These six issues examine education in the inner cities. Titles include: "Pathways to School/Community/Family Partnership Results: Measures of Success and Student Learning" (e.g., promoting community partnerships and active learning through federal policy and linking child development knowledge with partnership evaluation); "Emerging Models of Governing School Districts" (e.g., redesigning public schools to improve student performance and changing governance structures in the Chicago Public Schools); "Research-Based Lessons from Title I Implementation: Examining Different Strategies for Improving Student Outcomes" (e.g., using standards-based assessment for Title I accountability and program improvement and teacher quality and educational inequality in Title I schools); "Closing the Academic Achievement Gap: Successful Strategies for Educators, Schools, and Communities" (e.g., developing successful intelligence in all children and children of immigrants and their achievement); "Can Unlike Students Learn Together? Research and Recommendations on Grade Retention, Tracking, and Grouping" (e.g., dropout in relation to grade retention and race-ethnicity, social background, and grade retention); and "Social-Emotional Learning and
School Success: Maximizing Children's Potential by Integrating Thinking, Feeling, Behavior" (e.g., the learner-centered psychological principles and cooperation, conflict resolution, and civic values as the three C's of social and emotional learning). (SM)
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Pathways to School/Community/Family Partnerships Results: Measures of Success and Student Learning

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Over the past decade, a wide variety of school/community/family partnerships have been organized to improve educational and social outcomes for children and families by connecting collaborative services with school reform efforts. However, the partnerships have come under increasing pressure from a number of fronts. For example, even such well-intentioned efforts as class-size reduction have put a strain on partnerships' efforts by reducing the availability of school facilities.

One of the most serious problems confronting collaboratives is the general lack of evidence about the effects of school/community/family partnerships. Specifically, there is no widely known or accepted data that documents the impacts of these partnerships on student learning outcomes. Some evidence has been published showing impact on student behaviors, such as school attendance, violence, and dropout rates. But data showing an impact on student learning outcomes, such as student achievement on standardized tests, by and large, has yet to be developed.

Context

The urgency of placing a sharp focus on this complex but essential task of documenting outcomes of school/community/family partnerships is emanating from a variety of forces shaping current school reform initiatives:

- Advocates of standards-based education reform and accountability recognize that students learn both in and outside of school and that communities have a responsibility for students' academic success and to ensure all students are ready to learn.
- Emergent brain research findings are creating even more clarity about the effect of early childhood development on later school and life successes.
- The sporadic, but nationally chilling episodes of violence in schools have brought home the understanding that students' "connectedness" inside and outside of school walls is everyone's concern.
- The federal devolution of reforms in the welfare and workforces development systems have served to heighten the awareness of local partnership participants of their critical role in fostering economic self-sufficiency for poor families.

These forces are among the most important reasons why more school and community leaders and parents are pushing harder for the development of partnerships. But a major question still remains about what difference they make. Neither the participants in these partnerships nor the policymakers who often compel them to take on these important social issues can answer this basic question.

(Pathways, continued on p. 13)
Local Partnerships: Creating Coherent Pathways to Success  
Lisa Villarreal, University of California at Davis

Since 1992, California's Healthy Start state-wide program has provided over 600 grantee sites with money to create collaborative, school-community partnerships (S–CPs) to improve academics, health, family and social functioning in disadvantaged, low-performing schools. The most recent evaluation of Healthy Start student achievement reveals a 25% increase in reading scores and a 50% increase in math scores for students in the lowest quartile of student performance; other evaluations reveal significant improvements in quality of life and well-being of students and their families. These findings make a strong argument for embracing the learning support model as an essential component of public education. Furthermore, the problems faced by Healthy Start and the lessons learned in creating its many successful partnerships are broadly applicable to other school-community initiatives.

The Critical Building Blocks for Creating S–CPs

Experience in organizing and sustaining Healthy Start sites has lead to Healthy Start’s development of a schema of critical building blocks, an ordered sequence of steps necessary for developing successful sites.

1. COLLABORATION

Effective and lasting partnerships begin with a common belief that collaboratives can accomplish far more together in improving the lives of children, youth, families, and communities than could the partners working independently. Partners must believe that learning support efforts like Healthy Start should be an essential component of public education, must embrace shared leadership, must be willing to commit resources, and must promote simultaneous reform that at the school and at the home sites of the partner agencies.

2. COMMUNITY ASSESSMENT

The required second step in the organization of S–CPs is a community assessment. This assessment captures insights of the community from many perspectives—schools, businesses, parents, communities of faith, youth and youth groups, disadvantaged people, and those with means—and identifies the community’s sense of its strengths, the challenges it faces, and what it envisions for itself. An assessment might not lead the collaborative where it initially had assumed it would go, but a successful collaborative makes adjustments and thereby establishes community trust, an essential ingredient for sustaining the partnership.

3. SELECTING GOALS

The partners must next select the goals determined to be most important to the community. Healthy Start sites have found that goals chosen by outsiders without community input lead to support strategies that are considered awkward, ineffective, or even offensive by the community.

4. CHOOSING AND IMPLEMENTING EFFECTIVE STRATEGIES

After the assessment and selection of appropriate results, implementation strategies must be chosen which reflect the goals and the collaborative model. The biggest challenges are (a) deciding which partnerships will best achieve the desired results: social service agencies, grassroots community centers, recreation programs, education enrichment programs, emergency intervention programs, employment development, parent education, tutoring, counseling, or health; (b) deciding which strategies are best implemented on-campus or off-campus; (c) training staff for the integrated approach; and (d) scheduling, supervising, and managing the various components of the collaboration. Developing a customized, school-compatible case management or care management system that addresses the strategies is the responsibility of the whole collaborative. The partners will also have to collectively agree upon who holds the decision-making responsibility and allow those people to focus on what is best for the children and families, not just the system.

5. INTEGRATING AND TRACKING THE WORK

Integrating and tracking the work present substantial challenges to Healthy Start. Because multiple sites are often involved, scheduling, staff development, training, supervision, monitoring, and collecting data are complex tasks,
complicated by the need to integrate different professional cultures. Also, the home or partner agency might be subject to other pressing concerns that may compromise its contribution to the partnership. Furthermore, deciding who, how, and when to track data that accurately captures the progress of all is not simple. For some sites, finding the time or resources to analyze data that would enable them to leverage local support—and sustainability—are substantial barriers.

6. MAKING DECISIONS ABOUT THE WORK
So that adjustments may be made, Healthy Start sites annually evaluate their partnerships according to the entire cycle of building blocks outlined here. Collaborative partners must continually be making decisions about the answers to a few key questions:
- Is this what we came together to do?
- Is this what the school—community wants?
- Is our plan working and how do we know?
- What strategic changes must be made for it to work better?
- How can we tie this good work to sustainable funding?

Defining Pathways
One of the most serious challenges to a Healthy Start program occurs when its assessment reveals community priorities different from those agencies are willing to fund. A partnership may then feel the need to “tweak” its program to remain eligible for funding, but, as a result, the site loses the focus on its original, meaningful goals, leading to a fragmented or even ineffective program. Consequently, Healthy Start now requires grantees to include community input in all aspects of their planning, implementation, and governance. Program evaluations must reflect one category, student outcomes; the site determines what other outcomes it will evaluate.

Partnerships and the Educational Standards Movement
Healthy Start—a program of the California Department of Education—has connected its work to the educational standards movement by requiring its sites annually to submit data on student academic progress. We have strong evidence that Healthy Start works in low-performing schools, but not all of the highest level decision makers are considering learning support as a remedy for such schools. California’s narrow focus on test scores and class size reduction—however laudable these proposed remedies may appear to be—ignore all of the non-cognitive factors that contribute to academic success: They do not address the underlying personal, family, and community barriers to academic achievement. Some underperforming Healthy Start schools have even de-emphasized their alliance in order to focus on “teaching to the test” or have evicted Healthy Start sites to make way for more classrooms.

State Policy and Financing Healthy Start Partnerships
The notion still prevails among legislators that a successful site will sustain itself after the initial grant period ends. Consequently, no sustained state-level funding for Healthy Start sites extends past the 3–5 year operational grant cycle, and sites must consider the sustainability from the inception of the project as they compete with growing numbers of sites for shrinking public and private funds. Partial sustainability has been attempted by gaining reimbursements through California’s school-based Medicaid plan (Medi-Cal), but the fear of Medicaid fraud at state and federal levels keeps promising reimbursement strategies from being effectively implemented.

Other promising state funding available to Healthy Start comes in the well-funded After School Learning and Safe Neighborhoods Partnership grants, but these grants are not designed necessarily to fund the systemic reform envisioned in S–CPs like Healthy Start. Despite the fact that Healthy Start regularly offers informal after-school programs, no automatic linkage exists between the two grant programs at the local level; in some cases the two programs operate out of different offices at the same site.

Beyond these technical assistance challenges posed to S–CPs, many of our Healthy Start sites are also challenged by competition with other programs focused on youth development, family support, asset development, community education, or community organizing. Because Healthy Start sites can embrace all of these, sharing core principles with each, advocates for these approaches could advantageously view Healthy Start as an ally rather than as a competitor, but the sustainability of short-term grant funding is a constant pressure that sometimes forces programs to focus on concept survival rather than implementation.
Seizing New Opportunities at the Intersection of Schools and Communities
What Do We Know? What Can We Learn? What Should We Question?
Lisbeth B. Schorr, Harvard University

The landscape at the intersection of schools and communities has been dramatically transformed by four powerful new trends: (a) escalating pressures for improved school achievement, (b) demands for evidence of improved outcomes for all social investments, (c) concern for the safety of children at school and during unsupervised non-school hours, and (d) substantially more public and philanthropic resources supporting activities that promise to improve academic outcomes.

In the context of these trends, five lessons emerge from recent experience with community efforts to strengthen and expand support for youngsters, their families and neighborhoods, and their schools.

Accountability, School Achievement, and Social Value

First, we must be willing to be held accountable for results. To obtain the level of public funding warranted for work at the intersection of schools and communities, all participants must respect the public's demand for scoring. It hardly matters whether these demands arise because a cynical public has decided that good intentions are not enough or because an enlightened public wants decision-making to become more rational. Either way, we must be thinking more rigorously about why we do what we do, what ends we hope to accomplish, and how we can document our successes in achieving those ends.

Our willingness to be held accountable for results comes with an important caveat: It is equally important that those involved in community initiatives commit themselves only to promises they know they can keep rather than trying to tie their accomplishments to school achievement. The initiatives that make contributions to the community certainly do not want to seem to be failing when they are, in fact, succeeding. Leaders of these initiatives should insist on being held accountable for the valued purposes that they can accomplish.

