TRANSFORMING ABBOTT SCHOOLS IN NEW JERSEY

Guidance from the Field

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November 30 1997

Paper prepared for the Education Law Center, Newark, New Jersey with funds from the Ford Foundation

I. INTRODUCTION

New Jersey faces a rare opportunity and a daunting challenge. The state now has the financial resources with which to provide the children who attend its urban public schools with an education that is second to none. It has the challenge of organizing at the state, district, and school level to create and implement such a system. Meeting the challenge will not be easy and it will take time.

New Jersey has begun the process of reform by adopting academic content standards and implementing a set of achievement measures, some of which provide students and teachers with “early warnings” of potential achievement difficulties. Over time, the assessments will be refined so that they better match the state’s content standards. With standards as the heart of state-level reform, each urban district and school must shape local reforms that will be effective for its children. Districts and schools, in collaborations of teachers, parents, administrators and others concerned with increasing children's achievement, must forge and select high quality programs in which all children genuinely have the opportunity to achieve agreed upon standards. The goal of this paper is to provide those engaged in this essential task with useful information and insights with which to make the decisions that will shape urban school reform.

The report does not offer a blueprint or recipe for reform; none exists and none could exist. No one practice or program, by itself, will meet the needs of all students in all schools. But, each district does not have to invent the reform as if we knew nothing about the strengths and weaknesses of different educational approaches. Urban districts have been trying to reform for decades. Their efforts have yielded some success and considerable knowledge about what is important and about barriers to reform. New Jersey as a state and its urban districts can learn from the experiences of others as it moves forward with developing its own unique approaches to reform.

This report, therefore, provides information about what others who have been in the business of improving urban schools have learned. The knowledge that this paper draws on comes from teachers, administrators at the state and local levels, researchers, and funders who work in urban schools and school districts. It aims to provide what might be called "best thinking" about what is important in school reform when the goal is increasing children's achievement to high, publicly agreed upon standards. The paper should be used to spark ideas about what can be effective and what needs to happen to create effectiveness. The paper also provides cautions about the pitfalls and barriers to genuine educational improvement.

The paper begins with a discussion of standards as the basis for reform. The phrase "standards-based reform" has become familiar to educators and to the public, but its meaning and implications for teaching, learning and assessment are often unarticulated. Also left unspecified are the organizational conditions and capacities necessary to fully implement the reform. Standards are not an entire reform; they are a piece of what has to happen to improve student achievement. Standards will not implement themselves; they must be located in contexts that are designed to foster their achievement. As the Abbott ruling states, "Real improvement still depends on the sufficiency of educational resources, successful teaching, effective supervision, efficient administration, and a variety of other academic, environmental, and societal factors needed to assure a sound education."

This paper discusses the part that standards can play in school reform as well as the other components of reform that are essential to their successful implementation. It addresses key issues which must be well-managed at the state, district and school levels to assure effective implementation of standards reform. The first section provides an overview of standards and their implications for the rest of school reform. The paper then turns, in section III, to a discussion of what high quality teaching looks like in light of new understandings about how children and adults learn. The section focuses on the form and content of professional development that is likely to enhance teachers' capacities. The fourth section describes changes in principals' roles and responsibilities in the context of reform and discusses their need for professional development. Section five provides a brief discussion of accountability in the context of standards reform and section six focuses on issues of district and school organization. The seventh section stresses the centrality of leadership at the state, district and school levels and offers suggestions for policies and practices that can help forward reform. The concluding section reminds readers that the Abbott decision is about helping children. All decisions that follow from it must also be about children; they must reflect the leadership, commitment and will to design and implement standards-based urban school reform so that all of New Jersey's urban youngsters have genuine opportunities to learn at high levels.

II. STANDARDS: THE HEART OF TEACHING AND LEARNING REFORM

Across the United States, states, school districts and individual schools are working hard to determine what they want students to know and be able to do, the quality with which they want students to know and be skillful, and how they will measure or assess students' knowledge and skill. It is difficult to open a newspaper or listen to the radio without hearing something about academic standards. One might think that no one had ever considered these questions before, that schools did not know what to teach when or what constituted adequate or brilliant achievement, that they did not know how to assign grades to students' work. Why, one might ask, is there all this talk about standards?

In truth, the American education system has not openly articulated what it expects of students other than achievement of minimal standards as measured by norm-referenced tests. Individual districts and schools certainly had standards, but they varied for students depending on whether they were rich or poor, immigrant or native-born, members of minority or majority groups. Two children taking an American History or a Math class in the same high school might encounter vastly different curriculum content and be graded on very different measures of accomplishment. Everyone knows that an "A" in one teacher's class may be achieved by very different levels of work than an "A" in another teacher's class. As a nation, we have accepted this system with its agreed-upon tacit expectations and standards and with the often explicit understanding that some children will never be able to achieve as much as others.

The current discussion of standards is different in that it is an attempt to make expectations about what should be taught and learned and how well it should be learned a matter of public record. And, such standards are for all students whether they are wealthy or poor, whether they merit special education services or speak a first language other than English, whether they are male or female, whether they are native-born or immigrant. The discussion of standards has opened up the process of talking about what is taught, what is taught to whom, and what students are expected to learn. This is good because it encourages the participation of all stakeholders in each community. Standards reform is not a program of school reform; it is a way of thinking about teaching and learning. Why does this approach hold promise for New Jersey's urban youngsters?

First, many educators at all levels of the educational system think that students should be held to higher standards of achievement. Researchers, educators, and policy makers now argue that for the better part of the last 75 years there has been a growing market for what are called "dumbed-down" texts and academic content tailored to judgments about which children can master different kinds of content.

As more and more children had access to education and stayed in school longer, educators found it difficult to help them achieve. Too many came to believe that the children's backgrounds and socio-economic circumstances made it unlikely that they would learn at high levels. Many thought that pushing children to try would harm them psychologically. As a result, there was pressure on those who produced books and other educational products to create materials that were easy. This trend toward simpler materials was reinforced by states' recent attention to basic skills and functional literacy rather than to higher order thinking and content knowledge. The current call for standards is primarily a call for **higher** standards that are deemed necessary to prepare children for the world as it is and as it will become.

Second, and perhaps most important in the context of New Jersey's reform agenda for urban schools, students in urban settings have rarely been held to the same standards as have students in more affluent school systems. **Standards reform has an equity component: it says that all students, regardless of their circumstances, can achieve at high levels and will be held to the same high standards as all other students.** By implication, schools must provide students with the opportunities to learn that will enable them to meet such standards. This assumption about high standards for all students is reflected in the Improving America's Schools Act (IASA), the reauthorization of ESEA which mandates that students receiving services under the Act be held to the same standards as all other students. It is an essential component of the Abbott ruling. The standards movement seeks to end policies and practices that sort children into differentiated learning environments on the basis of perceived ability that, de facto, provide them with weak academic programs.

Third, reforms that are centered on high academic standards shift the educational emphasis to what the learner is learning and away from sole attention to what and how the teacher is teaching. One urban administrator responsible for her district's professional development described the distinctiveness of standards reform this way:

> What a scope and sequence tells you is at each level and in each content area what content **you're** responsible for, not what kids will learn. And, what standards tell you is what kids will learn. Those are two very different ways of looking at teaching. If I'm following the scope and sequence and Student A doesn't get earth science, well, it's really kind of too bad, because I covered earth science and she should have gotten it. If I'm looking at a standard for scientific inquiry and what I expect kids to come away with after they've studied science, then my teaching is different and I don't leave Student A

behind. It's not satisfactory that Student A didn't get it even though I covered it. There's no such thing as "covering it." That kind of shift in conceptions of teaching is a major shift and it has the power to change teaching as few reforms do.

Standards reform is focused on the adoption of higher level standards and on enabling all students to have genuine opportunities to achieve them. This sounds simple enough, but the conceptual shift that accompanies standards reform is difficult to grasp. First, there are different kinds of standards:

1. **Content or academic standards** that describe the knowledge and skills expected of students at certain stages in their education. The emphasis is apt to be on learning content more through critical-thinking and problem-solving strategies than through rote learning of discrete facts.

2. **Performance standards** that describe how well students should be able to demonstrate their knowledge. They answer the question: How good is good enough? Usually they take the form of a number indicating a level of proficiency, for example: 1 = Novice, 2 = Apprentice, 3 = Proficient, and 4 = Distinguished.

3. **Opportunity to learn standards** that describe what students need in order to have a fair chance to meet the content and performance standards. These include access to knowledgeable teachers, materials, resources and time.[1]

Second, the language that accompanies the reform does not always create a clear picture of what the standards look like in practice. The distinctions between different kinds of standards, the discussion of scoring strategies, and the use of junctures -- points at which achievement is assessed -- rather than grade levels to identify satisfactory achievement lead to conversations about standards and standards reform in which no one has agreed upon the meaning of the words they are using and the ultimate orientation of the reform.[2] The specialized language also makes it difficult for interested stakeholders -- parents and other community members -- to understand what the schools, district and states are attempting. Nonetheless, the ideas are powerful and they form the basis for what can be successful reform in New Jersey.

New Jersey already has academic content standards in core disciplinary areas. Educators in the state and external reviewers such as the American Federation of Teachers suggest that the standards are not sufficiently high. However, they are a

starting place for reform. The state has begun to develop assessments that will measure students' achievement of the standards given agreement about what characterizes work that is "at standard." The opportunity to learn standards are deemed especially important given that states increasingly are creating or requiring high stakes assessment to accompany standards reform. If there are to be consequences for students and/or for teachers as a result of such assessments, then it is imperative that all students have an equal opportunity to learn from teachers who have had the opportunity to learn to teach in ways that are effective. Again, the Abbott decision speaks directly to this issue when stressing that different resources must be made available to different students in order to fully provide them with the opportunity to learn.

Using standards as the focus of school reform will not be easy and results will not come immediately. Implementation will require several years of hard work. Professionals at all levels of the educational system will have to reflect on what is happening in classrooms, schools, district offices and at the state in order to determine how their work does or does not forward standards reform. They will need to pay attention to the following requirements of standards reform in order to keep their emphasis on areas that must be addressed if the reform is to succeed.

Quality Teaching

Ë Standards reform requires teachers to have substantial knowledge of their content areas and to develop teaching strategies that engage students in constructing the meaning of academic content within the framework of each discipline.

Ë Teachers need well-developed and articulated content standards in order to select and tailor curriculum that will help students achieve the standards. They need appropriate and sufficient materials with which to teach the curriculum.

Ë In order to teach effectively, teachers, principals, and members of central office staff need long-term professional development that assists them in developing teaching strategies, curriculum materials, and assessment techniques to accompany the reform.

Ë Research on changing teaching practices and on implementing standards-based reform concludes that teachers learn best in the company of others. Teachers learn a) by sharing examples of student work, developing common notions of quality work and comparing them to the performance standards, b) through opportunities to observe their colleagues demonstrating effective teaching toward the standards, c) by discussing how to increase the achievement of those who are not performing

up to standards, and d) by realizing where they need additional assistance -- expert professional support, for example -- and engaging in such work as a faculty or department or team. Often, teachers benefit from the assistance of a facilitator or coach when engaged in these processes of examining standards, assessments, and student work.

Teaching Diverse Students and Assessing their Progress

Ë The conception of content and performance standards asks teachers, principals, students and parents to reject the idea of a normal distribution of grades and achievement and to adopt the position that **all** children can achieve at levels reflecting high standards. As such, the reform is radical and difficult for most school practitioners, students, parents, and community members to grasp.

Ë The reform asks teachers and principals to accept responsibility for student learning across the wide range of diverse learners in our schools. Until today, teachers and principals were responsible for presenting the material and, perhaps, presenting it in an engaging and thoughtful way. They were responsible for providing access to learning. Standards-based reform shifts the emphasis to student learning outcomes and asks educational professionals to help all children reach the standards.

Ë Given the assumptions of standards reform, schools will have to figure out how to address the educational needs of students who do not meet the standards at key benchmark points. It is no longer acceptable to relegate such children to a lower track class where the curriculum is weak. Rather, schools and parents will have to provide learning opportunities that enable students, with rare exception, to achieve the requisite standards.

Ë Teachers, parents and principals need to see the performance standards and assessments with which students will be judged in order to know what students are aiming to achieve. Without the assessments, student content standards will likely turn into traditional curriculum guides or a scope and sequence that leave teachers continuing to stress what they are "covering" rather than what students are learning.

Ë Parents' involvement is also essential because it is likely that the method of reporting student achievement will change from traditional grades to achievement of standards. Parents need to understand what the new reporting process tells them, what it measures, and what it means for their children.

District and School Organization

Ë District and school organization often keeps teachers and administrators from working in structures that encourage the kind of collaboration needed for improved teaching and learning. Districts and schools, therefore, will need to develop novel ways in which to organize their use of time, in particular, to provide better learning opportunities for students. Organizational arrangements such as block scheduling or interdisciplinary team teaching do not lead to increased student achievement unless they are designed to specifically focus attention on standards and student learning.

Ë Reformers often encourage the growth of local decision making structures as part of school improvement. However, unless these site-based decision models are designed to focus explicitly on teaching and curriculum, they will not lead to improvements in student learning. Districts, schools, and the state will have to avoid adopting organizational reforms that do not have an explicit link to accomplishing the reform agenda's achievement goals.

Leadership for Urban School Reform

Ë Principals need to increase their knowledge and skill in order to lead standards-based reform. They are not usually sufficiently knowledgeable about instruction, standards, and assessment at the outset of the reform process. Yet, too often, they are not able to participate in professional development that could increase their capacity to help forward the reforms. This situation must change.

Ë Standards-based reform requires broad participation. Parents and other community members must be involved with the reform in order to understand what it entails, its goals, and its strategies. Since standards-based reform represents a significant change from most parents' education, they are likely to worry about whether their children are the focus of an unworthy experiment. To garner parent support, districts and schools must engage parents in the content, process and goals of the reform strategy.

Ë Districts and schools will need assessments that provide meaningful data that can be used to inform curriculum and instruction and not only to audit performance. And, they will need to learn how to use data to analyze their progress and to provide meaningful feedback to parents, students and the community. The state must take a role in identifying and/or developing such assessments and insuring that educators at the school and district levels have the opportunity to learn how to use the data that the assessments provide.

Ë Standards reform demands leadership from all levels of the system. Its success depends on resources, of course, but also on continuing attention to learning at all

levels of the educational system. Educators at the state level, no less than those at the district and school levels will need to provide access to pertinent knowledge and skill and they will have to become learners as well as providers.

As we discuss in subsequent sections, none of the requirements of standards reform will be addressed unless there are leaders at all levels of the educational system who have the will as well as the knowledge and skill sufficient to the task. Furthermore, reformers attempting to implement standards-based reform must be alert to the following cautions.

First, standards can be high or low even if they are agreed upon by consensus or vote. The existence of well-articulated standards does not inevitably lead to their being of high quality. New Jersey's educators and other stakeholders will have to determine just what high quality means for its urban students in terms of content and performance standards. If the state's standards are low, wealthy suburban districts will, no doubt, see them as a minimal and develop higher standards for their children to achieve. Urban areas must do the same or they will fail to create true opportunities for their students to learn. On the other hand, it is possible that urban districts will find even the current standards too high. They might appear "so far from current practice as to alienate or mystify most potential learners [and their families]. But standards set close enough to current practice to be more easily understood and attained could fail to simulate much improvement" (Cohen, 1995). New Jersey and its districts and schools must be aware of these concerns and take them seriously as they begin their standards reform process. For these reasons, we stress that **the state must take a significant leadership role in ensuring that its standards are of high quality and in providing districts and schools with the resources necessary to implement them.**

Second, standards, by themselves, do not constitute standards reform. Standards are a piece of reform and it is unwise to believe that they will lead to all of the changes necessary to improve student achievement.[3] Standards are an essential start to urban school reform because they deal with the heart of education -- what children at different points in their schooling should know and be able to do. Standards must be designed and implemented in a context that identifies what must be done and how it must be done to create conditions in which children genuinely have the opportunity to meet specified performance standards. We reiterate this point because it is essential to successful implementation of the Abbott decision.

