ABSTRACT
              Based on the assertion that significant school
restructuring depends on the maximization of student cognitive
development, this paper examines emerging patterns of change in
restructuring schools at the school and classroom levels. The first
part defines school restructuring and explains the premise of student
cognitive development. The second part describes the organizational
practices that are advocated by national restructuring coalitions and
related student-centered coalitions, such as Foxfire, Coalition of
Essential Schools, Open School Concepts, League of Professional
Schools, the Carnegie Council on Adolescent Development (CCAD) Middle
School Concepts, and the Association of Supervision and Curriculum
Development (ASCD) Consortium. Examples of classroom practices that
change student/teacher relationships are identified in the third
part. A conclusion is that restructuring success requires support at
state, federal, community, and business levels. Two tables are
included. The appendix contains possible survey questions. (69
references) (LMI)

Emerging Patterns of School-Level

and Classroom-Level Changes in

Restructuring Schools

Jane H. Wilson

Principal

H.A. Jones Elementary School

Bremen, GA 30110

404/537-4352

John L. Keedy, Ed.D.

Assistant Professor

West Georgia College

Carrollton, GA 30117

404/836-6557

Paper Presented at the Second National

Conference on School Restructuring

Atlanta, Georgia

November 21, 1991

2

DEST COPY AVAILABLE

Significant restructuring will occur when we maximize student cognitive development and a student's ability to perform in the globally competitive Information Age. In this paper we have three purposes. We will define school restructuring and explain our premise of student cognitive development. Second, we will examine what organization practices are advocated by national restructuring coalitions and related student-centered coalitions: Foxfire, Coalition of Essential Schools, Open School concepts, League of Professional Schools, the Carnegie Council on Adolescent Development (CCAD) Middle School concepts, and the Association of Supervision and Curriculum Development (ASCD) Consortium. Third, we will identify examples of classroom teaching practices which approximate changing teacher-student relationships.

Definition of Restructuring

According to Murphy (1990) school restructuring has four dimensions: 1) school-based management (a redistribution of authority from district level to school level); 2) teacher empowerment (which includes upgrading the quality of the work environment); 3) choice (breaking up the consumer-insensitive monopoly); and 4) teaching for understanding (the shifting from teacher-centered to student-centered classroom learning).

The fourth area is what many educators believe to be the most crucial and under-addressed aspect of reform. "The third wave of reform should start from the overarching purpose of school to help students develop their full intellectual potential in their own and their parents' terms, while also providing them with academic skills, with an understanding of mainstream culture, and with the ability to participate in it" (Metz, 1988, p. 451). Sizer (1987) also believes that the development of the intellect should be the central purpose of schools and that students should be workers and participants rather than passive recipients of what educators deem as "knowledge."

In our fast paced society educators must anticipate and prepare for what lies

ahead. Educators must set goals based on what they really want students to be able to do and go about making the changes necessary to meet these goals. The only way for this to take place is for the teaching process itself to change. The change must be in the classroom and must involve the way that teachers and students work together to produce "learning" (Goodlad, 1983). Murphy (1990) suggested that when deciding what needs to be done we should backward map from the student. In other words we should first look at the educational needs of students within schools and for ways to create more effective arning before worrying about other aspects of the school structure.

The processes involved in reform, restructuring, or other types of school improvement movements must result in improved educational output (improved cognitive development of students) to be deemed successful. "Serious efforts to restructure teaching and learning in schools require 'bringing the structure of classrooms and schools into conformity with the best available knowledge about teaching and learning'" (Murphy citing Elmore, 1989, p. 4).

The change process must be an ongoing process and continually receive impetus from future needs of our society and from the ongoing analysis of research on ways students learn and develop cognitive abilities. Some schools are altering how their schools are organized to meet student needs. Also, some field research is beginning to emerge relating to the changing roles of teachers in their interaction with students and the effect this has on student learning. Both of these efforts are described below.

Core Principles for Changing Schools as Organizations

Cuban (1988, p. 341) asserts that the fundamental organization of schooling has not changed since the mid-nineteenth century:

The graded school with self-contained classrooms, the sorting of

students by age, and the division of the curriculum into grade-level

chunks were all innovations introduced to American schools in the mid-

19th century... Teachers' reliance on textbooks, worksheets, and

homework was already standard practice in the early 20th-century

classrooms. Despite the rhetoric of reform, basic ways of schooling

children have been remarkably durable over the last hundred years.

Shanker (1990) claims that the assembly line organization of schooling is obsolete. If

educators do not change how we educate students, the system as we know it will be

destroyed. What do various national groups advocate about how schools should be

reorganized?

Open School

The St. Paul Open School approach was developed in answer to a growing

problem with some students who were not achieving or who were discipline problems.

This alternative school had many hurdles to cross before it could begin. The first

problem was the waiver of requirements by the Minnesota Board of Education. As in

most states Minnesota has requirements regarding accumulation of credits for

graduation and course requirements at other grade levels. The school agreed to

accept responsibility for student learning, to measure results, and share with the

public. The plan for the school was devised by parents, teachers, and school leaders.

The school serves students ages 5-18 and has been in operation since September

1971. It has received numerous awards and has had more that 50,000 people from

around the world to visit and observe its methods. The school operates under the

"umbrella" of the following basic principles:

Core practices.

1. Each student should have an individual program of courses and other learning

opportunities, developed cooperatively by parents, students, and staff members.

2. Each teacher and administrator should spend some time teaching and some time advising a group of students.

3. Parents, teachers, and students should have the opportunity to help make decisions about school policies and procedures.

4. The school should function as a headquarters for learning, with many important activities taking place outside the school.

5. Students should have the opportunity to learn with and from a variety of people.

6. New procedures should be developed for graduation.

7. Students should be involved in classes and other activities based on interest and ability, not age. The school would enroll students from 5 to 18 years of age.

8. The school should have considerable autonomy to determine how its budget is spent. After a two or three year startup period during which the school is equipped, the school would receive the same per pupil allotment as other district schools.

9. The school would seek a faculty and student body that reflected the racial diversity of the city and that had voluntarily chosen the school.

10. Developing higher order problem solving and thinking skills should involve helping solve real problems, and make a difference in other peoples' lives. (Nathan, 1984)

Coalition of Essential Schools

The Coalition of Essential Schools is made up of ten core high schools who work directly with Brown University. It also includes numerous (47 in 1987) other schools who are also part of the Coalition (Chion-Kenney, 1987). These schools are autonomous and develop their own programs. Sizer (1986, p.39) said "that it is intellectual work that Coalition schools ultimately value most." He further stated that "what is essential must be pursued, and general intellectual education is for us the primary essential, the one that best enables all youngsters to observe sensitively, to

become informed, to think clearly and with imagination, and to express themselves precisely and persuasively" (Sizer, 1986, p. 40). He believes that these ideas are the heart of all good education. The schools all agree on certain "ideas" about schools. These ideas are expressed in the Common Principles of the Coalition.