In addition, a review of the outcomes identified by funders, policy analysts, practitioners, scholars, and community coalitions suggests it is time to squelch the notion that all school-based interventions should be judged by their impact on student achievement. Too many other socially valued purposes are, in fact, being pursued—and perhaps achieved. This review also illuminates the importance of interim indicators. The availability of opportunities for children to be enrolled in preschool programs or to make connections with health services or caring adults can be documented long before children experience higher rates of school-readiness, good health, or higher hopes for a better future.

Human service agencies and youth development initiatives should be able to be explicit about their contributions, whether they are services that respond to the child who comes to school hungry or sick or abused or in need of eyeglasses, or are efforts to build social capital or to produce the "relational trust" between schools and families that must precede other reforms in the most alienated communities. But even the finest supports and connections are unlikely to result in improved school achievement unless there are also changes in the classroom.

Improved Teaching

Second, we must take explicit account of the evidence that improved school achievement depends primarily on improved instructional practices. All pathways to improved achievement (especially among student populations that have typically lagged behind) include—significant improvements in the classroom, reflecting profound changes in instructional practice.

The removal of nonacademic barriers to student achievement may, especially in the most depleted schools and neighborhoods, be a necessary condition of improved school achievement but is probably never a sufficient condition. Non-educators and the community at large can play a crucial role in removing the nonacademic barriers to student achievement, but their claims will not gain legitimacy by being inflated.

Make Better Use of Schools

Third, efforts to make better use of non-school time, school facilities, and school resources will be supported by the public even if they cannot demonstrate their value in higher student
achievement. It is worth providing opportunities for expanded out-of-school experiences because they enrich children's lives. Keeping children safe, mobilizing needed services, and providing children with opportunities for constructive use of free time are valued by parents and other citizens even if their impact on school achievement cannot, at least in the short-run, be proven. Middle-class children growing up in resource-rich neighborhoods are routinely exposed to opportunities for experiential learning, travel; recreation, the arts, and other experiences that bring pleasure and a sense of mastery. Deliberate and concerted efforts are required if poor children in the inner city are to experience similar opportunities.

Increasing Our Learning Capacity

Fourth, we must strengthen our capacity to learn from current efforts. The knowledge base that undergirds work at the intersection of schools and communities is not very sturdy. The lines connecting interventions and outcomes are still shrouded in mystery. The mystery is sustained in part because it serves our purposes—at least in the short run. If everything connects to everything else in unspecified and unknown ways, we can get support for our diverse activities simply by promising that whatever we do will help raise test scores. But this victory will be short-lived because we probably won't be able to deliver on our promise. Whether because our contributions will be too marginal or too late in showing up to be detected, because we don't have the right outcome measures, or because the value of our contributions does not, in fact, lie in higher test scores, we risk failing the very test of effectiveness that we, however inadvertently, agreed to be measured by.

Because of the radical changes in what the public expects of schools today, and because of the many forces that have depleted earlier informal sources of support for school learning, new needs for more formal supports have surfaced over the last two decades. It is tempting to think that revitalized services and supports could substitute for massive efforts now needed to fundamentally reform the core of public education in order to strengthen what teachers actually do in the classroom. Growing evidence suggests they cannot.

But when we look at what we can do at the intersection of schools and communities, the prospects are golden. We have now accumulated considerable experience in using schools as the setting around which to build up the services and supports whose absence can be barriers to children achieving their full potential. It is no longer necessary for every community to "start at square one" to invent its own unique response. While solutions crafted centrally and imposed from outside are unlikely to work, local communities should not have to act as though there were no generalizable wisdom based on past research and experience. This requires the field to become much clearer about the pathways that lead to the outcomes we seek, and to strengthen our capacity to learn from the rich array of activities now under way. By building on multiple ways of knowing, we will be able to draw on a far broader spectrum of information about past and current experience than is conventionally considered to constitute credible knowledge. We should focus less on individual projects, programs, and even best practices, and more on building the pathways that link the crucial elements to one another. We should take the grab bag of implicit hypotheses that underlie our current efforts, and organize them into testable propositions to be systematically confirmed, modified, or refuted.

Best Solutions and Priorities

Fifth, we must identify what we need to do together, what we can best do separately, what the trade-offs are, and what our priorities should be. We know that the most important results we are pursuing cannot be achieved by single, narrowly circumscribed interventions. Most desired outcomes require multiple inputs from multiple sources over a sustained period of time. Yet we still fund, provide services, maintain accountability, and conduct evaluations in circumscribed pieces.

So it's tempting to look to collaboration and integration as the answer. Understanding how hard true collaborations are, how time-consuming, how energy draining, should we not ask, when and for what functions they are worth it? Rather than assuming that partnerships are always the answer, we should ask under what circumstances partnerships are the best strategy, and face up to the
The healthy growth of a child is marked not only by development of the brain and nervous system and other obvious aspects of physical maturation but also by development in the linguistic, cognitive, social and relational, psychological and emotional, and moral and ethical domains. The different theories of child development all agree that there are critical pathways to optimal, positive growth in these domains; and understanding the factors that promote development along these pathways can help educators and partners devise strategies that enhance school achievement.

Focal Points for Partnerships

Based on these development pathways, I see three focal points for partnerships: (a) relationships—providing nurturing support so that a child feels secure and develops the skills and internal resources to accept, develop, and maintain relationships; (b) experience—providing opportunities for children to have continuity of learning experiences between the school, home, and community; and (c) exposure—repeating content in cycles that reinforce learning over extended periods of time.

Relationships

Research concerning attachment underscores the importance of nurturing relationships and their enduring impact on a child's ability to form and sustain both peer and adult relationships, two behaviors central to school success. Children who are able to form positive relationships with their teachers, peers, and other caring adults are more likely to persist in school and to succeed academically. Conversely, children who do not have these relationships are often disenchanted with schooling—even as early as the fourth grade. Furthermore, studies focusing on drop-out prevention and juvenile delinquency have shown that social isolation, lack of parental involvement, and lack of empathy from teachers and peers are predictors of school failure. Given the effects of positive relationships, partnerships should be designed to promote meaningful interactions with children and to strengthen a child's ability to accept and form such relationships. There are several strategies to promote this development.

Providing modeling for prosocial behavior. The more children see and experience positive relationships, the better they will be to negotiate, develop, and maintain similar relationships and interactions. Partners must also model positive problem solving so that children will learn how to confront issues and effectively resolve them. In addition, adults need to be available to assist children in processing their problems and to help them reflect on the strategies they use for resolution.

Providing "social security." Children look to parents, teachers, and other adults to determine how to evaluate new social situations. Children need to be exposed to a wide variety of social situations to cultivate confidence in their own independent ventures, but they need to have available a stable base of adult support to provide guidance and to aid them in processing these new experiences and encounters.

Developing social competence. Family and community partners can help students overcome social isolation and develop social competence for learning. Many programs target students' self-esteem as an important personal development goal, but few link the esteem-building activities with the competencies needed for academic success. Social competence for learning has become particularly important recently as teachers move away from direct instruction models to collaborative and cooperative models of learning. Students need the skills that allow them to engage in group activities and that simultaneously promote academic success. Skills such as consensus building, listening, perspective-taking, and sharing all need to be developed so that children will be prepared to participate in sophisticated group tasks. Family support service partnerships can play an important role in teaching parents how to develop and model these important skills for their children.

Experience

Growth in one domain of development does not, of course, happen in isolation from the others. Just as the neural and
synaptic integration occurs in the brain, the developmental domains also integrate—a consequence of both nature and nurture—allowing a child to accomplish particular milestones of development. Children, therefore, need to be presented with integrated and thematic curricula that prepare them for and capitalize on those developmental milestones, curricula which also enable them to perceive relationships among content areas.

To support these efforts, partnerships need to be aware of the curriculum and the thematic units and to connect their work to the curriculum goals. The integrated approach is also applicable to partnerships providing social and health services. Students need to see relationships between their social and behavioral functioning and academic learning.

Establishing continuity in a child’s experiences at home, school, and community is another key to sound development. The brain’s capacity for recalling information is based on making associations, practice, and experience; and family and community partnerships can provide these critical linkages and reinforcements, enabling the child to understand that learning is continuous, occurring in and outside the classroom.

Exposure

The interactions of the developmental domains and the progress a child makes do not occur in systematic stages; rather, development is flexible, and recent studies on the brain’s growth cycles suggest that both behavior and the brain change in patterns that repeat several times between birth and adulthood. These findings suggest that children have multiple opportunities to learn and relearn skills in cycles that reshape neural networks that were not developed during earlier cycles.

These cycles produce a new capacity for thinking and learning that appears to be grounded in an expanded and reorganized neural network. Full development in thinking and learning at each new level emerges gradually over long periods of time, enabling children to show a cluster of changes over several years. Thus children need to have many opportunities to learn and to reinforce the learning of new skills and content in non-linear and non-sequential ways. Partners can provide opportunities for this reinforcement to take place by providing many activities that correspond to learning objectives and that give students the opportunity to make connections.

Linking Development to School–Community Partnerships

The opportunities to know children, to assist and enhance their development rests largely in the hands of the teachers and parents and other supporting adults. Thus, schools must begin to view themselves as “child development centers” because so much of what a child must master is dependent upon developmental readiness. To attain this view, school/community/family partnerships—which are often more adult-centered than child-centered—must do more to promote child development. Although meeting the needs of parents often improves their child’s ability to learn, it is essential also to help parents develop the skills needed to both advocate for and aid the development of their own children and their children’s friends.

A school must have goals and strategies for promoting children’s learning and development, but to date, few plans for school reform are guided by our knowledge of child development. A school’s reform plan should be developed through an analysis of (a) all the programs, activities, and strategies a school provides during the course of a year; (b) the special characteristics of the students these strategies are intended to address; and (c) the extent to which all of the programs and activities, including those supported by partnerships, target a particular developmental pathway in order to promote students’ learning. These child-centered planning analyses will allow schools to determine redundancy or fragmentation in the overall programming for students and enable schools to determine what resources they will need and what partnerships will be able to provide them. Without this articulation, partners will be deemed peripheral or, worse, working at cross-purposes as they compete for students’ attention.

Finally, students must understand the school’s goals, the developmental milestones they are expected to reach and the ways in which these partners will help them reach those goals. This understanding is important because children need to make connections between supportive resources and activities at the school and their academic

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Promoting Community Partnerships and Active Learning through Federal Policy

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Across the country, states and communities are mobilizing to focus attention on young children and families, and many benefits could accrue from an integration of community-school efforts with early childhood initiatives. Ample evidence from research supports such integration. Recent studies demonstrate the importance of early cognitive stimulation and early emotional development, development promoted by a nurturing, reciprocal relationship with a primary caregiver and reinforced by others. But for too many infants and toddlers, this relationship gets off to a poor start, with parents who, because of their own circumstances, place their children in jeopardy. To address this need for better early childhood programs, this paper explores ways to promote the incipient expansion of school-community partnerships (S–CPs) into early childhood learning through maximizing federal policy and employing other new strategies.