Third, standards reform at the district and school levels must be embedded in a comprehensive and coherent reform strategy that makes explicit what has to change with respect to teachers' knowledge and skill, principals' knowledge and

skill, school organization, assessment and accountability. Standards reform requires participants to continually ask themselves hard questions about how they think the reform as it is designed will work, what supports are needed, and, after careful observation, whether there is evidence that reform is moving teaching and learning in productive directions. School reformers must become students of school reform; they must actively learn about what they are doing, not an easy task in any school, but one that is especially difficult in urban schools. As Betsey Useem, a careful observer and analyst of urban school reform notes:

> This kind of learning requires that staffs engage in a continuous process of gathering and analyzing information and modifying strategies as a result. Evaluators have learned that ongoing feedback with participants and sustained inquiry among them are an important component of reform (Cochran-Smith & Lytle, 1993; Cousins & Earl, 1992). To do this, organizations must have structures and work rules that allow their staffs to meet together frequently to reflect on the complex and nonlinear change processes characterizing school reform initiatives (Fullan, 1996). Without supports for a rich "civil society" within the school building, the trust needed to facilitate cooperation cannot grow, and meaningful organizational learning is frustrated.
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> The need for teachers and administrators to interact collaboratively over sustained periods is especially great in urban schools. Individual staff members, faced with a constellation of pressing issues -- dilapidated workplaces, large classes, inadequate curricular resources, and high concentrations of needy students -- cannot mount an effective response in isolation from colleagues. It is ironic and alarming that our nation's inner-city schools, whose need for professional community building is paramount, tend to be those characterized by pervasive staffing instabilities.[4]

The conditions under which standards reform might flourish will be difficult to create in urban schools. But they cannot be impossible. While there is little evidence to suggest that urban educators or policy makers have yet developed a clear vision of what strategies to use to implement urban school reform that has high academic standards as its centerpiece, their experiences enable us to know a great deal about what is important and what to avoid. There is much that educators in New Jersey can learn from those who have been the pioneers in these reform efforts. Their work is a call to action for New Jersey's educators.

III. QUALITY TEACHING: WHAT IS IT? HOW CAN WE DEVELOP IT?

There was a time when a parent or principal would walk into a classroom and know that the teacher was doing her job. Students, regardless of their age, were sitting quietly at desks. They might be writing a composition or doing a worksheet of arithmetic problems. The teacher might be circulating to answer questions or indicate that something was correct or incorrect. In another classroom, the teacher might be telling the class how to do a certain algebraic equation or what steps to follow to successfully complete a long division problem. In yet another room, the teacher might be detailing four major causes of the Civil War. If students appeared attentive, the teacher was doing her job. High quality teaching was perceived as an orderly class controlled by the teacher.

Times have changed. Today we know that learning is much more than remembering and repeating what the teacher has said. We know that learning requires students to make connections between new knowledge and old. Reformers expect teachers to teach for deep understanding and they expect to see students engaged in learning activities in which they solve problems and come to understand the materials in new and different ways. The image of students working alone and in silence is gone. Students may still work on their own, but they also work often with one another in collaborative learning activities. This is a tall order in times when urban classrooms are large and diverse; when middle and high school teachers may work with as many as 150 different students each day and elementary classes may have as many as 30 students. It is an especially tall order when too many urban teachers are not well-versed in the subject matter that they teach.

New Visions of Teaching[5]

The new visions of teaching cast teachers as guides or coaches who facilitate learning by "posing questions, challenging students' thinking, and leading them in examining ideas and relationships." These activities are considered essential because "what students learn has to do fundamentally with how they learn it." Schools that have been successful teaching basic skills will need to learn how to foster this new vision of teaching. They need to become places in which children and teachers challenge each other about facts as well as opinions. They need to become places in which students approach academic content through assignments that involve problem solving, critical analysis, or higher order thinking. Teaching that includes all of these components is known as "teaching for understanding." It is a key component of standards reform.

What might such a classroom look like? Consider the following 7th grade, urban

classroom in which this kind of teaching and learning occurs. In Helen's seventh grade humanities class (language arts and social studies), students are engaged in a presentation that is a culminating activity at the end of a unit focused on learning about the stories that different cultures tell about the creation of the universe and the planets. The students and teacher are engaged in the kind of discussion that reformers hope to develop in most classrooms. They are engaged with high performance and content standards that are also the hallmark of teaching for understanding.[6]

While reading the brief vignette that follows, consider the following:

* The children had completed independent reading assignments.
* They talked directly to each other, not only to the teacher.
* They added to each other's comments and suggested corrections to other people's statements.
* The teacher continually asked students to explain, to use facts and to draw conclusions. Sometimes she challenged their conclusions. Often, students were able to use facts to back up their conclusions. We have used bold type to identify examples of these teaching strategies.

Example: Teacher as Coach and Facilitator; Students as Knowledgeable Workers

The class was arranged to be a talk show with a group of students as panelists, with the rest of the class as the participatory audience, and with the teacher as the host. The topic of this panel was creation myths. Other students had been reading scientific explanations of creation. Panelists were sitting at the front of the room; Helen circulated in the "audience" with her faux portable microphone which she placed in front of people who had a comment or question for the panel. When panelists wanted to speak, they took the microphone. Many students participated in this class.

The teacher reported that she did not know before the panel how much the children knew because they had been reading on their own, none of them in exactly the same books. The panel was their first chance to demonstrate what they had learned. This vignette begins when the panel is already underway.

> A girl in the audience asked the panelists whether the planets got their names from the Greek gods. A girl on the panel said "yes," and stopped. Helen said to her, "**could you give us a few facts to back that up**?" The panelist then provided evidence for several minutes based on a book she had read about the naming of planets. Her command of the material was impressive. The teacher next asked

the panel: "**Do these gods [in the different creation myths] have anything in common?**" A girl answered, "They all created the earth." Helen: **"Did they do it in the same way?"** Girl: "No, it depended on the culture they were from." She goes on to explain this answer with examples from different cultures.

This snippet of conversation was typical of what went on in the class. There were a lot of teacher questions on the order of "Can you clarify that for us? Can you give us an example?"

Later in the discussion one panelist gave an answer, and another said, "I think she had a few errors in what she said." The second panelist went on to elaborate what she thought the answer should have been. **The first girl agreed with the correction and addition**. Then Helen asked, "What do we learn about human beings from these myths?" A boy on the panel answered, "There has been conflict and evil for a long time." Helen asks: "What kind of evil did they have?" The boy answers, "Stealing fire.....(he continues).

After a bit more panel conversation with Helen moving rapidly around the room to involve students, she paused and said, "We have all of these stories about gods and how they began the world, and yet we have scientists who say that this isn't how it happened at all. It was a... And a boy says, "BIG BANG." Some children say, "Yeah, people made up the myths." Helen says, "**If people made up the big bang theory, could it be a myth?**" A girl in the audience who has been reading scientific explanations for creation takes the mike and says, "No. They have more facts about how it was nothing and then chemicals came together and gases and there were explosions." Helen, in a very dramatic presentation, looks at the student who gave this scientific claim and said, "You mean there was nothing and then there were gases and chemicals and a big explosion and then there was the world? **SOUNDS LIKE A MYTH TO ME!"**

A boy in the audience then disagrees with Helen saying there are data from telescopes and computers and facts. Another boy says that data can be wrong. Still another then talks about facts from bones that are older than people. "So," he asks, "how could people have been first?" The other boy still insists on his point of view saying, "Data can be wrong. We weren't there." A girl then says, "You don't need to be there to know the facts are correct." Another girl reads some lines from a science book that she has about the creation of the earth and

life from chemicals. Helen interjects and says, "You mean that we are all made from old stars? Still sounds like a myth to me."

What stands out in this last exchange is the students' interaction with each other, without going through the teacher, and the seriousness of their conversation. They speak using information garnered from books, and they have sufficient command of the material to go beyond their initial comments, or in the case of this last exchange, to open the book, find the appropriate passages and read them as evidence. The students' and teacher's capacity to function in this way makes it clear that they were familiar with these kinds of classroom exchanges.

This kind of teaching requires a great deal from the teacher and from the students. **First**, the teacher has to have created a classroom culture in which students know that a) they and their learning will be taken seriously, b) challenges to their knowledge are legitimate parts of learning, c) they are required, and know or have been taught how, to present arguments based on data, and d) students talk to, learn from, comment on and question each other's presentation. **Second**, the teacher must have the knowledge and skill with which to pose appropriate questions; challenge without intimidating; and trust students to have the capacity to carry on such a dialogue. Most teachers never experienced such teaching when they were students and were not taught to use these strategies in their teacher education programs. **Third**, teachers must know how to manage new and different kinds of classroom routines, new and different kinds of relationships between themselves and their students. They must learn to be comfortable in challenging students knowledge and in having students challenge their own knowledge. For many teachers, most especially for those who are not confident of their own content knowledge, this can be intimidating.

> **We want to stress that in order to meet the demands of teaching for understanding, teachers must learn new pedagogy that is connected to their content area. They must review their understanding of the content they teach and, often, re-learn it in deeper ways. All of this will take time, commitment and sufficient financial resources. And it will be difficult. In order to ensure success, the state must provide districts and schools with sustained leadership and access to high quality professional development that can assist teachers in making these enormous changes.**

The demands of teaching for understanding become even more clear if we look at particular subject matters. Ever since the National Council of Teachers of Mathematics (NCTM) issued Curriculum and Evaluation Standards in 1989, followed by Professional Teaching Standards in 1991, and Assessment Standards

for School Mathematics in 1995, the world of mathematics teaching has undergone a revolution. NCTM successfully encouraged many districts, test producers and textbook publishers to adopt its agenda for mathematics reform. As a result, teachers need new understanding of the content that they teach and new teaching and management strategies that will enable students to conceptualize rather than memorize mathematics. NCTM's professional standards for teaching mathematics state:

1. The goal of teaching mathematics is to help all students develop mathematical power....Teachers must help every student develop conceptual and procedural understandings of number, operations, geometry, measurement, statistics, probability,...
2. What students learn is fundamentally connected with **HOW** they learn it....What students learn...depends on the ways in which they engage in mathematical activity in their classrooms. Their dispositions toward mathematics are also shaped by such experiences. Consequently, the goal of developing students' mathematical power requires careful attention to pedagogy as well as to curriculum.
3. All students can learn to think mathematically.
4. Teaching is a complex practice and hence not reducible to recipes or prescriptions.[7]

To many teachers, these goals and assumptions about teaching mathematics are unfamiliar. So are the teaching strategies that NCTM recommends. Therefore, addressing the new content and performance standards in mathematics and in other content areas is a tall order for teachers and for teacher educators who must figure out how to teach the new content and pedagogy to pre- and in-service teachers. This is the job ahead, however, if children are to have the opportunity to learn and achieve at high standards.

The demands of high quality teaching raise significant questions for all levels of the educational system. What will help experienced teachers reconceptualize their content knowledge and their pedagogy so that they can provide such learning opportunities for students? How will such learning be organized and how will teachers find time to learn? How will pre-service teacher educators and those who teach the content specific courses in teacher education programs learn to better prepare future teachers? These questions have yet to be fully answered, but we know quite a bit about strategies that can foster such learning.

We turn next to a consideration of professional development that focuses on high quality teaching in the context of standards.

Strategies for Promoting High Quality Teaching

Teachers participate in numerous, organized activities that are supposed to help them improve their practice. Often, they are required to complete a certain number of hours of such activities in order to maintain or advance their certification. Most of the activities, however, are not designed in ways that are likely to help teachers learn what they need to know in order to enable their students to achieve at higher levels.

> …it is still widely accepted that staff learning takes place primarily at a series of workshops, at a conference or with the help of a long-term consultant. What everyone appears to want for students -- a wide array of learning opportunities that engage students in experiencing, creating, and solving real problems using their own experiences, and working with others -- is for some reason denied to teachers when they are the learners. In the traditional view of staff development, workshops and conferences conducted outside the school count, but authentic opportunities to learn from and with colleagues **inside** the school do not.[8]

Almost everyone writing about how to improve teaching recommends changing the traditional organization and content of professional development so that it better addresses teachers' learning needs. Reformers argue that professional development of the sort needed to help teachers teach for understanding requires a) new ideas about what counts as professional development and b) new policies that provide the framework within which professional development can occur. Most important to the current discussion, professional development must be responsive to local needs. The best information available about the essential features of professional development suggests:

- It must be connected to and derived from teachers' work with their students.
- It must engage teachers in concrete tasks of teaching, assessment, observation, and reflection that illuminate the processes of learning and development.
- It must be grounded in inquiry, reflection, and experimentation that are participant-driven.
- It must be collaborative, involving a sharing of knowledge among educators and a focus on teachers' communities of practice rather than on individual teachers.
- It must be sustained, ongoing, intensive, and supported by modeling, coaching, and the collective solving of specific problems of practice.
- It must be connected to other aspects of school change.[9]

In most school systems, the organization, content, and strategies that define professional development do not match these characteristics. And, most schools and school systems are not currently organized in ways that would enable them to implement new approaches to professional development. The culture of teaching as a profession is not often aligned with this view of teacher learning. Teachers are almost never held accountable to themselves, to their colleagues or to their students for the effectiveness of their teaching strategies as measured by student learning. They are not used to working with colleagues to determine what and how they teach and, most importantly, whether they are effective based on their students' achievement. In fact, neither teacher education nor traditional teaching practice has been organized to help teachers take stock of the effectiveness of their approaches and make adjustments either as individuals or as part of a collegial team. Finally, too many teachers in urban areas, regardless of their own backgrounds, seriously doubt whether their students can learn at current levels let alone at the new and much higher standards. If teachers are to become more accountable for what and how they teach, if they are to develop the capacity to enable their students to achieve at levels far higher than those expected today, they need to have opportunities to improve their teaching and content knowledge and they need to know that the children they teach can accomplish what is expected of them.

Reorganizing professional development along these lines does not preclude the value of other approaches. There are good reasons for having large group instruction that introduces teachers and principals to a new concept or activity. There are great benefits to intensive summer institutes that focus on content as well as pedagogy. There are many good reasons for teachers to broaden the array of people with whom and from whom they learn. **What studies of teachers' learning suggest, however, is that professional development must be closely and explicitly tied to teachers' on-going work if it is to lead to high quality teaching.**

With sufficient investment in high quality professional development, teachers will be more capable of helping New Jersey's urban youngsters achieve at high standards. Assuredly, there are barriers that stand in the way of implementing such professional development. They include a well-established teacher training industry inside and outside of school districts that has vested interests in the provision of workshops and other short-term activities. Often, these professional development providers do not have sophisticated strategies for helping teachers over extended periods of time. They, too, need to gain new knowledge and skill in order to work more effectively.

