Organizations are the product of the ideas and interactions of those who work in them. The challenge for learning in organizations is to have a shared purpose and vision of the organization, to develop new ideas arising out of the vision and purpose, to test the ideas in the organizational reality, and to communicate that knowledge to other members. This paper describes how accelerated schools act as learning organizations and "master the cycle of thinking, doing, evaluating, and reflecting." It presents two case studies of accelerated schools in Louisiana, one elementary and one middle school. Accelerated schools are based on three principles—unity of purpose, empowerment coupled with responsibility, and building on strengths. Results of the case studies show that both school cadres used the learning-organizations disciplines in varying degrees. They utilized systems thinking, overcame outdated mental models, learned personal mastery, developed a shared vision, and participated in team learning. (LMI)
ACCELERATED SCHOOLS AS LEARNING ORGANIZATIONS: 
CASES FROM THE UNIVERSITY OF NEW ORLEANS 
ACCELERATED SCHOOLS NETWORK

Ilse Brunner 
Center for Excellence in Metropolitan Education 
University of Missouri-St. Louis 
and Visiting Professor 
University of Klagenfurt, Austria

Betty M. Davidson 
University of New Orleans

Patricia H. Mitchell 
University of New Orleans

ACCELERATED SCHOOLS AS LEARNING ORGANIZATIONS:
CASES FROM THE UNIVERSITY OF NEW ORLEANS
ACCELERATED SCHOOLS NETWORK

INTRODUCTION

In business journals and in management courses the concept of learning organization has become a household word within the last few years. That organizations as organizations--and not only as the sum of their organizational members--can and must learn, using their organizational memory and organizational learning tools, is now a widely accepted fact (Senge, 1990; Senge et al., 1994; Ackoff, 1996). Schools have taken on this challenge of the business world and have started to use the "art and practice" (Senge, 1990, Title) of learning organizations in order to analyze and improve their performance.

No matter how we look at organizations, we must agree, that they are the product of the ideas and interactions of those who work in them. Rules and regulations, policies, budgets, organizational structures may all be imposed by outside forces, but how we as members of an organization react to them and creatively interpret, bend and twist them constitutes the actual organizational context in which we think and interact, work and learn.

Learning in organizations is defined as "the continuous testing of experience, and the transformation of that experience into knowledge--accessible to the whole organization, and relevant to its core purpose" (Senge, 1990, p. 49). The challenge, therefore, is to have an agreed upon purpose, to have a shared vision of the organization within its larger context, to develop new ideas and concepts coming out of that vision and purpose, to test these ideas within the concrete reality of the organization, and to make this knowledge transparent to such a degree that each one of the organizational members will be able to understand and use it in her own work environment. Ray Stata, President and CEO of Analog Devices, Inc. says:
The core challenge faced by the aspiring learning organization is to develop tools and processes for conceptualizing the big picture and testing ideas in practice. All in the organization must master the cycle of thinking, doing, evaluating, and reflecting. Without, there is no valid learning. (Senge, 1990, p. 351).

PURPOSE OF THE STUDY

In this study we pursue two goals. First, we want to give examples of how accelerated schools act as learning organizations and "master the cycle of thinking, doing, evaluating, and reflecting." From our experiences with the Accelerated Schools Project (Hopfenberg, Levin et al., 1993; Finnan et al., 1995) we have taken two accelerated schools in Louisiana that have internalized the accelerated schools philosophy and process and have made substantial school-wide improvements in their educational practices using a systemic approach which connects "the big picture" with day-to-day challenges.

Starting with a shared vision of the whole school community, these schools have taken a hard look at the challenge areas they had identified and the reasons for their existence. The responsible cadres have tested their hypotheses with respect to why these problems exist and have brainstormed solutions. They have developed theories of action and action plans, have implemented and evaluated these action plans, and they have collectively institutionalized new processes and structures as the expressions of their schools' organizational learning.

Using these two examples of learning organizations, we furthermore want to explore how the accelerated schools philosophy and process serve as vehicles for the disciplines that Peter Senge has identified as essential tools for learning organizations. Although these schools did not consciously use Senge's ideas, there seem to be undeniable parallels and connections between
Senge’s disciplines and the philosophy and process of accelerated schools. To illuminate these connections and make us aware of them is the second purpose of this paper. Based on our observations, we want to suggest that a more conscious use of the disciplines may be in the interest of accelerated schools. Proficiency in these disciplines may help accelerated schools to become more proficient in the use of the accelerated schools philosophy and process.

THEORETICAL FRAMEWORK

In his book, The Fifth Discipline, Peter Senge describes what organizations must do to be competitive and successful in a global economy. It seems that schools, whose task it is to educate the young people who will work in this new world economy, will need to heed the same lessons in order to be able to assist their students to become successful players in many different organizations and on many different levels.

According to Senge (1990, 1994), organizations will become successful learners when they (a) adopt a systemic approach to change, (b) analyze and make transparent their mental models of how things work, (c) encourage and support their members in the effort to develop personal mastery, (d) develop a shared vision which contains as much as possible the personal visions of the individual organizational members, and (e) build a unity of hearts and minds in the organizational teams through collective team learning. Using these five disciplines, organizations will be able to achieve the individual development of each of its members and superior performance of the organization as a whole.

Disciplines are "lifelong programs of study and practice" which will lead the learner on a developmental path. According to Senge, a discipline "is a body of techniques, based on some underlying theory and understanding of the world, that must be studied and mastered to put into
practice. As you develop proficiency, your perceptual capacity develops; you gradually surrender to new ways of looking at the world" (Senge et al., 1994, pp. 6-7).