The Case for Expanding S–CPs into Early Childhood

Research and comprehensive, high quality early childhood programs, such as the Abecedarian project, suggest that intervening early to strengthen development and parent-child relationships results in long-term positive impact on children, including significantly greater academic achievement, cognitive and language skills, and fewer behavioral problems than evidenced by children in control groups. However, for children in family childcare or center-based care, poor quality is the norm, with the worst care documented for infants and toddlers. As more welfare-to-work parents take low-paying jobs, greater numbers of young children are spending more time in childcare and early learning environments; currently, about half of young children are in informal, unregulated child care. Poor quality childcare is a corollary of poverty, and, with a stunning 42% of all young children growing up in poverty—roughly half of those in extreme poverty—the implications are ominous and pressing.

Research has long documented powerful relationships between poverty and poor academic achievement and other risk factors, but primarily in older children. Now there is evidence that poverty is even more harmful for young children, and the more extreme the poverty, the more harmful. Clearly, waiting until these children hit the schools is waiting too long for developing an integrated community response with a set of outcomes that reflect cooperative ventures by educators, human service personnel, and other community groups and family members.

The federal Educate America Act now mandates school readiness as the top priority; and the objectives of school readiness, as defined by the National Education Goals Panel, include (a) providing universal access to quality preschool programs that prepare children for school; (b) enabling parents to act as a child’s first teachers, with access to training and support; (c) providing nutrition, exercise, and health care to ensure a child is optimally prepared to learn; and (d) reducing the numbers of low-birthweight babies through enhanced prenatal care. The focus on “school readiness” has directed attention to the development of conceptual frameworks that can capture the complexity denoted by the term, from child factors reflecting social-emotional, cognitive, physical readiness, to family factors, to school factors. Although many people advocate a narrow child focus or even a child-specific focus, there are also strong voices arguing for community-wide indicators that can be used to drive strategic thinking and collaboration.

For all these reasons, S–CPs need to include attention to young children that goes beyond just having a Head Start program on site, or even a family resource center. Current programs throughout the country indicate a solid base on which to build. In 1998, 24 states were funding parent education and family support programs for infants and toddlers; 34 states were funding programs for preschool-aged children. These programs were sometimes home-based and sometimes included parent education, family support, and family literacy initiatives; sometimes they funded communities or schools in designing their own mix of supports for families with young children. In addition, half the states reported funding family support and parent
education strategies for children from birth to 6 years. These programs establish a clear framework for joining the early childhood agenda with early learning goals and with S–CPs.

Currently, only six states have made young children a high policy priority and mounted multiple strategies promoting their well-being. Most efforts focus on family support or on early learning, but, with the exception of some home-visiting and family literacy programs and Head Start, most programs don’t attempt to integrate an array of services. This lack of comprehensive services and family support—exactly those supports that supplement a learning focus in the community–school vision—is why S–CPs could be so powerful an asset to the early childhood community.

Even as youth development is now a part of the community–schools vision, so child and family development should be, too.

Building and Sustaining S–CPs

The search for sustainable reform has now shifted its approach from “process is all” to “results is all.” Such a mentality gives little thought to what can achieve those results and provides no opportunity for partners to build a shared vision or to think systematically about links between goals, strategies, and outcomes. Because of this result-oriented focus, funds are seldom made available to develop the kind of working relationship among the partners that would sustain the partnerships over time. Furthermore, political and educational rhetoric, and sometimes legislative reality, creates new pressures to de-emphasize the many pathways to real educational reform and to focus exclusively on achieving simple goals. Concerns about teaching to the test or narrow visions of school readiness (e.g., knowing 10 letters of the alphabet) are real. The challenge for S–CPs is to use outcomes to broaden the vision of how to get to real learning, real family support, and real community collaboration to change the “learning life” of students.

Building and sustaining meaningful cross-agency collaboration with a vision that includes strong family involvement, linking formal and informal supports, and enhancing educational outcomes are not easy tasks. The following dicta seem critical for developing and sustaining S–CPs:

- Strong and sustained leadership is key.
- Building a shared vision for change is labor intensive and requires a mix of clear vision, achievable goals, and opportunistic risk-taking.
- Integrating family, student, and teacher voices is both challenging and essential.
- Engaging broad community support and involvement, including business support, can make a difference in political and fiscal sustainability.
- S–CPs must take on the characteristics of the local culture; they are unique enterprises.

Federal Policies and the Promotion of S–CPs

Federal assistance can help overcome challenges in three key areas: integrating early learning more deeply into the S–CP movement, expanding the leadership and vision of S–CPs to more communities, and assessing results in a way that holds schools and communities accountable for students’ outcomes and also provides information about sustaining and deepening the partnerships.

Goals 2000, Title I schoolwide programs, and other federal actions have promoted greater flexibility than was previously permitted in using federal funds and in consolidating resources. This flexibility is not yet, however, widely used to promote S–CPs specifically or educational reform in general. Furthermore, benefiting from this flexibility, especially across programs, remains enormously complex. One other emerging and not yet fully developed characteristic of recent federal legislation is the use of incentives and performance bonuses to reward states which exceed federally framed goals. These changing perspectives on crafting federal policy offer new possibilities for how the community–schools movement might promote federal policies that can move this complex and crucial agenda forward. Here, in the hope of stimulating debate, are some principles for federal legislation, along with some specific recommendations, particularly related to the early learning challenge:

1. Federal legislation might create incentives to promote systems-level development that include S–CPs. Incentives can help existing

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Outcomes and Accountability in School–Community Partnerships
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In our most troubled and inadequate schools and communities where many students suffer adverse life situations, no "laser-like focus" on learning can achieve improved academic outcomes by ignoring outcomes which are prerequisites to learning, such as improved health or behavior. School–community partnerships (S–CPs) offer one reform model that seeks to improve non-academic supports to learning. But not all S–CPs are created equally. At its inception, every S–CP must reach a consensus on the relative importance of non-educational outcomes, which may be (a) regarded as essentially marginal, a distraction from, perhaps even a detriment to improving academic achievement; (b) regarded as co-equal to education reforms in achieving better learning outcomes; (c) supported proportionately to the extent that non-educational barriers to learning characterize a given school or district.

When there is consensus that the S–CP’s focus on non-academic outcomes should either be co-equal or proportional to academic outcomes, then the relative importance of classroom performance and interventions aimed at the external causes of classroom achievement gaps must be negotiated. In that discussion, schools are correct to emphasize the academic outcomes, but schools’ partners are also correct to emphasize how their efforts can make a major contribution to academic performance and other goals in the lives of the students and their parents. An overarching concern must be identifying where overlapping goals can form the “glue” that cements the partnership. For example, schools must recognize that reaching academic goals may be tied to health-related issues. At this point, the partners must establish accountability by further negotiations toward a consensus on what outcomes should determine success and what levels of attainment indicate a project should be replicated—two fundamental, “shared outcomes,” the goals of the project. Partners can then determine what outcomes indicators will be used as fair measures of progress and how data will be collected and reported.

The relationships between the types of outcomes aimed for by most S–CPs may be suggested by three concentric circles.

The innermost circle represents core school-based outcomes: achievement (test scores), attendance, and school completion/graduation rates. The middle circle represents outcomes still achievement related but no longer restricted to what happens in the classroom: parent involvement, help with homework, reading to elementary school-aged children, and parent engagement with teachers in responding to behavior problems in the classroom. The third circle represents community building and youth development and may include schools’ success in attracting community volunteers, children’s health coverage in the immediate neighborhood, and the effects of early childhood programs that aim at school readiness goals. The outer circles also represent a progressive reduction of accountability for academic achievement. Circumstances—such as strong or strained relations with the community—will dictate the extent to which the outer circles of outcomes can be goals of the partnership; academic achievement may be all the partnership can handle. These circles also suggest the range of options S–PCs may pursue, and because of this range, universal standards should not be specified for S–CPs in the same way we may agree upon, for example, math standards.

Process Outcomes
The partnership’s structure and methods of operating can be specified and used as guides for negotiating locally determined student and family outcomes. Specifically, the following are indicators of the “collaborative capacity” of the partnership:
1. Data-driven policy: the assessment of students’ needs outside the classroom as a basis for determining which partners are most needed to build effective learning supports.

2. Roles for parents that go beyond conventional “parent involvement.”

3. A commitment by the members of the partnership to redirect their own resources rather than relying solely upon grant funding.

4. Efforts to strengthen collaborative members’ information systems in order to measure better the progress toward shared outcomes.

5. An effort to address equity issues in both the content and process of the collaborative’s activities.

The fifth of these indicators—equity issues—is inherently controversial, but tracking subgroups may reveal worsening conditions within a total population showing overall success. Seeking to respond to conditions which are not universal is a real test of the partnership’s accountability for improved results for the students who need the most help.

Accountability

Accountability issues are driven by (a) the types of agencies and their appropriate goals, (b) the collaborative’s capacity to evolve from lower to higher stages of cooperation, and (c) the willingness of partners to negotiate shared outcomes concerning academic achievement as opposed to other goals.

The partners

Four different kinds of partners exist, and each has a different approach to working with and in schools and a particular set of funding sources, and therefore different accountability. Public city, county, and regional agencies, such as child protective services agencies, receive institutionalized, recurring funding. These agencies are accountable to legislatures, resulting in a compliance mentality which emphasizes rules of spending money. Major not-for-profit agencies, such as Boys and Girls Clubs or children’s hospitals, rely on United Way, contracts with public agencies, and sometimes fee income. Some of these not-for-profits have developed in-depth outcomes measures. Community-based agencies are more informally funded than the not-for-profits, and they range widely in accountability, from those that have used outcomes to a larger group which still measures success based on the number of clients contacted. Organizations representing parents frequently have no formal budget and typically have no explicit outcomes framework.

Evaluations of S–CPs

S–CPs need to negotiate agreements to provide data on student performance to external agencies—or vice versa, but problems evaluating S–CPs are manifold. The securing of outcomes data is often crippled by public agencies’ information systems, so schools often choose partners according to their capacity to provide and use data—important ingredients of a good partnership. Another important choice related to accountability and evaluation of the S–CPs is selecting among the available outcomes frameworks and the emerging outcomes software. Some of these frameworks are better than others at orienting new outcomes planners to the broad choices they face; other frameworks are better at providing user-friendly data entry than grappling with what to measure and why.