These and other barriers can be overcome with determined leadership by the state in two ways. First, the state must be a vocal advocate

for new and more effective professional development. It must talk about what teachers need and why it is urging those who provide professional development to increase their capacity to provide what is needed. Second, the state must use the resources provided by the Abbott ruling to cultivate the development and use of high quality professional development. It must ensure that its Abbott and other resources are not used to maintain inappropriate approaches to teacher learning. The state must demonstrate commitment to the work of professional development by its actions. These must be mirrored by similar actions on the part of district level leadership.

A Note About Pre-Service Teacher Education. This section of the paper focuses on improving the work of experienced teachers. However, urban youngsters' opportunities to learn also depend on the quality of new teachers. Too often, youngsters in urban schools are taught by poorly-prepared teachers. The blame for poor preparation is placed on weak teacher preparation programs and on the difficulty of recruiting highly qualified teachers to urban areas. Certainly, both factors influence the quality of teaching in urban schools. However, many who make this argument then suggest that urban students will learn more from teachers who are knowledgeable in their content area even if such teachers have little or no preparation to teach. **Before continuing with our discussion of professional development, we want to stress that there is a considerable body of evidence demonstrating that teachers with more and better formal training are more successful as measured by their students' achievement.**

> Teacher education, as it turns out, matters a great deal. In fields ranging from mathematics and science to early childhood, elementary, vocational, and gifted education, teachers who are fully prepared and certified in both their discipline and in education are more highly rated and are more successful with students than are teachers without preparation, and those with greater training are found to be more effective than those with less.
>
> In science, a review of 65 studies found that teachers' effectiveness depends on the amount and kind of teacher education and disciplinary training they have had and on the professional development opportunities they experience later in -the career. And in mathematics, another review found that the extent of teachers' preparation in mathematics methods, curriculum, and teaching is as important in predicting effectiveness as is preparation in mathematics itself. Finally, students who study with fully certified mathematics teachers experience significantly greater gains in achievement than

those who are taught by unlicensed or out-of-field teachers. [10]

These findings about the relationship between teacher education and student achievement hold for reading as well.

> **We strongly recommend that New Jersey work with its many teacher education programs to develop and implement high standards for admission to teacher education programs, high standards for curriculum and instruction and a focus on teaching for understanding within teacher education programs, and a set of accreditation standards that ensure that programs provide future teachers with the opportunities to learn to teach in ways that will help urban youngsters.**

1. New Approaches to Professional Development: District Level Examples

Size is one of the many challenges facing urban school systems that want to implement high quality professional development. It is difficult for teachers to feel part of a coherent enterprise when they work in large schools and school systems. It is difficult for districts to figure out how to make professional development local and, at the same time, make sure it addresses district level goals. The following example describes one way that one urban district approached the challenges posed by size.

> *Example 1: The Cluster Approach in San Diego.* This central city cluster (a grouping of one high school with its feeder elementary and middle schools) is the most diverse and poorest in the district. Students' low facility in reading and speaking English is a great challenge to both teachers and students. Using the cluster as an organizational arrangement, and spearheaded by a middle school principal and the cluster Assistant Superintendent, the schools are developing an approach to deal with their students' needs. The approach is designed to focus on students' learning needs. The process and content provide strong professional development for teachers and for administrators that focuses on local students' needs in light of district content and performance standards.
>
> The cluster's work began with the knowledge that children were not doing well in reading and language arts even though there were exemplary learning activities going on in classrooms and schools. Through a variety of strategies, and encouraged by one principal, the cluster attempted to learn what interested the children. The thinking

was that if the curriculum could be more interesting to children, then they might put forth additional effort to learn. The children's increased effort and enthusiasm would lead to more learning and would further motivate teachers to enhance their teaching.

A student survey revealed that many children had a tremendous interest in science no matter what their language background. The cluster, primarily at the administrative level at this point, decided that science might be the hook into student engagement and that, as a cluster, they needed to consider how to develop performance standards that included the integration of reading and science.

The cluster teachers and principals began a series of activities designed to give themselves the information they needed. Two administrators and three teachers from each of the cluster's eight schools visited all of the cluster's schools as a group. Over the course of six weeks, they spent three hours at each school talking with teachers about reading and science for the first hour, visiting classrooms for the second hour, and reflecting and asking more questions for the third hour.

After the eight site visits, the Assistant Superintendent asked the teachers as a group to give her an oral summary evaluation of what they valued in what they saw. She met separately for the same purpose with the administrators who had been on the site visits. During these meetings she asked teachers and administrators to identify the strength of the cluster, a question designed to get them to think beyond their own school. She also asked them to identify what they thought would enhance the cluster and what they personally would like to know more about as a result of the site visits and discussions. They were asked to consider what their peers who had not visited should know about the other schools and the cluster as a whole.

The result of the site visits, discussions and an additional teacher survey was a collaborative decision to put together a K-12 instructional council for the cluster and focus its work on reading through science. The cluster intends to create professional development opportunities designed to help **all** teachers better understand the reading process and include reading in their content areas, as well as explore ways to link science to reading instruction. One of the anticipated outcomes from this work will be a set of

performance standards that reflect the links between science and reading. Future professional development will pay special attention to issues associated with teaching science and reading to students whose first language is not English.

The cluster strategy with its emphasis on networking and collaboration creates a sense of community within and between schools. It asks principals and teachers to take seriously the teaching and learning needs of all children in the cluster and to make their own work somewhat public in the process. The cluster strategy requires Assistant Superintendents to have a much more intimate involvement with teaching, learning and professional development than they had in the past. They, too, must become learners in the process of implementing standards in the cluster and in the district.

Cluster activities throughout the district are intended to generate solutions to educational problems by moving teachers and principals out of their isolation and into a common professional development dialogue that is always focused on helping children achieve at standard. Individual cluster activities connect to other cluster and school-level activities that engage teachers in a) identifying an academic area in need of improvement, b) working as a school and cluster to develop a strategy for addressing it, and c) looking at student work at the school and cluster levels to develop performance standards within and between schools. Cluster activities are a strategy through which the district hopes that teachers and administrators will work together in manageable units as part of a districtwide effort to raise student achievement.

This next example describes how another large urban district has organized to bring professional development to the schools. There is more to the district's professional development strategy than this particular innovation, but this one is worth considering as a way to engage teachers in learning that is immediately relevant to them. It is another strategy for creating professional development that is local and targeted to teachers' on-going work.

Example 2: Innovative Professional Development: School Support Resource Teachers in Louisville. Louisville has made a strong move toward establishing professional development at the school site. Each school in Louisville has the services of a School Support Resource Teacher who works with four schools for the equivalent of one day each week. These support teachers spend the fifth day in meetings with their supervisor and with each other. They share their experiences with the twin goals of gaining knowledge about how to proceed at their own schools and helping their colleagues develop

strategies and resources for their schools. Each School Support Resource Teacher was a highly praised practicing teacher; each must be able to work as a generalist, providing services to teachers in all curriculum areas and to the school as a whole. At the middle and high school levels this means that there are limits to what these support teachers can do in subject matter classrooms that are not in their content areas. However, the organization of the entire professional development effort enables some flexibility in how these teachers spend their time and in the resources available to them to assist teachers in particular content areas.

School Support Resource Teachers' prime role is advancing implementation of Kentucky's standards-based reform agenda, the Kentucky Education Reform Act (KERA). Considerable emphasis in Kentucky is placed on preparing students for KIRIS (Kentucky Instructional Results Information System), the high stakes state assessment. School Support Resource Teachers focus on the broad reform and not primarily on the assessment. They:

1. help schools develop their School Transformation Plans with a focus on KERA goals (STPs are school improvement plans focused on teaching and learning);
2. examine the resources available in the school and work to integrate and coordinate them;
3. do demonstration lessons and coaching;
4. provide teachers with materials they might request; and,
5. provide other professional development to the schools.

Each year, School Support Resource Teachers assist principals and teams of teachers in completing a school needs assessment from which they develop their School Transformation Plan. The School Support Resource Teacher helps the school use its KIRIS data report to inform curriculum decisions and determine academic priorities. During the school year, School Support Resource Teachers help the schools monitor STP implementation.

In addition to this built-in role with the STP, School Support Resource Teachers provide direct help in classrooms with curriculum and instruction. They might help with the teaching of personal narrative, for example, and support teachers who are trying cooperative groups.

> They co-teach, do demonstration lessons, and observe and give feedback as teachers request. Their goal is to help teachers with their immediate questions and, in the process, facilitate their engagement with on-going professional development. School Support Resource Teachers do not want to provide "quick fixes" or "magic bullets." They want to create habits of mind that will lead teachers to continue to inquire into their own professional development.
>
> School Support Resource Teachers also work with teachers on issues of classroom management and discipline, but this is not a major focus of their work. Their orientation is to help teachers provide instruction that is engaging to all students with the conviction that when such instruction occurs, management and discipline problems diminish. They are concerned, first and foremost, with increasing teacher and student learning, believing that the route to higher test scores is to be found in better curriculum and instruction and not, primarily, in teaching test taking strategies (although they do assist in this area).
>
> The School Support Resource Teachers have a strong orientation to improving curriculum and instruction and they urge teachers to carefully look at what they are doing when they say they are teaching one content or another. These teachers are concerned with the content as well as the process of teacher learning. They know that just talking about teaching will not lead to better teaching unless teachers have access to new ideas. The School Support Resource Teachers are a valuable resource for teachers, principals, and the district.

This shift of professional development to the schools is designed to have a significant impact on teachers' learning and, ultimately, on children's opportunities to learn.[11]

Both of these approaches to professional development depend on leadership and innovative thinking at the district level as well as at the school level. Both districts had to reorganize administrators' roles and responsibilities in order to create these approaches to professional development. Both had to help teachers and principals find the time to take on the professional development work. In Louisville, the district had to reorganize part of its professional development unit and reallocate time and money. It had to identify teachers who had the knowledge and skill to take on the new role. And, it had to help them develop a novel relationship with principals and teachers. Each district, by dint of its efforts, is encouraging changes in the culture of schools and of the district itself. Schools, and perhaps the

districts, are becoming places of learning for teachers and for administrators.

> **Given the resources available to urban districts in New Jersey due to the Abbott ruling, districts and the state have the financial capacity to reform the organization, content and delivery of professional development. It is incumbent upon the state and the districts to a) investigate a variety of strategies for creating high quality professional development and b) select and implement such strategies in a timely fashion. In the spirit of standards reform, all new professional development efforts must include on-going assessments of their impact on teaching and learning.**

There are numerous other ways in which districts can provide teachers with high quality professional development opportunities. For example, districts can a) create opportunities for teachers to serve as teacher leaders, b) involve teachers in the development of content and performance standards, c) organize districtwide professional development focused on teaching a particular content at a specific grade level, and d) engage support for local professional development from local colleges and universities and from other providers.

Create opportunities for teachers to serve as teacher leaders and prepare them for these roles. In many urban districts, teachers are leaders of reform. They may work in new roles, as described above, or they may retain their regular teaching roles while taking on additional work in site-based professional development. For example, a group of K-12 teachers might be trained in the use of new reading strategies. Back at their schools, such teacher leaders could share their knowledge with colleagues as they begin to implement strategies designed to help children in all content areas achieve the reading standards. Teacher leaders can lead school-based sessions that engage teachers in, for example, looking at what they currently teach in light of the content standards. They can facilitate department or team meetings in which teachers look at student work in light of content and performance standards.

In order to work effectively, teacher leaders need district support to learn their new roles. They need to learn how to organize effective professional development sessions that engage their colleagues in doing the work of reform. They need to learn how to provide feedback that identifies both the strengths and the shortcomings of their colleagues' work. Since providing such feedback is counter to longstanding teacher norms, teacher leaders will need help learning how to create a climate of trust with their colleagues so that they can effectively provide teacher-led professional development. However, by creating a well-prepared cadre of teacher leaders who can work in their schools, districts can go a long way

toward creating more effective forms of professional development.

Involve teachers in the development of content and performance standards. Even if standards have been adopted and given to teachers, experience across the country suggests that teachers and principals need to develop content and performance standards for themselves in order to truly see how this reform is different from traditional conceptions of curriculum, assessment and learning. In some districts, teachers and principals develop special knowledge and skill by working as partners with curriculum specialists and others to develop the district's content and performance standards. Without a deep understanding of what standards are, how they are developed and how they must be used, teachers and principals will be unable to effectively implement standards. *Front-End Alignment,* a publication of The Education Trust written by Ruth Mitchell (and listed as a reference for this paper), provides a compelling case as well as strategy for involving teachers, principals, parents and other community members in the work of creating and using standards at the local level.

Organize districtwide professional development focused on teaching a particular content at a specific grade level.[12] Teachers from a number of schools can work together to develop new knowledge and skill in teaching common content in light of standards. With the help of a facilitator, they might develop curriculum units that span several standards. One benefit of this approach would be the development of agreement about the meaning of content and performance standards across schools within a district. In addition, there is research to indicate that teachers can improve their knowledge of content by learning to substitute new units for old within their curriculum. As they study the "replacement" units, teachers learn new content as well as new teaching strategies. They learn in the company of colleagues and what they learn is useful immediately in their classrooms.[13]

Engage support for local professional development from local colleges and universities and from other resources available to the district. New Jersey has a wealth of higher education institutions that may be able to help in the provision of professional development that meets the criteria outlined earlier. The state, the districts and the higher education institutions have an opportunity to work together to create effective professional development programs.

2. New Approaches to Professional Development: Work at the School Level

Schools on their own can create innovative opportunities for teacher learning. These are likely to develop best in a district context that is also working to improve the form and content of professional development. However, there is no need for

schools to wait for their districts. With appropriate principal and teacher leadership, schools can be in the forefront of professional development reform. For example, a) principals can transform department and faculty meetings into occasions for professional development, b) teachers can do demonstration lessons for one another or lead small group work sessions, c) teachers and principals can examine student work in light of standards, and d) teachers can experiment with new assessment tasks.

Principals can transform department, team and whole-school faculty meetings into occasions for professional development. We have visited a number of urban schools where faculty meetings are no longer used to present information that could easily be conveyed on pieces of paper. Principals now use the time available to discuss issues of teaching and learning. We know that some teachers may raise union concerns about this use of faculty meeting time. Teacher association members and/or leaders may argue that teachers should not participate in such professional development faculty meetings if they do not get professional development credits for the time. However, in most schools that have moved in this direction, faculty are enthusiastic about the increased value of this traditional meeting time. And, principals are pleased to have time to focus on instructional issues.

Engage teachers with specialized knowledge and skill in helping their colleagues by doing demonstration lessons or small group work sessions or other arrangements. This kind of professional development work can be done within departments, teams or grade level groupings. It provides a way for teachers to work with one another to address local issues of teaching and learning.

Create opportunities for teachers to carefully examine student work with other teachers and even with students and their parents. The process of looking at student work can lead teachers to begin to talk to one another about assignments and the strategies that they use to enable students to produce high quality work. Teachers might look at student work in light of a rubric or other scoring device. Teachers in a department might give the same assignment and then share the students' products to determine a) the quality of students' work, b) differences in the quality of student work across classrooms, and c) how to revise the assignment to enable more students to produce better work. The process of looking at student work supports continual reflection on teaching, curriculum and student and teacher learning. Often, it needs to be led by an experienced facilitator.

Engage teachers in trying assessment tasks, such as those embedded in the New Standards documents. Performance assessment tasks enable teachers to see what students will need to know and be able to do if they are working at standard.

Such professional development, engaged in with colleagues, can encourage teachers to think about how they might change their curriculum and instruction to enable students to learn what they need to know to complete the assessment tasks. Assessment tasks enable teachers to see, concretely, what students will need to know and be able to do as a result of instruction.

