appear in abundance. The Reflections Model simply incorporates a number of ideas into a single, workable framework.

Not only that, the Reflections Model can act as a framework for any innovation. In essence, it promotes self-renewal, values and belief clarification on an organizational level, instills development of process skills, and predisposes the school community to employ input and feedback from all stakeholders, as well as privileging the exploration and mutual discovery of approaches that will transform practice, improve output, and generate continual growth.

The Reflections Model sets the stage for occurrence of meaningful, sustained change. According to those who have studied change extensively, such penetrating reform must incorporate 1) a unifying vision, 2) promote collaboration, 3) encourage two-way communication that emanates from both top-down and bottom-up sources, 4) provide time for critical conversations to take place among practitioners and other stakeholders, and 5) provide for staff development that takes into account the way adults learn best (see, for example, Anderson, 1993; Deal, 1990; Hall et al., 1997; Lieberman, 1986; O’Neil, 1993; and Sheridan, 1989). The
Components of the Reflections Framework

Structure, culture, capacity building -- these organizing concepts lie at the heart of systemic change and school reform (or self-renewal). The Reflections Model promotes the position that these three tiers (structure, culture, and capacity building) must be addressed within the school as an open system if meaningful reform is to occur. Not only that, these three components must be addressed simultaneously.

Structure. Reflections encourages establishment of flexible governance structures that promote change and growth. Such practices include institution of flexible scheduling where possible (i.e., common planning periods, restructured days), establishment of shared decision-making mechanisms, promotion of bottom-up communication, and implementation of teaching arrangements that support collaboration, inquiry and discovery -- all of this must be in place along with the dollars and policies to support such effort.

These structural components serve to promote collaboration, communication, and time. Collaboration is an important part of the change process because it offers teachers the opportunity to commiserate about the difficulties of teaching, identify viable solutions, and to work together toward mutual goals (Fullan, 1991; Lieberman, 1986). Change, however (be it in gestalt or in practice), comes slowly; thus time is needed to engage in conversations about “best practice,” to solve problems, to develop curriculum, to brainstorm, or simply to compare notes. Providing time through revamped structures further creates opportunities for teachers to rethink the purposes of education, reinvent teaching and learning, and create new school cultures (Deal,
A growing body of research supports the idea that many of these same mechanisms are linked to improved student performance and self-renewal in schools (Goodlad, 1984).

A related, yet perhaps less obvious, structural component is leadership. Not enough can be said about the importance of leadership in supporting adjustments to structure, culture, and capacity building. A model such as Reflections works best when leadership practice facilitates the building of community in schools. Poplin (1992) reports that "our profession now calls on administrators to be the servants of collective vision, editors, cheerleaders, problem solvers, resource finders. We must not only be self-conscious about change, but we must also encourage it in others" (p. 11). This kind of leadership requires an understanding of and an ability to work within the school's organizational culture, employing whatever means are necessary to accomplish the task at hand. This, in turn, requires flexibility in executive style.

**Culture.** Culture embodies the beliefs that drive practice, the values held by the school community, along with the traditions and rituals that protect and nurture the core values. Culture consists of the history within a given school community that explains "why we do things this way around here." The Reflections Model acknowledges that culture exists on many levels (e.g., on a national, regional, and district as well as school level). Systemic change that addresses the attitudes, beliefs, and values of students, teachers, parents, and other stakeholders, however, must focus on culture that is school-based.

One manifestation of culture at the school level is the so-called "shared vision." Again, we encounter a potentially perplexing buzz word -- "the shared vision." To increase the likelihood that the vision is truly shared, the Reflections Model encourages stakeholders to examine such
questions as, Whose vision is it? Who embraces the vision and how do we know? What artifacts exist to support the vision? Do organizational behaviors comport with what the organization says it values? What day-to-day school behaviors give life to the vision? Is the culture healthy or unhealthy (that is, do behaviors match beliefs?), and if not, in what ways? Creating a culture that supports self-renewal in schools not only requires establishing a unified, shared vision but also provides for collaboration and conversations among teachers and other stakeholders. This must be coupled with time to engage in dialog to clarify and to reshape or re-validate perspectives of all stakeholders as circumstances change (Fullan, 1993).

