Themes for Change: A Look at Systemic Restructuring Experiences

Catherine A. Norris and Charles M. Reigeluth

Holistic, integrated restructuring efforts tend to be based on central themes. General features such as teacher collaboration and mastery learning have emerged in the process. The authors highlight five outstanding examples of schools throughout the country where unifying themes have helped restructure in meaningful ways and discuss general trends in restructuring.

RESTRUCTURING SCHOOLS, an idea that gained educators' attention in the mid-eighties and called for fundamental changes in our educational system, is now becoming reality in schools across the country. At some of these schools, restructuring has been undertaken individually, while at others, efforts have involved the aid of supporting networks. Whichever way, the challenge has been to reassess and redesign the way we think of and do schooling. This article summarizes a project to identify and analyze as many of those schools nationwide as possible.

The School Improvement Resources Inquiry USA Project (SIRIUS-A Project) was funded by the Indiana Department of Education and involved analyzing sixty-two restructuring experiences across the country. The study was launched to identify schools that are restructuring, the kinds of structural changes being implemented, and the kinds of change processes being used to plan and implement restructuring. This article does not address the change processes.

Background of the Study

A case-study approach was used to characterize the uniqueness of each school's restructuring effort and contextual conditions. This approach also facilitated free access to information in order to compile a holistic description of each school and describe the restructuring effort in school participants' own words.

Because a goal of the study was to identify and survey *all* schools in the country that had undergone recent re-

structuring, the study utilized a sampling strategy which included all cases that met established criteria.[1]

For the SIRIUS-A Project, schools that met the criteria for restructuring were those that not only planned but initiated *systemic* restructuring. Systemic refers to interrelated rather than piecemeal changes; a change in one part of the school requires changes in other parts. These changes build to a holistic, integrated restructuring effort. Schools described simply as having undergone "restructuring" were not included.

A systemic restructuring effort that focuses on "time, talent, and technology," for example, would affect daily instructional periods and yearly grade levels (time); the roles of teachers, administrators, assistants, and students (talent); and facilities, equipment, and instructional resources (technology).[2]

The principal at Linda Vista Elementary School in San Diego, one of the participating schools in the study, offered an apt definition of systemic restructuring: School restructuring appears to be most successful if it is a pervasive, systemic change—it affects each student in the school and it does not attack only one aspect of the school program.

Process of the Study

The study began with a concerted search for schools nationwide that were involved in restructuring. Criteria for systemic restructuring were established, and relevant organizations were contacted. Major sources of contacts included state departments of education, the Coalition of Essential Schools, the National Education Association's Mastery in Learning Network, and the North Central Regional Educational Laboratory's Accelerated Schools Action Project. Names of schools also were acquired from the media, current educational publications, and referrals from schools participating in the study. The search resulted in an initial data base of 531 schools.

Each of the schools was contacted and invited to answer an open-ended questionnaire or send information describing its restructuring efforts or both. Of 531 schools, 137 (26 percent) responded by November 1990. Information from the 137 schools was then analyzed to identify examples of systemic restructuring. Those schools that met the systemic restructuring criteria comprised a final sample of sixty-two schools, forming the basis for the findings reported here.

Systemic As Well As Thematic

While analyzing the sixty-two schools, it became striking how the systemic descriptions often included an underlying theme explicitly relating the changes. In fact, it appeared that the more a school's changes built upon a theme, the more extensively systemic the restructuring effort seemed to be. The schools with strong themes reported changes that appeared more and more interrelated than the changes reported by schools without strong themes.

Thus, perhaps the most significant finding from the SIRIUS-A study is that some schools seemed to base their restructuring on a connected, underlying theme, which appeared to result in more systemic changes.

Theme-Based Restructured Schools

The following descriptions of restructuring experiences focus on systemic and theme-based elements. The descriptions presented here are not comprehensive; space does not allow for a discussion of all the schools' implementations.

The Saturn School of Tomorrow in St. Paul, Minnesota, based its design on two major themes: (1) "high-tech, high-teach, and high-touch" and (2) "mastery learning." The school serves grades four through seven. An example of a school that explicitly implements its themes, Saturn reported that its students spend one-third of their time with technology, one-third with teachers, and one-third with other students on cooperative learning projects.