Senge’s disciplines of personal mastery and mental models refer mainly to individual changes. In personal mastery, the organization supports its members in reaching their own potential. Individuals need to articulate their personal visions, develop a clear understanding of their current realities, and then commit to self-set goals and actions (Senge et al., 1994, pp. 193-196).

Mental models determine what we see. They are "the images, assumptions, and stories which we carry in our minds of ourselves, other people, institutions, and every aspect of the world" (Senge et al., 1994, p. 235). Through reflection and inquiry organizations can help their members to become aware of outdated mental models and to be tolerant of many different interpretations of reality based on different mental models. Openly sharing mental models helps an organization in their unity of purpose.

Shared vision and team learning are collective disciplines. When organizations develop a shared vision they gain the commitment of their members to create their own future. Shared images of the future also contain ideas about how the organization will be able to reach this future. These can be developed into goals, guiding principles and preferred practices.

Team learning refers to the capacity of groups to align their thoughts and actions in such a way that they can work together creatively and effectively. Team members know each other’s thoughts and visions to such a degree that the team thinks and acts in new synergistic ways which multiplies the talents of its individual members (Senge et al., 1994, pp. 351-353).
In *The Fifth Discipline*, Peter Senge calls systems thinking "the cornerstone of the learning organization." Systems thinking is a language with which we can describe sophisticated issues, series of patterns, feedback processes, and many other interdependent relationships of a complex set of elements. Given that all systems follow certain principles, systems thinking allows an organization to appreciate the interdependencies of its elements and to be prepared to accept that any change will produce some of the desired results together with some unintended consequences at a different point in the organization or its environment (Senge et al., 1994, pp. 87-94).

Together the five disciplines represent a powerful program for continuous organizational change. They make it possible to build "organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together" (Senge, 1990, p. 3).

In the Accelerated Schools Project we have developed a similar approach to organizational learning geared particularly to the needs and aspirations of schools. The accelerated schools philosophy and process supports schools in their journey toward the best school they can think of for their students, their teachers and staff, and for their community. Building on the fact demonstrated by many accelerated schools that "all students can do high-quality academic work, can engage in collaborative and individual inquiry and research, can communicate effectively, and can meet high standards" (Hopfenberg, Levin et al., 1993, p. xi) school communities make changes in their educational practices in order to encourage their students to live up to this challenge.
Senge's definition of a system highlights the interaction over time of elements which share a common purpose (Senge, et al., 1994, p. 90). Using Senge's definition, we can describe the Accelerated Schools Project as a systemic approach to school renewal. School communities recognize their schools as systems which contain many smaller systems and simultaneously can be seen as elements within larger systems. They are keenly aware that any change in one of the sub-systems of the school affects the whole school, and that any school-wide change may affect larger systemic processes.

The three principles of accelerated schools--unity of purpose, empowerment coupled with responsibility, and building on strengths--and the accelerated values build a framework and focus which undergird and guide the actual change process. The different elements of the change process--(a) developing a shared vision, (b) taking stock of the current realities, (c) comparing vision with reality and setting priorities for change, (d) setting up a new democratic governance structure consisting of work teams, a steering committee, and school-as-a-whole as the decision making body, (e) and a systemic problem solving approach or Inquiry Process--act in similar ways as Senge's disciplines. They are processes in which the disciplines can be exercised and trained. They assist schools in making deep and far-reaching changes at the organizational level and they encourage the members of the school community to make enduring changes in their beliefs and values, their perception of reality, their judgments, and in their work habits (Senge et al., 1994, pp. 17-45).

The five disciplines of a learning organization can be practiced in all parts of the accelerated schools philosophy and process. However, in this paper we will particularly focus
in on the Inquiry Process in which all five disciplines can be used to develop successful strategies to overcome challenges and to move the whole school nearer to its vision.

In accelerated schools, challenges are met and problems are solved in a process that relates the collective aspirations of the school community to the actual reality, creating in this process innovative ways for better teaching and learning. Inquiry looks into the relationship between a school's present situation and its vision of a better school, between its challenges and its dreams. Inquiry is used to look at the priorities which the school has set for itself. It is a process in five stages which directs school communities to (1) focus in on the challenge area, (2) brainstorm solutions, (3) synthesize solutions and develop an action plan, (4) pilot test and/or implement the plan, and (5) evaluate and reassess (Hopfenberg, Levin et al., 1993, pp. 95-121).

First the cadre—a representative group of the school community—explores the challenge area from all sides and looks particularly at the many different perceptions pertaining to the challenge. In this way the challenge area is seen as a complex problematic situation with many different and sometimes contradictory manifestations. In addition, each of these manifestations may have different causes and be part of a complex system of interacting reasons. Therefore, the group develops a list of hypotheses of why the challenge area exists. Many of these hypotheses are based on inadequate mental models and prejudices which have been examined through rigorous testing of the hypotheses with data collected in the field.

Once the data have been analyzed and interpreted, and the true reasons for the challenge area have been established, the cadre will look inside and outside the school to find new and innovative ways of responding to the situation. It will also focus in on the school's vision to
determine which of the brainstormed solutions agree most with their picture of an ideal school. Only then is the cadre ready to synthesize all solutions and to develop an action plan.

In most cases this plan will first be piloted for a certain amount of time and data for its evaluation will be collected. Only when the whole school is committed to implement the plan immediately, the pilot study may be omitted. However, the full scale implementation still needs to be accompanied by a systematic collection of data for its periodic evaluation. Only this evaluation will allow the school to determine how well the solution has worked and what improvements may still be needed in order to be even more effective and to become a true step in the direction of the school's vision.