The role of the principal in affecting cultural change is pivotal. The Reflections Model encourages principals to assess the culture of their schools, along with having teachers engage in examination of their own attitudes, beliefs, values, and skill levels. The principal at each school must be willing to relinquish certain aspects of control, power, and authority and must engender trust among teachers and other stakeholders.

Change is difficult. One explanation for the elusiveness of change in schools emanates from the work of Terrence Deal. According to Deal (1990), revolutionary changes in public educational institutions are rare because schools represent “storehouses” of our memories. Thus, changing culture represents a major challenge, is expensive in terms of time, and requires re-visioning as a reflexive activity. Organizations that dare to tackle cultural reform must be skilled in conflict resolution, communication sensitivity, consensus building, conducting effective meetings, and force field analysis. Not only that, cultural reform demands sensitivity to the concerns of teachers as they adopt innovation. Finally, teachers must be clear on and comfortable with their own attitudes, values, and beliefs before they can engage in consensus building with
their peers and other stakeholders (see Daresh & Playko, 1995).

The point of these exercises is not to make changes uncritically or impetuously. Besides, when dealing with culture, some values and beliefs held by stakeholders are so deeply embedded that they will never be shaken. Yet engaging in reflection, soul searching, and thoughtful (perhaps even heated) discussions about “what we believe and what we value” may prompt the “hard core” to experience a shift in gestalt (in the vein of Kuhn’s paradigm shifts). Such grappling with the issues may serve to broaden perspectives and help all stakeholders interpret “reality” from a common point of reference. The shared frame of reference, then, serves as the guide for everything that follows.

**Capacity building.** Curriculum, pedagogy, and assessment all relate to the capacity building component of the Reflections Model. This, in turn, may be linked to provision of a well-prepared work force (a.k.a. dedicated, caring, and competent teachers). Ann Lieberman (as cited in Sparks and Hirsh, 1997, p. 2) points out the similarities between the way students learn and the way teachers learn:

> [P]eople learn best through active involvement and through thinking about and becoming articulate about what they have learned. Processes, practices, and policies built on this view of learning are at the heart of a more expanded view of teacher development that encourages teachers to involve themselves as learners -- in much the same way as they wish their students would (Lieberman, 1995, p. 592). ... Lieberman states, “it is important that teachers, administrators, and policymakers become aware of new and broader conceptions of professional development” (p. 592). She believes that “teachers must have opportunities to
discuss, think about, try out, and hone new practices” by taking new roles, creating new structures, working on new tasks, and creating a culture of inquiry” (Sparks & Hirsh, p. 2-3).

The capacity building aspect of the Reflections Model encourages reflection and self-renewal among teachers. Through formal and informal staff development efforts, teachers are given latitude to figure out for themselves how to implement curriculum, improve pedagogy, and align assessment practices according to the core vision of the school. This may entail having teams of teachers meet periodically to discuss and model “best practices,” explore with grade level colleagues why a particular strategy is not working in certain classrooms, adapt instructional materials, align standards with practice, engage in peer coaching or mentoring, carry out action research, or consider ways to involve parents in the process of educating children. This presupposes that teachers possess process skills in how to engender self-renewal. The Reflections Model trains teachers in the use of such process skills. What will engender self-renewal in a particular school setting is still another issue. The Reflections Model directs teachers through exploration of this issue by using strategic planning as a guide -- that is, assessing needs, establishing a shared vision, setting goals and objectives, and formulating an action plan with steps built in for ongoing assessment and evaluation (Patterson, Purkey, & Parker, 1986).

A Preliminary Test of the Reflections Model

In theory, the Reflections Model contains all the components most change advocates have been promoting when it comes to school restructuring and reform. In practice, however, few of these advocates have tested the theory. Those who have tested models for affecting whole-school change have not attempted to implement structural, cultural, and capacity-building mechanisms as
cohesive and simultaneous components of a change system. This researcher, working through the Center for Urban Research and Education (CURE), wanted to determine if such a model was realistic, feasible, and effectual. During the summer of 1998, she conducted a pilot study in a 6-week graduate level course at Chicago State University. She hypothesized that students taught using the Reflections model as a framework for instruction would learn as much as they would in a course using conventional methods.