The "high-tech" component includes a computer-based integrated learning system and extensive video-based instruction, especially in reading, writing, and math. The school also uses the computer-based Discourse System for group-based instruction.[3]

"High-teach" entails commitment to the belief that students, parents, educators, and the community are all instructional resources who can ensure the success of each student. "High-teach" is realized through on-site learning at the St. Paul Public Library, the YMCA, and the science and art museums, through parental involvement, and through a differentiated staff that is not based on grade or classroom level.

THE "high-touch" component is described as meeting students with sensitivity and concern on their level. A teaching team stays with a group of students throughout their third and fourth years at the school. All students are assigned to an advisory group their full time at school. In addition, heavy emphasis is placed on letting students follow their interests and choose individual activities. Students also take heterogeneously grouped courses lasting eight weeks.

Many of the school's activities are designed so that students learn by reaching mastery, rather than by earning grades or spending time in a subject area. Some of these activities include the following:

• The student, parents, and an advisor develop a personal growth plan in which they identify the student's interests, strengths, and needs. Goals and objectives are unique to each student, and students are actively involved in determining their own progress and making modifications to their goals and objectives.

• Mastery learning is monitored through a computer-based Integrated Learning System (ILS) and the personal growth plan process. The ILS has hundreds of lessons the students use to develop reading and math skills. Students work at their own level and pace, and the computer provides

specific, immediate feedback .
- Students choose much of how they use their time in school and are given sufficient time and resources to achieve mastery. They progress to a new topic after mastery is reached, not after passing a certain period of time.
- Mastery is assessed through a portfolio of proficiencies, a record of teacher comments from courses, personal growth plan documents, and computer-assisted instruction records.

Saturn's implementations may at first seem varied and disconnected, yet the components and changes within them are interrelated in working toward the two themes. The computer-based learning system, for example, links a technology component with a mastery component—the technology allows students to work at their own pace, monitors the students' attainment of mastery, and provides records of mastery for use as assessments.

The differentiated staffing of "high-teach" gives students individualized time to work toward mastery and facilitates "high-touch" cooperative learning in the courses.

Thus, systemic restructuring is demonstrated at Saturn through various interrelationships permeating the entire school and presenting a holistic picture of a fundamentally transformed school. Furthermore, the two integrating themes contribute a depth and breadth to Saturn's systemic characteristics.

Skowhegan Area Middle School in Skowhegan, Maine, based its restructuring on the theme, "collegial/team approach to change." The school's staff is organized into five teams that decide and implement their own yearly plans as schools-within-a-school. Each team creates plans to meet students' needs, tries the plans for a year, and, based on the trial implementations, revises, extends, or drops various changes. Grade levels are mixed, and students stay with their school-within-a-school throughout their years at the middle school.

Examples of implementations within teams include an individualized reading program with daily sustained silent reading for all students, flexible scheduling and multigrade grouping in one team's math program to meet varying student needs, and a homework monitoring program for at-risk students. The school also pursues a school-wide action plan, not only to address the needs of all students, but also to address certain goals needed by all teams "to provide for a cohesive forward movement."

To sustain the multigrade organization of teams that is Skowhegan's restructuring emphasis, teams maintain heterogeneous grouping within the classrooms. To address individual student needs at different grade levels, cooperative learning and differentiated instruction are used in the classrooms. Other key features conducive to a team approach are common team planning times, flexible scheduling, peer tutoring, and four para-educators who assist mainstreamed students in the classroom.

Narragansett School in Gorham, Maine, is an elementary school incorporating two major themes: making the school a center of inquiry and focusing on children's development as learners.

Toward the first goal, Narragansett implemented activities such as developing and carrying out research projects. A teacher-leader position was established for each grade to facilitate communication and collegial decision making among teachers, and teacher assistants allow teachers more time for peer conferencing. Finally, the school added a teacher-scholar position to observe and facilitate teacher reflection processes.