Current data present a tenuous estimation of cooperatives’ impact because of their inexperience in evaluating outcomes and the lack of comparability among the variety of S–CPs. What is most needed is a “tagging” capacity for student files, enabling schools to report to external agencies how their interventions may be affecting academic performance, attendance, and behavior. Without this follow-up and monitoring capacity, neither the school nor the outside agencies will have regular feedback on the impact of their programs.

A final issue in existing evaluations of S–CPs is the extent to which parents and community members are the focal points of the evaluation. We must find better ways of measuring community contributions to the schooling—and the preparation for schooling—which means better assessment instruments and qualitative methods that can verify what changes in behavior are really happening. For example, it is wishful thinking to assume that because adults participate in parenting programs, they are becoming better parents. The curriculum, the instructors, and the parents must be united in a common enterprise in which real changes in parenting can be assessed—and not (Outcomes, continued on p.12)
Accountability and the Four Stages of Collaboration

A four-part approach to the stages of collaboration distinguishes between the initial stages of information exchange and joint projects, and the third and fourth stages of changing the rules and changing the system. As long as it is working at the level of a project, a coalition can get along without emphasizing accountability. When the collaborative begins to change the rules of service—because of changes in its shared outcomes or as it attempts to scale up the operation—accountability issues become more important. That is because changing the rules should not be done for convenience but to achieve different or better outcomes than the old rules permit.

When the collaborative is working on changing the rules and moving from the project level of collaborative operations to going to scale, both client and systems outcomes matter. Assessing the relations among the partners may be as important as assessing the impact on students and families. Tracking the efforts made by S–CPs to change the rules, enabling agencies to work together more effectively, can help ensure that “fixing the kids” does not always become the sole focus, with “fixing the institutions” being ignored.

Conclusion

That much-discussed “laser-like focus” on academic achievement may be appropriate if we define academic achievement broadly to mean both the changes within the classroom that enhance learning and those outside the classroom that prepare and sustain the project of learning. If communities opt for cooperative reforms, which currently offer the best hope for reducing the barriers to learning for our most severely disadvantaged students, S–CPs will need to negotiate a series of issues to reach a consensus on general goals, specific outcomes and the measures of accountability that define their progress.

Local

At workshops, the state does coach local Healthy Start sites on evaluation procedures and on using results to leverage long-term sustainability. Sustainability rates among Healthy Start sites, once as high as 95%, appear to be slipping slightly to around 90% after 8 years. While this sustainability rate is still astonishingly high for a short-term funded grant, one must ask: How long can the rate hold as new sites (over 100 every year) compete for limited outside resources?

These issues in fostering and financing Healthy Start and other S–CPs indicate a need for leadership development for S–CPs’ leaders. Currently, technical assistance funding creates and sustains the planning and implementation of sites, but does not necessarily train leaders to champion the learning support model. Healthy Start provides local leadership development, but this training is insufficient. Funding commitments to create strong leadership development are clearly dependent on funding commitments to first sustain programs.

Why would a legislature or a foundation fund leadership development to champion a concept or approach that is still struggling to gain universal acceptance and sustainable funding?

California’s schools and those of most other states are being pressed to improve test scores, and we know a substantial remedy lies in the implementation of S–CPs like Healthy Start. Nevertheless, policymakers are still reluctant to make similar programs automatically available to all low- or under-performing schools; they are even reluctant to provide the sustained funding that established programs require. Bootstrapping may be philosophically sound for American capitalism, but it is neither healthy nor fiscally sound for America’s children.

Opportunities

The fundamental conclusion to be drawn is that we need to become more precise about what we are trying to achieve and shrink what Paul Hill calls our “zones of wishful thinking.” The task of reforming and expanding services may indeed be competitive with academic tasks and is probably not best addressed by schools. By
contrast, evidence that schools in depleted neighborhoods are most likely to succeed when they emphasize rigorous academic expectations and convey to students a sense of being known and cared for should stimulate new efforts to find ways of making action on both of those fronts compatible and not competitive. 

(Development, continued from p. 7)

learning. In doing so, students play an active role in their own development and learning.

Implications for Evaluation of Partnerships

Partnerships and associated activities must be closely aligned with the school’s academic and developmental goals so that the outcomes expectations of all the partners are congruent. The partnership should know which of the developmental pathways it will focus on to achieve those outcomes. This knowledge will enable partners to generate and test hypotheses about the potential impact of the intervention. Although it may be difficult to tease out the effects of a single partnership on outcomes, it should be feasible to look at the interaction effects and to compare the experiences of students exposed to different learning opportunities.

Since we know that development is not a sequential process, non-linear evaluation methods should be designed to assess a students’ progress. Few models exist. A viable strategy would be to examine the evidence that exists supporting the child-centered thrust in the school and to develop new measures from this evidence. 

(Policy, continued from p. 9)

programs—such as Head Start—and new ones direct their attention to include community-based initiatives for young children and families, and encourage integration with any ongoing school–community efforts. The incentives might consist of implementation and bonus funds for initiatives that show evidence of systems change and improved community indicators and educational outcomes.

2. Legislation should continue to promote flexibility in existing federal education programs and more consistency in the ways flexibility is defined across programs.

3. Federal agencies can promote among themselves easier resource sharing, better strategic planning, and new initiatives.

4. The federal government, both through legislation and agency (especially inter-agency) initiatives, should promote a strong research and development agenda to facilitate more effective learning.

Conclusion

Federal policy alone is not sufficient to change schooling in America to meet the vision and goals set forth by the S–CPs. But it clearly has played a key role in helping to develop the S–CPs of the late 20th century, and it can, and must, continue to play an important role in shaping and implementing the vision of S–CPs for the future.

A National Invitational Conference

As a result of this perplexing question and other issues confronting partnerships, the Council of Chief State School Officers (CCSSO), through the aegis of its program, Ensuring Student Success through Collaboration Network, and the

(Pathways, continued from p. 1)

This key question remains unanswered not because of an unwillingness to grapple with how to determine school partnership outcomes. Most state and local partnerships have conducted evaluations and examined outcomes. The “theory of change” approach, for example, which has been constructed over a number of years by evaluation researchers working in concert with the Roundtable on Comprehensive Community Initiatives for Children and Families at The Aspen Institute, is among the most thoughtful and systematic. Further, one of the best efforts at documenting partnership results came from SRI’s (formerly the Stanford Research Institute) evaluation of the California Healthy Start program. SRI’s first evaluation report was issued in the spring of 1999, and it contains solid evidence about Healthy Start’s positive impacts on schools and communities in general, as well as on student achievement outcomes specifically. However, for a myriad of political, philosophical, and policy reasons, forging a common vision about what outcomes matter and how best to measure them remains one of the most vexing stumbling blocks in this field.

(Pathways, continued on p. 14)
Laboratory for Student Success (LSS), The Mid-Atlantic Regional Educational Laboratory at Temple University Center for Research in Human Development and Education jointly convened a national invitational conference, “Pathways to School/Community/Family Partnership Results,” held in Los Angeles, CA, April 12-15, 2000. The conference was designed to accomplish two key goals: (1) fostering a greater understanding of the existing measures of success of school/community/family partnerships; and (2) building a consensus around a few core measures of success and approaches for developing pathways for measuring these agreed upon results. Therefore, LSS and CCSSO proposed the following objectives for the conference:

1. articulation of why “moving beyond collaboration to results is essential”;
2. formulation of a definition of pathways to success for school/community/family partnerships;
3. strategic examination of effective approaches for engaging and sustaining family members’ involvement in their child(ren)’s school and community activities that are essential to improving student achievement;
4. strategic examination of elementary school-level partnerships with community and family stakeholders that have some existing measures of success in general, and student learning outcome measures in particular;
5. examination of how federal and state resources could be more strategically aligned to promote and sustain school/community/family partnerships; and
6. development of recommendations for creating a more coherent, systematic approach to defining and collecting data on generally accepted core measures of success for school/community/family partnerships, including alignment of public and private sector resources necessary to advance these endeavors.

In an effort to bring clarity to the discussion about school/community/family partnerships, the focus of the possible range of partnerships was limited to elementary school/community/family partnerships. These types of partnerships, which collaborate with community-based health, human service, and recreational organizations, have typically been the focus of investments from the philanthropic and public sectors. Leaders of such partnerships have many lessons to offer about overcoming the barriers to effective partnerships and defining and documenting results; many have solid evidence of outcomes. Conference participants included representatives from seven states participating in CCSSO’s Ensuring Student Success Through Collaboration Network, coordinators of multi-agency school/community/family partnerships, policymakers, and scholars from throughout the country.

To serve as a prolegomena to the conference discussions seeking to identify next-step recommendations in coordination with the stated objectives of the conference, participants were provided with commissioned background papers prior to convening. The nationally-recognized authors of these commissioned papers, like the other invited participants, bring their diverse expertise to bear on the problems collaboratives face. Précis of their papers are presented in this issue of the CEIC Review.

**Recommendations**

The recommendations presented by the work groups at the conference encompass a broad range of topics, including issues about data, purpose, infrastructure, funding, and governmental policies concerning these collaboratives.

**DATA**

- Data sharing and the ability to disaggregate it at the local level need to be significantly improved. Data need to be available in forms that are accessible and user-friendly. Improvement will entail developing ways to align data and follow students across systems.
- Federal, state, and local agencies should work together to develop common outcomes and indicators.
- Researchers should work with practitioners to identify and develop appropriate tools for evaluation and assessment. Core indicators could be focused on the strength of families, the health of children, and the children’s school preparedness, clear indicators which policy makers can readily appreciate.
• Researchers need to provide assistance to local community leaders and parents in applying data to partnerships.
• In response to data and to identified community concerns, research institutions should be able to provide information on the appropriate best practices.

PURPOSE
• From the beginning, a partnership must clearly define its nature and goals, the roles the partners will play, and what methods will be employed to achieve those goals.
• Partnerships should focus their efforts on supporting student success, which should be defined at the local level. This need not necessarily be defined in terms of improved achievement test scores, though improving the situation for children and their families through school/community/family partnerships may have that effect.
• Partnerships should seek to build their capacity to fund early childhood programs, such as preschool programs for 4-year-olds and full-day kindergarten, parent-child engagement programs, and parent educator programs.

INFRASTRUCTURE
• State and local communities should map resources and establish state-level clearinghouses to coordinate all resources and therefore avoid duplication. District- or county-wide councils, aided by planning maps of publicly owned properties, should oversee the development and use of such properties, including their cross-use with schools and support agencies.
• Both state and local powers need to create an environment that supports and nurtures partnerships and their leaders. This environment should include professional development in technology, training, and mentoring methods for collaborative leaders, leading to their certification. Such certification would validate their expertise and engender support for their work in this capacity.
• The preparation of teachers, administrators, and health and human services professionals should include training in community partnerships.