Used repeatedly for all school-wide challenges, the Inquiry Process allows schools to shape their own destinies and to realize their dreams. Instead of narrowly responding to narrowly defined problems as in most traditional schools, Inquiry enables school communities to effectively use the disciplines of a learning organization. Its systemic approach allows the cadres to take into account the school as a whole, together with its environment, and to find long-lasting solutions with few unintended consequences. Mental models are made transparent in the definition of the challenge area and in testing the hypotheses of possible reasons why the challenge exists. The shared vision of the school is the main criterion to select solutions and to develop an action plan. The commitment to pursue personal mastery is promoted by building on the strengths of the whole school community in the search and implementation of solutions. Finally, team learning is fostered by the intimate knowledge of the challenge area developed by the cadre, and the many deep conversations held throughout the Inquiry Process.
RESEARCH METHODS AND TECHNIQUES

The development of the two case studies was a collaborative effort of the university facilitator, the accelerated schools coaches, and the cadre members of the two selected cases. The university facilitator participated in cadre meetings, read the minutes of all cadre meetings, and collected, analyzed and interpreted the data of the two cases. They also wrote the case studies. The coaches of the two schools assisted in the data collection and responded to formal and informal interview questions. They frequently had long conversations with the facilitator in which their thoughts about the two projects were shared. The cadre members systematically recorded their activities in meeting minutes and are currently collecting data for the first formal evaluations of the implementation of their action plans.

In addition to these data sources, the facilitator used other documentation created by the projects. In the first case which documents the development of extracurricular activities, they looked at surveys, meeting dates, number of participating students, activities of the clubs, and behavior grades of students. In the second case which describes a series of complementary activities to raise test score, the facilitator compared test scores, and reviewed sign-up sheets, parent participation logs, teacher survey data, and student participation in the afternoon tutorial sessions.

The information collected from the cadres and the coaches was in one case triangulated with information collected in open-ended interviews with several students and seven teachers. They responded to questions about the effectiveness of the intervention and of the interest it had created among students. In the second case initial evaluation data were available in the form of test scores. These were used to determine the effectiveness of the program.
ACCELERATED SCHOOLS AS LEARNING ORGANIZATIONS: 
TWO SCHOOL EXAMPLES

As we mentioned before, learning organizations build a new culture in which people start to see the interconnections of their actions. Instead of looking for someone to blame for problems, they seek to find solutions which will satisfy all stake-holders. Instead of juggling for positions, members of learning organizations are keenly aware of their own personal dreams and see how they are related to the collective aspirations of the whole organization. That allows them to invest in personal mastery, to become committed to common goals and to be willing to learn together.

These changes do not come about without structures and dynamics in which initial training and support are embedded. The Accelerated Schools Project has developed a network of regional and local training an support centers which are dedicated to promote the Accelerated Schools Project, to train interested schools and to support them in their efforts to make their dreams a reality.

The two schools which we present in this paper belong to the network of accelerated schools coached and supported by the University of New Orleans (UNO) Accelerated Schools Center. Before we present the two case studies of successful school transformation, we will give a very short description of the Center.

The UNO Accelerated Schools Center is an affiliate of the National Center for Accelerated Schools at Stanford University. Through a grant, funded by The Chevron Companies, the UNO Accelerated Schools Center began with a single pilot school located in the inner-city of New Orleans in 1990. In the fall of 1991, eight new schools initiated the accelerated schools process as part of a statewide project funded by the Louisiana State Board
of Elementary and Secondary Education (BESE). During this time, one additional school also began the process, but this school was funded by local school district resources. Seven additional schools also funded by BESE were initiated into the process in the fall of 1992. Currently there are 42 schools in the UNO Accelerated Schools Network representing 19 school districts in Louisiana, six schools from the Memphis City School District, and one school in Cleveland, Mississippi.

The UNO Accelerated Schools Center provides initial training for school communities, implementing the accelerated schools process and systematic technical assistance to all schools in the network. Additionally, the UNO Accelerated Schools Center facilitates network meetings, so that teachers, administrators, and parents can establish a support system and learn from each other's experiences in the transformation process. Semiannually, the Center also publishes a newsletter highlighting the accomplishments of the schools.

In 1994, the UNO Accelerated Schools Center began building capacity for expansion by piloting a training of trainers' workshop for school districts. The goal of this training was to enable school districts to launch accelerated schools and ultimately become partners with the UNO Accelerated Schools Center.

**CASE STUDY #1**

**INTRODUCTION**

The school selected for this case study is located in a small town in the southern region of the United States. Pineville Elementary School is a member of a city school district. The city elected to develop a city school system rather than become part of the county school district. At the time the decision was made, the city was one of the largest in the state with most of the population of the county located within the city limits. The surrounding area was rural and
sparely populated. Presently, there are ten schools in the City School System—three lower elementary schools, three upper elementary schools, one magnet elementary school, one alternative school, one junior high school, and one high school.

The original school was a two room building that was located across the street from the current school building. The faculty consisted of a principal and one teacher. The school housed grades one through four and the building was heated, as the teacher stated, by a pot bellied stove. The present building that houses the school was constructed in 1949. The name was derived from the area of town in which the school is located. When the school opened, grades one through four were taught, then expanded to one through eight, and today grades three through six are educated in the school.

BACKGROUND

Pineville Elementary School is located in a very low socio-economic area of the town with approximately 89% of the students on free or reduced meals. The current principal is the twelfth person to hold the position. Seventy-five percent of the students are bussed to school. Most of the students in the school are being raised by single parent or in homes of grandparents.