Narragansett implemented several changes to focus on children's development. Teacher teams stay with children from mixed grade levels for more than one year. Parents choose students' placements with their teachers. There is differentiated staffing with teacher assistants, and parents volunteer in the classrooms, with

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some working on teacher-volunteer teams. The students learn with a variety of materials and are evaluated through alternative forms of assessment, including a multimedia portfolio project. The school also is focusing on helping children in their metacognitive development. In essence, Narragansett has based restructuring on its two themes by implementing changes that extend directly from them.

Mark Twain Elementary School in Littleton, Colorado, based its restructuring efforts on the theme of "the peak performance school," coined by the school's principal, Monte Moses, who authored a book by that title.[4] According to Moses, peak performance schools have a clear vision and purpose, seek to actualize human potential, and surpass expectations. Moses maintains that becoming a peak performance school requires first creating a visionary perspective and then establishing a mission for the school.

The vision for Mark Twain Elementary yielded a mission to foster human growth that resulted in three major new features. First, Mark Twain changed the organizational emphasis of its curriculum and assessment from a body of information to a small set of tasks and critical knowledge that have utility in a variety of contexts. The restructuring effort established several performance assessments: a peak performance profile (comprising a checklist of character traits, critical thinking skills, and reading, writing, and scientific problem solving), a fifth-grade research performance assessment, and a portfolio of projects, including a self-improvement goal and a service goal. Furthermore, students move at their own pace within grade levels.

Second, the restructuring effort reorganized the teachers into teams that stay with the same students for two or three years. This helps teachers better respond to student needs and differences; as staff members at Mark Twain contend, students will grow more with teachers who know them.

Third, Mark Twain now utilizes differentiated staffing arranged in a professional hierarchy of a lead teacher, professional teachers, interns, undergraduate aides, and teacher's aides. The larger staff gives teachers more time to devote to curriculum planning and instructional needs, thus serving the growth needs of students. In addition, fifteen parents volunteer daily and over twenty additional parents volunteer regularly.

Bloomfield Hills Schools in Bloomfield Hills, Michigan, is creating a model high school through extensive changes funded by RJR Nabisco. Major themes are (1) community involvement in designing education, (2) inquiry, (3) mastery learning, (4) integrated disciplines through encompassing themes (for example, "How have humans dealt with the question of whether to live in harmony with nature or completely dominate it?"), and (5) student responsibility and choice.

Students have the option of selecting what problems they will study, how to study them, how to use their time to study them, and how they will demonstrate mastery of core competencies after studying them. They decide how they will be assessed for the core competencies, who will assess them (i.e., who will serve on their student assessment panel), and such details as whether they will spend all or a part of their day at the model high school.

To create a school that accomplishes these ends, Bloomfield Hills Model High School has implemented major changes in the use of time, teachers' roles, and assessment. It has restructured time by offering two daily two-hour interdisciplinary instructional blocks, a daily twenty-five-minute student advisory program, and a two-hour period for students' independent projects (e.g., individual or group research or internship). The school day also provides one period for common team planning and one for individual planning for all teachers.

The model high school restructured teachers' roles in that they truly be-

come co-learners and facilitators with the students. Because the teachers are creating the new thematic curricula based on community input and their own and their students' explorations of how disciplines interrelate, in effect they are investigating along with the students. Teachers also collaborate to create new curricula and to help students undertake responsibility. Finally, they coach students on mastery performances before student assessment panels. The teachers from the model high school serve on these panels, but as the students' advocates rather than evaluators.

Because students demonstrate mastery of learning through performances instead of through traditional grading procedures, the school established an administrative/liaison counselor position to help coordinate students' courses and transcripts with the other district high schools and colleges.

Implications of Thematic Restructuring

Of the sixty-two schools that met the criteria of systemic restructuring, these are five examples that go one step further by basing their restructuring on one or more major integrating themes. In all sixty-two schools, the structural changes are systemic, but the changes in the schools with integrating themes appear deeper and more interrelated. Schools with integrating themes also presented a more complete picture in the information they provided for the survey, compared to less theme-based schools.

THIS TENDENCY suggests that a systemic restructuring effort will be more effective if the new design is based on one or more underlying, integrating themes. From early indications, it is hypothesized that building a restructuring process on an appropriate theme or vision may facilitate the planning and implementation of systemic change and, consequently, may contribute to the creation of a more lasting, fundamentally transformed system.