Method

Participants

Participants in the study were twenty-two (22) graduate level students enrolled in a school supervision course at Chicago State University during a six-week summer term in 1998 (a small sample of convenience). All twenty-two students who started the course completed course requirements and received a final grade. Twelve of these students were enrolled in the Master of Arts degree program leading to certification in school administration. Four students were enrolled in master’s degree programs in other areas. Five students were classified as “students at large,” and one student was seeking only administrative endorsement. Eleven of the twenty-two students already held master’s degrees in other disciplines and were seeking second master’s degrees. All participants in the study were working full-time in area schools. Twenty-one (21) of the students were employed by the Chicago Public School system; only one student was employed in a suburban setting. Seven of the twenty-two participants worked in pre-Kindergarten or elementary classrooms (K-5); five worked in middle or junior high schools (6-8); five taught at the high school level (9-12); and five students were either freed from classroom responsibilities or served a span of grades in resource or quasi-administrative capacities.
Two-thirds of the participants indicated that they were currently serving in some leadership role at their current site of employment (i.e., curriculum coordinator, grade level chair, quality review facilitator, "acting" assistant principal). Five of the twenty-two participants (23%) reported that their schools were either on probation, remediation, or were being reconstituted.

This sample comprised nineteen (19) African-Americans and three (3) European-Americans, which is reflective of the demographics of Chicago State University. Participants included six (6) male subjects and sixteen (16) female subjects. In terms of age, four (4) subjects classified themselves as being 20-29 years of age; three (3) were 30-39 years old; ten (10) reported being 40-49 years of age; and five (5) classified themselves as being older than 49. One subject did not report age data. Subjects reported having held their current positions for an average of 6.5 years and having worked in the field of education for an average of 15.8 years.

Among the reasons students cited for taking the course were the following: One student from a school that was being reconstituted stated that she wanted to gain an "understanding of the process of supervision and how it relates to my current position." Another student who serves in a K-8 special education resource position hoped to "gain the knowledge that will one day enable me to be a school administrator." One student in special education wanted to gain enough knowledge about supervision to one day run her own school. A reading coordinator who was enrolled in the administrative certification program said "I’d like to learn effective ways to communicate with other teachers and learn how to generate enthusiasm for school projects." A 20-year veteran teacher who had worked as dean of students and had taught secondary social studies, elementary special education, and bilingual education wanted to acquire knowledge about the "state of the art" ... in the field of educational administration (i.e., what are considered best
practices given various environments).” The scenario represented by this summer course was not unlike scenarios found across the country: Emphasis was placed on both staff development (acquiring skills to perform the job) and accountability (obtaining high test scores on state certification examinations). **Instruments/Design**

In this descriptive research study, data were gathered using a tool developed by this researcher. The survey tool used Likert-type scales as well as open-ended items to collect information about students’ opinions pertaining to the course as well as their perceptions of the model and its application in their own school settings. Specifically, the tool consisted of eight parts, namely 1) a student evaluation of the course, 2) specific course outcomes, 3) state accountability indicators, 4) use of the model for whole school change, 5) transferability to real life, 6) current staff development practices in your school setting, 7) demographic information, 8) open-ended items. Students rated the items using a 4-point Likert-type scale with ratings ascending from “1” for not important to “4” for critical. The tool used four subscales, namely, structure, culture, capacity building, and transferability. The study sought to describe student opinions and perceptions in terms of percentages and proportions and to clarify some responses using open-ended items. The Cronbach alpha reliabilities showed that the subscales had adequate internal consistentency. Alpha reliabilities on the four subscales ranged from .82 to .86.

**Procedures/Materials**

The summer course met for 3 ½ hours (from 5:00 - 7:30 p.m.) two nights a week for 6 weeks. On the first night of class, the instructor introduced herself and invested the time necessary to give students a chance to tell who they were, what they did professionally, and why they were enrolled in course. She announced that the first thing any “leader” should do when
assuming a new role was to get to know the people with whom she would be working. Although individual introductions were costly in terms of time, the class spent approximately 90 minutes getting to know one another.