Pineville became a part of the UNO Accelerated Schools Center during the 1994-1995 school year. During the three years of implementing the process the role of the principal changed several times. The interim principal was and the current principal is highly supportive of the Accelerated Schools Project, whereas the principal who had been the longest in the school did not feel up to these changes.
IMPLEMENTATION OF THE PROCESS

Year One

The school community made great strides during the first year of implementing the process. The vision created by the school community reads as follows:

"Pineville Accelerated Elementary School is dedicated to learning with our hearts, heads, and hands, providing a safe, wholesome, caring and creative environment for all members of the school family."

The taking stock process was completed and three cadres were formed--discipline, curriculum, and school climate. The faculty concluded the inquiry training and the year ended with each cadre setting priorities and in the process of developing an action plan.

Year Two

The number of students for the 1995-1996 school year was 215 with one administrator, three paraprofessionals, one guidance counselor, and 12 teachers. The ethnic background is 51% Afro-Americans, 49% whites, and 0% others. The change of principals and the new teachers on the staff prompted the school-as-a-whole to vote to reduce the number of cadres from three to two--retaining discipline and school climate. The shift in cadre membership prompted each cadre to revisit their challenge area. The cadres reviewed the concerns identified in the taking stock process completed in year one. These concerns for the School Climate cadre were:

* students did not feel safe on the school yard (from other students and strangers)

* school repairs done in a timely manner

* students feel embarrassed at school due to lack of experiences
* lack of organized clubs to broaden the base of experiences for the students (in the rural schools of Louisiana, the establishment of clubs is common practice. Several years ago, Pineville sponsored a 4-H Club. This club was not very successful. Even though the city is located in a rural part of the state, the children do not live on farms and the major industry of the region is not farming).

* visitors accessibility to the classrooms

* low student self-esteem often resulting in discipline problems and lack of motivation towards academics

* educational level of the parents

**FOCUS ON THE CHALLENGE AREA**

Based on the taking stock information and the vision that states in part, "...providing a...caring and creative environment for all members of the school family," the School Climate Cadre's focus of concern was that the student's low self-esteem was due, in part, to the lack of available extra-curricular experiences for the students of Pineville School. The Cadre's rationale for the area of concern was that the lack of self-esteem on the part of the students resulted in discipline problems and lack of motivation to achieve academically.

In an attempt to understand why the challenge area existed, the cadre discovered the following underlying causes: Lack of time for activities, lack of funds, lack of teacher sponsorship, discipline problems, lack of parental support, not enough interest, age of the children, lack of knowledge about organizations (clubs), and no one has ever promoted these activities.
In the exploration of this challenge area, the cadre developed the following list of hypotheses that described potential underlying reasons why the challenge existed:

1) The school did not sponsor any extra-curricular activities.
2) The students lacked self-esteem due to their limited exposure to activities outside of the school curriculum.
3) The families lack both the funds and the initiative to enroll their children in interest related activities.
4) The city has limited funds to offer community activities for the children.

**Brainstorming and Testing Solutions**

A Parent/Student Survey was developed to determine if the students would be willing to join a club, be willing to pay dues, and other related questions. The survey concluded requesting the students to rank their top five choices of interest. The Staff Survey explored the staff's opinion on their willingness to sponsor, support, and devote time to a club. The staff was also requested to rank order the clubs they would be interested in sponsoring.

The response to both surveys was very positive. Students, parents, and teachers expressed a willingness to participate in and support the organization of clubs at Pineville School. The response from the teachers and staff was 100% in favor of sponsoring and/or participating in the clubs at Pineville School. Combining the choices of the students and teachers the cadre selected the following areas of club interests: Art, hunting and safety, gardening and environmental, photography, newspaper, music, and science.
DEVELOPING AN ACTION PLAN

Having received an enthusiastic reply to the question of organizing clubs at Pineville School, the cadre began brainstorming organizational solutions. Looking at resources inside the school itself, the cadre created and posted a sign up sheet for teachers to select the club they wished to participate or sponsor. Each club needed two teachers to serve as sponsors. A letter was mailed to parents and students explaining the types of clubs offered and soliciting parental involvement and expertise. One teacher volunteered to contact the parents that expressed an interest via the survey. Posters were made and displayed around the school building to inform the students and visitors of the clubs.

Seeking possible assistance from outside the school, the cadre contacted by phone calls, letters, and personal communication various people knowledgeable in the areas of interest. Area businesses were also contacted for financial aid and/or materials and supplies.

An organizational plan for the clubs was developed by the cadre. The clubs would meet on the last Friday of the month from 1:00 p.m. until dismissal time at 2:40 p.m. A small monetary amount will be charged for dues. Each student in the school would be given the opportunity to select his/her choice of clubs. To maintain membership in the clubs, students must maintain at least a B average in behavior. A grade of C or below in behavior for a nine weeks period would automatically place the student on probation for the next nine weeks. The student would retain his/her club membership while on probation.

An in-school suspension or a time-out (misbehavior resulting in loss of recess privileges) would also place the student on probation. A second violation in either area, would result in dismissal from the club.
EVALUATION AND ASSESSMENT

The evaluation/assessment measures the cadre established in the action plan consist of:

1) Documentation of meeting dates

2) The number of students in the club

3) The number of students attending each meeting

4) Each club will submit a written end of the year summary of the activities and projects.

5) Club sponsors and members will be asked if they wish to continue in the same position next year.

6) *At the end of each nine weeks grading period the behavior grades of all students will be reviewed. Those receiving a C or below in behavior will be placed on probation from club membership.

7) At the end of the year, the records of students placed in time-out and in-school suspensions will be obtained to determine if there is an increase of decrease from previous years.