FUNDING
• Collaborations need to have assured funding sources.
• Successful programs—those that meet the outcome goals of both the local community programs and the broader goals of the funding stream—should be rewarded by sustained funding over longer periods of time.
• New initiatives and funding must include capacity-building strategies.
• Programs and their funding need to be flexible enough to achieve goals established by the community.
• Increasing flexible funding shared across state and federal systems, including incentive funding for youth development, prevention, and early intervention programs, and family support programs, would enhance the efficacy of partnerships.
• Title I funds might effectively be redirected to support partnerships’ endeavors to create early childhood programs.

POLICY
• State regulations should only be developed in view of broad-based and representative community input.
• The federal government should neither dictate who should be on the collaborative nor define what constitutes a collaborative.
• The federal government should encourage new coalitions to use existing collaborative structures.

The CEIC REVIEW
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Editor

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Emerging Models of Governing School Districts
JoAnn B. Manning, National Center on Education in the Inner Cities at Temple University Center for Research in Human Development and Education

As efforts are made to improve student outcomes, various reform models have been adopted to change schools' operational processes and governance structures. To explore some of the issues and research connected with these emerging models of governing school districts, the Laboratory for Student Success and the Institute for Educational Leadership cosponsored an invitational conference on October 5–6, 2000 in Washington, DC, commissioning papers and inviting speakers to relate their experience and research on these models.

Speakers included Dr. Kurt Schmoke, former mayor of Baltimore and now a partner with the law firm Wilmer, Cutler & Pickering, who pointed out that, among other things, education is a quality-of-life issue; families often choose their homes because of the quality of neighborhood schools, and move away because of bad schools. The state of education in a city is the state of life for families with children in that city.

Mayor Anthony A. Williams of Washington, DC emphasized the importance of overcoming complacency and skepticism in the struggle to improve education. He remarked, “Effective education is not an option, it is a necessity.” He stressed the importance of after-school programs, rapid change, parent involvement, and teacher quality.

Dr. Rod Paige, Houston Independent School District superintendent of schools, remarked that educators need to think differently about school governance. He said no part of an organization offers a higher leverage opportunity for organizational change than its governance. He listed three key policy decisions: overall organizational goals, hiring of key personnel, and monitoring and accountability systems. He said, in order to make the organization work better, focused decision making is required, rather than a consensus among all stakeholders. He said stakeholders should be regarded not as customers but as partners. Subsequent to this conference, President George W. Bush selected Dr. Paige to be the new U.S. Secretary of Education.

Other conference participants included Dr. Betty Hale, Vice-President of the Institute of Educational Leadership; Dr. Lucian Yates, superintendent of the Harrisburg, PA Public Schools; Dr. Cozette Buckney, chief education officer of the Chicago Public Schools; and Dr. Dale Kalkofen, Vice President of New American Schools.

The three papers summarized in this issue of The CEIC Review are entitled “Redesigning Public Schools to Improve Student Performance: Two Emerging Models of School Governance,” “Changing Governance Structures in the Chicago Public Schools,” and “Emergent Governance Models for Public Schools and School Districts: The Case of New Jersey, of Urban Districts in New Jersey, and the Challenges of Being an Urban District Superintendent in New Jersey.”

In addition to speakers and presentations, plenary sessions (on school governance/operations and the 21st-century school district) and small-group discussions (on such topics as how to organize your school for the 21st century, with particular emphasis on improving low-performing schools) were held.

Among the next step recommendations emerging from this conference were: more discussion and exchange opportunities between superintendents and board members; school board development and professional development; workshops and professional development events for each stakeholder role group (i.e., superintendents, board members); use of distance learning for follow-up or future professional development; development of a model for conversation and collaboration among stakeholders; the creation of “central offices” that are service oriented; reaching all students in the district—public, private, charter, and choice; ongoing professional development; and stronger policies and procedures for retaining quality staff and removing unsatisfactory staff.
Redesigning Public Schools to Improve Student Performance: Two Emerging Models of School Governance
Kenneth Wong, The University of Chicago

Transforming schools from low to high performance is at the top of our nation's agenda. To improve school quality and raise performance, educational leaders at the district, state, and federal level are faced with the challenge to:

- **Address Socioeconomic Disparity**—Thirty percent of the children in urban areas are poor compared to 18% for the nation as a whole. Urban schools are twice as likely to enroll minority and immigrant children than the national average. When compared to the national level, students in urban areas are three times as likely to live in extremely impoverished neighborhoods.

- **Improve Teaching and Learning**—Urbanity and poverty intensify the magnitude of constraints on teaching and learning. While only 23% of the fourth graders in high poverty schools performed at the basic level or higher in the National Assessment of Educational Progress (NAEP) reading tests, almost 70% of their peers did so in schools with less poverty outside the urban setting. A substantial number of teachers in urban and rural settings are teaching in areas in which they did not earn a minor or a major in college.

- **Manage the technological gap**—Digital divide between the "haves" and the "have-nots" will widen if public schools lag behind in developing learning opportunities to meet the technological challenge.

- **Sustain Leadership Quality**—Urban superintendents have an average tenure of less than 3 years. Top talents are leaving the public sector for the fast-growing sector of e-commerce.

- **Regain public confidence**—While 67% of the urban school board members rated their schools as A and B, only 49% of the urban public did (NSBF, 1999). The public seemed half as likely than the board members to agree that the schools were "doing a good job" in preparing students for college, keeping violence and drugs out of schools, and teaching children who don't speak English.

To address these complex tasks more effectively, policymakers have adopted various reform models to change the school's operational processes and its governance structure. Two emerging models of school governance reform that are designed to improve student performance within the public educational sector are: (1) "integrated governance," a term that we developed based on our research in Chicago, and (2) charter school reform. These two models demonstrate the range of institutional options that policymakers can select in their efforts to improve accountability and management.

The two emerging models differ along several design dimensions. Integrated governance adopts a "corporate model" to improve school management and finance, it seeks to raise academic standards for all students system-wide, it applies sanctions and targets support to turn around low-performing schools, and its power is decentralized and governed by system-wide standards. The charter school model adopts consumer-based preferences to promote competition, it seeks to raise performance and promote alternative assessment, to turn around low-performing schools it uses site-specific strategies that may be part of a reform network, and there is strong autonomy at the school level.

Whereas integrated governance relies on system-wide institutions and standards to target low performance, charter schools focus innovation and promote alternative assessment in a market-like environment. Understanding these emerging models will help in developing the proper balance of various reform strategies.

Integrated governance maintains a proper balance between site-based decision making and system-wide performance-based accountability. It focuses on district-level capacity to reduce institutional fragmentation and raise academic accountability. This kind of restructuring is based on:

- a clear vision of educational accountability that focuses on academic standards and performance outcomes;
- strong political support to improve the operation of the school system;
- district-level capacity to intervene in failing schools; and
- a mix of direct intervention and support strategies to meet the challenges faced by urban schools.

This emerging model is likely to spread as an increasing number of mayors have gained control over the public schools, including the mayors of Chicago, Cleveland, Boston, Oakland, Baltimore, and Detroit. Mayoral control may not necessarily turn into integrated governance reform; for example, mayors may be reluctant to play an active role even though they are granted the legislative authority; mayoral control may be constrained by state legislative compromise; or civic leadership may be the driving force behind a more focused, performance-based accountability framework.

More importantly, integrated governance reform is not simply a
recentralization of authority nor can it be fully understood by focusing only on the issue of city takeover. Instead, integrated governance redefines the responsibilities and enhances the capacity of the district-wide leadership. Given its strong focus on raising student performance, integrated governance legitimizes system-wide standards and policies that identify and target intervention at low-performing schools. In effect, integrated governance creates institutional pressure and support that are necessary to address a key limitation of decentralization, namely, that organizational changes at the school site are not sufficient for academic improvement system-wide. While decentralization may produce successful reform in some schools, system-wide improvement is not likely to occur unless district-wide leadership has the political will and the capacity to implement outcome-based accountability.

During the last decade, Chicago has undergone two major phases of reform, each promoting a particular set of policy strategies. While the 1988 reform empowered the parents and community representatives at the school sites with the establishment of Local School Councils (LSCs), the 1995 reform substantially strengthened the authority at the district-wide level.

Local School Council as Decentralized Reform

The Chicago School Reform Act (P.L. 85-1418), passed in December 1988, was grounded in the belief that parental control can lead to educational improvement. The Act created the 11-member Local School Council (LSC) in each of the 550 schools in the district. The LSC is made up of six parents, two community members, two teachers, and the principal. Only parents whose children enroll in the school are eligible for the parental seats. Community members are elected from the geographic area served by the school. Teacher representatives are chosen among the teachers in the school. Consequently, the make up of LSC reflects racial, ethnic, and income diversity of the neighborhoods in the city. Because the LSC appoints the principal, the percentage of principals who are African American has increased from 37% to 50%, and the percentage that are Latino has increased from 7% to 11% between 1989 and 1994. The LSC also has the power to establish a school improvement plan, develop a curricular focus, and set budgetary priorities. But the 1988 reform fell far short of its promise to improve schools across the district.

By the seventh year of LSC empowerment, state and local political leaders and various groups of stakeholders were increasingly frustrated with the mixed outcomes under decentralized governance. Further, the decentralized model did not improve organizational effectiveness for the system as a whole. Financially, the school board was unable to eliminate a $150 million deficit and, in 1993 and 1994, resorted to borrowing to keep schools operating. Politically, Mayor Richard J. Daley was frustrated because his power over school board appointments was constrained by the nominating commission created by the 1988 legislation.

Integrated Governance to Improve Accountability

Declaring an “educational crisis,” the governor and state legislature passed the Chicago School Reform Amendatory Act in July 1995. This law integrated school governance by placing authority for the public schools under the control of the mayor and by providing the district with enhanced powers over financial, managerial, and educational matters. Drawing on corporate management practices, the 1995 reform created the position of the chief executive officer (CEO) that oversees the top administrative team, including the chief education officer. The CEO was given authority to place poorly performing schools on remediation, probation, and intervention.

Integrated governance is designed to facilitate policy coherence and improve organizational effectiveness. Not only was the mayor given the responsibility over schools, the 1995 reform eliminated competing sources of district-level authority, such as the school board nominating commission, and suspended the functions of the school finance authority. Powers were granted to the citywide board of trustees to hold LSC accountable to system-wide standards. The district acted on these powers to reallocate financial and managerial resources towards an accountability focus through downsizing the central office, privatizing several district functions, and monitoring poorly performing schools, principals, and teachers.