Among requirements for successfully completing the course were attendance and participation, tests, and development of a portfolio which was to include a personal educational platform, reviews of four journal articles related to course content, and group formulation of a staff development plan. Specific guidelines were listed in the course syllabus.

The required textbook for the course was written by Daresh and Playko (1995). Students were also required to obtain and study the *Illinois State Board of Education Certification Testing System: Study Guide - Administrative* (1996). In addition, the instructor provided a listing of Internet resources pertaining to systemic change, constructivism, paradigm shifts, emerging models of curriculum development, pedagogy, and assessment, and other topics related to whole-school change.

Subsequent sessions consisted of brief lectures; student reviews of articles, group case study analyses, or discussion of important issues along with time for groups to work on their staff development plans. Lectures and discussions focused on process skills, including managing change, strategic planning, decision making and consensus building, group work and conflict resolution, assessment of culture, facilitative leadership styles, case analysis strategies, and the application of these processes to real life. The article reviews provided students with a means for sharing a large body of information about "best practices" in a short period of time. Case analyses generated lively discussions drawing on the 15+ years of experience of teachers enrolled in the class. An attempt was made to provide ample opportunities for interaction among students.
A questionnaire, developed by the instructor, was administered to all students in the class during the 5th week of the 6-week term.

Results

This study hypothesized that students taught using the Reflections model as a framework for instruction would learn as much as they would in a course using conventional methods. Based on results obtained on the evaluation tool, this hypothesis is supported. Results are described in greater detail in the paragraphs that follow.

What were student perceptions of teacher effectiveness? Students were asked to rate the effectiveness of the instructor along nine dimensions. Out of a scale of 36 possible points, the mean rating students assigned to the instructor was 35.68 (n=22, SD = .78). Students generally agreed that the instructor did an “outstanding” job, with two students dissenting on each of the following dimensions: “interprets abstract ideas and theories clearly,” “makes effective use of examples and illustrations,” “and explains student evaluations clearly.”

What were student perceptions of course effectiveness? For the course, the mean overall rating was 19.86 (out of a possible 20 points on a scale consisting of five dimensions). The standard deviation was .47. Students assigned ratings of “outstanding” across the board, except in the following three areas, where at least one student assigned a rating of “highly effective:” “syllabus describes course adequately,” “resource materials are suitable to course content”, and “course is well-organized and structured.”

To what extent did strategies and techniques used in the course help students internalize course content? The course utilized a number of strategies consistent with constructivist principles and inconsistent with traditional university pedagogy. Students were asked to rate
these strategies with respect to how well they helped students internalize course content. Based on a 28-point scale, students assigned a mean rating of 25.59 (SD = 2.09, n = 22). Table 2 summarizes student responses.

<table>
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<th>Strategy</th>
<th>Outstanding</th>
<th>Highly</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
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<td>22.7%</td>
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<td>(n=16)</td>
<td>(n=5)</td>
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<td>(n=17)</td>
<td>(n=5)</td>
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<tr>
<td>Staff Development Plans</td>
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<td>50%</td>
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<td>(n=11)</td>
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<td>Case Analyses</td>
<td>72.7%</td>
<td>27.3%</td>
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<tr>
<td>(n=16)</td>
<td>(n=6)</td>
<td></td>
<td></td>
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<tr>
<td>Social Construction Of Meaning</td>
<td>66.3%</td>
<td>36.4%</td>
<td></td>
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<tr>
<td>(n=14)</td>
<td>(n=8)</td>
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<td></td>
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<tr>
<td>Consensus Building</td>
<td>68.2%</td>
<td>31.8%</td>
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<tr>
<td>(n=15)</td>
<td>(n=7)</td>
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<tr>
<td>Cooperative Learning</td>
<td>63.6%</td>
<td>36.4%</td>
<td></td>
<td></td>
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<tr>
<td>(n=14)</td>
<td>(n=8)</td>
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Did the course effectively cover outcomes as listed in the syllabus? This section of the evaluation elicited information regarding student perceptions of how well the course covered outcomes outlined in the syllabus. Most students believed the course was highly effective in covering outcomes. However, opinions were scattered with regard to the following: "Critically assess administrative/organizational theories," "acquire knowledge about supervisory skills based on current best practices," "practice analysis of the role of educational policy within the community's social and political context."