Core practices.

Principle 1: Teaching and learning should be personalized, with teachers and principals "unreservedly" responsible for what is studied, how time is spent, and what materials and pedagogues are used. No teacher should have a class load of more than eighty students.

Principle 2: The governing metaphor of the school should be student-as-worker, rather than the more familiar metaphor, teacher-as-deliverer-of-instructional-services.

Principle 3: The school should focus on helping adolescents learn to use their minds well.

Principle 4: Each student should master a limited number of essential skills and areas of knowledge.

Principle 5: The principal and teachers should perceive themselves as generalists first and specialists second.

Principle 6: The diploma should be awarded upon a successful demonstration of mastery.

Principle 7: The school's goals should apply to all students.

Principle 8: The tone of the school should stress expectation. trust, and decency.

Principle 9: Ultimate administrative and budget targets should allow for student loads per teacher of eighty or fewer students; time for collective planning; and competitive salaries. The ultimate per-pupil cost should not exceed traditional schools by more than 10 percent. (Chion-Kenney, 1987, p. 20-28)

Sample Practices. Wasley (1990) described three examples of teachers and administrators changing organization structures of schooling. At Newline Comprehensive High School the principal suggested that four of his teachers form a school-within-a -school and try the principles of the Coalition as outlined in Ted Sizer's book Horace's Compromise. They divided the subject areas into four blocks--Inquiry and Expression, Literature and the Arts, Mathematics and Science, History and Philosophy. The time was arranged so that there would be four two-hour teaching blocks divided over two days. The teachers were given two planning blocks to work together and to plan activities for the classes (Wasley 1990).

The Coalition program at Riverdale began in response to interest expressed by the principal. He wanted to try the principles of the Coalition with some students who had performed well up to the middle school level, but who were not doing well in high school. They formed a program called "Opportunities to Learn" which was made up of 100 students and a team of four teachers. The second year they added another team with like number of students, but heterogeneously grouped. They used alternate scheduling and allowed for collaborative teacher planning.

The third teaching situation that Wasley investigated was at Westgate Alternative School, located in a moderately poor neighborhood (40 percent Black, 40 percent Hispanic, and 20 percent Other) and an original Coalition school (Wasley, 1990). Katherine had been teaching for eighteen years and had become dissatisfied with education as she saw it. She came to Westgate at a time when the Coalition principles had been in use for two years. She was very excited about the prospect of new outlooks and new methods. The school was divided into "houses" of about seventy-five students. Each house had a team of teachers who worked exclusively with that group of students. Students had blocks of time for humanities, math/science, and an advisory period. In addition there were additional offerings of languages, physical activities, music, etc. which were available during lunch, and before, and after

school. The students were grouped into houses across grade groups with seventh/eighth, ninth/tenth, and eleventh/twelfth grade groups.

Katherine was a teacher in the humanities for the ninth/tenth grade "house". She had common planning with her team of teachers. In addition to the principles of the Coalition, the entire faculty met weekly to help set policy for the school as a whole. In working with students, Katherine believed that it was her job to know these students well and to become a trusted adult who could help them problem-solve and cope with the daily complexity of both school and adolescence. She was expected to be a generalist and to be responsible for writing, language arts, history, civics, geography, and expression. She did this through broad topics and interdisciplinary units of study. When Wasley visited, her class was working on the broad topic "What is justice?" (Wasley, 1990).

In addition to the nine general principles of the Coalition, the school had developed five questions to help students develop good habits in thinking: "How do we know what we know? What's the evidence? How else might it be viewed, seen, considered? What's the viewpoint? What difference does it make?" (Wasley, 1990, p. 10). The classroom was arranged for flexible grouping. Katherine used some small group and some large group activities. She reported that students were free to move the desks around to accommodate the various groupings. The advisement sessions were mostly discussion of various topics.

CCAD Middle School Concept

The Carnegie Corporation established the CCAD Middle School concept in 1989 to study the education of adolescents (Carnegie Council, 1989). The Middle School, according to this study, should be quite different from the Jr. High Schools that have traditionally educated students of this age. Junior High Schools across America have used the same methods and arrangements of a typical High School. Far too many students in this age group have not made a good transition into early adulthood. They

have too often dropped out of school or failed to develop into productive citizens. "During early adolescence, many youth enter a period of trial and error, of vulnerability to emotional hurt and humiliation, of anxiety and uncertainty that are sources of unevenness of emotions and behavior associated with the age. Yet the turmoil can herald the emergence of a new individual with the potential to learn, to think critically and independently, and to act responsibly according to principles and a code of ethics" (Carnegie Council, p. 21). There was a great mismatch between the needs of the young people and the methods being used. The middle schools should be based on the following core ideas.

Core Principles.

1. Large middle grade schools are divided into smaller communities for learning.
2. Middle grade schools transmit a core of common knowledge to all students.
3. Middle grade schools are organized to ensure success for all students.
4. Teachers and principals have the major responsibility and power to transform middle grade schools.
5. Teachers for the middle grades are specifically prepared to teach young adolescents.
6. Schools promote good health; the education and health of young adolescents are inextricably linked.
7. Families are allied with school staff through mutual respect, trust, and comr unication.
8. Schools and communities are partners in educating young adolescents.

    In addition the goal is to produce students who are:

    Intellectually reflective

    En route to a lifetime of meaningful work

    Good citizens

    Caring and ethical individuals

Healthy. (Carnegie Council on Adolescent Development, 1989, p. 15, 36)

Sample practices. To achieve the middle school ideas schools were either created to meet the prescribed configuration or carved out of existing junior high schools. Maeroff (1990) describes the "set up" of Shoreham-Wading River, a school v.hich houses grades 6 to 8. The team approach is used with 40 to 45 students taught by two teachers for the four basic subjects. This core group will have 4 to 5 advisors. The large group will be divided among the advisors and will meet for a minimum of 10 minutes two times a day. In addition each student will be advised individually several times a year. The group remains together most of the day. They eat together with their teacher in their classrooms.

A core group from each grade is clustered together on each of four wings of the school. The atmosphere is more like a family than a traditional school. The school relies on the quality of interaction to shape the character of the school.