3. New Approaches to Professional Development: Work that Spans Districts and States

Finally, although we have been stressing the importance of district and school-based professional development, there are also valuable learning opportunities for teachers that occur outside of these contexts. For example, a) teachers might participate in voluntary associations that focus on specific content areas, b) they might participate in national programs of professional development, and c) principals and teachers might participate in national networks such as the Coalition of Essential Schools.

Encourage teachers to participate in voluntary associations that focus on teaching specific content. In some urban districts, foundation or federal funds enable teachers to work with others to focus on teaching and learning. For example, teachers in each core content area in one urban district we know meet together once each month to focus on how to teach a specific piece of content or how to develop a curriculum unit to meet a set of standards. Teachers set the agendas for these meetings; they have funds available to bring consultants in to assist them in their work. Teacher networks of this sort can provide teachers with a wider array of content specific learning opportunities than those available in any one school.

Encourage teachers to participate in national programs of professional development such as summer institutes. Provide financial support for their participation. Long-term, intensive learning experiences may be quite effective when teachers are trying to reconceptualize their content knowledge as well as their pedagogy. For example, the Education Development Center (EDC) in Newton, MA, has implemented numerous federally funded professional development programs for mathematics teachers in urban areas. Selected teachers within a district work together and with outside experts to reconceptualize ideas in science and/or math, for example. Multi-week summer institutes bring teachers together from participating districts across the country where they share what they know and develop new knowledge and skill. Such professional development often enables teachers to take leadership positions in their home districts and schools.

Encourage schools and districts to participate in national networks such as The Coalition of Essential Schools and John Goodlad's National Network for Educational

Renewal. Networks of this sort bring together faculties from across the country to address issues of common concern in light of the network's focus. These two, for example, focus on teaching for understanding and creating the organizational and cultural contexts in which it can occur. Therefore, schools participating in the Coalition of Essential Schools might discuss strategies for developing and using "essential questions," a key component of the program's reform.

In concluding this discussion of the kinds of professional development needed to ensure high quality teaching in New Jersey's urban schools, we want to stress the following.

> **New Jersey's urban districts will have funds available to them as a result of the Abbott decision. Given the exceptional opportunity provided by the funds, districts should engage talented assistance to help them a) look at the financial and human resources currently available for professional development and their current allocation; b) consider what additional resources will become available in the coming years; and, c) develop creative options for providing on-going, high quality professional development that increases teachers' knowledge and skill while it changes the culture of teaching and learning in ways described earlier.**

4. Finding the Time and the Money

How can districts organize to provide tailored learning experiences to teachers? How can they find the personnel, the time and the funds for such professional development? Even with the Abbott funds available, Superintendents may argue that their professional development budgets are inadequate to the task and that providing large group workshops -- the very traditional approach to professional development -- reflects economies of scale: one expert can talk to many teachers and provide them with something to take away and use. How, ask superintendents, can districts finance and organize to provide the kinds of on-site and on-going professional development suggested here?

Districts, with help if necessary, can do a thorough audit of a) the extent to which and ways in which their current approach to professional development does and does not support what needs to happen, and b) the total funds from all sources available for professional development. A serious look at the contrast between what teachers need and what the district provides will usually convince the most skeptical superintendent that economies of scale do not lead to beneficial results when applied to improving teachers' knowledge and skill. Such a serious examination usually reveals that separate pools of professional development funds

can be combined to create a larger overall budget with which to address the actual learning needs of teachers.

Many urban school districts have addressed these issues by decentralizing some professional development funds to the school level where local councils or planning teams have decision-making authority. These organizational units can also benefit by carefully analyzing the cumulative funds available and the ways in which they are currently used. In Boston, for example, schools participating in standards-based reform with financial support from the Boston Plan for Excellence, the local public education fund, are required to spend time during the first year of the reform carefully examining resources. With the help of a "school change coach" selected by the school and available one day each week, teachers and principals consider how they might reallocate the funds and the personnel that they have in order to provide opportunities for teachers' professional development. The coach and others from whom they can learn help them develop innovative ideas for spending their professional development dollars.

Even with funds, however, people will ask about time. They will want to know: If professional development takes place at the schools, when will it happen? In urban schools across America, it is beginning to happen during the school day as well as after school and on regularly scheduled professional development days. Teachers and principals have found a variety of ways to create time for teacher learning. In some schools, teachers and principals, with support from their parent community, "bank" time so that they can have an hour or so regularly scheduled each week or on some other schedule when the entire faculty is available to work on professional development. The school might run four long days and one short, early dismissal day as a result. With the common time, teachers might meet together as a faculty one week to discuss whole school issues of teaching and learning; they might use the time on alternate weeks to meet in departments or teams. Professional development is often led by a teacher with some particular expertise who is from the school. It could also be led by an external coach or an expert in a selected area.

Several middle schools in San Diego use a banking system to create professional development time. At one school, where the hour is scheduled before school, teachers can be found discussing progress with the school's portfolio system, how to help students create products for a new district assessment, how to improve their language arts program in light of data provided from a common assessment or how to better implement their homework policy. The agenda for the professional development meetings is set by a group of teachers who work with one assistant principal as a planning team. Most important to the enterprise is that all faculty and administrators attend the professional development sessions. Principals are a part of teacher learning.

High schools find it especially difficult to establish common time for all teachers given their size and complexity. Yet we know of several Boston high schools that have created the common professional development time using such a banking system and accumulating a few minutes each day. Eventually, the minutes accumulate into a block of time. Persistent and effective leadership from principals and teachers makes this happen.

In many schools, teachers are organized into teaching teams by grade level, interdisciplinary team membership, a house structure or some other configuration. With scheduling professional development time a priority, principals and teachers agree to a schedule that provides such teams with common planning periods. During at least some of that common time, they engage in professional development.

5. Suggestions for Moving Forward

Although districts do not currently assess the impact of professional development programs on teacher learning and student achievement, it is essential that they do so in the future. Districts and schools need to develop smart ways of assessing the design, implementation and impact of the new professional development strategies that they adopt. The information they gain from such assessments will enable them to know whether they are moving in productive directions.

It is also essential that districts and schools have help in designing new approaches to professional development. With this in mind, researchers suggest that policy makers at all levels of the educational system ask themselves a series of questions when re-thinking professional development policies. These questions, which follow, are designed to provide good information to policy makers; they are also a way to nudge the culture of school districts toward inquiry. Addressing these questions can help transform schools and school systems into learning organizations.

- Does the policy reduce the isolation of teachers, or does it perpetuate the experience of working alone?
- Does the policy encourage teachers to assume the role of learner, or does it reward traditional "teacher as expert" approaches to teacher/student relations?
- Does the policy provide a rich, diverse menu of opportunities for teachers to learn, or does it focus primarily on episodic, narrow "training" activities?
- Does the policy link professional development opportunities to meaningful content and change efforts, or does it construct generic inservice occasions?
- Does the policy establish an environment of professional trust and encourage

problem solving, or does it exacerbate the risks involved in serious reflection and change and thus encourage problem hiding?

- Does the policy provide opportunities for everyone involved with schools to understand new visions of teaching and learning, or does it focus only on teachers?
- Does the policy make possible the restructuring of time, space, and scale within schools, or does it expect new forms of teaching and learning to emerge within conventional structures?
- Does the policy focus on learner-centered outcomes that give priority to learning how and why, or does it emphasize the memorization of facts and the acquisition of rote skills?[14]

Policy makers and practitioners at all levels of the educational system must ask these questions as they transform professional development. In addition, they must figure out how to address other sets of policies and practices that may be formal or informal and which can undermine the best professional development available. Such policies and practices, often designed and implemented by the principal and supported by teachers' seniority privileges, can cripple everyone's best efforts to restructure their school culture and their practice. These policies and practices must be addressed if reform is to be meaningful.

Barriers to Using the Fruits of High Quality Professional Development

Districts and schools face considerable challenges in organizing to implement these kinds of professional development opportunities for teachers. The new approaches do not mesh well with prevailing practices; they do not mesh well with formal and informal policies that direct many school and district level decisions. Before leaving the discussion of professional development, we want to highlight examples of these policies and practices that can be barriers to successful implementation. We do this to alert principals, teachers, district administrators, school boards, and teacher associations, for example, to policy arenas that need their attention if reform is to be successful.[15]

One set of barriers to implementation result from the ways in which principals complete the task of assigning teachers' work. Principals weigh many factors in assigning teachers to specific programs or classes. They consider teachers' formal qualifications as well as their strengths and weaknesses. They consider the requirements of negotiated agreements with the teachers associations. Most often, they do not consider the implications of teachers' on-going professional development work. In fact, principals may not even know what their teachers are learning to do. As a result, if an initiative involved teachers in a summer curriculum writing experience that was to be continued back at the school, the principal might

not remember to provide those teachers with common planning time. Or, the principal might assign those teachers to different houses or units within a school making it impossible for them to work together. As a result, teachers might be unable to continue their curriculum development work.

Another barrier arises if principals not take advantage of what their teachers have learned. In one professional development program in Philadelphia, for example, teachers who participated in training that prepared them to teach special courses were not assigned to teach those courses. "Of the 17 teachers trained [in The Algebra Project] in the initial group, only 10 were assigned to teach a for-credit algebra course the following year. Of the 23 teachers trained in the second cohort, only 9 ended up teaching eighth-grade algebra." (Useem et al, 1997, p. 67). Such decisions can nullify the potential impact of high quality professional development.

Principals do not make these decisions to stymie school improvement. Most often they make them unaware of their teachers' professional development activities. In many urban schools, reform is not systemic even at the school level; principals, as a result, are not full partners in their schools' reform activities. It is not surprising, therefore, that teachers' work is not foremost in their minds as they make staffing decisions. It is, however, wasteful. **We stress that principals must be integral to the instructional focus of their schools. They must have the opportunity and the requirement to become knowledgeable about all of the components of school reform. Districts must take a leadership role in enabling principals to focus on instruction and instructional reform.** (The section of the paper devoted to leadership discusses principals' professional development needs in light of the current reform agenda.)

Another barrier to implementing the fruits of professional development arises from high principal and teacher mobility in urban schools. This instability is harmful to reform. It stands in the way of creating principal and teacher leadership and a cohesive school culture. **If districts are serious about implementing standards reform, they must do everything possible to ensure that their policies and practices promote high levels of principal and teacher stability.**

Some aspects of teachers' negotiated agreements can negatively impact school reform. Although rules about the length of the work day, the sanctity of the teacher's preparation period, and the number of faculty meetings permitted are appropriately designed to protect teachers' time and limit the work day to a reasonable number of hours, these rules often stand in the way of creating professional development opportunities. We are aware of urban districts in which principals are prevented from using faculty meetings for professional development. Similarly, we are aware of districts in which there are great constraints on what

can be asked of teachers during their planning time.

The convergence of inadequate principal involvement in the nuts and bolts of reform, policies and practices that stand in the way of enabling schools to make use of the new knowledge and skill that teachers gain from professional development, and the instability in staffing all work to undermine the efforts designed to improve teaching and learning. As Useem and her colleagues conclude:

> The forces militating against sustained collaboration and its resultant accumulation of trust are strong in Philadelphia and other large urban systems. The notion that social capital [the knowledge and skill of the people who work in the school] is a scarce and treasured resource deserving of nurturance has yet to drive the actions of most school leaders....[so] friendships among staff members are not necessarily seen as a resource to be built on, and newly trained teams of teachers -- whose professional development was often supported by a substantial infusion of external dollars -- are often separated during the school year. Thus, reform efforts must devote serious attention to altering the policies that deplete precious social capital and identify ways to enhance it. (Useem et al, 1997, p.73)

Even if all of the policy and practice barriers to reform were removed, barriers would remain because the work is intellectually and emotionally demanding. It is not easy to learn to implement high quality teaching based on content and performance standards. The learning demands are high; the fruits of teachers' hard work do not come immediately. Programs of professional development need to be designed with the difficulties made explicit and with some attention to ameliorating them whenever possible.

Coe and Useem found that professional development that worked through teams of teachers and was directly connected to teachers' own work had the outcomes noted below. Their findings support those of others who have worked with teachers in similar professional development efforts.

- [It] was a productive but sometimes painful process. Looking at their own student work through the lens of standards made the change efforts "real" rather than abstract or top-driven.
- ...hearing constructive criticism about their own assignments and student work was hard for teachers. This was especially so when teachers brought their best assignments and best student work to the team meeting yet found that most of their students received ones or twos when the group scored the

work.

- The process worked best when one or more team members could draw on a wide repertoire of pedagogical content knowledge to re-design assignments....When teachers lacked depth of content knowledge or pedagogical strategies, they were more likely to feel frustrated about creating better assignments.
- The process was also frustrating when the assignment was not strong enough to be worth revising. Group meetings that began with high-quality assignments enjoyed the process.
- Facilitators pushed teams to revise the assignment so that students would do better than ones and twos. However, one way to raise student scores was to lower the standard of the assignment and the expectations, and this led to confusion about the purpose of revision.
- Nothing gave participants greater faith that this work was worthwhile than a personal experience of seeing one's own students or children produce better quality work as a result of scoring guides and standards-based assignments. So too, nothing deterred participants more than a personal experience in which student work did not improve from a revised assignment or the introduction of scoring guides. (Coe and Useem, 1996, quotes taken from throughout the article.)

The kind of professional development described above puts teachers' work in the public domain by requiring teachers to share assignments and samples of student work. This is new for teachers and it is likely to be frightening. This is especially so if the teacher feels inadequate as a result of weak content matter knowledge or management strategies or, indeed, about her own capacity to change and improve. Professional development that asks teachers to change must recognize that personal and psychological factors as well as intellectual factors are central to the process of changing teaching practices.

However, professional development that creates these kinds of collegial interactions has powerful potential. It can enable teachers to address the quality of student work, and, in the process, lead them to draw connections between the quality of the work and the quality of the assignment, between the quality of the work and the extent to which the student had an opportunity to meet the academic content standards. Teachers are urged to try new strategies and, in the company of colleagues, determine whether they are productive based on examples of student learning. This kind of professional development binds teachers' practice and students' learning tightly together. As a result, done well, new forms of professional development create on-going assessment of teaching and learning. This, too, is a critical feature of professional development, of standards-based reform, and of the culture of inquiry that must become a part of every school,

district, and state's continuing work. Such team work can be a vehicle for the development of curriculum, assessment and pedagogy that greatly increases students' opportunities to achieve at high levels.

We want to raise one last barrier to standards reform. **Standards reform can be transformed into standardized curriculum and teaching that leaves all students engaged in lockstep learning.** This is not the vision held by developers of the reform, but it is a tendency that we have seen across urban districts. It results from insufficient opportunities for teachers, principals and district administrators to learn what the reform is about and how different it is, conceptually, from traditional views of curriculum. It results from the desire to move quickly and find the "teacher proof" curriculum packages that promise to ensure teacher and student success. Past experience leaves us certain that such approaches to reform will fail to meet the needs of teachers and students.

However, with their eyes on the target of achieving the broad academic content and performance standards that should guide reform, teachers, principals and others working together can create or adapt locally responsive curriculum that enable children to achieve the standards in multiple ways. This design possibility is another benefit of locally implemented professional development that focuses on standards and provides sufficient support to teachers in the form of facilitation and a safe environment in which to try new practices.