General Trends in Restructuring

A second indication from the survey is that a few general features are emerging as central to restructuring efforts across the country. Universal features of restructuring were not found; rather some general emphases seem to be surfacing. Hence, the term "central features" is used.

In presenting these central features, it should be noted that not all schools emphasize any of them in their restructuring efforts. In fact, some of the schools focusing heavily on overall themes appear not to stress any of these features inasmuch as their overall theme is more idiosyncratic. Other schools use one or more of these central features, but only on a superficial basis. They might implement a feature as one of their changes, but not as one of their central restructuring emphases.

The central features are restructuring emphases occurring fairly frequently in our nationwide sample. They are not based on a tally of all the schools that are implementing that feature, for example, all the schools using team teaching. Rather, they are based on a count of the schools whose primary restructuring focus appears to be on that feature, for example, team teaching.

Teacher Collaboration. The most frequent central feature emerging from the study was teacher collaboration. In addition, two large subcategories of teacher collaboration emerged: (1) site-based management and (2) team teaching.

Site-based Management. The schools in the study emphasizing teacher collaboration through site-based management used terms such as "shared decision making," "participatory management," and "shared leadership" in describing their practices. Although some schools are restructuring by facilitating collaboration among teachers, most are emphasizing collaboration among all groups, including the community, parents, and administrators. Some include students and staff. Many mechanisms and structures for deci-

sion making and determining governance responsibilities were reported by the schools. In a unique example at Sweeney Elementary School in Santa Fe, New Mexico, a team comprised of a teacher-facilitator, three teacher-coordinators, a secretary, and two parents replaces the principal. The facilitating teacher is on leave of absence and is responsible for the school's day-to-day management. For their peer evaluations, each teacher is observed by two other teachers and the facilitator.

Team Teaching. Many types of team teaching were reported by schools: interdisciplinary team teaching, schools-within-a-school, teacher teams that stay with multi-age groups for more than a year, teaching teams for at-risk students, and teaming of regular and special teachers. In some schools, facilitating teacher collaboration was found to be the major purpose of using interdisciplinary team teaching, rather than attempting to integrate the disciplines.

Heterogeneous Grouping. Heterogeneous grouping of students is another central feature of restructuring efforts among schools in the SIRIUS-A study. For some schools, particularly middle and high schools, non-ability grouping, which eliminates tracking, is a major emphasis. Multi-age grouping is a common restructuring feature for elementary schools.

Continuous Progress. Students progressing at their own learning or developmental pace also seems to be a central feature in restructuring efforts. This is implemented by a variety of structures, such as no grade levels in the entire school, continuous progress within two or three grade levels, and continuous progress within one grade or classroom.

Integrating Disciplines/Learning. This central feature includes interdisciplinary team teaching where the emphasis is on providing an integrated, holistic view of the curriculum for students. Some schools have emphasized specific integrated learning theories. Guggenheim Elementary School in Chicago, for example,

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emphasizes learning that integrates the arts, kinesthetic activities, social and personal learning skills, and memory enhancement processes in the curriculum.

School as a Center of Inquiry. Examples of inquiry themes reported by schools were: "developing a culture of learning and professionalism for educators," "creating an ongoing critical dialogue about all aspects of the school," "the process of learning," "a community of learners," "a community of learners and leaders," and "thinking."

Personal Student Development. This feature has become an important aspect of restructuring middle schools. The middle school concept strives to meet the developmental needs of adolescents and restructures many aspects of the school to meet those needs: time, grouping of students (usually in schools-within-a-school with teacher teams), and the role of teachers.

A major component of these and other schools that focus on personal development is the advisor/advisee program in which students meet with small advisory groups as a regular part of the school day or week. In addition to helping meet students' personal and academic needs, some schools have adopted a theme of helping students develop social and group decision-making skills during these sessions.

Mastery Learning. In several schools with strong themes or theme combinations, mastery learning is one of the major elements and seems to help contribute to the extensiveness of the schools' restructuring. The mastery theme seems most often to be combined with other emphases, although it is a sole emphasis for a few schools.