Did the course expose students to state accountability measures? Students were asked to rate their level of exposure to information that was to be covered on state accountability measures using ratings of "3" (adequate exposure), "2" (limited exposure), or "1" (no exposure). All students felt they had received adequate exposure in the areas of team building and collaborative decision making. At least 90% of all students felt they had received adequate exposure in the areas of assessing job satisfaction, employee morale, conflict resolution, group facilitation, assessing teacher performance, and evaluation of inservice education programs. Approximately 80% of the students believed they had adequate exposure in the areas of developing needs assessments, inservice education, and communication skills. Approximately 77% of the students felt their exposure to procedures for terminating staff was adequate. Only half of the students felt their exposure was adequate in the areas of selection of staff and assignment of staff.

In addition to rating the instructor, course, strategies, outcomes, and exposure to accountability measures, students were asked to assess the extent to which they believed components of the Reflections Model were important in facilitating whole school change. Ratings consisted of "1" (not important), "2" (important), "3" (very important), and "4" (critical).
Students assigned ratings of very important or critical to four of the thirteen structural components, namely, use of “problem solving among teachers;” “open, two-way communication;” “sharing of concerns;” and “provision of adequate time.”

For the 21 cultural components, students assigned ratings of very important or critical to only two: “motivating members of the staff” and “promoting high expectations.” Five cultural components such as “developing a unique way of doing things,” “creating artifacts supporting the shared vision,” “establishing do’s and don’ts,” establishing a “sense of community,” and maintaining “order and discipline” received ratings spanning the full range of possibilities from “1” (not important) to “4” (critical).

All students felt the 18 capacity building components were important. Six of the components were rated as very important or critical by all students. These components were “engaging in strategic planning,” “identifying curriculum appropriate for meeting goals and objectives,” “identifying pedagogical skills appropriate for meeting goals and objectives,” “adapting instructional materials,” “considering input from all appropriate stakeholders,” and identifying appropriate staff development delivery systems.”

Students were asked to express their opinions about the match between theory and reality as applied to whole school change. Presented with 26 declarative statements, such as “the whole-school change model is realistic;” “the model may be used in real life settings to introduce innovation;” and “most teachers would benefit from the collaborative approaches;” students were asked to assign a rating of “1” (strongly disagree), “2” (disagree), “3” (agree), or “4” (strongly agree). Students assigned ratings of “3” or “4” to 16 of the 26 statements. Students strongly agreed with statements such as the three noted above, in addition to “teachers who acquire skills
through the model will have a greater level of comfort in implementing inquiry-based instructional techniques;” “support from the principal is critical;” and “using the model is worth the extra investment of time.” Generally students felt that teachers trained in the model would also have greater capacity as decision makers, communicators, problem solvers, and innovators. Students also felt that teachers who undergo such training would have greater capacity as instructional leaders in the school setting. In summary, responses indicated that students believed the whole-school change model represented a valuable tool for improving schools.

In many cases, quantitative studies direct our attention to important relationships that exist among variables, yet these quantitative results fail to capture the reasons why people feel and behave as they do. In acknowledgment to this complexity, the evaluation tool sought to collect opinions about four open-ended questions, namely, 1) What did you like about the course? What did you dislike? 2) In your opinion, were the instructional methods used during this summer term as effective as other methods of instruction you have encountered during your graduate studies, Why or why not? 3) To what extent did the course help you internalize knowledge and skills pertaining to leadership, decision making, analyzing change, communication, cultural change, curriculum innovation, strategic planning, and staff development? 4) Please comment generally on our experience during this summer term. Responses of selected students are provided below:

When asked what they liked and disliked about the course, several students reported enjoying the group work, interaction, and case study analyses. Students liked the article reviews the least because they took too much time. For example, Respondent 2 said, “We were always doing something different. Dislikes: Some students would not let anyone else get into the debate; article reviews took too long!” Both respondents 3 and 8 reported learning a great deal from
listening to others. Said respondent 8, "I liked the cooperative group work. It allowed me to open my mind and envision other ways of doing things." Respondent 10 summarizes the feelings of his classmates by saying, "I enjoyed being an active learner. The material presented was very useful as well as interesting. The journal reviews were an excellent way of keeping us current in educational trends but became rather long."