IV. QUALITY PRINCIPAL LEADERSHIP: WHAT IS IT? HOW CAN WE DEVELOP IT?[16]

It would be difficult to find a school that has become successful for its urban students without a strong and effective principal. We know, however, from our own and from others' research that most districts do not provide principals with professional development opportunities in which they can learn what they need to know to help design and implement school reform that focuses on implementing high quality teaching in the context of standards. Principals rarely have the opportunity to learn, for example, about how to develop an effective instructional leadership role and style or how to facilitate the new approaches to teaching, curriculum and assessment that their teachers are attempting. In the previous section, we discussed barriers to improving teaching that arise out of principals' lack of knowledge of the reform agenda and their role in fostering it. In this section, we discuss how districts can help principals learn what they need to know so that they can support their schools' reform agenda.

New Visions of Principal Leadership

The work of urban school principals, just like the work of urban teachers, is becoming more ambitious. Roles and relationships between teachers and principals and between schools and central office are changing with respect to power and authority as a result of reforms that include components of site-based management (discussed in section V) and high stakes accountability. Contemporary principals are expected to create a shared vision, foster collaborative and team relationships among staff members, allocate resources, provide the information that teachers need in order to be successful with youngsters, promote teacher development and ensure increased student achievement. As researchers and practitioners note, "strong collaborative and instructional skills have replaced strong bureaucratic skills as important qualities needed for effective school principals" (Payzant and Gardner, 1994). Yet districts rarely provide them with ways to learn what they need to know in order to forward today's complex reform agenda. In this section of the paper, we focus on what urban principals need to know and be able to do to create a school culture that enables their teachers to implement high quality teaching. The points we raise developed out of long conversations with urban principals who are in the process of implementing the kinds of reform that are beginning in New Jersey.

In light of the role that they must play in standards-base school reform, principals need to do the following:

1. Develop a meaningful vision for their schools; facilitate buy-in to the vision and

goal setting process; involve the larger community with the vision and address the concerns of doubters and detractors. Principals need to know how to deal with the tensions that arise between those who value the new views of teaching, curriculum and assessment and those who prefer what they call "basics."

2. Forge a cohesive faculty unit that works together toward the school's vision, goals and objectives. This requires principals to create a collaborative school culture in which they can effectively exercise leadership and move schools toward the vision. Principals need to know how to create a learning community of teachers and other school-based administrators.

Principals are most familiar with a traditional school structure in which teachers often work in isolation from one another. Yet, as we discussed in the previous section, high quality teaching for understanding requires collaboration among teachers and between teachers and students. Creating this kind of collaborative culture or learning community, requires principals as well as teachers to a) expose their practice to the scrutiny of others in the interest of improving it, b) assume responsibility for helping others and sharing knowledge, and, c) have a safe environment in which to do each of these. Principals need to be able to model these processes in order to learn and in order to convince teachers to do the same.

3. Convince their faculties and communities to have high academic expectations for all children regardless their social circumstances or prior achievement. This can be difficult for principals if they are not sure that the goal is realistic. Most principals have had no first hand experience with such success and it is difficult for them to find examples of widespread student achievement in other urban schools. They, like teachers, need existence proofs. Principals need to believe, based on knowledge, that the learning goals they propose are feasible.

4. Work with teams of teachers as well as with individuals. Principals need to know how to form teams including what to consider about the professional and personal characteristics of teachers who might constitute each team. They need to know how to help team members work with each other, and, in the case of site-based management teams, with the principal. Principals need to know a) what teams should do to improve student achievement, b) how to connect their work to schoolwide reform, c) how to deal with within-team conflict when it arises, and, d) how to evaluate team progress.

5. Gain considerable knowledge about the pedagogy and curriculum their teachers are being asked to implement. Principals may have heard of the NCTM standards, but they are unlikely to fully understand what they imply for changes in teaching, curriculum and assessment. They may not know how hard it is for teachers to

learn to teach according to the new math standards. Without access to such knowledge, principals cannot lead these reforms. How can they monitor the implementation of the teaching and curriculum reforms if they do not know what they should look like? How can they evaluate teachers if they do not know what effective teaching, done the new way, should look like?

6. Evaluate their school's progress with the programs and practices implemented at their schools. Principals may not be especially eager to learn how to assess their programs and progress, but this is an essential area of knowledge and skill for principals serious about implementing teaching and learning reforms and in creating a learning community in which all practices are open to scrutiny and adjustment.

In New Jersey, urban principals will be leading school reform that challenges their existing ideas about school organization, leadership and management, teaching, learning, curriculum and assessment. This will be an impossible task if they do not have access to appropriate professional development. They will fail and, as a result, so will the children of New Jersey's urban schools. **As a result, we strongly urge districts and the state to carefully consider what principals need to know and be able to do and provide them with learning opportunities that will enable them to implement their new and more complicated roles.**

Characteristics of Formal Principal Professional Development

Having described what principals need to know, we turn to a brief discussion of the structures and pedagogy with which they might learn. Principal professional development needs to have many of the same characteristics as teacher professional development. It needs to be focused on actual principal work, on-going, and conducted in an environment in which principals can genuinely share their knowledge, skill, successes and failures in the process of gaining new knowledge and skill.

1. Principals need professional development that puts them into the role of genuine learners. They need to have the opportunity to re-think their goals, purposes, knowledge and skill, to explain themselves fully to their colleagues, to those providing the professional development, and, ultimately, to themselves. This will not be any easier for principals than it is for teachers, but it will give them the opportunity to grow as professionals. By being taken seriously as learners, principals are likely to develop a greater sense of efficacy, a sense that they are capable of learning and improving, and the confidence with which to ask for help.

2. Principal professional development needs to take place in a supportive structure. The culture of most school districts discourages principals from detailing their lack

of knowledge in public even if doing so would get them help. Principals become like students in traditional classrooms: afraid of looking "stupid" by revealing what they do not know. Professional development needs to change this culture to one in which inquiry is praised and principals are rewarded for identifying what they need to learn. Principals can find such support in arrangements that provide them with "critical friends." This and other arrangements can be organized within or across districts.

3. Professional development needs to take place over a long period of time and provide opportunities for principals to try new skills at home, review their impact, discuss them at the next training session, and then attempt refinements. This feature of principal professional development, again, matches what is recommended for teachers.

4. High quality professional development for principals, like that for teachers, requires them to reflect on their work alone and in the company of colleagues. The process of thinking systematically and in the presence of others helps clarify thinking as well as produce new ideas. Reflection can also help principals realize that there are multiple, effective ways to approach problems and that, as leaders, they need to appreciate the styles with which they and their administrators and teachers work.

5. The content of professional development should reflect a mix of what principals identify as important and what others who provide professional development for urban principals find important from their work in other urban communities. By building a professional development program, in part, on what principals identify as their needs, trainers involve the principals in their own learning. However, principals who are new to reform may not be aware of all that they need to learn. For this reason, outside consultants who are familiar with the demands of reform can add important components to the professional development program.

Principals who are serious about reforming their urban schools face a daunting task. They need to transform themselves from managers into leaders and learn new knowledge and skill. Principals have to reconstruct core ideas about their role and, therefore, how they should spend their time, set their priorities, seek new knowledge and skill, and situate themselves with respect to teachers and others in the educational community. In many respects, the demands on principals are similar to those on teachers who are attempting to become facilitators of childrens' learning, and are rethinking their conceptions of content, pedagogy, and assessment. The process is complicated, takes time, and requires models of good practice and coaching support. It works best in the company of others, and in an environment which encourages risk-taking designed to improve student learning

(Little, 1993). Principals, like their teachers, will benefit from professional development that has such characteristics.

Consideration of Some Barriers to Principal Professional Development.

This conception of principals' professional development is, to some extent ideal. It assumes that there is no district context, no set of management priorities and incentives stressed by superintendents and other upper level administrators. But the district context exists and is critical to principals' capacity to implement what they learn. We know that central offices, for the most part, still attend most to the management side of the principal's role. They reward principals for keeping order more than for increasing student achievement. Therefore, one important question for those who are serious about changing the principal's role, is how to change the district culture so that principals are more likely to be rewarded for the kinds of changes professional development will promote. Without a supportive district culture, principals' efforts will be stymied.

V. ISSUES OF SCHOOL AND DISTRICT ORGANIZATION

During the last ten to fifteen years, schools and districts across the country implemented organizational changes expecting that they would lead to better teaching and higher student achievement. We now know that organizational changes, by themselves, are quite loosely linked to how well teachers teach and, therefore, to student achievement. This is not to say that organization does not matter. It is to say that for organizational changes to improve teaching and learning, they must be accompanied by activities that focus directly on teaching, curriculum, and assessment. Organizational reforms are worth considering because, under the right circumstances, they can provide the contexts in which high quality teaching and expert principal leadership foster high student achievement.

District Organization

There are numerous ways in which districts might organize themselves to better meet the needs of students. As they develop local strategies to implement standards, New Jersey's districts would benefit by considering what research reveals about organizational arrangements that can foster student achievement. With this in mind, we want to address briefly five organizational strategies that districts should consider in moving towards standards-based reform. They are 1) site-based management/shared decision making, 2) reconfiguration of central office roles and responsibilities, 3) creation of small schools or small school units within schools, 4) year-round schools, and 5) specialized standards-based support programs.

1. Site-Based Management/Shared Decision Making

Site-based management/shared decision making is a very popular organizational reform. It is supposed to (Malen and Ogawa, 1989):

- enable site participants, notably teachers and parents, to exert substantial influence on school policy decisions.
- enhance employee morale and motivation.
- strengthen the quality of school-wide planning processes.
- foster the development of characteristics associated with effective schools.
- improve the academic achievement of students.

Teacher associations have pressed for this reform because its proponents claim that it increases teachers' authority over decisions that influence their work. Policy

makers encourage it in the belief that decisions made close the work setting will be more responsive to local stakeholders' needs. Often, this belief grows out of the view that the district office is ineffective and may even stymie reform. For such reasons, state policy in Kentucky mandated site decision making councils, as did Chicago's urban reform strategy. District administrators may support the reform because it provides justification for holding schools accountable. After all, if site-based management councils make decisions about hiring their principals, selecting textbooks and organizing instruction, they cannot complain that low achievement results from constraining district policies. These are good reasons to adopt one or another form of site-based management. **However, there is scant evidence that this organizational change benefits children.**

A number of factors contribute to the lack of impact. Site-based councils usually lack a) time, technical assistance, independent sources of information, and funds to use to evaluate the success of current programs -- critical resources that might make them effective, b) appropriate training to overcome the traditional norms regarding participation, conflict, and formal authority, c) knowledge about reforms that might improve teaching and learning, and d) clear guidelines for principal authority and responsibility in light of the site-based management teams' decisions.[17] Furthermore, the reform fails to show how central office administrators must change their roles and responsibilities if considerable authority is given to the schools. Site-based management does not enable central office administrators to know what they should do to help schools help children.

Site-based management can provide a way to create local commitment to a school and make changes in light of its population. The content of the changes, however, matter most. Unless the site-based council's recommendations are informed by knowledge that will help teachers and students, the decisions will be no better than those made by central office.

We raise strong cautions about site-based management because, despite evidence to the contrary, the reform continues to be touted as a strategy to increase student achievement. We are not arguing against site-based management. **We are arguing that, by itself, this strategy will not lead to increased student achievement. And, we are arguing that the reform requires restructuring of the entire school district's operations, not only those that occur at the schools. If districts want to implement this reform, they would do well to consider what else needs to accompany the organizational changes**.

2. Reconfiguring the Roles and Responsibilities of Central Office Administrators

With or without site-based management, central office administrators will need to

increase their knowledge and skill if they are going to help schools implement high quality teaching. In the critical arena of professional development, responsible district administrators will have to figure out what to do if school level professional development becomes central to standards reform. What will happen to the organizational unit and to the personnel who provide large-scale workshops? How will the professional development unit gain the knowledge and skill with which to work with small groups of teachers on a continuing basis? Who will help them learn these things? What will be the district's new approach to whole district professional development days? These are important questions with which districts will have to grapple. We raise questions about the professional development component of district offices because this unit can become anachronistic in light of the demands of professional development for high quality teaching. Or, it can be reorganized to provide teachers with much needed knowledge, skill and encouragement.

We ask similar questions about other units in the district's organization. For example, what will be the role of the office that deals with assessment and evaluation? Testing units usually have audit and public reporting functions. In a standards-based district, they should provide schools with usable, clear data in a timely fashion. These units are rarely set up to provide that information. How will the people who work there learn to work directly with schools? Who will teach them how to help principals and teachers use the data they provide? In another district arena, who will help schools understand the resources that are at their disposal from federal and state programs, for example? Who will help teachers and principals understand the new flexibility that now enables schoolwide reform with federal dollars?

Reconfiguring central office needs to include consideration of what the district requires of and provides for its school level administrators. Districts need to ask themselves: How likely it is that their principal professional development programs, for example, enable principals to lead standards-based school reform? How well do the criteria with which principals are evaluated match the knowledge and skills that principals must use to enhance school reform? To what extent are new principal and/or assistant principal support programs focused on what new and prospective principals need to know and be able to do? How well does the district use the time it requires for districtwide principal meetings? If the answers to these suggestions suggest weaknesses in the district's organization, central office administrators will have to create new organizational units that have the capacity to meet the district's needs.

We urge district administrators to grapple with these and other questions so that they can become capable of helping the schools help children. Roles and

responsibilities will have to change. So will criteria for successful performance. Districts that expect changes at the schools but not in their own part of the organization will find themselves facing considerable hostility from the schools. If central offices do not take on the hard work of school reform, schools will find them, at best, ineffective and, at worst, an obstacle due to policies and practices that thwart teacher learning and student achievement.

3. Create Small Clusters of Schools, Small Schools and/or Small School Units within Large Schools, and Small Classes

In order to have the opportunity to succeed, both adults and children need to work in organizational units of reasonable size. **It is incumbent upon district leaders to ensure that size is not a detriment to leadership, teaching or learning.**

Some districts are too large to be led by one central administrator. They usually have assistant superintendents among whom the operations of the district are distributed. For example, some districts may divide responsibility for federal programs and compliance among its assistant superintendents. It may assign non-federal innovations or curriculum responsibilities to other assistant superintendents. But the arrangement of these assignments and responsibilities may not enable assistant superintendents to work coherently to foster standards-based reform. They may, rather, fragment the district's efforts. **In light of standards-based reform and the opportunities provided by the Abbott decision, districts must assess how likely it is that the organization of senior administrators' work will help schools do a better job educating children. If the current organization is ineffective, than districts must learn how to reorganize to better support their principals and teachers.**

Research tells us that children do better in school when they are well-known by the adults and feel that those adults have a genuine stake in their success. Research now clearly demonstrates that children learn better in classes that are very small, in classes that have fifteen or so students. Teachers, also have stronger, professionally oriented collegial relationships when they work in small schools. In such settings, they develop a strong sense of responsibility for the impact of their own work on children and other teachers.

It is not always necessary to construct a new building in order to have a small school. It is possible to reorganize a large school into semi-autonomous units within one building. This strategy has been used to create programs tailored to diverse students' interests and needs and to enable teachers to implement teaching and curricular strategies that do not mesh well with the school's traditional program. Even if the program remains the same, smaller units of the same school

can lead to the benefits of small size.

Such organizational changes lead to many questions about duplication of administrative staff and capacity to run multiple school programs within the same physical space. Will there be enough science labs? Will there be enough students for high level courses to justify their duplication in two semi-autonomous structures within the same physical facility? These questions are reasonable; with the goal of increasing student achievement in mind, they can be answered.