By strengthening the district-wide authority of the system, the 1995 reform shifted the balance of power between the central office and LSCs. Prior to 1995, LSCs had broad authority, but there was little direct accountability or oversight. For example, state Chapter 1 funds went directly to the schools, but the board remained accountable if the money was misused. Organized constituencies in the broader school community often influenced selection of principals by the LSC.

The new administration has signaled the LSCs that they can no longer operate with complete independence, and have incorporated the LSCs into the overall system by defining standards and responsibilities they must adhere to in such key decisions as hiring and firing of the principal.

The 1995 reform has enhanced the ability of the central administration to perform financial and management functions efficiently. It increased the school board discretion over revenue allocation, allowing the board to prepare a balanced budget and successfully negotiate two 4-year contracts with the teachers’ union, including substantial raises for teachers, bringing both financial and labor stability to the system. As bond companies upgraded the CPS rating several times, the board was able to issue $2 billion of bonds to fund a decade-long capital improvement campaign. Unlike the 1988 reform, the 1995 reform sharpened its focus on

(continued)
low-performing schools and their students.

To illustrate how the district uses a mix of pressure, support, and professional incentives to improve school performance, we focus on two sets of key initiatives: probation and reconstitution, and academic promotion.

Probation, reconstitution, and academic promotion are examples of formal regulatory intervention, although they also involve some support and limited professional discretion. Under probation and reconstitution policies, the district can intervene in schools with less than 15% of their students scoring at national norms on either the reading test of the Iowa Test of Basic Skills (ITBS) for elementary schools, or the Test of Achievement and Proficiency (TAP) for high schools. The district provides schools with a probation manager to help direct school improvement efforts, and schools must hire one of several external partners the district has contracted to assist schools in improving instruction and student achievement. A similar support system exists for schools under reconstitution. These schools have less than 10% of students scoring at national norms. The district can remove a principal from a reconstituted school and all teachers must reapply for their positions. In 1995, 21 schools were placed on remediation and, in 1996, 109 schools were placed on probation. Seven high schools have been reconstituted; five of the seven had their principals replaced, and about 30% of the teachers were not rehired.

The board of trustees ended “social promotion” of students in third, sixth, and eighth grades who did not meet set levels on standardized tests. These students were required to participate in a system-wide summer school called the Summer Bridge Program. The central office provides Bridge teachers with “structured” lesson plans that identified lesson objectives and materials, the order of activities, how the teachers should present the materials, and the instructional format teachers should use. At the end of the 7-week program, students take the ITBS again. If they meet or exceed the district benchmark, they are promoted to the next grade. If they fail, they are retained and placed in a class with no more than 15 students.

The district’s junior/senior academy initiative is also central to the district’s High School Redesign Plan. Chicago provides a rich experience in school reform in the last decade. A key lesson learned from the decentralization experiment is the need for system-wide standards and intervention to address the challenge of student performance. The LSC and its supportive network alone are not sufficient to promote educational improvement system-wide. Indeed, decentralized reform may have widened the capacity gap among schools to raise performance. Instead, district-wide leadership is needed to apply both pressure and support to schools. Such a mix of intervention strategies did not occur during the period of LSC dominance because the reform ideology with its strong antibureaucratic sentiments did not allow for the proper functioning of the central office.

The 1995 reform constitutes a major effort to reduce organizational fragmentation with integrated governance. Mayor Daley took on the new responsibility for improving education and has demonstrated his ability to use his political capital to bring about coherent policy. Because of integrated governance reform, the Chicago Public Schools are no longer complacent with their performance. The top leadership has engaged in ongoing self-learning and has made serious efforts to fine-tune many of its reform initiatives.

Taken as a whole, the post-1995 strategies of sanctions and support have improved the overall conditions that lead to better student performance across the system. Better test scores are seen not only in elementary schools but also in the more problematic high schools since 1996. If the current pace of student gains can be sustained in the longer run, the Chicago experiment in integrated governance may serve as a national model for transforming urban school systems. Indeed, integrated governance has gained national attention. With a sharpened focus on accountability, former President Bill Clinton’s educational improvement plan, as announced in his 1999 State of the Union Message, proposed an end to social promotion, a phasing out of teachers who lack subject area competence, and an effort to reconstitute low-performing schools. In light of the accountability focus as proposed by President George W. Bush, Chicago’s reform experience since 1995 will be valuable to policymakers and researchers nationwide.

Charter Schools as a Reform Model

In contrast to the seemingly recentralizing tendency under integrated governance, charter school reform aims to significantly reduce regulatory control from the central administration and union agreements. Although they are labeled as public schools, charter schools are distinctive in several major aspects. The school’s charter or contract explicitly spells out the conditions and expectations for outcome-based performance. The authorizing agency can be the local school board, the state, or other legal entities (such as universities). Once established, charter schools enjoy substantial autonomy in setting curriculum, teacher salaries, and work conditions, although they are bound by state regulations regarding safety, health, dismissal, and civil rights. School funding follows students to the charter schools, which operate on a multiyear renewable contract.

Charter schools are guided by several design principles. They aim to:

- create a new structure of school autonomy based on performance contract;
- limit central office control over curriculum, instruction, and personnel decisions;
- grant parental preferences on schooling opportunities; and
- promote innovation and alternative assessment on student performance.

Since 1992, when the first two
Charter schools opened in Minnesota, the number of states with charter legislation and the number of charter schools in operation have grown steadily. Thirty-six states and the District of Columbia have passed laws allowing for the creation of charter schools. In the 1999–2000 academic year, 1,689 charters were in operation, and there are an additional 305 approved to open in 2000–01. At least one district in California has converted to a system of charter (or contract) schools. Enrollment in charter schools increased to about 2.5% of the nation’s public school student population in 1999–2000. In Arizona, California, and Michigan, charter enrollment figures are much higher.

Charter school advocates have identified two kinds of innovative effects: (1) charter school can create competition, maintaining a better fit with the needs of their “customer-parents,” and thereby pressuring regular public schools to improve in order to maintain their share of the student “market”; and (2) enjoying substantial autonomy from the central office, charter schools can serve as laboratories for developing new educational ideas and practices, fostering and following through on innovative ideas from which traditional public schools in the district can learn. But are these claims supported by the knowledge base in the current literature?

Not surprisingly, the literature is split on the issue of whether charter school competition pressures public schools to improve. Most of the research has found light to moderate effects, more prevalent in smaller or mid-sized districts where the system is often more nimble and the impact of a few charter schools is more readily felt. Legislative compromise—capping the number of charter schools, cushioning the financial blow to traditional district schools, or reducing the autonomy of charter schools—may lessen the effects. Educational reform was also influenced by past performance and the eagerness of the district leadership to undertake change. While there is some evidence suggesting district response to competition, charter schools is such difficult work that a significant amount of time may be needed before producing strong, system-wide impacts on school districts. In districts where charter schools made an impact, districts made “piecemeal” instead of system-wide changes, and were most concerned with expanding their school day by offering new add-on programs. In short, given the mixed evidence on charter school impact, more research is needed on what works and what doesn’t in charter school as a system-wide reform.

As for charter schools promoting innovative practices, researchers have asked two related questions: (1) Are charter schools engaging in classroom innovation, with new methods of teaching? (2) Are district schools able and willing to integrate those classroom innovations into the mainstream curriculum? On both of these issues, the empirical evidence tends to be mixed. While innovations were found, many were structural, few were either freestanding or independently replicable, and no evidence of significant sharing or dissemination of practices from charter schools to district schools was found. Some evidence suggests that changes in organizational and institutional arrangements may prove more significant than any academic innovations. The literature remains unclear on whether charter reforms are actually “adding value” to student learning.

Conclusions

The two emerging governance models represent a continuum of institutional possibilities for urban educational reform. At one end of the continuum is integrated governance, which redefines the responsibilities and enhances the capacity of district-wide leadership. Given its strong focus on raising student performance, integrated governance reform tends to target resources on and apply pressure to low-performing schools and students. A challenge is to recruit leadership that has the vision to apply pressure and provide support to low-performing schools.

Concerns about the potential of excessive central direction have prompted some reformers to support the charter school model, which represents the other end of the institutional reform continuum. While decentralization may facilitate innovative practices and promote more efficient use of resources, the charter school model is likely to be unevenly implemented across different settings. Given charter schools’ autonomy, system-wide standards are not likely to be considered a high priority. Whether charter schools are able to recruit high-quality leaders will be a critical challenge. Equally important is the charter’s capacity for turning around low-performing schools and students.

From a broader perspective, the two emerging models call our attention to the complex challenge of reengineering low-performing schools with a particular focus on leadership and management issues. More specifically, this review of the two models raises several issues in the area of educational leadership, including: the role of states and districts in designing and implementing alternative systems of accountability; leadership qualities and management practices that are necessary for implementing the reform models at the district and school level; the kind of technical assistance that is needed to ease organizational transition and improve effective management in settings where political leaders at the state and city level have taken a more active role in education; principals’ strategies in developing school-wide vision and implementing strategic plans that are designed to raise student performance; the ability of public school leadership at the school and district levels to respond to an emerging competitive environment given the increase in the number of charter schools; and effective ways in which noneducators can collaborate with school professionals to turn around low-performing schools.
Changing Governance Structures in the Chicago Public Schools
Cozette Buckney, Chicago Public Schools

Since the publication of *A Nation at Risk* in 1983, the country has been searching for ways to improve public schools. Proposed solutions have focused on virtually every aspect of education, from curriculum and teacher certification to outcomes and accountability. Recently, more attention has been focused on the issue of governance— that is, who is responsible for making the policy and operational decisions about schools. Traditionally, that responsibility has rested with local school boards, the vast majority of which are elected. But as dissatisfaction with public schools, particularly those in the large urban districts, has grown, other forms of governance have been proposed and even implemented.

**Chicago Reform, Part I**

The Chicago Public Schools has led the way in alternative forms of governance, beginning in 1988 with a decentralized structure. The Chicago School Reform Act (P.A. 85-1418), passed by the Illinois legislature in 1987, dramatically shifted the control of the schools away from the central bureaucracy to the parents. The reform law created in each school an elected local school council (LSC) comprising six parents, two community residents, two teachers, and the school principal.

The LSCs were given extensive powers. They helped write and approved the mandatory school improvement plan, and approved the school’s budget, including the use of discretionary funds. The law transferred control of state funds for poor children directly to the schools these children attended, taking more than $200 million out of the district’s control and giving it to the LSCs to spend.