* The club became organized during the second nine weeks grading period. This study was completed before the end of the third nine weeks period thus club membership had remained status quo.

As the 1995-1996 school year ended, the action plan of the School Climate cadre was in place and ready to implement in the fall of 1996. In October of 1996 each student in the school was given the opportunity to select and join the club of their choice. For various reasons (mainly parental objection) 25 students elected not to participate in the clubs. As the activities
of the clubs evolved, several clubs began to meet more than once a month. By December each club reported the following activities:

* The Art Club made decorations for the school Christmas tree exhibited in a city wide celebration entitled Christmas in the Park. Valentine cards were made and given to the members of a senior citizen home in the city. A field trip to New Orleans is planned for the spring to see a play at one of the theaters thus exposing the members to different art forms.

* The Music Club is planning a patriotic program based on famous Americans to be presented to the school community during the month of February. The Music and Art Clubs will join forces and finances and travel to New Orleans to attend a musical performance.

* The Science Club focuses on a different subject each week. The solar system was the focus of one week. The students viewed a video of the solar system and constructed the parts of the system to scale. The planets in relationship to the sun were carefully measured and exhibited in one of the halls of the school. The Club plans to visit the planetarium in New Orleans.

* The Garden and Environmental Club planted flowers and a vegetable garden in front of the school. They also redid the planters in the patio area of the school. The plants for both projects were purchased with money from the school fund.

* The Hunting and Safety Club obtained sponsorship from a community organization and are in the process of organizing a fishing trip. Gun safety and tips on hunting and fishing were the focus of several meetings. Plans are complete for a representative from the State Department of Wildlife and Fishery to attend one of the meetings to discuss and demonstrate skeet shooting was an upcoming event.
* The Photography Club made pin hole box cameras. They also created a dark room to develop the film. They are now attempting to improve both projects.

* The Newspaper Club published a monthly paper entitled Pineville Press. Students and staff are interviewed, the students write and type the text for the paper. Copies are sold for twenty-five cents.

**IMPLICATIONS**

A site visit to the school was made in January 1997 by the university facilitator specifically to conduct informal random interviews with several teachers and students to determine the attitude toward the clubs. Seven teachers were interviewed. The common verbiage from each teacher was that the clubs were an overwhelming success. As the sponsor of the Hunting and Safety Club stated, "The students are constantly asking me if the club could meet once a week instead of once a month." The Art Club sponsor related that the club meets weekly during recess at the student's request. Each of the teachers related, albeit in different words, that the clubs had generated enthusiasm and excitement among the entire student body and had changed the ambiance of the school.

The interviews with the students reflected the excitement of the teachers. As one fifth boy stated, "I like it [the Hunting and Safety Club] a lot. I have come to every meeting and look forward to the next one." A fifth grade member of the Photo Club related that the members had "made black and white cameras and had made a dark room to develop the pictures. We also got on the internet to see what others had done--like create calendars with pictures. Also like what happens to pictures. Why you have red eyes and stuff. I like to come." A third
grade student summed up the feelings of the students when she said, "I wish I could go every Friday."

CASE STUDY #2
INTRODUCTION

The school selected for this case study is a middle school serving an urban area with a population of 3,483. The school has an average of 360 students yearly in grades 5-8. The staff includes one principal, one assistant principal, one guidance counselor, one librarian, one Title I Curriculum Coordinator, 24 teachers, and 13 support personnel.

Currently, 64% of the school's students receive free lunch and 17% receive reduced lunch indicating a high percentage of economically deprived children. The ethnic makeup of the student population is 65% white, 34% black, and 1% Asian. Eighty-seven percent of students are scheduled in regular education classes, while 13% of the student population are scheduled into special education classes. One class of ten students is self-contained while two classes of approximately 35 students are mainstreamed for elective classes.

BACKGROUND

The school launched the accelerated schools process in August of 1994 following the coaching model. The principal, two teachers employed with the school, and one district central office representative were trained in the coaching model in August of 1994 through the UNO Accelerated Schools Center. These coaching representatives then conducted a three-day schoolwide training in the accelerated schools process with the assistance of a mentor representative from the University of New Orleans Accelerated Schools Center. On the third day of the schoolwide training, four taking stock committees were formed which included Curriculum and Instruction, Parental/Community Involvement, School Climate, and Student...
Discipline. Each taking stock committee then began the process of taking stock of needed information for each area.

The school was granted permission by the District School Board to bank an extra fifteen minutes per school day so that one full day per month be devoted to taking stock committee meetings. On the last Wednesday of every month the entire school staff, community representatives, parents, and students reported to school to work in their committees. Students not volunteering to work on a taking stock committee remained home for that day.

In December, 1994, surveys were sent out to community leaders, parents, teachers, and students. Survey information was completed by the end of January of 1995. In April of 1995, taking stock committee reports were finalized and presented to the school-as-a-whole. The vision statement was then formulated utilizing ideas from community, parents, school personnel, and students. Cadres were then established based on priority areas identified. The three cadres established were Curriculum Enrichment and Instruction, Parent/Community/Family Relations, and School Environment and Climate. The steering committee was then developed to consist of the school principal, assistant principal, Title I Curriculum Coordinator, two coaches, and one representative from each of the three cadres.