As a result of what we know about the importance of size to learning, to the extent possible, New Jersey's districts should create small schools and classes when they have the opportunity to develop new schools or reconfigure existing large schools and classes into smaller units. Some of these changes may make teachers and principals uncomfortable. At the high school level, in particular, they may have an impact on what courses teachers can teach. However, the adults' temporary discomfort must be weighed against the potential long-term gains for children. Districts must ensure that these kinds of changes can occur. They must not put obstacles in the way of good ideas just because they require new ways of thinking or of organizing services.

4. Year-Round School Schedules

Poor urban youngsters forget a great deal of what they learn in school during the summer. As a result, their teachers spend weeks at the start of each school year reviewing what was taught the previous year. This results in these youngsters having less time to learn new material than do their counterparts in more advantaged settings.

Some districts look to year-round schooling as a way to solve this problem.[18] A year-round calendar might include several nine or ten week terms interspersed with two- or three-week breaks (and a somewhat longer summer break). Schools use the time between terms to provide academic support for children who are in danger of falling behind. Teachers are paid for this additional work as they would be paid for summer school teaching. In this arrangement, students learn from teachers who know them, know the school's program and can appropriately target curriculum and instruction to address specific student needs.

There are potential benefits for teachers in a such a year-round school. Professional development time can be built into term breaks. This can enable teachers to engage in sustained curriculum work and/or site-based professional development throughout the year rather than only during the traditional summer break.

Implementing year-round schools that include attention to both teacher and student learning may cost more than running a traditional school schedule. But the benefits may be worth the cost. In the context of the Abbott decision, New Jersey's urban districts have the luxury of proposing such changes.[19]

5. Specialized Standards-based Support Programs

As we wrote at the start of this paper, standards reform defines teacher success in terms of student learning. It is not sufficient to say, "I taught well, but they didn't learn." In addition, standards-reform is not about grading on a "curve." Each child is expected to achieve at standards agreed upon at the district (and perhaps the state) level. We believe this goal is attainable, but achieving it requires new ways of providing support to children who have difficulty.

One way, described above, is to reorganize the school year and provide new learning opportunities during term breaks. Others include, for example, standards-based summer schools and after- or Saturday-schools. For example, in Corpus Christi (Texas) parents are notified mid-term if their children are in danger of not meeting the standards for that term. They are asked to bring their children to Saturday school where instruction is organized around the standards that each student needs to achieve. The idea of Saturday school is to help students meet the standards and reduce student failure. However, standards-based summer schools still exists for children who have not achieved at standard by the end of the school year. Several districts are also experimenting with standards-based summer school. In one version with which we are familiar, students need only attend until they have mastered the standards that they did not achieve during the school year.

As with year-round schooling, we want to stress the opportunity for teacher learning that can accompany new approaches to summer school and other organizational supports for students. Teachers in San Diego, for example, have organized summer school programs that provide targeted instruction for students in the morning and professional development opportunities for teachers in the afternoon. In one such school, teachers taught for four mornings and worked on curriculum during the afternoons. On the fifth morning, students came to school and were taught by others who provided them with different learning opportunities that tapped into more expressive areas such as art and music. During this time, teachers worked together to examine students' work in light of standards, to consider the quality and appropriateness of the work they were assigning, and to get help in trying to better address their students' needs. In yet another school, three teachers worked with a class of fifteen or so students in the morning. They too engaged in standards-related professional development in the afternoon.

These kinds of reforms have great potential benefits for students and for teachers. They do require funds to support new organizational arrangements. Given the availability of funds as a result of the Abbott decision, we urge districts to think creatively with respect to organization. Done well, organizational changes can lead to learning opportunities for teachers and for students.

School Organization

In this section, we discuss school-level organizational reforms that have the potential to improve teaching and learning. They have potential because they can provide teachers with the time they need for in-school professional development, common planning time, and longer blocks of teaching time. They have the potential to provide students with less fragmented school days and years and with smaller classes. However, as is the case with site-based management, organizational changes, by themselves, will not lead to increased achievement. That outcome depends on what teachers and principals do within the new organizational arrangements.

We present these organizational reforms as options for schools to consider. In the process of developing their local standards-reform strategy, teachers and principals can decide whether they might help them achieve their goals.

1. Schoolwide Teams that Focus on Program Development and Implementation

Some reform programs, for example the Accelerated Schools program and Dr. James Comer's School Development Program (SDP), function through leadership teams that focus on improving the academic program and the social climate of the schools. Other programs, such as the 21st Century Schools program in Boston require formation of an Instructional Leadership Team (ILT) that is designed to keep the school's attention on teaching and learning. Absent formal programs, some schools also develop organizational structures for the purpose of implementing school reform.

Each of these schoolwide teams has the potential to enhance implementation of standards reform. They can only do this if members have sufficient knowledge and skill with respect to the reforms they are trying to implement. Too often, teachers and principals lack the professional development necessary to make use of the schoolwide teams. Too often, team participation leads to great frustration because teams do not have leaders who bring them the knowledge and skill they need to work more effectively with students.

At all levels of the school, teams will be effective to the extent that school and district leadership enables teachers and others to learn what they need to know to

make good use of these structures.

2. Interdisciplinary Teaching and Block Scheduling

Teachers in elementary schools can often vary the amount of time they spend on a particular content area. They can decide to do a project with students that spans several content areas without running into organizational problems. They must have their children ready to go to physical education, lunch and, perhaps, music and art. But otherwise, they have considerable control over the use of time.

This is rarely true for middle and high school teachers. The daily seven or eight period day leaves teachers and students with an hour or less to work together. Such short periods of time place genuine constraints on what and how teachers can teach. Multi-period days result in high school and middle school teachers working with 150 or more different students each day. They require students to be able to rapidly tune in and then out to five or six different subjects. For teachers and students, they press against sustained, thoughtful work.

Interdisciplinary teaming and block scheduling are organizational approaches designed to reduce fragmentation and reduce the number of students for each teacher. How does this work? At the middle school level, we have seen teachers create interdisciplinary humanities teams. For example, in the vignette described at the start of section III, this middle school teacher and her colleagues have combined language arts and social studies content to create an integrated humanities block. One teacher teaches a two hour humanities block in the morning and another in the afternoon. As a result, teachers might teach 60 students in those two classes rather than the 120 they would have if they were teaching four different language arts or social studies classes. There are also advantages for curriculum content: teachers can integrate curriculum making connections, for example, between what students read in language arts and what they are studying in history.

Interdisciplinary block scheduling can reduce fragmentation for students as well as teachers. Done well, it can help provide students with an educational program that makes genuine links between what are usually unconnected content areas. However, as with other organizational reforms, this one will only be as good as the content that goes into the structure. To make the most of this kind of organizational change, teachers need professional development to learn how to use the longer blocks of time.

3. Consider Assigning Children and Teachers to Each Other for Two or More Years

Teachers in a number of urban elementary, middle and high schools know the benefits of working with students for more than one year. They note the advantages of building a community of students who stay together over time. They speak of the time they gain at the start of the second year by not having to learn about an entirely new cohort of students or teach them classroom rules and regulations. In addition, such arrangements can provide students with additional time to learn without the stigma of failing a grade. We have seen the benefit of this in several urban high schools that created ninth and tenth grade teams. Students who were behind at the end of ninth grade continued on with the same cohort of students at the start of tenth grade. Many were able to use the second year of the cycle to catch up on old work and master what was required of them as tenth graders.

As we have said before, teachers cannot just be assigned to such arrangements. They must have opportunities to learn what they need to know to create better learning opportunities in the new organizational structures.

4. Restructure the School Day to Provide Time for Teacher Professional Development

With or without block scheduling or interdisciplinary teaching, principals and teachers can restructure the way in which planning/preparation periods are organized. They can schedule common planning time for teachers working in the same grade level, with the same content or with the same cohort of students. Such scheduling can enable teachers to work together toward common teaching and learning goals.

In an elementary school, this might mean enabling all fourth grade teachers to meet together so that they could, for example, examine student work in light of standards, decide whether to reassign students among themselves, or plan to do an entire fourth grade project. At all school levels, sensibly organized common planning/preparation time can be used for teacher professional development. Teachers might, for example, arrange for a specialist to talk with them during this time. They might look at achievement data from a recent test and decide what to do about their curriculum and instruction in light of students' strengths and weaknesses. Appropriate organization of time can enable principals and teachers to participate in the kinds of professional development experiences that are essential to the development of high quality teaching.

5. Use Faculty and Department Meetings as Times to Look at Data

Traditionally, principals and department chairs use meetings to tell teachers about

new policies and practices and to convey up-to-date information about conditions in the school. Much of this information could be conveyed in writing; only some of it needs to be discussed. Principals and teachers who are seriously engaged with school reform find that their faculty and department meeting times can be put to better use.

As we mentioned earlier, some principals have incorporated high level professional development into faculty meetings. They have had teachers examine samples of student work in order to come to agreement about performance standards. They have helped teachers look at data provided by the testing and evaluation department in order to develop new strategies in light of student achievement. Department chairs have focused meetings on aligning curriculum with standards and developing standards-based lessons. Through this process, teachers in one school learned that they were teaching volcanoes at all grade levels but never addressing important aspects of plant life. As a result, they worked together to reassign topics to themselves so that students would have access to a complete curriculum.

Organization provides a context within which teaching and learning occur. Some contexts nourish the high quality teaching that New Jersey needs to implement; others starve it. As schools consider alternate uses of time, personnel and resources, they need always to keep in mind how they think the proposed organizational changes will influence teaching and learning. As they try out the alternate organizations, they must seek information with which to answer questions about their impact. And, they must keep in mind that the quality of what happens in the organizational structure is as important as the potential of the structure itself.

VI. ACCOUNTABILITY[20]

Accountability for student learning is tricky business. On first glance, it appears simply to be about identifying who to praise and who to blame for different levels of student achievement. This seems reasonable. On second glance, accountability is about incentives, about rewards and punishments as motivators of improved practice. Many of those who support accountability systems argue that teachers and schools fail because of weak incentives. Get the incentives right, they argue, and teachers will work harder and principals will take on more effective leadership roles. In yet a third view, accountability is about success on external assessments. Most external assessments, however, are a) loosely tied to curriculum and instruction, b) measure only a narrow band of learning, and c) by dint of their importance, lead teachers to stress test content over more important district curriculum and learning goals. Accountability based on external assessment may eliminate other indicators of achievement that better measure student learning.[21]

Accountability for student learning, as represented in complex accountability systems, is a technology in its infancy. Our desire for it arises out of the belief that schools are failing students and that such systems can identify the reasons for failure and direct educators to more effective strategies. Because of this belief, accountability will likely become important in New Jersey. Therefore, we highlight several points that the state and districts should keep in mind as they develop accountability systems.

1. State and district accountability systems can be beneficial if they are tied to a needs assessment process that engages teachers, principals, and community members in thoroughly examining their schools and determining what they need to do to improve in light of content and performance standards. Accountability, in this form, can be a method of capacity building. If educators can get help in identified areas of weakness, then the system can lead to increased learning opportunities for students and increased achievement. District and school progress can be measured in light of goals set from the needs assessment process.

2. If assessment data are used in an accountability system, the measures of achievement need to be closely aligned with district and school curriculum. Often, this principle is violated by measuring success on external assessments. Districts and the state must deal directly with this issue to ensue that assessment measures what should be taught and learned.

3. Schools and teachers should be helped and not punished if, by virtue of district and/or state policies and practices, they do not have the capacity to help students learn. Those who permit these practices should be held accountable. When urban

schools cannot hire qualified teachers, district and state policies allow them to hire unqualified teachers. Teachers and children in too many urban schools work without sufficient material resources. They may teach and learn in sub-standard physical facilities as well. These conditions contribute to poor student achievement. Such schools may be identified as "failing" in an accountability system. While teachers and principals bear some responsibility for such outcomes, we stress that those who permit these policies and conditions contribute mightily to students' weak opportunities to learn and, therefore, to their poor academic achievement. If teachers, principals and schools are to be help accountable, they must have adequate material and human resources with which to work.

4. Data from accountability systems must be presented in ways that truly represent achievement in a district or school. In many urban school systems, there are schools that draw a disproportionate representation of the district's higher income, higher achieving students. As a result, on average, the school's achievement may be quite good. In determining success for such schools, it is essential to look at disaggregated data that describe achievement by categories such as gender, race, primary language, and income. Otherwise, high achievement by one student group may mask low achievement by another. Standards-based reform is not about achievement "on average." It is about achievement at standard for all students, regardless of their backgrounds or other circumstances.

5. Assessment, by itself, does not lead to improvements in teaching and learning. Just as organization does not result in higher student achievement, neither does testing. In both cases, this is made possible when the organizational structure or the assessment information is used as the starting point for identifying better teaching strategies. As Bernauer and Cress (1997, p. 74) point out, assessment "must serve the ultimate purpose of promoting the continuous improvement of teaching and learning."

As with all efforts to improve student achievement, accountability must be designed to provide help to teachers and principals. Without help, the measures generated by accountability systems will likely do little more than identify schools that are already known to be contributing far too little to student learning. With help, accountability systems can be a vehicle through which schools and districts identify schools' strengths and weaknesses and target help where it is needed.

VII. ISSUE OF LEADERSHIP AT THE STATE, DISTRICT AND SCHOOL LEVELS

No matter how much money is available for urban school reform, little will happen without concerted, sustained leadership from all levels of the educational system. Standards will not implement themselves and neither will high quality teaching or the other components of school reform. At all levels of the system, from the state to the district to the school and classroom, individuals must demonstrate the will and the leadership to formulate and implement reform strategies focused on increasing student achievement in the context of high academic standards. Such activity will not occur spontaneously. How might the process begin? In the current context, the trick will be to create state, district and school environments in which a) reform is not the constant change process that usually characterizes life in schools, and b) all efforts are aimed at the same goal: high student achievement as measured by agreed-upon high quality performance standards.

Stressing high student achievement does not mean that schools should disregard students' social and emotional development. To the contrary, it is clear from decades of research that schools will fail at helping students learn at high academic levels if they disregard who students are as individuals. Only by working to reform schools and create places where children have genuine opportunities to learn regardless of their backgrounds and circumstances will schools achieve these goals.

Reform needs to be coherent at each level of the educational enterprise and between the levels. In the same way that a school system's curriculum ought to be coherent from elementary to middle school and from middle school to high school, the reform agenda ought to be coherent from the state to the districts to the schools. This does not mean that each district must do exactly the same thing. Rather, it means that each level of the system must figure out what it has to do to achieve the agreed-upon high academic goals and create a coherent program designed to achieve those goals. Means will vary, but the goals will remain constant.

This discussion of leadership for urban school reform in New Jersey begins with a consideration of what the state might do to set the stage for districts' and schools' work. The discussion builds on the knowledge that standards reform is at the heart of the state's approach to reform and that it will be at the heart of the districts' and schools' focus. It builds on the knowledge that the state has begun the process of developing assessments based on its standards. The recommendations in this section aim toward deepening and expanding all participants influence on educational reform.

What Can the State Do?

New Jersey cannot "do" school reform in each of the state's urban districts but it can provide leadership that encourages and even requires districts to move expeditiously toward practices likely to improve student achievement. The state must lead reform, but it must also be a learner. It must invent ways to reflect on its own policies and practices to determine whether they are having the desired impact. Reflection is important for teachers and principals; it is also important for policy makers at the state level. With this in mind, the state should act on the following components of leadership.