The most important and controversial power given to the LSCs was the authority to hire the principal, who was given a 4-year contract. Principals no longer had tenure, but could be replaced at the end of their contracts. The reform law also gave the LSCs more say in the selection of school board members.

The law was a major victory for the advocates of decentralized decision making, giving control of the school councils to the parents and giving these councils real power to shape the students’ education. But the performance record of the LSCs has been uneven and, 5 years into the decentralized reform effort, it was apparent that serious problems existed. By 1995, elementary schools showed little improvement, high schools continued to spiral downward, dropout rates were high, school buildings were overcrowded and/or deteriorating, the school system was facing a $150 million shortfall, and public confidence in the schools was almost nonexistent.

**Chicago Reform, Part II**

In 1995, the state legislature passed a new reform law creating a new form of governance—sometimes referred to as *integrated governance*— which balances centralized responsibility with local decision making to establish accountability for performance.

The essential features of this new governance structure are:

- Responsibility for the school system was given to the mayor of Chicago.
- The mayor was given the power to appoint the school board.
- The mayor also appoints a chief executive officer (replacing the general superintendent of schools), who in turn appoints a chief operating officer, a chief fiscal officer, a chief educational officer, and a chief purchasing officer.
- The chief executive officer was given greater authority to monitor the performance of schools, to place schools on remediation and probation, to recommend to the board schools to be placed on intervention and reconstitution, and to intervene in schools that were in “crisis.”

- The school board gained greater management rights in negotiating with employee groups.
- Greater flexibility was given to the school district in the use of local and state revenues. The ability to accumulate funds for future years and a 4-year financial plan have been vital in restoring the district’s financial stability.
- The school board was given the power (in 1997) to establish certain requirements that candidates for principalship had to meet.

This new reform act created an overall structure of authority and responsibility to support local decision making. The act made it clear that the purpose of reform was not local empowerment but improved student achievement. The success of this governance model is determined by the interaction between central authority and local control.

While the concept is sound, the devil is in the details. Mayoral control is succeeding in Chicago because of the way the involved individuals have implemented the legislature’s design. Putting the mayor in charge of the schools brought several important benefits. Obviously, there is greater accountability for the performance of the schools; everyone knows whom to hold responsible, and they can voice their sentiments in the voting booth. Because the mayor wields more political power and influence than the old school board did, he has greater credibility with the business community and with political leaders in the city, the state, and Washington, DC.
Prior to 1995, the school system suffered in splendid isolation, separate from other city agencies, but today all city agencies are working cooperatively for the same purpose: to improve life in the city. The sense of teamwork is evident in things like the passage of tax increases proposed by the school board and additional funding from the state.

The greatest responsibility of the mayor is the selection of the school board and the chief executive officer. Perhaps guided by the maxim “if you want a job done, give it to a busy person,” Mayor Richard M. Daley selected for his board business leaders who are also active in the community. The board president, Gery Chico, is a former chief of staff for the mayor and managing partner in a major law firm.

Having a small board consisting of knowledgeable and experienced individuals has served the school system well. They have clearly focused the board on monitoring the performance of the school system, making policy, and improving management and operations systems. The current board functions more like a corporate board of directors than like a traditional school board.

In keeping with the corporate look of the new school board, the new administration was headed by a chief executive officer: Paul Vallas, Daley’s budget director and a former teacher. The new administrative team assembled by Daley, Chico, and Vallas consisted of two major sectors: education and support. The key education appointments were all drawn from within the school system; all had served as successful principals of schools in Chicago and were knowledgeable about the school system. The support leadership was new to the school system, but they had extensive experience in their specialties. The new administrative team had a degree of professionalism in all areas that was unseen before.

It also had a new charge from the mayor: make the school system the best in the nation. Change and innovation were the order of the day. The bureaucracy—which had lost much of its purpose during the first phase of reform—was reduced in size, refocused on providing services to schools, and reenergized with a new sense of urgency. The school system’s new motto was “Children First,” which became the touchstone for all decisions.

One early sign of the new team’s approach was its handling of the projected budget deficit and the looming contract negotiations. Within 6 weeks, the administration and board had negotiated a 4-year contract with the employees and produced a balanced budget that placed an additional $117 million in the schools.

Building an Accountability System

The power to intervene in failing schools had been included in the original reform act, but had scarcely been used. In part, this was because the school system had no clear standards or expectations for what students were to learn. Although the Illinois State Board of Education had adopted state goals for learning, there was no link between these goals and what schools were teaching. Social promotion was established policy—retaining students in grade was widely discouraged—even though barely one quarter of the elementary-school students were reading at or above national norms. What was needed was an accountability system that would comprise three components: standards, support, and assessment.

The new administration quickly developed a comprehensive education plan designed to improve the schools. For high schools, this meant setting specific graduation requirements that include a strong core curriculum. For elementary schools, it meant the elimination of social promotion and the adoption (for grades 3, 6, and 8) of specific criteria for promotion.

It also meant creating academic standards—expected outcomes. These were developed for every grade from kindergarten through high school in English/language arts, math, science, and social studies. The world-class standards were carefully sequenced, linked to the state’s learning goals, and accompanied by “curriculum framework statements” which define the curriculum for each standard and can guide teachers in developing their lesson plans.

These standards, graduation requirements, and promotion criteria gave local school councils and school staff the necessary structure and framework for making responsible decisions about how to educate their students. It also gave the administration and the school board a clear basis for measuring students’ progress and schools’ performance.

To help the schools meet these expectations, the administration provides a broad range of support. Model curricula with lesson plans were created for the core subjects and offered to schools to use at their own discretion. After-school programs incorporating extra instruction and tutoring were initiated in more than 300 schools, primarily to help children having difficulty in reading and math. An intensive summer program was developed for students who were in danger of not being promoted. Schools were given additional teachers, and retired teachers were hired as tutors. This year, more emphasis is being given to teacher-assigned grades, student attendance, and standardized tests in decisions to promote or retain elementary school children.

The school board and the administration have a clear responsibility to ensure that every child receive a good education. The accountability system defines "good education" and helps students to attain it. But when students are falling behind, the school district must step in.

As mentioned earlier, students in grades 3, 6, and 8 must meet specific criteria in order to be promoted. These
Probation brings a school a probation manager to help the school staff diagnose the problems and develop appropriate solutions. It also brings an external partner—normally a university or other expert—to assist the school in carrying out the solutions. Schools needed to reach at least 20% (now 25%) of students at or above the norm to be taken off probation.

Intervention is necessary for schools with long-term failure patterns that have failed to improve under probation. In 1997, seven high schools were reconstituted. Essentially they were closed and then reopened with a new program and a newly selected staff. Six of the seven received new principals. All staff—teaching and nonteaching—had to reapply for their jobs. About two thirds were selected; the rest sought positions at other schools. This fall, the administration selected five schools with persistent failings for intervention. A single theme runs throughout the entire accountability process; not punishment but improvement—doing whatever is necessary so that students are learning those things they need to know for success in college and life.

The accountability process does not end local decision making. Schools that meet standards are left alone. Even in probation schools, the local staff is intimately involved in the decision-making process. Only in intervention is local decision making significantly reduced, but these schools are dysfunctional. The integrated governance structure provides a sound balance between local control and central oversight.

Results
Integrated governance works. For 5 straight years, the percentages of students scoring at or above the national norm in reading and math on the Iowa Tests of Basic Skills and the high-school version, the Tests of Achievement and Proficiency, have risen. Compared to their low points, the number of students scoring at or above the national norm has risen in elementary-school reading (a 67% increase) and math (77.6%), and in high-school reading (72.2%) and math (117.4%). These gains extend across the spectrum of students: the percentage of students scoring in the bottom quarter of the national norm has diminished significantly. Other measures are also improved; the graduation rate has increased from 44% in 1991 to over 65%, the dropout rate has continued to decline, and both enrollment and attendance are increasing. Clearly more improvement is needed, but it is reasonable to conclude that the school system has put in place the right governance structure, programs, and other initiatives for continued progress.

Conclusion
Changing the governance structure of a troubled school district is often an attractive idea. Certainly, it has proved efficacious in Chicago. But other districts have been less successful with similar changes. A successful takeover by the state or the mayor requires more than simply shifting power and responsibility; it calls for a coherent plan for bringing about the right changes to improve learning. It also calls for the right political environment. A governance structure that works in Chicago may not work in other cities simply because the political dynamic at the city and state levels are different.

One important factor in Chicago’s success is that all the major segments of the community have come together to support education reform: the unions, business, academia, civic organizations, community groups, city government, and the state. Serious resistance from any of these groups could significantly impede the change process. Thus, changes in governance need to be carefully planned, taking into consideration all the particular circumstances of the school district. While Chicago’s experience can offer valuable lessons for others, one size doesn’t fit all.
Emergent Governance Models for Public Schools and School Districts: The Case of New Jersey, of Urban Districts in New Jersey, and the Challenges of Being an Urban District Superintendent in New Jersey

James H. Lytle, Trenton School District

I am the superintendent of schools in Trenton, NJ, one of the 30 so-called “Abbott” school districts in the state—districts which must implement whole school reform, a complete restructuring, as the result of a 1998 consent decree entered into by Gov. Christine Todd Whitman’s administration and the New Jersey Supreme Court. The importance of this consent decree is that it commits New Jersey far more directly to urban school reform than any other state in the union. Many states have gained notice for whole state reform efforts (e.g., Kentucky, California, Texas, Tennessee), but only New Jersey is concentrating education reform in its urban districts. The state has, in effect, taken over all 30 urban districts and is now engaged—or more accurately, enmeshed—in an attempt to manage and micromanage reform in all 30 districts.

The consent decree was the culmination of over 25 years of litigation regarding equity issues in New Jersey urban school districts. The most important component, in terms of funding, was the agreement on parity aid in the state subsidy formula. All New Jersey districts are ranked on a 10-point scale in terms of ability to pay for public education costs. The parity aid agreement requires that the 30 Abbott districts be funded at the same per pupil expenditure level as the wealthiest districts in the two top ranks, a provision that has had very immediate benefit for all Abbott districts. Where parity aid proves insufficient to implement the required components of Abbott, districts are entitled to supplemental funds, both for preschool and for K–12 programs and services. Abbott requires that all 3- and 4-year-olds living in Abbott districts have access to free preschool, independent of family income, though the administration determined that this could not be accomplished through the expansion of existing preschool programs, but rather through approved community providers. The court took the lead in insisting that all urban schools must adopt “research-based,” comprehensive school reform models within a 3-year period. In elementary schools, eight models were approved (e.g., Modern Red School House, Comer), with Success for All being the default model. The court held that there were no demonstrably successful models at the secondary school level, so secondary schools were given somewhat greater latitude in selecting school improvement programs, although national models (e.g., Coalition for Essential Schools, Talent Development) were clearly preferred by the Department of Education (DOE).