Mastery learning alone appears to be the central restructuring feature in South Tama County Community School District in Tama, Iowa, and Natchez-Adams School District in Natchez, Mississippi. South Tama, whose theme is "outcome-based education," gives only the grades of A or B for demonstrating mastery or I for incomplete. At Natchez-Adams, where the emphasis is on mastery by objectives, all students test for mastery before moving to the next level.

Building a Democratic School Community. Examples of such themes were "student participation and governance in a just community," "a partnership approach to governance structure between students, parents, and community," and "partnership among children, parents, staff, and community."

A related concept, building a community in the school, is articulated by utilizing the outside community. The Saturn School of Tomorrow, mentioned earlier, is one example. Another is the School Without Walls in Rochester, New York, a high school where all students spend part of their day in the community in an internship with a community mentor.

Linking Schools, Homes, and Community Agencies. Emphasizing the social needs of the family also seems to be emerging as a central feature of restructuring efforts. Garfield Elementary School in Olympia, Washington, for example, offers family support through the community mental health agency, home visits, transportation, parent classes, and medical, food bank, clothing, housing, and employment referral services. The school devotes one day per month for staff members to confer with professionals from a project coordinating council that plans and implements interventions. The staff also confers with students and parents on that day.

Another school, John Glenn Middle School in Bedford, Massachusetts, uses a case study review team of police, social workers, and juvenile probation workers to share information on problematic student and family cases.

Systemic Restructuring Vs. Past Reforms

Much time, effort, and money has been spent on piecemeal reforms the past twenty-five years, yet the quality

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of education is generally perceived to have declined significantly over that time. Society is changing in ways that make our educational system obsolete and, therefore, ineffective in meeting the needs of children and society.[5] As we progress into the information age, it seems likely that this trend will not only continue, but accelerate. Does restructuring represent a different enough approach from reforming to reverse this trend? The SIRIUS-A Project is helping answer that question by identifying some important differences between restructuring and past reform efforts.

First, true restructuring involves systemic change in a school, including district-level administration. Most past reforms have been piecemeal. They changed only one or a few aspects of a school without taking a holistic view of how the changes would affect other aspects. Systems experts have found that the parts of a social system evolve to fit with each other. When attempts are made to change one part of a system, other parts often work to change it back to what it once was. This explains why most educational reforms that thrived when external money flowed have disappeared as the external money stopped. And similarly, it indicates that for any fundamental change to be successful, other parts of the system must change in turn to fit with and support it. Consciously taking a systemic approach and making systemic changes appear to offer a much greater chance of significant and lasting improvement in education.

Second, the schools reporting the most extensive and fundamental changes have based their structural changes on underlying integrating themes. It would appear that the themes help to unite the changes being implemented throughout the various parts of the school by giving more meaning and direction to those participating in the restructuring effort. This seems likely to contribute to more cohesive and enduring change.

Third, in most of the schools, the people involved in planning their school's changes chose their themes based on the needs and values of their community: students, staff, parents, teachers, and other community members.[6] This required open conversations, negotiations, and real commitments from stakeholders in the school. Few past reforms have been so widespread in involving members of a school community. Such involvement is likely to contribute to more lasting and permanent change because the participants are designing the changes themselves, based on a theme that has meaning to them and gives them ownership in the changes.

These three characteristics unique to restructuring—systemic, thematic, and community based—distinguish restructuring from past reform movements. Systemic means the change will be pervasive and holistic, thematic means it will have meaning, and community based means those who are affected by it have bought into it.

With systemic, fundamental change that is meaningful and that the school community itself has worked to create, restructuring appears to hold great promise for more lasting change that can result in a quantum improvement in meeting the needs of students and society in the twenty-first century—a radically different, post-industrial, information age.

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2. Indiana Curriculum Advisory Council, *Indiana Schooling for the 21st Century* (Indianapolis, IN: Indiana Department of Education, 1987).
3. The Discourse System is produced by Cybernetic Communications Systems, Inc., Israel.
4. Monte C. Moses, *The Peak Performance School: A Reason for Restructuring* (Westbury, NY: Wilkerson Publishing Co., 1990).
5. Bela H. Banathy, *The Systems Design of Education: A Journey to Create the Future* (Englewood Cliffs, NJ: Educational Technology Publications, 1991).
6. This information emerged from an analysis of the change-process data, which are not reported here. EH