1. Foster Coherence, Capacity Building and Changed Practices at All Levels of the Public Education System.

New Jersey has adopted standards and is in the process of developing accompanying assessments. It is essential that the state "stay the course." Too often with a change in the governor or the composition of the state legislature, states swing wildly from one reform agenda to another. Districts follow suit as they try to be responsive to changing requirements. The result is lots of activity and little improvement. It is also essential that the state develop a set of programs and practices that engage educators in the work of reform in ways that increase their capacity to provide high quality education to all students. And, it is essential that the state foster changes in practices at all levels of the system. Too much of the form and content of education is taken for granted; all aspects of the system need to be subject to scrutiny if reform is to meet the demands of the standards-based system being put in place.

California provides an example of both the benefits of coherence, capacity building and changed practices as well as the drawbacks of wild swings in policy. [22] In 1983, California's legislature began the process of school reform by focusing on a wide number of issues: graduation requirements, the length of the school year, revised textbook adoption guidelines, subject matter projects, administrator training programs and new curriculum standards. The well-known California Curriculum Frameworks project continued for several years resulting in "model" curriculum standards in language arts, mathematics, science, social studies, fine arts, and physical education. These Frameworks guided change at the district and local school levels. According to Chrispeels, the legislature developed capacity for reform by "establishing several regional centers at California universities to help educators implement the new frameworks in their classrooms and to develop a cadre of curriculum leaders. In addition [the legislation] called for the establishment of the California School Leadership Academy with 12 regional centers, housed at

county offices of education. The purpose of the leadership academies was to increase the skills of current and prospective administrators in line with the new policy direction" (p. 460). The Curriculum Frameworks -- in today's language, the academic content standards -- guided decisions about the selection of texts and other teaching materials, assessment and professional development.

The state encouraged local capacity building as well as improvement by implementing a monitoring strategy for school improvement. The strategy, called Program Quality Review (PQR) created groups of districts "to share responsibility for reviewing and guiding the development of one another's programs. These changes increased local educators' ownership of the reform process and enhanced their capacity to bring about educational changes in their schools and classrooms as a result of training for and conducting the reviews" (pp. 461-462). Teachers and principals participated in the PQR process in their own schools and they served as "critical friends" to other schools. This work broadened their views of teaching, learning, curriculum and school organization. The form and content of the PQR process matched well to the components of high quality professional development discussed earlier. Teachers and principals became part of a dialogue of inquiry about teaching and learning in the context of the state's standards as embodied in the Curriculum Frameworks. Through this work, the state created networks of teacher leaders who helped formulate and implement reform in their own districts. Finally, although we have not described all aspects of the state's reform program, California developed a test with which to align student assessment with the Frameworks. The test was known as CLAS, the California Learning Assessment System.

Teachers and administrators were involved in the work of reform over a long period of time. They were members of the committees that developed the frameworks and the assessments. They considered textbook adoption issues and they brought their knew knowledge and skill back to their districts, schools and classrooms. Districts' local capacity grew as a result of principals' and teachers' participation in the work of state reform.

Reform in California was not perfect. The state was never able to provide the huge amount of professional development necessary to fully enhance teaching practice; the coherence which held for ten years as a result of alignment of the reform agendas at the state department of education, under the leadership of Superintendent of Public Instruction Bill Honig, and in the legislature faded with changes in the California Department of Education, the governor and members of the legislature. Nonetheless, the state created a system from which one could reasonably expect to see changes in practice at the classroom level. The state created a system designed to forward the goal of increasing student achievement.

At the moment, school reform in California is far less coherent. CLAS was withdrawn after outcries about the content of some of the questions, its cost, and the fact that it would not provide information about individual children. Other components of the reform remain, but districts await with concern changes at the state level with respect to standards and assessment.

New Jersey can learn from California about the importance of designing a reform that is comprehensive and coherent. It can learn about the value of including teachers, principals, district level administrators and community members in the work of developing reform. As Chrispeels and others say, the reform made sense, the pieces fit together, teachers, administrators and parents could understand the components and see their interconnections. This design feature, along with the provision of wide participation in the development of the reform's components, helped create a coherent, capacity building effort designed to change teaching practice and, therefore, student learning.

New Jersey cannot recreate California's process and content, but we suggest that it think of its role in reform as leading such a coherent, capacity building endeavor. And, we suggest that New Jersey make every effort to avoid having the reform held hostage to the vagaries of political swings by involving a broad array of stakeholders in its development from the outset. It may take time to do this well -- although it is important not to spend the bulk of the time on design rather than implementation -- but creating buy-in on the part of districts, professional associations, community groups and others will be of long-term benefit. Working together, the districts, the state and other stakeholders can create a system that helps insure that the reform agenda stays in place.

2. Examine the State's Reporting Requirements for Special Education, Title 1, bilingual Education and Other Special Programs to Insure that they Support Districts in Providing High Level Academic Programs for All Students.

Nationwide, districts are trying to include more children with a variety of educational needs in mainstream classrooms. Teachers are working to enable all students to have access to curriculum that is based on high level standards. This direction is encouraged at the federal level by new regulations concerning testing requirements for students receiving special services and by changes in reporting requirements that detail how funds have been expended. This is to be applauded.

However, we know that some locations still require reports on spending that practically force districts to provide substantially separate classrooms for children entitled to special services. New Jersey should conduct a careful and review of its reporting requirements with the goal of informing the public and the schools of

what it requires and the ways in which districts can demonstrate compliance without resegregating children or preventing them from participating in classes that have high academic standards. Such a review and public demonstration will prevent school districts from blaming the state for the organizational decisions it makes. It will enable the state to lead the districts to provide more inclusive educational programs where they will benefit children.

3. Thoroughly Review All of the Data Information Requests that the State Currently Makes in Order to Create Coherence and Minimize Duplication of Effort at the State and District Levels.

States request numerous reports from districts and individual schools. The reports often require the districts to reconfigure the same data in multiple formats. State data bases are often unconnected, leading departments and agencies to request the same data over and over again in slightly different formats. Too much of the time, the districts get no benefit from the information they collect and it is not clear that the states do much of value with the data. Too often, the data themselves are not valid, making it impossible to use for any purpose. For example, schools, districts and state departments of education often collect data on student drop-outs and on retentions in grade using completely different counting systems. As a result, drop-out rates computed in one district cannot be compared with rates from another. When the state aggregates such data, it can say nothing that is valid about drop-out rates in the state.

In the context of the current reform opportunity, the New Jersey Department of Education and any other department that collects data from the schools should carefully review their data collection, analysis and reporting strategies with the goal of creating coherence and parsimony. A significant part of this review should focus on how the state uses the data and the extent to which those ways benefit its educational goals. The state might consult with universities or other institutions that are familiar with strategies for managing school, district and state level education data. The state, by taking on this task, can become part of the learning community necessary for successful school reform.

4. Insure the Equitable Allocation of Financial Resources.

All states are charged with the responsibility of providing children with a fair and equitable education. In New Jersey, the Abbott Decision requires a new formula for allocating funds to urban schools. Although this is a requirement with specifications, implementation will still have to be carefully monitored at all levels of the educational system. The state will have to look at its own allocations and it will need a way to examine the way allocations are made at the district and school

level. Just as reform and standards implementation do not happen just because they are mandated, we know that funds are not necessarily distributed in equitable ways just because they should be. The state must take an active role in ensuring that funds are allocated in ways that support urban students' opportunities to learn by meeting the spirit as well as the letter of the Abbott decision.

5. Develop a System for Monitoring Districts' Accomplishments and Identifying Districts in Need of Additional Assistance.

It is true that districts and schools will teach what is measured. As a result, the state can have a great influence in forwarding reform by dint of the accountability system it puts in place. The state can help districts by putting into place testing requirements that are based on achievement of the standards. In some states, state leadership praises standards-based reform while it requires the districts to implement norm-referenced tests that are not tied to the districts' curricula or to standards. This is the current situation in California. Such mixed policies create incoherence at the district and school level. Furthermore, they do not enable the state to know whether students are moving toward achieving at higher standards. New Jersey will help improve achievement in all of its districts by establishing a state testing system that is tied to the outcomes the state has determined it values as embodied in its academic content and performance standards.

6. Assist in the Recruitment and/or Preparation of Qualified Teachers for Urban Areas.

As noted earlier, urban districts have difficulty finding sufficient numbers of high quality teachers in all content areas and especially in mathematics and science. Teachers in urban settings often teach out of their area of certification. What should the state do to ameliorate this situation? The state should develop incentives to a) attract qualified teachers to urban areas and b) encourage the state's teacher preparation programs to focus on preparing teachers for these positions. The state, in collaboration with the teachers' associations, should develop an educational structure to provide a) assistance to certified teachers who are teaching out of their area of expertise, and b) focused professional development to teachers with emergency credentials who want to obtain a permanent certificate. The proposed Professional Standards Board could help in the design of such a program. The state will have new requirements for professional development that are tied to continuing certification by 1999. These requirements should address the special needs of teachers who are working out of their areas of expertise.

Some might think that districts, rather than the state, should deal with these issues

in their local context. In theory this might be true; in practice it is unlikely that each district could mount effective programs across a number of grade levels and content areas by itself. No district is likely to have the funds let alone the professional development expertise such an enterprise would require.

Teacher associations may desire to focus less attention on teachers who are working in areas for which they have insufficient preparation. They are likely to note that there are job-security issues involved in any new requirements for such teachers. These concerns must not be ignored. However, the state must work with the teachers' associations to enable teachers to gain expertise in the content areas that they teach. Without such commitment by the state and by the associations, children will remain without sufficient opportunities to learn even with added financial resources.

7. Develop a Clearinghouse of Professional Development and Curriculum Resources

The state cannot be the primary provider of professional development, but it can foster a network of providers whose services will be available to districts and schools. The state can establish, in collaboration with universities, colleges, educational agencies and others, a set of standards for acceptable professional development. These standards might be based on those already developed by the National Staff Development Council. Districts could use this clearinghouse to obtain information about services that are available in areas they wish to pursue.

The state might provide a similar service with respect to curriculum materials. Within the clearinghouse, the state could provide information about curriculum and materials that are appropriate for helping children reach standards in a variety of content areas and at different grade levels. This information might indicate where such materials are in use and who to contact about their effectiveness.

8. Provide Funds for the Development of One or More Superintendent Centers to Focus on Urban School Reform.

Superintendents will confront a range of similar problems as school districts move forward with reform. Although an Urban Superintendents Association of New Jersey already exists, it is not clear that it provides the kind of professional development that superintendents will need as they move their districts toward standards reform. And, despite associations such as these, superintendents are often isolated from colleagues who might provide them with assistance. They do not often have access to professional development that would help them learn how to better lead reform designed to significantly increase student achievement.

A new Urban Superintendent Center, perhaps available to all senior district administrators, might be modeled on one of the various Principals Centers that exist across the country. As such, it might be led by a board composed of urban superintendents who would represent their fellow superintendents in developing a program of speakers and/or practicums designed to address the issues that superintendents face. For example, some Superintendents may want to mount an on-going program of community involvement in the development of local content and performance standards. They may not know how to get started or how to manage the controversy that will likely accompany this important effort. Other Superintendents might want to hear about the impact of reporting student progress to parents and the community on the basis of standards rather than in the traditional letter or number grade system. They may all want help translating the language of standards reform and the standards themselves into language that all parents can understand. And, they all might value a setting that they organize and in which they are free to describe their concerns outside of the glare of a public school board meeting and without the presence of reporters. A new Urban Superintendent Center could address these and related issues.

By supporting such a center, the state would be helping to replicate the conditions for superintendents' professional development that are known to be crucial for teachers' professional development. If it is essential for teachers to break out of the mold of isolation in order to improve their teaching by working in the company of colleagues, it is equally likely to be essential for superintendents. If teachers benefit by holding their practice up to the scrutiny of colleagues, it is likely that superintendents will also benefit from such opportunities. By creating such centers the state would be developing another part of a coherent strategy of reform in professional development for educators in the state.

9. Provide Funds for the Development of One or More Principal Centers to Focus on Urban School Reform.

For the same reasons that the state should support the development of one or more Urban Superintendents' Centers, it should support the development of such centers for urban principals. Such centers could build on the work of the Principal Center that already exists in the state. A central mission of the new centers must be implementing standards reform that leads to high student achievement.

10. Recognize and Encourage District Efforts to Develop and Sustain Partnership Relationships that Encourage Parent and Community Involvement in Urban Schools.

Standards reform embodies new concepts, new ways of teaching and new ways of assessing student learning. It is essential that parents and other community

members have an opportunity to learn about and participate in the design and implementation of standards-based reform. Parents will need to understand the reform in order to help their children learn. Community members need to understand the reform because they are asked to support it with their tax dollars. Students need to see tangible proof that their community values the effort they are being asked to make in order to learn.

Ultimately, parent and community involvement will take place at the district and school level, but the state can make involvement a priority. While the actual activities should be designed at the district level, the state can use incentives to encourage and reward high quality parent and community involvement activities. What might such activities look like?

In Louisville, a community organization called the Middle School Coalition works with a broad range of social service agencies to make their services available to the district's children and families. The Coalition is the community's voice in support of middle school reform. As one of its efforts, the Coalition convinced over 2,000 adults in each of the last two years to visit middle schools and talk to two or three children for half an hour about the children's aspirations, about the world of work, and about the importance of schooling. In the second year of the program, the Coalition almost had more adult volunteers than it needed. Many of these volunteers have made additional commitments to the district's schools. In Minneapolis, foundation funds are being used to start a school project with the League of Women Voters. Members of the League committed themselves to learning more about the city's schools by "shadowing" children in school for a day and talking with them about their school experiences. League members will also talk with principals and teachers. Both the League and the Coalition's work are ways of opening the schools to the wider community to enable greater understanding, feedback, and support for the school.

The Right Question Project, with headquarters in Massachusetts, works in districts across the country to enable parents to have the knowledge and skill with which to talk to teachers and get good information about the school programs and their children's progress. This and other programs can inform the strategies that New Jersey adopts to increase parent and community knowledge about and commitment to its urban schools.

Summary: The State's Role in Leading Education Reform. New Jersey must lead the urban reform agenda by committing itself to developing policies and practices that give students the greatest opportunities to learn and achieve at standard. The state must ensure that funds are equitably distributed, but it must also do more. It must make sure that it fosters coherence in reform through an integrated and

thoughtful approach to all aspects of school improvement. As we highlighted above, the state must do this through careful examination of all of its reporting and data collection requirements with an eye on the extent to which they provide data that inform increasing student achievement. The state must ensure that districts and schools that are not making progress get the kind of support they need to effectively address student achievement. This implies that the state must take a role in ensuring that there is an adequate supply of well-trained, highly qualified teachers available to urban schools. And, the state must support the development of principals and superintendents so that they have the knowledge and skill with which to lead their districts' urban reform programs. If New Jersey takes seriously the leadership demands of reform in the context of the opportunities provided by the Abbott decision, then there is great hope for the children who attend its urban public schools.

What Can Districts Do?

Districts, like the state, have the responsibility of developing and implementing a coherent approach to school improvement. They, too, must strive to develop the capacity of all who work in the schools and school systems. Then, if the state's policies and practices are coherent and supportive of standards-based reform, the districts and their schools will have a positive context in which to forward their local, coherent versions of reform.

We consider district capacity to be the accumulated expertise of central office and the schools. The district and schools are one unit because, to a considerable extent, district capacity depends on schools' capacity. District capacity, in other words, is not located solely with the administrators who occupy "central office." Rather, district capacity is embodied in the aggregate work of central office administrators, principals and teachers who have the knowledge and skill with which to implement reform in schools and classrooms.[23] Districts and schools together create systemic reform.

We noted earlier in this section that the state cannot "do" school reform in each district but it can lead the reform. Districts and schools, however do design and implement reform. As a result, we strongly urge them to consider the following suggestions.