In looking at this school from the restructuring viewpoint, one must keep in mind that this school was not restructured. It was structured. All the faculty was hired specifically to use the teaching techniques and the facilities in the manner described. Maeroff speculated that "he is uncertain whether some other school, with a faculty entrenched in its on way, could shift directions" (Maeroff, 1990, p. 510). When the school began, the teachers were young and had little in the way of outside obligations. Now an older faculty has family obligations which erode the amount of outside time the teachers had been devoting to their jobs. Younger teachers did not question the after hours, the before school planning breakfast meetings, and the extra time spent in developing materials; but now they are pulled in a different direction. Another outside force affecting the internal structure is that of the teacher union and collective bargaining. Even the freedom of the faculty is controversial. Some believe that the emphasis on students "feeling good" has been overemphasized to the point of loss of academic learning. The students, however, who have left the school in the past have

scored well above average over all in achievement tests and seem to fair well in high school.

While the school is undergoing some internal strife, the implication is not that the system established is not working or that teachers are basically unhappy. The point is that it is not a "utopia." No school is or will be. No program should remain static or it will become stagnant. In the past it has been proven true that educators tend to regress to traditional norms of schooling. This phenomenon makes permanent change difficult. We evaluate our programs to meet the needs of a changing society.

Program for School Improvement (PSI) and the League of Professional Schools.

Carl Glickman, Director of the Program for School Improvement at the University of Georgia, has long been an advocate of school improvement and for changing the norms which relate to teacher performance. In the newsletter of the league, In Sites (1990), he cites Arthur Wise, Director of Education Policy Studies for the Rand Corporation "that legislative reform is still dominant but the new movement, entitled 'empowerment,' is gaining ascendancy" (Wise cited by Glickman, 1990, p. 2). He further expresses "that he believes in the growing perception that teachers and local administrators may be the solution rather than the problem, and engaging educators in local problem solving rather than following prescriptions may be the answer to long-term school success" (Glickman, 1990, p. 2). The premise of the league is that shared governance should produce curriculum development and innovations in instruction which will enable the teacher to meet the needs of students in the classroom. The core practices of the league refer to the methods that schools should follow in producing the changes that they desire or perceive a need for.

Core practices.

GOAL: To promote growth of the individual--student, teacher, administrator--and of the organization.

OBJECTIVES:

1. To provide for shared decision-making between faculty and administration relating to schoolwide improvements (shared governance).

2. To provide on-going means for initiating and supporting schoolwide improvement.

3. To provide formal procedures for gathering valid information for problem identification, decision-making, and problem-solving activities (action research and evaluation).

4. To provide schools where interested educators can observe a model learning community--one in which students and staff are studying, seeking, applying, exploring--a living/learning experience led by professionals who are themselves lifelong learners.

DESCRIPTION:

1. A school-based improvement program in which the staff sets its own goals.

2. A voluntary program supported by at least 80 percent of the school staff.

3. A program that uses shared governance to plan school improvement initiatives.

4. A program that helps a school study itself and evaluate its goals.

5. A program that promotes the school as a professional workplace--as an active learning community for students, teachers, and administrators.

6. A program that promotes the tendency to reach forward to growth, improvement, and enrichment.

7. A program that promotes and uses dialogue and collegiality to plan, to solve problems, and to build a better learning environment for all.

8. A program that promotes the joy of working together to accomplish goals. (PSI League of Professional Schools, 1990, p. 4, 13)

Sample practices. The League of Professional Schools provides structure for schools that are going through the restructuring process through the newsletter, planning meetings, and through facilitators who assist school teams in establishing the

13

priorities that they wish to address and in helping them to structure the process. The use of demonstration schools also aid the schools in the league so that they can see the concepts in action. Team members from the demonstration schools also give presentations at various meetings to discuss their experiences in restructuring.

Dr. Sharon Denero, Principal of Fowler Drive Elementary School, presented at the Southern Association of Elementary School Principals on the topic of "School Restructuring and Interdisciplinary Curriculum." Methods that teachers were using both in the classroom and within the school encouraged great changes in the school itself. The school has become organized around families made of classes of all grade levels. They have special days that the total school engages in interdisciplinary units. This gives opportunities for students to work with others at different age levels and to develop skills in communication. In addition to these major units, all instruction is based on interdisciplinary units at each grade level. These units are developed by the teachers around broad questions that can lend themselves to depth of thinking. The units are developed to include the state required curriculum objectives at each level.

ASCD's High School Futures Planning Consortium

Cawelti (1989, p. 30) states that "for many high schools, the mandated reforms are unlikely to have significant impact because they seek to solve a variety of problems for which each solution is complex and time consuming" and that many schools are at different places in their efforts at restructuring. ASCD consortium schools have addressed this by planning the various areas on a different time schedule according to their needs. The first group of fifteen schools examined curriculum issues; the second group of twenty-five looked at comprehensive plans in organization, improved instruction, and technology. The third group of twenty-five schools worked on strategic planning and designed programs more suitable for the future lives of students. The consortium schools believe "that a given program or innovation can rarely be simply exported from one school to another....school leaders may be better able to develop

their own solutions by examining these experienced-based principles" (Cawelti, 1989, p. 31). All of the principles developed by the consortium schools are focused toward individual school-based restructuring.

Core practices.

There are four main areas of core practices.

School Organization Principles

1. A faculty expected to make a significant contribution to school improvement must have strong administrative support, access to information, and ample time.

2. Maximum authority and responsibility for teaching and learning are placed at the school site for authentic accountability.

3. New roles are created, and others redefined, to respond to leadership needs in both teaching and administration.

4. Working together in teams facilitates interdisciplinary communication, delivery of instruction, and better decisions about planning for school improvement.

5. Incentives, recognition, and rewards convey to faculty members that their extra efforts on behalf of total school improvement are important and are valued.

6. Larger high schools assure that each student has a "home-base," where teacher-advisers cultivate a sense of social affiliation with the school and provide counseling on social, academic, and vocational matters.

7. Each high school has discretionary financial resources for responding to staff development or student needs on a month-to-month basis.

8. The school is a learning center for the larger community, where a variety of student and adult learning options are provided (Cawelti, 1989, p. 32).

Curriculum Principles

1. Designing a core of common learning helps ensure that all students are provided the curriculum content and learning experiences most appropriate to their future lives.

2. Key organizing elements for the core curriculum center around fundamental societal concerns such as global interdependence, civic responsibility, ecology, economic productivity, and world peace.

3. In addition to attaining competence in the basic skills, students are required to demonstrate the ability to apply essential learning-thinking-communicating skills needed in the future.

4. Schools should avoid student tracking plans that deny any student access to a fully balanced and substantive instructional program of general education or electives.

5. The curriculum is designed to assure that students demonstrate application of previously acquired knowledge, that students are actively involved in the learning process, and that each year they assume more responsibility for their own learning (Cawelti, 1989, p. 33).