The Vision Celebration was held in May as a culminating event celebrating the first year of the accelerated schools process. The celebration began with a schoolwide Mardi Gras style parade through the main street of town with every business participating by decorating storefronts with banners of support for the school and its launching as an accelerated school. The whole community came out to view the parade. The parade ended at the school with the school community enjoying a huge picnic and fun day which was sponsored by local businesses.
The cadres reconvened in August of 1995 prior to the opening of the school year to begin planning for their second year in the process. The district school board again granted the school permission to maintain the school’s daily schedule so that the Accelerated School Day would be held on the last Wednesday of every month for the 1995-96 school year. All cadres met from 9:00 A.M. to 2:00 P.M. working on the Inquiry Process and developing action plans. The steering committee met from 2:00 P.M. to 2:30 P.M. to discuss the progress of each cadre. When needed, school-as-a-whole met from 2:30 P.M. to 3:00 P.M.

IMPLEMENTATION OF THE PROCESS

The Curriculum Enrichment and Instruction Cadre of this school was selected for this case study based on the intensive use of the Inquiry Process and development of the Action Plan by the cadre. This action plan focused on schoolwide improvement in student achievement. The cadre identified three priority areas of focus for year two and three of the accelerated schools process based on taking stock information, including survey and non-survey data collected the previous year.

The major goals and objectives were identified based on the challenge of improving test scores in the areas of reading and math on the California Achievement Test (CAT), the Louisiana Educational Assessment Program (LEAP), and the district’s Criterion Reference Test (CRT). Following the Inquiry Process, the cadre first analyzed the results of test scores from 1992-1994 and reported for each of those years, students were performing below the national percentile of 50%. Total battery scores on the CAT indicated students scoring in the 30 to 40 percentile range in both reading and math. The LEAP tests minimum mastery levels in reading and math. Based on a 100% mastery scale, the school reported 80% of students in grades five
and seven passing LEAP in reading and math. Since LEAP measures minimum skills mastery, the cadre felt that this was a challenge area of concern. LEAP tests only grades 5 and 7 in reading and math. The CRT is utilized by the district to determine pass-fail status in the area of reading. A score of 70% or below indicates failure. This school is tested on the CRT in grades 5-8. Analysis of CRT test scores for the years 1992-94 indicated an average of five students per grade failing the CRT with a score of 70% or below. After compiling test score data on the three major testing programs, the cadre identified the problem area as weakness in the areas of reading and math.

FOCUS ON THE CHALLENGE AREA

The cadre then devoted research on why this problem area (weakness in the area of reading and math on the CAT, LEAP, and CRT test scores) existed. Several hypotheses were reported including overcrowded conditions in the classrooms, lack of parental involvement, insufficient time-on-task during classroom instruction, weakness in working on test taking skills, lack of student motivation, too many tests being given during a two-week window period mandated by state guidelines, and lack of student self-esteem.

The Curriculum Enrichment and Instructional cadre then began identifying the goals of the cadre to address this problem area. Steering Committee agreed with the cadre that working through these priority areas would address the school's vision of "Creating an environment in which optimum learning will occur offering a variety of educational electives as well as meeting the special needs of students, staff, and community." In order to accomplish this vision, the cadre agreed that the school should endeavor to achieve the following goals:
1. Minimize the removal of students from the regular classroom by changing from a pull-out system to classroom tutoring, collaborating with the regular classroom teachers to target the needs of all students in fifth, sixth, and seventh grade reading and in fifth grade math, thereby reducing pupil teacher ration in the regular education classroom.

2. Provide opportunities for extra skill development while at the same time reducing the pupil-teacher ratio for sixth, seventh, and eighth grade math students through extended-day tutoring.

3. Provide opportunities for professional development for administrators, teachers, and other school staff members to provide a high-quality curriculum including powerful learning and teaching techniques.

To work toward obtaining these goals, several strategies were reported to Steering Committee as priority areas:

1. to reduce pupil/teacher ratio by providing classroom tutoring by assigned classroom teacher aides in the reading and math classes,

2. to provide extra skill development for at-risk students through extended-day tutoring,

3. to increase parental involvement, and

4. to provide professional growth opportunities for teachers.

The cadre then worked on developing action plans to implement these strategies which included establishing an extended-day tutoring program, classroom tutoring utilizing the assistance of a Title I Lab Technician and a classroom Teacher's Aide collaborating with the classroom teacher,
peer tutoring in cooperative learning groups within the classroom and noontime tutoring for students who scored below 50% on teacher-made tests.

**DEVELOPING AN ACTION PLAN**

The school obtained Title I funds to provide salaries for six teachers each working two hours per week after school which allowed for two teachers providing extended-day tutoring services three days per week. Students who had performed below 50% in reading and/or math on the CAT, below 80% mastery on LEAP in reading and/or math, and below 70% on the CRT in reading and/or math were recommended to participate in the extended-day tutoring program on a voluntary basis. Parents were also invited to volunteer their time by assisting in the extended-day tutoring program as monitors.

Title I schoolwide funds were budgeted for salaries for one full-time paraprofessional and one full-time classroom teacher’s aide to provide classroom assistance in the regular classroom tutoring program. The paraprofessional and the aide collaborated with the classroom teachers in reading and math to provide added assistance to students performing 50% or below on class tests.

Staff development inservices were provided once a month to introduce cooperative learning techniques to all teachers. The UNO Accelerated Schools Center mentor provided two inservices on developing powerful learning lessons. The teaching staff began utilizing these techniques of instruction to make learning more relevant to the lives of the students.

Title I funds were also used to create a parent center in the school. A parent facilitator was also hired for three hours daily to coordinate parent/teacher/student activities. A weekly "Tete A Tete" parent meeting was scheduled to give the parents the opportunity to visit the
school to get useful information about school activities or useful parental guidance tips. Parent volunteers worked with the parent facilitator to help prepare materials for teachers and students in the parent center. The parents also help by assisting in the classroom to keep students on task. This comprehensive plan was approved by Steering Committee and school-as-a-whole in October, 1995, and the pilot program was implemented in January of 1996 and continued until the end of April, 1996.