1. Foster Coherence, Capacity Building and Changed Practices at the District and School Levels. Just as we urged the state to put together a coherent, intelligent reform strategy focused on implementing standards-based reform, we urge districts to do the same. A coherent approach provides the framework within which schools can shape their individual approaches to improving teaching and learning.

2. Conduct Careful and Thorough Needs Assessments that Help Identify What Districts and Schools Must Do to Implement Standards-based Reform. District administrators must address the implications of standards reform for their own work. As we have said before, they may need to alter their roles and responsibilities in order to support changes underway in the schools. Schools need to get good information about their current status in order to begin the process of change. The district as a whole and each individual school must learn to use information as part of on-going decision making.

3. Provide Central Office Administrators, Principals, and Teachers with Professional Development that Enables Them to Carry Out the Tasks of Reform. Throughout this paper we have identified some of what teachers, principals and district administrators will need to know and be able to do in order to implement standards-based reform. Districts must ensure that appropriate, high quality learning opportunities are available to them. Senior district administrators must lead this process by involving themselves in new learning and in supporting colleagues as they attempt new ways of fulfilling their jobs. **We stress especially the importance of promoting principal professional development.** Informed school leaders are essential for successful school reform. Districts should create opportunities for principals to learn in formal settings as well as in principal networks within and across districts.

4. Provide Opportunities for Teachers to Become Leaders and Engage Them in Professional Development Roles as Described in Section III. If districts take seriously the development of teacher leaders, they will have considerable capacity to spur and sustain reform at the schools.

5. Create a Process that Involves Principals, Teachers, Parents and Community Members in Creating a Set of District Content and Performance Standards that Build on What the State Has Adopted. We noted early in this paper that it is difficult to understand the full meaning and implications of standards reform. The language can be confusing and the reform's implications unclear. As a result, those who work with districts to implement this reform strongly urge them to go through a process that enables them to understand what standards mean and ensure that local curriculum fully addresses local students' needs.[24]

6. Create Opportunities for Teachers, Principals, Parents and Community Members to Consider How to Report Student Achievement by Standards. Current grading practices do not align well with standards. Teachers generally develop their own criteria for high or low grades. In urban schools they tend to reward students by giving high grades for effort even if achievement is only fair to moderate. Standards reform requires reporting students' absolute achievement of a standard

regardless of effort or other extenuating circumstances. Districts and schools will have to figure out how to deal with this requirement. They will also have to figure out how to report growth. After all, students who begin a year of school very far behind may learn a great deal without achieving at standard. Districts and schools will likely want to develop ways to report such progress as well as absolute achievement.

7. Develop Strategies for Dealing with Stakeholders Who Object to Standards Reform and the Ideas Connected with High Quality Teaching as Described in this Paper. Standards reform and teaching for understanding as described in this paper have their detractors. There have been serious concerns raised about teaching to the NCTM math standards. Parents and others worry that children will not learn the basics of adding, subtracting, multiplying and dividing with this approach. They fear that process rather than the correct answer matters. Similar kinds of concerns have been raised about other content areas. And, without doubt, there have been foolish uses of this and other educational reforms. Parents' concerns must be taken seriously. Districts need to understand the controversy and develop and promote their position on these issues. They need to foster intelligent debate rather than ideological wars.

8. Create a Public Information Strategy that Helps the Community Understand the Reforms and Ask Questions About It. Encourage parents to ask questions about the new ways in which their children will be learning.

9. Implement Testing and Accountability Policies and Practices that Reflect Standards Implementation and Provide Information that Informs Teaching and Learning. The technology for assessing standards-based learning is in its infancy. Tests that do exist, such as the Reference Exams developed by the New Standards Project, are very expensive. As a result, districts across the country are adopting proxy tests such as Terra-Nova and the SAT-9. If districts in New Jersey make such adoptions, they should inform the public about the ways in which the tests do and do not reflect the standards-based program being implemented in the schools. In addition, districts should collect multiple measures of student achievement, perhaps through portfolios and exhibitions, to more adequately assess students' achievement of standards.

10. Redesign Evaluation Criteria for Teachers, Principals and Central Office Administrators in Light of the Role Changes that Result from Standards Reform. Consider the implications for the role descriptions of central office administrators. Standards reform will change what principals and teachers know and do. Districts must ask themselves what the implications of these changes are for their own work. This may lead to professional development for middle managers such as

area superintendents who now have responsibility for assisting schools with the work of standards reform. What will these folks need to know and be able to do in order to help with the reform? How will the district help them learn those things? How will their evaluations change as a result of the change in their responsibilities.

11. Ensure that Children are Taught by Qualified Teachers Who Are Knowledgeable in their Content Area and Skillful in their Teaching. Children do not have opportunities to learn if their teachers do not know the content they are teaching. This is self-evident. And, yet, all across urban schools, teachers who lack content knowledge are teaching at all grade levels. In this context, there are calls for greater student accountability for learning. Districts and states are calling for an end to social promotion; communities are seeking ways to punish students by withholding driver's licenses from students who fail to achieve. Of course students have a considerable role in their own learning. However, they cannot be held responsible if their teachers are incapable by dint of inappropriate or inadequate preparation. Districts and schools must ensure that students have opportunities to learn from qualified teachers. If this does not happen, schools will be preventing student learning.

Summary: The Districts Role in Leading Education Reform. Given the Abbott decision, central office administrators and schools have great opportunities to think creatively, to draw upon a wide array of research and experience in other urban areas, and to employ expert consultants who can help in the process of improving urban education as they begin to develop local standards-based reform programs.[25] Leadership requires taking advantage of such circumstances. It requires acts of will and commitment to a process that will be difficult, and, at times, uncertain. However, the conditions to move forward have never been so good. Those who devote their careers to helping urban youngsters have an obligation to step forward and lead in New Jersey's districts, schools and classrooms.

VIII. CONCLUSIONS

This paper discussed the part that standards can play in school reform as well as the other components of reform that are essential to the successful implementation of standards. It described what high quality teaching looks like in light of new understandings about how children and adults learn. And it stressed the need for professional development that can enhance teachers' capacities to teach in these ways. The paper also described changes in principals' roles and responsibilities in the context of reform and discussed their need for professional development. It provided a brief discussion of accountability in the context of standards reform and longer discussion of issues of district and school organization. Finally, the paper emphasized the importance of leadership at the state, district and school levels and offered suggestions for policies and practices that could help forward reform. This concluding section reminds readers that the Abbott decision and urban school reform in New Jersey are about helping children. All decisions that follow from Abbott must be directed toward children; they must reflect the leadership, commitment and will to design and implement standards-based urban school reform so that all of New Jersey's urban youngsters have genuine opportunities to learn at high levels.

Standards-based reform provides an appropriate framework with which to consider all students learning needs. It is inclusive. It is for students who have special learning needs as well as for students who are learning English as a second language. It is for students who are designated as gifted and talented and for those who are in the mainstream school program. **The fundamental idea that accompanies standards-based reform is that teaching for understanding demands inquiring into what helps and hinders each child, whoever that child is and whatever designation she carries.** The reform asserts that all children can learn to use their minds well and function as high level problem solvers if they are taught by teachers who have the knowledge, skill and determination to help them learn.

Standards-based reform does not suggest that organization and context are insignificant. No matter how skillful they are, teachers are unlikely to help children learn if class size is large. If student diversity is great, even the best teachers will be unable to spend sufficient time with all students to figure out how to address their individual needs.

But, standards-based reform has the potential to provide urban students with access to high level content and high quality teaching in organizations designed to promote teacher and student learning. This will not happen without considerable exertion from educators at all levels of the system. It will not happen without the funds that can support the kinds of reform strategies described in this paper. But

with these strategies, with resources and with the will to change, New Jersey's educators can provide urban students' with dramatically improved opportunities to learn.

End Notes

1. These definitions can be found in Mitchell, R. (1996). *Front-end alignment: Using standards to steer educational change.* Washington, D.C.: The Education Trust, in the National Education Goals Panel's *Promises to keep Creating high standards for American Students.* Washington, DC: NEGP, 1993), and in Lewis, A. C. (1995). An overview of the standards movement. *Phi Delta Kappan.* 76(10), 744-750.

2. Without concrete examples, it can be difficult for administrators, teachers, parents, children to understand the reform. Therefore, we present a sample of content and performance standards for mathematics at grades 5-8 to clarify the meaning of standards reform. We chose mathematics because the standards are widely accepted and have already influenced teaching, curriculum, test construction and the production of texts and other instructional materials. We chose mathematics, also, because there is considerable debate about the extent to which teachers are sufficiently knowledgeable to teach to these high standards. This is a critical issue that must be addressed in designing urban school reform.

An Example of Standards in Mathematics: [Academic Content] Standard 5: Number and Number Relationships

In grades 5-8, the mathematics curriculum should include the continued development of number and number relationships so that students can --

- understand, represent, and use numbers in a variety of equivalent forms (integer, fraction, decimal, percent, exponential, and scientific notation) in real-world and mathematical problem situations;
- develop number sense for whole numbers, fractions, decimals, integers, and rational numbers;
- understand and apply ratios, proportions, and percents in a wide variety of situations;
- investigate relationships among fractions, decimals, and percents;
- represent numerical relationships in one- and two-dimensional graphs. (End Note. These are taken from Curriculum and Evaluation Standards for School Mathematics. (1989) National Council of Teachers of Mathematics)

A child's learning would be assessed on the basis of the quality with which he or she, for example:

- consistently and accurately adds, subtracts, multiplies, and divides rational numbers; raises rational numbers to whole number powers;
- understands the inverse relationships between addition and subtraction, multiplication and division, and exponentiation and root-extraction; and uses the inverse operation to determine unknown quantities in equations;
- consistently and accurately computes with, applies, and converts the different kinds and forms of rational numbers, i.e., integers (both whole numbers and negative integers) and other positive and negative rational, written as decimals, as percents or as proper, improper, or mixed fractions; irrational numbers, i.e., those that cannot be written as a ratio of two integers, are not required but are suitable for introduction, especially since the student should be familiar with the irrational number pi.
- is familiar with characteristics of operations and numbers, e.g., divisibility, prime factorization, and with properties of rational numbers, e.g., commutativity and associativity, short of formal statements;
- interprets percent as part of 100 and as a means of comparing qualities of different sizes or changing sizes;
- reasons proportionally to solve problems involving equivalent fractions or equal ratios;
- orders numbers with the > and < relationships and by location on a number line and has a sense of the magnitudes and relative magnitudes of numbers; note that scientific notation is not required.

These examples are taken from Performance descriptions detailed by the New Standards Project, a partnership of 17 states and 6 urban school districts created to develop common performance standards in language arts, mathematics, science, and applied learning. The performances are based on the NCTM standards identified earlier.

3. See Hill, P. and Celio, M. B. (No date) *System-changing reform ideas: Can they save city schools?* The Brookings Institute and the University of Washington. for a thorough discussion of different approaches to school reform and what they include and omit.

4. Useem, E. L., Christman, J. B., Gold,, E., and Simon, E. (1997) Reforming alone: Barriers to organizational learning in urban school change initiatives. *Journal of Education for Students Placed at Risk.* 2(1) p.57.

5. This description relies heavily on the discussion of teaching presented in Milbrey McLaughlin and Joan Talbert's book *Teaching for understanding: Challenges for policy and practice.*

6. The teacher's name in this description is a pseudonym. The description was written by B. Neufeld as part of a multi-year study of standards-based reform in urban middle schools funded by the Edna McConnell Clark Foundation.

7. Taken from the NCTM Professional Standards. Pp. 21-22.

8. Lieberman, A. (1995). Practices that support teacher development: Transforming conceptions of professional learning. *Phi Delta Kappan. 76(8). Pp. 591-596*.

9. Darling Hammond and McLaughlin, 1995, *Phi Delta Kappan* p. 598. Order of the list is changed from the original.

10. Darling-Hammond, L. and Ball, D. L. (1997). Teaching for high standards: What policy makers need to know and be able to do. Prepared for the National Education Goals Panel. Page 6.

11. In addition to the generalist resource teachers, the district uses funds from an external grant to provide four content specialists -- expert teachers in language arts, mathematics, science and social studies who are on leave from the classroom for one or two years -- to work in a professional development role with the district's middle school teachers.

12. This kind of work could also be done at the state level in ways similar to the California Subject Matter Projects that are described in Janet Chrispeels discussion of California's education reform project, AERJ, Summer 1997.

13. These findings were reported by Cohen, D.K. and Hill, H. (1997, April). Instructional policy and classroom performance: The mathematics reform in California. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

14. Darling Hammond, L. and McLaughlin, M. 1995, *Phi Delta Kappan*

15. Much of this discussion is based on the work of Betsey Useem and Cati Coe. Their paper is excellent reading for policy makers at the state level, principals, teachers and superintendents. They describe what principals can do to support and

sustain program implementation and what they more frequently do that stymies implementation. Coe, C., and Useem, B. (1996). Bringing standards into the classroom: A report on the summer work of *Partnerships for Standards-Based Professional Development.*

16. This original study from which this section was developed was funded by the Edna McConnell Clark Foundation. It appears as a separate section rather than in the section called Issues of Leadership at the State, District and School Levels because we consider it essential for readers to understand the demands that standards-based reform places on principals. With this knowledge, readers will better understand why it is essential for districts and the state to provide principals with professional development that will enable them to implement proposed reforms.

17. Malen, B. and Ogawa, R. T. (1989). An analysis of site-based management as an education reform strategy. *Paper prepared for FOCUS (Formulation Options to Consider for Utah Schools).* Graduate School of Education, The University of Utah. This article provides a comprehensive review of site-based management's impact. For those who feel strongly about implementing it as one component of a more comprehensive school reform agenda, the article provides suggestions about what might need to happen if this strategy is to enable schools to achieve their goals.

18. Year-round schooling can also be a solution to problems of overcrowding. In this section of the report, we discuss only its potential benefit in light of loss of learning during the summer and in light of the flexibility it provides for academic support for students.

19. In some districts, individual schools rather than the entire district, may decide to implement a year-round calendar. Even though such a decision might be made at the school level, we include the discussion of this organizational change in the district discussion. This is because we imagine that, ultimately, central office and the school board will have to approve such a change. For the same reason, we discuss summer school and other support options as ultimately resting with the district. In some districts, however, schools may be able to make such decisions without district approval.

20. This section on accountability is partially developed. The next version of the paper will contain a more complete discussion of the topic.

21. Bernauer, J. A. and Cress, K. (1997). How school communities can help redefine accountability assessment. *Phi Delta Kappan.* 79(1). Pp. 71-75. This article includes a good discussion of the limits of basing accountability systems on

external assessments.

22. The discussion about the development of reform in California is based on Neufeld's experience working in the state and on a careful analysis of reform in the state over the last ten years done by Chrispeels, J. H. (1997) Educational policy implementation in a shifting political climate: The California experience. *American Educational Research Journal.* 34(3), 453-481.

23. For a recent discussion of these issues, see Spillane, J. P. And Thompson, C. L. (1997) Reconstructing conceptions of local capacity: The local education agency's capacity for ambitious instructional reform. *Educational Evaluation and Policy Analysis*. 19(2) pp. 185-203.

24. As noted earlier, Ruth Mitchell's book, *Front End Alignment*, makes a strong rationale for such a process and provides a strategy with which to undertake it.

25. School Boards play a central role in district policies and practices and we do not intend to suggest otherwise by limiting our district-level discussions to central office and the schools.