Staff Development Principles

1. Because teachers vary substantially in training and experience, staff development is planned by the staff members themselves to provide a variety of options for continuous professional growth.

2. Effective staff development, which should be carried out in a sustained fashion over time, includes such elements as an adequate theory base, modeling and demonstration, and opportunity for practice, followed by a system for providing feedback and coaching.

3. Long-term plans for staff development include an appropriate balance between training in teaching strategies appropriate to specific fields and opportunities for further study in the field itself.

4. Staff development plans include programs for helping students acquire proficiency in such skills as problem solving, critical thinking, reasoning, comprehension, and creativity, as well as training for teachers in how to assess students' proficiencies in these areas.

5. Incentives are provided for teachers to develop new and specialized skills in such areas as diagnosing student learning needs, helping others improve their teaching, using technology, and evaluating student learning. These teachers are afforded opportunities for helping their colleagues on a clinical basis at the school site (Cawelti, 19489, p. 34).

Technology Principles

1. To select appropriate hardware and software, schools must decide on the desired uses and purposes of techno'gy. Effective software can help retrieve and sort information, solve problems, dramatize events or issues, or assure mastery of skills. The first step is to establish where technology can accomplish tasks more efficiently or effectively than humans.

2. In planning for broader implementation of technology, careful provision must be made for the time and expense involved in training personnel in its use.

3. In the computer field, early attention is given in selecting programs to assure balance between instructional applications that provide "drill and practice" and those that make more open-ended, creative uses of the technology.

4. Care is taken to provide equity in access to technology as a learning tool in order to assure that neither teachers nor students are denied the opportunity to learn in this manner.

Students receive training in how to access, synthesize, and present information, and they participate regularly in assisting teachers in the presentation of such information to other students. (Cawelti, 1989, p. 35).

Summary: Key Findings of New School Organization Elements

In looking at the Core Principles of the restructuring movements mentioned, one can see that there are many similarities of ideas. Table 1 summarizes selected ideas

Comparison of Core Principles

Table 1

Plan or Organization Restructuring	Teacher-Student Relationship	Budgetary Methods	Central Student Activity	Primary Decision Makers	Evaluation or Assessment	Primary Focus	Suggested Use of Core Principles	Central Curriculum Objective	Central Teaching Method	Population Served by Ideas
Coalition of Essential Schools	Colleagues Coach-Worker	Per pupil cost no more than 10% greater	Small group work-Learn how to learn	School staff	No failures Incomplete must be made up-performance based	Students use mind well	Not model but set of ideas	Use of essential questions	Teacher as coach	Apply to all regardless of ability, all need essentials
Foxfire	Collaborate	Not addressed	Small group, peer teaching	Work flows from the student interest or concern	Honest on-going evaluation	Learning to guide own learning, student action or interest	Not a recipe, an approach	Investigation & composition on outside world	Collaborator, team guide	Apply to all in class
Open School	Advisor - advisee	Autonomy of school to determine way spent	Service to community, worker related to real world	Parents, students, staff	Altered graduation requirements, individualized	Individual program, interest & availability, not age determined courses	Guide for alternative school	Develop high order, problem solving skills	Skill development, community activities	Cross age groups
League of Professional Schools	Mutual learning community	Shared decisions	Studying, seeking, applying, exploring	School staff	No specific suggestions	Growth of individuals	Guidelines for establishing school teams for governance	Living, learning experiences	Variety to meet goals	Apply to all
Middle School Concept	Support for adolescents, advisor	Not addressed	Developing skills, exploring, group learning	Teams	All students should succeed	Characteristics & needs of young adolescents, critical reasoning	Guide for Middle School	Core of common knowledge	Teaming, interdisciplinary units, facilitator	Heterogenous group, all should be successful
ASCD's Consortium	Teacher advisors, provide "homebase"	Discretionary funds available for student, faculty needs	Assume responsibility for learning-actively involved	School site faculty-administration	demonstrate essential skills for future	Learning, thinking, communication for future	Adapt according to school needs	Fundamental societal concerns, skills for future	Active involvement, technology	Avoid tracking

and allows one to view the relationships between the ideas at a glance. One can see that the application of these principles of restructuring depends a great deal on local educational authorities to adapt rather than adopt methods. There is a need to align philosophically with the ideas presented rather than take on a prescription for implementation. This aspect of the theories will allow schools which are well into the empowerment movement to use the ideas presented as a basis to develop plans for their schools. They might wish to buy into some of the support groups and networks that are provided without fear of loosing the school's autvromy. The greatest similarities seem to fall in the arena of how the teachers and students should "work" and what they should work towards. In traditional school settings, the teacher is viewed as the presenter of information and the student is the receiver. The teacher decides what is important for the student to know and the student is expected to learn what is presented. The philosophies of the restructuring movements cited here view the teacher as a kind of "coach" or "director" and the student as the main "player." The student must develop into a player through methods that promote the ability to use the mind well, to think, to problem solve, to question and seek means for solutions.

In sum, the comparisons of organization practices for restructuring indicate that:

1. The goal of educational systems should be to produce students who use their mind well, use critical reasoning, and have the skills necessary to be flexible in an ever changing society

2. Curriculum plans should be derived from the needs of students rather than from set disciplines. They should be developed by those in close contact with the students and made relevant to real world situations.

3. Student grouping should be heterogeneous and should make use of special needs and abilities within the groups.

4. Schools and teachers within schools should be empowered to make decisions regarding organization patterns, schedules, and methods for classroom instruction.

Teacher Giving Voice to New Teaching Roles:
Classroom Interaction Patterns

How are teachers in restructuring schools encouraging students to take ownership for their learning? How are these enterprising teachers setting new social classroom norms encouraging vital participation from all students? Ultimately, in restructuring classrooms, students will do the work. Two problems (discussed briefly below) must be overcome if teacher roles are to change: student disenr-- ement and student motivation.

According to Hampel (1986) a major problem in restructuring is eliminating the pervasive student disengagement or conspiracy of convenience (Sizer, 1984). Students and teachers often observe an informal covenant: Students will not bother teachers (i.e., cause classroom problems) provided teachers do not bother them. This social norm can function as a complex avoidance of rigorous, demanding academic inquiry (Sedlack, Wheeler, Pullin, & Cusick, 1986).

Student motivation appears to be a major key in classroom restructuring. How do we give students responsibility for their learning so that students become self-directed learners with the critical thinking skills necessary in the Information Age? Teachers need to change their roles from dispenser of information to facilitator and coach. Below are examples from the field research and classroom patterns emerging in restructuring schools. This information should be helpful in explaining the current attempts of teachers to change their traditional roles.