EVALUATION AND ASSESSMENT

Initial assessment of the project was conducted in August of 1996 after all test score results were returned to the school. Evaluation methods included sign-in sheets to identify an increase in student participation in the extended-day tutoring program, schoolwide increase in the CAT scores in reading and math, increased number of students passing LEAP, and reduced failure rates on the CRT. The cadre decided to track the progress of individual students enrolled in the extended-day tutoring program as to their progress on classroom achievement in reading and math, LEAP scores, CAT scores, and CRT scores for a three year period.

In reviewing the CAT score results for 1996, the results showed a gradual increase in percentages of students scoring above 50 percentile. Grade 5 showed a 16% increase for reading and math. Grade 6 was the only grade showing a decrease in CAT scores with an 8.60% decrease in reading and a 15.7% decrease in math. Grade 7 showed an 11% increase for reading and a 23% increase for math. Grade 8 resulted in a 10% increase for reading and a 5% increase for math.
The LEAP results showed definite attainment of the objectives with a 96% attainment in grade 5 in math, and a 94% attainment in grade 5 in language arts. Grade 7 language arts was outstanding with a 100% attainment, and grade 7 math had a 95% attainment.

The reading and math criterion-reference tests resulted in all grades showing above 75% mastery. Reading scores for grade 5 resulted in 79% mastery; grade 6- 92% mastery; grade 7- 99% mastery; and grade 8- showing 95% mastery. Math results showed 82% mastery in grade 6. Grade 8 mastery showed the greatest increase with 79% mastery compared to 1994’s 54% mastery. Based on these levels of achievement, the cadre recommended to Steering Committee to continue the classroom tutoring and extended-day tutoring for the 1996-97 school year. After receiving approval of Steering Committee, the School As A Whole approved to continued plan.

In reviewing the parent volunteer project, sign-in sheets and parent participation logs showed increased parent participation on various levels. For the 1995-96 school year, there were 74 parent conferences held, 12 parent meetings conducted, 46 parent volunteers working in the school on a irregular basis with 210 hours of time worked by parents. As of January, 1997, reports showed an increase in all areas: 96 parent conferences held, 22 parent meetings conducted, 23 parent volunteers working in the school on a regular basis providing 229 hours of volunteer service.

Based on this review of the parent volunteer project, the cadre has recommended to maintain ongoing activities to get parents involved in their children’s education. Also based on sign-in sheets and teacher survey data, teachers report cooperative learning as a vital part of the school’s program. Teachers are also developing powerful learning lessons and sharing lessons
by conducting teacher presentations to school-as-a-whole, UNO Network meetings, and conducting demonstration lessons to other schools in the area. A comprehensive evaluation report will be presented to school-as-a-whole in August, 1997.

**IMPLICATIONS**

In reviewing the initial evaluation report, the cadre reported additional evidence of success. It was thought that only students with low test scores would participate in the extended-day and classroom tutoring programs. However, as the programs progressed, teachers found that even students with high test scores were asking to attend tutoring sessions to improve specific skills they had identified as needing improvement. Sign-in sheets showed that an average of 24 high achieving students were attending the tutoring sessions on a regular basis. Two parent volunteers who assisted with the extended-day tutoring program reported that they felt that they had become more confident in helping their own children with homework because of the skills they learned while being in the tutoring sessions. Several parents have requested that the school offer a program for parents to "re-learn reading and math skills that the parents have forgotten or never learned." One parent is presently looking into returning to night school to obtain a high school diploma. She stated, "After sitting in on several sessions of the tutoring program, I felt it important that I get my high school diploma, so I can help my children better with their homework."

**ACCELERATED SCHOOLS AS LEARNING ORGANIZATIONS: HIGHLIGHTING THE DISCIPLINES**

When we look at the two case studies from the perspective of the disciplines of a learning organization we can see that both school cadres--without being consciously aware of it--used the disciplines in varying degrees in the different stages of the Inquiry Process. In order to make
the connections between the Inquiry Process and the disciplines more obvious, we will highlight some of the activities that demonstrate the exercise of the disciplines.

**Systems Thinking**

We can see that both schools had a systemic view of their challenge areas, both in the analysis of the interactions that led to the challenges and in their package of solutions which they finally implemented. The Pineville cadre took seemingly unrelated findings of the Taking Stock Process--discipline problems, lack of motivation, and self-esteem problems--as interconnected symptoms of deeper lying problems. In a traditional school most probably these findings would have been treated as isolated problems with changes in the discipline code, motivational activities, and a self-esteem curriculum. The systemic perspective allowed the cadre to find innovative solutions which opened the school towards the community involving parents, community, organizations, and businesses in addition to their own teachers.

The middle school cadre looked for connections between low test scores in reading and math and a list of reasons which could explain this situation. In a comparison between the identified reasons and the school vision, the cadre came up with three interconnected strategies that would help students improve their learning: Minimize removal of students from the classroom and reduce the student-teacher ratio; provide extra skill development in the afternoons; and develop the teaching skills of the faculty. Seeing the challenge systemically helped the cadre design an action plan which used Title I moneys creatively, recruited parents as volunteers, used noontime breaks and afternoon for tutoring, installed cooperative learning groups with peer tutors, and set up opportunities for professional development for all teachers.
Mental Models

The cadres clearly had to overcome outdated mental models that were not in tune with their reality. By voicing their hypotheses with respect to the reasons why the challenge areas existed in their schools and by testing them with actual data, they found out that some of their pet hypotheses were not true. The Pineville cadre thought that lack of time, funds, student interest, parent support, teacher sponsorship were responsible for the non-existence of clubs with extracurricular activities. However, when they proposed the organization of clubs to improve student learning, motivation, discipline, and self-esteem, they found that each one of their mental images were proven wrong. Everyone was eager to help and participate.