The second item asked students if the instructional methods used during the course were as effective as other methods of instruction they had encountered during their graduate studies. Responded 2 believed the method to be effective but indicated that "It was not what I was used to, considering the other classes I had with you. Honestly, I feel in such a short time I would have preferred lecture on the material in order to gain a better understanding." For other students in the class, the method received high marks. For example, respondent 10 said, "This class was very effective. By being an active learner I was able to internalize material that otherwise would have been memorized and later forgotten." The comments of respondent 11, however, seem to summarize the beliefs of most students: "I think that by talking we got a chance to put theory into hypothetical application. Everyone offered really good ideas and suggestions for various situations. The class illustrated how effective and dynamic a group can be when you collaborate on tasks."

The next item asked students to describe the extent to which the course helped them internalize knowledge and skills pertaining to leadership, decision making, analyzing change, communication, cultural change, curriculum innovation, strategic planning, and staff development? Respondent 3 replied, "I need more time to fully internalize all of the concepts presented. I would have liked more direct instruction on the variety of models, theorists
important in the field, and some of the key facts of the course.” According to respondent 8, “The group sharing covered all these areas on a consistent basis. We were inundated with information from the different article reviews.” Respondent 18 commented on the range of information learned: “To a great extent, I learned so many things that I never really thought of before. Basically, by using real-life situations in many discussions, so many issues and opinions were brought up.”

Finally, students were asked to comment generally on their experience during the term. Students described their experiences with comments including the phrases “informative and enjoyable,” “inspiring and helpful,” and “lots of material, so little time.” Respondent 9 said, “The experience is one I will never forget. It was fun! (In addition, I am using this model in my [own] summer school program.)” The overall spirit of the comments provided, however, may be summed up by respondent 18, who said, “Although it was quite a bit of work, I am extremely happy that I took this course. There were so many things I learned about, especially various strategies that could be used in given situations. I just wish there was more time because I feel that there are still many things I could learn about supervision.”

Discussion/Conclusion

All in all, students found use of the Reflections Model to be effective and rewarding as a teaching mechanism. The hypothesis that students taught using the Reflections model as a framework for instruction would learn as much as they would in a course using conventional methods was generally supported by the data, both quantitative and qualitative. Feedback from students suggests that similar constructivist approaches may be equally as effective when transferred to a staff development situation. Given student ratings on their exposure to some of
the important concepts they were expected to master pertaining to supervision, the model has some shortcomings. It is not as effective as other methods, perhaps, in imparting knowledge about the discrete pieces of various theories; nor was it as effective as other methods in informing students about the legal and bureaucratic steps involved in screening and selecting staff and in terminating teachers who fail to meet standards of the work setting. Some information is simply conducive to presentation through didactic means. Learning styles of teachers must also be considered. At least one teacher preferred a sequential and concrete presentation of the material. Those students who enjoy interacting with colleagues and expanding their perspectives through exposure to ideas from others gained particular benefit from the methods used in the summer course. Because of the sample of convenience and the short-term nature of the investigation, these findings may not be generalizable to the broader population.

Other researchers exploring this issue should consider examining more carefully the cultural aspects of change. School organizations usually do not embark upon systemic change for the sheer pleasure of doing so; thus organizational motivation for change is another topic for further investigation. The nexus between leadership and whole-school change represents still another critical area of future investigation. Finally, since change is time consuming, additional investigations might be longitudinal in nature.
References


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Phi Delta Kappan, 78(9), 706-709.


Educational Leadership, 47(8), 23-27.


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<td>[<a href="mailto:l-reed@osu.edu">l-reed@osu.edu</a>]</td>
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