The Open School concepts related by Nathan (1984) contain several of the trends regarding the cognitive development of students. Students are given input into the type of programs in which they will participate. All students must participate in community service as part of their learning experience. Learning becomes related to the real world of the students. In addition the students have a wide range of options. At St. Paul Open School classes include field trips to local and far reaching areas in

order to expand their experiences. It is reported that the urban studies class visits 10 eastern cities as part of their course. Teachers and students are given opportunities to meet together to discuss problems and to discover solutions. Teachers have 25-30 student advisees. Students are expected to help others in learning. Sometimes older students work with younger students. Students are involved in classes according to interest and ability, not age. In addition to these student /teacher related activities another aspect of restructuring schools is used. Teachers serve on all committees of the school and cooperatively work with administrators to make budget decisions and set policy. They are empowered to make decisions about what is needed at their school for their students.

The Coalition of Essential Schools field researchers have interviewed several teachers experiencing role changes with students. One of the teachers, Elizabeth, felt that her role of teacher changed significantly from previous experiences. "She saw herself as a 'coach,' a facilitator of student learning, and noted that this stance required quite different behavior from that of conventional teacher" (Wasley, 1990, p. 4). Her classroom had tables instead of desks and students spent a great deal of time doing group work with the teacher moving from group to group asking questions. Elizabeth feels that one of the most difficult tasks in planning is the formulation of questions that will promote interaction and a scholarly attitude. The groups work cooperatively and share their findings with the rest of the class. In summing up, Wasley says that Elizabeth feels she has a different relationship with her students. She says that she was able to do this because she believed that the changes are important and that she is providing a better quality of education for her students. She feels that the extra time she spends with the students allows her to know them better and to form a strong bond between teacher and student. (Wasley, 1990).

At Riverdale High School, Wasley visited with Jennifer, an Algebra teacher. She observed that "students were working in groups, some on tables, some on the floor.

Some were standing up, while others were laying down. There were no desks--only tables, no rows, and very little visible structure..Obviously, in the last couple of years she [the teacher] had changed her pedagogy significantly" (Wasley, 1990, p. 1). In Jennifer's class she often used projects for groups to work on. These projects would be given to the "coaches" of each group who would be responsible for the organization of the groups on the assignments. The coaches were also responsible for taking roll in each group and reporting to the teacher any absentees. The teacher would hand out lists of questions that must be answered as part of the project. The groups also had to do both an individual and a group evaluation of the project. She would move from group to group working with groups as needed. Jennifer says that the "broad, structural changes they had made at the outset" (Wasley, 1990, p. 21) led to a lot of changes that almost automatically took place. She made it clear that she had not gone exclusively to the group project learning. She said she still had to do some basic instruction in skills and concepts.

Jennifer felt that as she became better at the project method she hoped to work more of the basic instruction into the projects. She emphasized that the methods she used to teach basics had changed dramatically. She tries to use more real life problems to illustrate the methods and formulas as she teaches. She explains that she didn't realize how difficult it was for students to relate to each other. She is having to teach group dynamics within the cooperative learning groups. She sees that those who get concepts quickly are great at teaching others in their groups. She also reports that during the time that she was teaching traditionally she worried so much about covering everything that she "kind of ignored whether the kids were getting the concepts or not" (Wasley, 1990, p. 23). She says that one of the most difficult parts of the new program is making the changes that need to be made. She finds it hard to change what has been done for so many years. It has been hard not to talk so much and to listen more to what the kids are saying. Jennifer related that she had begun to

really hear what the students were saying, she realized how passive regular classes were, and that most students had "learned to survive, but they didn't learn to think" (p. 28).

Katherine at Westgate Alternative School related that at the beginning of the year she had a difficult time getting the group to "bond" together. She tried several methods finally taking them to a park for some "fun." She believes that if they can learn to have fun together they can begin to share experiences that will lead to special friendships and a support group for each other within the school. Wasley reports that activities within this classroom were different from those seen in traditional schools. She says "that at no time did I observe a lesson which involved whole group use of a standard textbook, nor was the room always quiet, nor were the desks in rows....She handed out no worksheets and she gave no multiple choice tests" (Wasley, 1990, p. 21). She sees the importance of the smaller teacher pupil ratio as very important since it affords the teacher the ability to really get to know the student and their individual needs so that goals can be set in an attainable way.

Katherine's role of teacher-as-coach was very different from her traditional role. Even though she had always been willing to try new things, accompany students to new places, and bring in new materials, she had never before completely changed her role. She says that she is "still the organizer and still the director. But my students' thoughts and their participation is primary" (Wasley, 1990, p. 28). Within the classroom, the teachers use a variety of methods for instruction. The use of cooperative groups is a primary method of instruction. The teachers organize the materials and act as resource providers. They also guide the students and help the groups set up their tasks.

An English teacher named Elliot Wigginton (1989) developed the Foxfire approach while working in a small 250 pupil school in a very rural area. He saw the need for students to relate their English work to the real world in which they live. "The

objective of the approach is to aide students to become more thoughtful participants in their own education and to become increasingly able and willing to guide their own learning, fearlessly, for the rest of their lives" (Wigginton, 1989, p. 4). The approach is based on "Core Practices." It is emphasized that these practices are not a "recipe" or a "one-best-way" teaching method. They are a way of thinking about and approaching teaching which must be integrated into the individual teacher's methods.

Core practices.

1. All the work teachers and students do together must flow from student desire, student concerns.

2. The role of the teacher must be that of collaborator and team leader and guide rather than boss.

3. The academic integrity of the work must be absolutely clear. Each teacher should embrace state-or-local-mandated skill content lists as "givens" to be engaged by the class, accomplish them to the level of mastery in the course of executing the class's plan, but go far beyond...

4. The work is characterized by student action, rather that passive receipt of processed information.

5. A constant feature of the process is its emphasis on peer teaching, small group work and teamwork.

6. Connections between the classroom work and surrounding communities and the real world outside the classroom are clear.

7. There must be an audience beyond the teacher for student work.

8. As the year progresses, new activities should spiral gracefully out of the old.

9. Teachers must acknowledge the worth of aesthetic experience, model that attitude in interactions with students, and resist the momentum of policies and practices that deprive students of the chance to use their imaginations.

10. Reflection--some conscious, thoughtful time to stand apart from the work itself--is an essential activity that must take place at key points throughout the work.

11. The work must include unstintingly honest, ongoing evaluation for skills and content, and changes in student attitude. (Foxfire Teacher Outreach Fund, Inc.)

Carol Stumbo, a teacher using the Foxfire approach, tells about her experiences in her eleventh grade classroom. She relates that she pushed back the chairs and listened to the students. Previously students were unresponsive and unwilling to open up, but now they take the opportunity to talk and get a handle on the world in which they live. They like sharing with the class what they have found out by talking to people in the community. She reports that it does make her feel uneasy not always knowing what will go on in class from day to day, but that the look on their faces and the absence of their usual dislike for school makes the work worthwhile.