In the case of the middle school the information is not as clear cut. However, we can see that the hypotheses of lack of student motivation and parent involvement also had to be revised. In addition to the targeted students with low test scores several highly capable math students participated in the afternoon tutoring session in order to further their studies. With respect to the parents, the parent center was very successful in involving many parents, and parent volunteers benefited from their participation in the tutoring sessions.

Personal Mastery

Personal mastery--the desire to broaden one’s personal capacity in order to achieve personally meaningful goals--can also be seen activated in both schools. Pineville teachers, parents, and community members have now the opportunity to use and improve their skills and talents. Art, music, science, gardening, photography, journalism, and hunting were talents discovered in the school community and put to work for the benefit of their children. What better use is there of one’s own talents?
In the middle school, parent and student participation in the tutoring programs also furthered in some individuals their desire for personal mastery. The parent who will return to night school in order to obtain a high school diploma and the parents who request parent programs in math are good examples for these personal aspirations.

**Shared Vision**

A school's vision is both its inspiration and its destiny. To develop a shared vision is the first activity an accelerated school is engaged in. It provides the school community with a concrete image of its shared desires and aspirations, and it is the standard with which all school innovations are measured.

The shared visions of both schools were instrumental in the selection of solution proposals and action plans. Only those activities were chosen that could be considered a step towards the shared dream. The clubs in Pineville Elementary are an expression of its commitment to "learning with our hearts, heads, and hands, providing a safe, wholesome, caring and creative environment...." Similarly, the set of learning improvement scenarios and activities in the middle school obey clearly to the dictates of a vision which focuses on "an environment in which optimum learning will occur...."

**Team Learning**

Cadres are good places for team learning. The shared desire to deeply understand a challenge and to find innovative solutions that will improve the whole school are excellent conditions to develop and exercise the skills for dialogue and skillful discussion (Senge et al., 1994, pp. 351-364). The Pineville and the middle school cadres had many opportunities to hone their skills in active listening, inquiring into the depth of the challenges, using each other's
strengths and building on each other's suggestions, until they finally came up with their action plans. The evaluations of the implementation process and the final results of the innovations provide also opportunities for team learning.

Perhaps one condition that helps team learning is the democratic governance created by the cadre structure. The cadres of both schools had the mandate to find solutions to a particular challenge area but they were free to work and learn together in an environment of openness which was supported by the whole school community. There was no competition involved and there were no demands from the administration to come up with a particular solution. Only the school vision provided a frame and guidelines for the creative Inquiry into the problematic situation.

CONCLUSIONS

It is always fascinating to see how accelerated schools truly create their own destinies, building on the aspirations and strengths of their school communities. Although all accelerated schools are inspired by the same philosophical principles and follow the same process, they all develop different paths to make their visions a reality. The two schools give us a good example of two different paths selected to increase motivation and promote learning among their students. This seems to us a characteristic of true learning organizations.

The success of the Accelerated Schools Project with over 1000 accelerated schools after 10 years of implementation is an indicator of the power of its learning process. However, it seems to us that the insights developed by Peter Senge and his associates can enhance the ability of the accelerated schools to think and act more strategically. A conscious use of the disciplines as part of the accelerated schools culture will help transfer the lessons learned from the changes
in the schools to the hearts and minds of each member. And it is here, in the hearts and minds of the members of the school communities, that enduring change takes place, and the deep learning of the organization is located.
REFERENCES


I. DOCUMENT IDENTIFICATION:

Title: Accelerated Schools as Learning Organizations: Cases from the University of New Orleans Accelerated Schools Network

Author(s): Dr. Ilse Brunner, Dr. Betty M. Davidson and Patsy Mitchell

Corporate Source: Center for Excellence in Metropolitan Ed. Univ. of Missouri and the Univ. of New Orleans

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract Journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the identified document, please CHECK ONE of the following options and sign the release below.

[ ] Permitting microfiche (4"x 6" film), paper copy, electronic, and optical media reproduction

[ ] Permitting reproduction in other than paper copy.

Sample sticker to be affixed to document

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Sample
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Level 1

Sample sticker to be affixed to document

"PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY
Sample
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Level 2

Sign Here, Please

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: Betty M. Davidson
Printed Name: Betty M. Davidson
Organization: University of New Orleans
Address: University of New Orleans
Dept. of Ed. Leadership, Counseling, Foundations New Orleans, LA 70148
Telephone Number: (504) 280-5682
Date: March 31, 1997
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or if you wish ERIC to cite the availability of this document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents which cannot be made available through EDRS).

<table>
<thead>
<tr>
<th>Publisher/Distributor:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price Per Copy:</th>
<th>Quantity Price:</th>
</tr>
</thead>
</table>

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

<table>
<thead>
<tr>
<th>Name and address of current copyright/reproduction rights holder:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td></td>
</tr>
</tbody>
</table>

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC Clearinghouse on Educational Management
College of Education - Agate Hall
5207 University of Oregon
Eugene, OR  97403-5207

If you are making an unsolicited contribution to ERIC, you may return this form (and the document being contributed) to:

ERIC Facility
1301 Piccard Drive, Suite 300
Rockville, Maryland 20850-4305
Telephone: (301) 258-5500