The Foxfire approach contains many of the emerging practices that appear to contribute greatly to cognitive development. There is group learning. Students take responsibility for learning. The teacher takes the role of collaborator. Learning is relevant to environmental situations of the students. There is a high expectation of good work. Teachers model processes. (Foxfire)

Summary: Key Teacher Classroom Patterns

The matrix of classroom patterns indicates the emerging patterns of classroom practices in the schools discussed which are restructuring. (See Table 2.) The matrix was derived from information stated or implied in field research, articles on classroom techniques, and presentations by persons directly involved in a restructuring school. A blank under a category does not necessarily imply a negative for that category. It only means that it was not indicated in the readings. Similarities may actually be higher in some areas. The matrix includes information on high schools, middle schools, and elementary schools. Some of the schools are using theories discussed previously,

Table 2

Schools (see attached list)

Classroom Patterns *	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Total
Heterogeneous grouping	x	x	x		x		x			x	x	x	x	x			x	x	x	x	x	15
Teacher's choice/ program participation	x	x	x		x	x	x	x	x	x	x	x					x	x	x			14
Teachers plan curriculum		x							x	x	x	x	x	x	x	x	x	x	x	x	x	14
Emphasis on mind development	x	x	x					x		x	x			x	x		x	x	x		x	12
Knowledge of students	x	x	x	x					x	x	x	x					x	x	x	x		12
All students meet same goals	x	x	x	x					x		x	x					x	x	x	x		11
Flexible/altered periods	x	x	x						x	x	x	x		x			x	x			x	11
Non-passive	x	x							x	x	x	x	x		x		x	x	x			11
teaching	x	x	x						x	x	x	x	x		x		x	x				11
Student as worker	x	x	x						x	x	x	x	x		x		x	x				11
Collective planning	x	x	x					x	x	x	x	x						x	x			10
Reduced student load	x	x	x					x	x	x	x			x				x	x			10
Essentials	x	x					x	x	x	x	x	x								x		9
Teacher as coach	x	x							x	x	x	x					x	x	x			9
Community involvement	x						x		x			x			x		x	x			x	8
Interdisciplinary units	x								x	x		x	x		x				x	x		8
Room arrangement altered	x								x	x	x	x		x		x		x				8
School within school		x	x	x		x		x	x	x	x											8
Teacher/student collegiality	x		x						x	x	x						x	x	x			8
Out of school activities					x	x	x							x	x		x	x				7
Sources other than textbooks	x								x	x	x			x			x	x				7
Teacher advisory	x					x			x	x		x							x	x		7
Faculty replacement				x	x	x	x		x										x			6
Student leaders	x								x	x			x				x	x				6
Teacher as generalist	x				x				x	x	x								x			6
Broad group questions	x								x	x	x								x			5
Technology												x				x				x	x	4
No failure/must complete work	x	x							x													3

Table 2

Attachment - Classroom Patterns

Representative Number for Schools Listed	School Name	Reference
1	Central Point High School	(Chion-Kenney, 1987)
2	Hope High School	(Chion-Kenney, 1987)
3	Walbrook High School	(Chion-Kenney, 1987)
4	South Boston High School	(Levine & Eubanks)
5	Washington High School	(Levine & Eubanks)
6	Wingate High School	(Levine & Eubanks)
7	Dewey High School	(Levine & Eubanks)
8	Kansas City High School	(Levine & Eubanks)
9	St. Paul Open School	(Nathan, 1984)
10	Newline High School	(Wasley, 1990)
11	Riverdale High School	(Wasley, 1990)
12	Westgate Alternative	(Wasley, 1990)
13	Cooper Elementary	(Slavin, 1987)
14	Charles Drew Elementary	(O'Neil, 1989)
15	Cheron Middle School	(O'Neil, 1989)
16	Horace Mann Middle School	(O'Neil, 1989)
17	Stumpo's High School	(Wigginton, 1989)
18	Brescoe's Middle School	(Wigginton, 1989)
19	Shorenam-Wadding River Middle School	(Maeroff, 1990)
20	O'Farrell Middle School	(Scholastic, 1991)
21	Toler-Oak Hill Elementary	(Scholastic-Lead Teacher, 1991)

others have derived methods based solely on local programs for change. The schools have been recognized as being "successful" educationally.

Further investigation would be needed to positively state that there were higher percentages. It would be interesting to see further investigation at these schools particularly in the area of technology, since it appears that there is a trend in this direction from literature reviews.

The matrix indicates that there is great emphasis on student-teacher interaction in these schools. Core Principle comparisons show that there is a change from the traditional authoritarian atmosphere to one of cooperation, group interaction, peer teaching, and student as active participant. The most frequently found category in classroom practices was the use of heterogeneous grouping not only structurally but also within individual classrooms. Instructional emphasis is on mind development, broad questions, and development of essential skills; rather than following textbook plans, skill sheets, and workbook assignment. Traditionally students have "moved through the hoops" of each grade for twelve years; but often were unable to perform when they were finished with school. In the schools surveyed emphasis is placed on continuous performance during learning activities. Activities are more student centered, where groups of students work together to produce learning with the teacher as a mentor and coach. Often these activities are related to the real world and integrated into units of study which include community activities or field trips. There is movement away from the use of textbooks as the sole source of information on the various areas of study to the use of a wide variety of print material, technology, and community resources.

One of the most significant items in the matrix deals with the teachers choice in program participation. This could indicate that there has been a change of teaching philosophy which has lead to the participation of students. If this is true, it could mean that the changes will be long lasting and continuous. It is a well known fact -- that

unless teachers believe what they are doing in the change process is important and necessary, there will be no long lasting change.

Changes tend to move back toward established norms with time. An area which needs to be investigated further is the one related to significant changes being made in the area of school norms. This can only be answered through further field studies in schools that have been in the restructuring movement for some time. Several years are needed to establish significant changes in school norms. Through information obtained in developing Tables 1 and 2, a list of sample questions that might be helpful in field studies looking at restructuring processes within the classroom and at examining changing school norms has been developed (see Appendix for complete list). The use of outside investigators field research is a valuable tool for learning about what is taking place in schools. The investigator can observe processes as well as interview teachers and administrators. They can be objective in what is actually taking place.

Conclusions and Implications

Successful school restructuring ultimately means changing relationships among school personnel (Timar, 1989). At the organization level personnel are using heterogeneous grouping, co-planning curriculum, sharing decision making, and using flexible scheduling. Ironically, as teachers go about changing their classroom roles (from that based on authority to one of cooperation), they receive little support from the organization structure which also is changing. (McQuillan & Muncey, 1991, and Prestine, 1991).

A central issue, then, appears to be organization change. School restructuring involves not just the teacher-student relationship but those of principal-central office, teacher-teacher, and student-student. All of these roles are tradition-bound and will be hard to change (Keedy, 1991). For organization change to occur schools need the support at all levels, including state, federal, and business. Is this multi-level support

occurring?

Curiously, state education agencies appear to be offering or supporting little site-based staff development, even though restructuring school personnel need staff development preparing teachers for both organization and classroom level change. The state of Georgia, for instance, has cut its state state development funding for two consecutive years approximately fifty percent.

Murphy (1990) states that "restructuring teaching and learning has received the least amount of attention, both in reform reports and in state, district, and school level efforts to restructure schools"(p. 3). Restructuring must begin with teaching and learning. He further cites the National Governors' Association statement that: "Few reform reports have touched on the heart of the educational process, what is taught and how it is taught (National Governors' Association, 1989, p. 1)" (p.3).

Significant restructuring cannot be done without the help of businesses, state governments, and local communities. Timar (1989) noted that current reform was merely a patchwork of treaties among self-interest groups with little cohesive policy from either the states or federal government. Educators must be allowed to do their jobs without the restraints that are often put on needed changes. The beginnings of program development and research in these areas are underway and must be continued, but at an accelerated pace. Far too much time has passed working on areas of restructuring that have not produced desired results.

Students of the 1990s must be able to perform in the 21st century--not on standardized tests--but in life. More field studies must be done to establish "what is good" so that schools can become effective in preparing students for life in the future. Pockets of reform are not sufficient; reform must be nation wide so that all students have the same opportunities for success. Finn (1990) indicates that he believes that the changes taking place philosophically are paradigmatic in nature. He believes that the enormity of this philosophical shift in process will be visible only to those looking

back from the 21st century. As Americans we must quit looking for a quick fix and for education to answer all the needs of society. Priorities must be set as to what schools are responsible for. The question, What do we want restructuring to do?, must be answered. The answer must be: to improve student-teacher interaction and performance within the classroom so as to produce capable citizens for the 21st Century.

Appendix
Possible Survey Questions

- To what degree have you accomplished the goals you initially set out with during planning for restructuring?

- To what degree do you as a teacher decide on curriculum to be followed in your classroom?

- To what degree do students participate in the decision as to what curriculum is followed and in what manner?

- What do you consider is the most vital part of a days activity in a class, block or other time segment? Has this changed in the past five years (since you began teaching for those who have less than five years experience?)

- What have you changed in your role that has the greatest significant impact on your class? What other changes in your role have been made?

- Does student interaction play an important role in classes that you teach? In what way?

- How is your classroom physically organized? Has there been any significant change in this area in the past few years since restructuring?

- What use is made of technology in your classes? What is the purpose and to what extent is it used? Was this part of restructuring?

- What areas continue to change at your school, in your class, or within administration/teacher relationships?

- Are there changes which you have committed to that you wish you could change or that you have altered?

- Is there role confusion that has come about through the changes in traditional school structures?

- What do you perceive the relationships between teachers and students should be?

- Has your attitude toward students in your class been altered in any ways through the restructuring process?

- Do you feel that the attitudes of parents toward the school has changed in any way during this process?

- What ideas initially interested you in the restructuring discussions? Are the same ones significant today?

- What problems have you seen with students adjusting to less traditional roles?

- Do you really believe that the changes that have taken place will be long lasting?

- Do you believe that your school will continue to move away from the more traditional school?

- What role do textbooks play in curriculum development and implementation?

- To what extent does assessment reveal the accomplishment of preset goals? How do you know that necessary material will be covered in a less restricted environment?

- What is the most important change that has taken place in your school to enable change in the classroom?

- What further changes would you like to make in your classes and/or school?

- Who or what controls what will happen at your school, in your class, or to individual students?

- Have other teachers picked up on some of the new or innovative methods being used in restructured areas and incorporated them in their classrooms?

References

Au, K. & Mason, J. M. (1981). Social organizational factors in learning to read: The balance of rights hypothesis. Reading Research Quarterly, 17(1), 115-152.

Bazeli, F. P. (1990). Evolution of instructional models within teacher subcultures. Thresholds in Education, 16(1), 1-5.

Berman, P. (1985). The next step: The Minnesota plan. Phi Delta Kappan, 67, 188-193.

Brandt, R. (1988). On changing secondary schools: A conversation with Ted Sizer. Educational Leadership, 45(5), 30-36.

Brandt, R. (1990). Restructuring: Where is it? Educational Leadership, 47(7), 3.

Brandt, R. (1990). On restructuring schools: A conversation with Al Shanker. Educational Leadership, 47(7), 11-16.

Budde, R. (1989). Education by charter. Phi Delta Kappan, 70, 518-520.

Carnegie Council on Adolescent Development. (1989). Turning Points: Preparing American Youth for the 21st Century. Washington, D.C.: Author.

Carroll, J. M. (1990). The Copernican Plan: Restructuring the American high school. Phi Delta Kappan, 71, 358-365.

Casner-Lotto, J. (1988). Expanding the teacher's role: Hammond's school improvement process. Phi Delta Kappan, 69, 349-353.

Cawelti, G. (1989). Designing high schools for the future. Educational Leadership, 47(1), 30-35.

Chion-Kenney, L. (1987, Winter) A report from the field: The coalition of essential schools. American Educator, 18-28.

Conley, S. C., Schmidle, T., & Shedd, J. B. (1988). Teacher participation in the management of school systems. Teachers College Record, 90(2), 259-277.

Crowell, S. (1989). A new way of thinking: The challenge of the future. Educational Leadership, 47(1), 60-65.

Cuban, L. (1988). A fundamental puzzle of school reform. Phi Delta Kappan, 69, 341-344.

Deal, T. E. (1990). Reframing reform. Educational Leadership, 47(8), 6-12.

Denero, S. (1991). School Restructuring and Inter Jisciplinary Curriculum. Presented at the meeting of the Southeastern Conference of Elementary School Principals, Savannah, GA.

Duffy, G. & Roebler, L. (1986). Constraints cn teacher change. Journal of Teacher Education, 27(1), 55-58.

Elison, D. (1986). Improving productivity in teaching. Phi Delta Kappan, 68, 111-124.

Finn, C. E. (1990). The biggest reform of all. Phi Delta Kappan, 71, 584-592.

Foxfire Teacher Outreach Fund, Inc. The foxfire approach: Perspectives and core practices. Pamphlet.

Fullan, M. G., Bennett, B., & Rolheiser-Bennett, C. (1990). Linking classroom and school improvement. Educational Leadership, 47(8), 13-19.

Garrison, J. W. (1988). Democracy, scientific knowledge, and teacher empowerment. Teachers College Record, 89, 487-504.

Gitlin, A. (1990). Understanding teaching dialogically. Teachers College Record, 91(4), 537-563.

Glickman, C. D. (1987). Unlocking school reform: Uncertainty as a condition of professionalism. Phi Delta Kappan, 69, 120-122.

Glickman, C. D. (1987). Good and/or effective schools: What do we want? Phi Delta Kappan, 69, 622-624.

Glickman, C. D. (1989). Has Sam and Samantha's time come at last?. Educational Leadership, 46(8), 4-9.

Glickman, C. D. (1990). School reform at the junction. In Sites, 1(1), 1-2.

Goldman, C. & O'Shea, C. (1990). A culture for change. Educational Leadership, 47(8), 41-43.

Hampel, R. L. (1986). The last little citadel: American high school since 1940. Boston: Houghton Mifflin.

Johnson, W. H. (1990). Inviting conversations: The Holmes Group and Tomorrow's Schools. American Education Research Journal, 27, 581-588.

Keedy, J. L (1990). A field study of restructuring schools. Unpublished manuscript, West Georgia College, The West Georgia Regional Center for Teacher Education, Carrollton, GA.

Klauke, A. (1989). Restructuring the schools. (ERIC Digest Series Number EA 37) Eugene, Oregon: College of Education, University of Oregon, ERIC Clearinghouse on Educational Management.

Lampert, M. (1990). When the problem is not the question and the solution is not the answer: Mathematical knowing and teaching. American Educational Research Journal, 27(1), 29-63.

Levine, D. U., & Eubanks, E. E. Organizational arrangements at effective secondary schools. Publication unknown.

Lieberman, A., & Miller, L. (1990). Teacher development in professional practice schools. Teachers College Record, 92(1), 105-122.

Lomotey, K., & Swanson, A. D. Restructuring school governance: Learning from the experiences of rural and urban schools. Unpublished manuscript.

Maeroff, G. I. (1988). Blueprint for empowering teachers. Phi Delta Kappan, 69, 473-477.

Maeroff, G. I. (1990). Getting to know a good middle school: Shoreham-Wading River. Phi Delta Kappan, 71, 504-511.

Marino, J. L. (1988, February). Between the lines of Boyer, Goodlad, and Sizer. English Journal, 19-21.

Martin, K. & Mc Grevin, C. (1990). Making mathematics happen. Educational Leadership, 47(8), 20-22.

Metz, M. H. (1988). Some missing elements in the educational reform movement. Educational Administration Quarterly, 24, 446-460.

Miles, M. B. & Louis, K. S. (1990). Mustering the will and skill for change. Educational Leadership, 47(8), 57-61.

Murphy, J. (1990, October). Restructuring schools: Looking at the teaching-learning process. Paper presented at the annual convention of the University Council for Educational Administration, Pittsburgh, PA.

Nathan, J. (1984). Free To Teach: Achieving Equity and Excellence in Schools. Minneapolis, MN Harper-Row/Winston.

Nemser, S. F. (1983). Learning to teach. In L. Shulman & G. Sykes (Eds.), Handbook of Teaching and Learning. New York: Longman Publishing.

Newman, F. M. (1989). Student engagement and high school reform. Educational Leadership, 47(9), 34-36.

O'Neil, J. (1989). Piecing together the restructuring puzzle. Educational Leadership, 47(7), 4-10.

Orlich, D. C. (1989). Education reforms: Mistakes, misconceptions, miscues. Phi Delta Kappan, 70, 512-517.

PSI League of Professional Schools. (1990). Program for School Improvement: Action Research - Shared Governance - Enhanced Education. (booklet). Athens, GA: University of Georgia, Program for School Improvement.

Purkey, W. W. (1991). The Fifty Million Dollar Principal. Presented at the meeting of the Southeastern Conference of Elementary School Principals, Savannah, GA.

Rief, L. (1990). Finding the value in evaluation: Self-assessment in a middle school classroom. Educational Leadership, 47(6), 24-29.

Sambs, C. E. and Schenkat, R. (1990). One district learns about restructuring. Educational Leadership, 47(7), 72-75.

Sedlack, M. W., Wheeler, C. W., Pullin, D. C., & Cusick, P. A. (1986). <u>Selling students short: Classroom bargains academic reform in the American high school.</u> New York: Teachers College Press

Shanker, A. (1990). A proposal for using incentives to restructure our public schools. <u>Phi Delta Kappan, 71</u>, 345-357.

Scholastic. (1991, Spring). Schools that work: Putting it all together. <u>America's Schools for the 21st Century Agenda, 1</u>, 32-38.

Shaw, C. C. (1990). On restructuring American schools: An interview with Beau Fly Jones. <u>Thresholds in Education, 16</u>(1), 13-17.

Sizer, T. R. (1986). Rebuilding: First steps by the coalition of essential schools. <u>Phi Delta Kappan, 68</u>, 38-42.

Sizer, T. R. (1987, January-February). High school reform and the reform of teacher education. <u>Journal of Teacher Education</u>, 28-33.

Sizer, T. (1984). <u>Horace's compromise: The dilemma of the American high school</u>. Boston: Houghton Mifflin.

Slavin, R. E. (1987). Cooperative learning and the cooperative school. <u>Educational Leadership, 45</u>(2), 7-13.

Timar, T. B., & Kirp, D. L. (1989). Education reform in the 1980's: Lessons from the states. <u>Phi Delta Kappan, 70</u>, 504-511.

Tyack, D. (1990). "Restructuring" in historical perspective: Tinkering toward utopia. <u>Teachers College Record, 92</u>(2), 170-191.

Tye, B. B. (1987). The deep structure of schooling. <u>Phi Delta Kappan, 69</u>, 281-284.

Wasley, P. A. (1990). <u>A feeling of uneasiness: A story of teacher change</u>. Unpublished manuscript, Brown University, Coalition of Essential Schools.

Wasley, P. A. (1990). <u>A formula for making a difference: A math teacher in the process of change</u>. Unpublished manuscript, Brown University, Coalition of Essential Schools.

Wasley, P. A. (1990). Stirring the chalkdust: Tales of three teachers in the midst of change. Unpublished manuscript, Brown University, Coalition of Essential Schools.

Wasley, P. A. (1990). Trusting kids and their voices. Unpublished manuscript, Brown University, Coalition of Essential Schools.

Wigginton, E. (1989). Foxfire grows up. Harvard Educational Review, 59(1), 24-49.