Another component of the court-determined school improvement model was reduced class size. Abbott regulations require that preschool classes not exceed Teacher/Student ratios of 1:15; for grades K–3 the ratio is 1:21; for grades 4–8 the ratio is 1:23; and for grades 9–12 the ratio is 1:24. A key DOE decision was that the reduced class sizes of Success for All schools, with 1:8 ratios during reading periods and with certified teachers as tutors, would also be applied to elementary schools which had chosen different models, even when the model did not require smaller classes or added staffing. The result was a dramatic increase in the cost of Abbott implementation.

Trenton Public Schools’ Abbott Implementation Strategies

When I arrived in Trenton as the new superintendent—at about the same time as the Abbott regulations were issued—I was aware that Trenton had a very poor relationship with the DOE and was just emerging from a period of intensive state oversight. The district was also losing enrollment to a contingent of newly opened charter schools, and in deep difficulty because of special education program compliance problems. The mayor, the board of education, parents, the media, the community, and even the district’s employees had lost confidence in the district’s ability to provide safe and effective schooling.

My sense was that if we played our cards right, Abbott could be an opportunity rather than a problem for us. I also calculated that, given the weight of the government actors and advocates behind Abbott, the regulations were going to be implemented whether the urban districts liked them or not. Our strategies evolved as our senior administrative group interacted with the board, our school communities, our employee organizations, and the DOE. Our strategies include:

- Submit every plan on or before deadline.
- Be first in line, not last.
- Set out to be the “model” district in Abbott implementation, thereby demonstrating that the timeframes and agenda were not unreasonable or undoable.
- Get ahead of the DOE in areas where they were unsure how to proceed (e.g., school-based budgeting, preschool program implementation, facilities planning, program evaluation design).
- Address DOE areas of concern or dispute (e.g., special education).
- Keep our local elected officials—the mayor, city council, and our legislative delegation—informed, thereby presenting an informed and united front in dealing with the DOE.

(continued)
- Adopt deficit budgets (for FY 2000 and FY 2001) based on the costs of full implementation of the Abbott provisions, then file appeals with the DOE and courts for full funding.
- Conversely, accept DOE offers of funding for programs, staffing, etc. that have not been requested.
- When dealing with the press, speak of Abbott at all times as an opportunity for Trenton, and not impugn individuals or support at the DOE.
- Create new markets (in our case a hugely successful dropout recovery program) and maintain good relationships with potential suppliers (i.e., the community-based preschool program providers).
- Form partnerships with major universities, foundations, and government agencies for research projects and experimental programs (i.e., enhance our "legitimacy").
- Be proactive, not reactive. Make Trenton a "can-do" district.

At least in terms of additional funding, the Trenton strategies have proven successful. For both FY 2000 and FY 2001, the Trenton Public Schools have received proportionately more supplemental funding (relative to student enrollment) for whole school reform and for early childhood/preschool than any city in New Jersey. In 2 years, our per student expenditures have increased by $3,000 to over $12,000, making us among the best funded urban districts in the country. When funding for our facilities projects was recently approved by the legislature ($317.5 million), Trenton again received a higher proportion of its request than any city in New Jersey.

Leading in This Policy Environment

While New Jersey’s intervention in its urban districts has led to a number of changes in traditional approaches to school district governance and decision making, none of these changes reduces the responsibility of the state’s urban superintendents (and their boards) for providing quality education for their students. The question remains: What does it mean to lead in this policy environment? The risk is in complying, and the reward is in complying. Leadership in this context means:

- persuading one’s community that the costs of complying with new state regulations will be outweighed by the benefits, both in additional resources and in learning opportunities for students.
- pressing principals, teachers, school management teams, and central office staff to complete plans and reports accurately and on time.
- removing school principals who cannot lead reform and replacing them with those who can.
- recruiting a cadre of young minority administrators who bring a deep sense of moral purpose to their work (and who are attracted to Trenton because they do not have to jump all the hurdles of large urban districts, and can work in a setting with resources adequate for doing the work in a responsible way).
- developing contracts with our teacher and administrator employee organizations that support reform.
- persuading teachers and administrators that the comprehensive school reform models are worth trying, while maintaining a degree of skepticism.
- understanding that reform will only occur if and when a deeper sense of community responsibility and diffused leadership can be established.
- becoming a skilled “sensor,” one who collects and interprets soft data, and daring to be different, to capitalize on one’s unique characteristics and abilities.
- creating a learning organization, modeling good teaching in one’s own work, and keeping teaching at the front of the organization’s priorities.
- making inquiry a core process; tying accountability to institutional research; and teaching administrators and teacher leaders how to use data for formative purposes, with the emphasis on interpreting, redesigning, and changing practice.
- making school-specific descriptive and performance data public, readily available, and the basis for community engagement in improving schools.
- forming partnerships with major universities, foundations, and government agencies for research projects and experimental programs to enhance our legitimacy in the eyes of our community and the DOE.
- keeping the moral purpose of our reform efforts at the center of all discussions of change.

Working to Become a Learning-to-Learn Organization

Since schools and school districts are supposed to be organizations whose first purpose is to help their students learn, then it would seem obvious that they should themselves be learning organizations and that their employees should experience them in that way. As one familiar with the literature on learning organizations, and as one who has tried to create these sorts of organizations in whatever leadership role I have held, I came to Trenton with the intent of making us a learning and a learning-to-learn organization.
I began my service in Trenton by conducting a series of public “fishbowl” meetings on our budget. I asked division heads to explain their budgets to me while sitting at a small conference table in the middle of our administration building auditorium. The table was surrounded by chairs, employees and the general public were invited to attend, and the meetings were televised on our public access channel. After a walk through of his or her budget led by the division head and then questions from me, the audience was invited to participate by asking questions and making recommendations. The meetings gave me an opportunity to quickly establish new norms. All budget information was public. All monies belonged to the schools, their parents, and their students. And I had an opportunity to establish myself as knowledgeable about budgets and operations.

As Abbott implementation moved forward in the fall of 1998, we continued to use budgeting as a way to support and drive reform. We designed a laptop-based spreadsheet and the accompanying instructions, taught principals and School Management Team members how to use the computer and how to develop a budget to meet state expectations, and met a very tight deadline. The ancillary benefit was that principals, teachers, parents, and our employee organizations emerged from the process with a much greater understanding of costs, priority setting, and resource utilization than they had had before the process began.

There are a number of other examples of how we have been working to create a “learning to learn” organization. Last year I used two thirds of the biweekly principal meeting time to teach a course in organizational theory so that we might move toward a shared understanding of schools as organizations. In each of our employee contract negotiations, we have increased tuition benefits for further education. We have also used negotiations as an opportunity to learn the history of the employee groups, an approach that greatly increased trust between the board and administration and the employee groups, and led to early settlements of our major agreements. Recently we have begun the process of making school descriptive and performance data public by developing detailed school profiles which will be available to teachers, parents, and the community in booklet form and on our website.

As superintendent I have developed two complimentary strategies to build support for change. One is to emphasize that our mission is insuring that as many students as possible who enter our ninth grade complete high school and go on to college, work, or military service (or combinations of the three). I remind everyone that what our parents and community want—more than higher test scores—is for their children to become responsible, self-supporting adults. That is why we have redesigned our high school into career-oriented small learning communities, each with college, community organization, and corporate partners, and why we have initiated dropout-recovery and adult high-school programs. My mantra is that we have no excuses. Our district has every element necessary to insure that our kids are successful: adequate funding, strong political support, agreements with our employees that support reform, a board committed to the best interests of children, and partnerships with a wide array of area educational, corporate, business, and social service organizations.

The other strategy is to focus on the long-standing problems we need to reduce or eliminate to improve our performance and opportunities for our students, including high rates of dropping out, special education referrals, suspension as a disciplinary strategy, retention in grade, course/subject failure, and high-school proficiency test failure. All of these programs are ones over which we have control, all are demonstrated by research to relate to negative student outcomes, and all are ones where we have begun to show improvement (e.g., doubling the number of high school graduates in 1 year; reducing suspensions by over 50% in 2 years). We have also made a concerted effort to recruit minority administrators and teacher leaders who have a deep sense of commitment to increasing opportunities for children of the city.

A substantial majority of the administrative appointments we have made to principal, vice-principal, and central office positions have been African-American or Latino, and a majority of them have come from outside the district. Interestingly, much of the credit belongs to School Management Teams who have consistently recommended the strongest of the available candidates, not simply the insider they already know.

In leading this complex change effort, it has been important for me to act in ways articulated by Peter Senge: being a designer, steward, teacher, and generator of tension. But I have become acutely aware that, in many ways, I am a middle manager, working between the state and the district I am paid to lead. As I hope this paper suggests, that means walking a very tricky tightrope.

The CEIC REVIEW

Robert Sullivan
Editor

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Research-based Lessons from Title I Implementation: Examining Different Strategies for Improving Student Outcomes

Margaret C. Wang, Distinguished Professor and Founder, Temple University Center for Research in Human Development and Education

This issue of the CEIC Review reports the research findings and recommendations of a national invitational conference on the impact of Title I schoolwide programs and whole school reform that was held on October 31 – November 1, 2000 in Washington DC. The conference, sponsored by the Laboratory for Student Success, brought together leading researchers, policymakers, and practitioners to continue and broaden the work begun in May 1999 at the previous Title I conference.

Participants discussed the Year 2 findings of the National Study of Effective Title I Schoolwide Programs and the Whole School Initiative Study and examined the effects of federally endorsed and state/district-initiated comprehensive reform models in high poverty schools. The focus of this conference was particularly timely in view of the upcoming reauthorization of the Elementary and Secondary Education Act (ESEA) and funding allocation for Title I schoolwide programs.

Following the recommendations of last year’s conference, this year’s meeting expanded the discussion to include topics affecting poor schools, such as race, language, and mobility. A particular area of concern was the availability of services to English language learners in Title I schoolwide programs. Participants also addressed such cross-cutting issues as the role of the state in strengthening Title I programs, teacher quality, standards-based assessment, investment in technology, and parental involvement that are an important part of the national education reform agenda. The conference provided a forum for practitioners to discuss how schoolwide programs and whole school reform can be effective in improving teaching quality and student performance and gave the participants an opportunity to build and expand upon professional networks that have fostered a wider adoption of effective strategies in challenging urban and rural settings.

The commissioned papers summarized in this CEIC Review offer an overview of the research base, the patterns of organizational and governance reform, and the development of accountability standards and practices that lead to effective implementation of Title I schoolwide programs and state/district-initiated whole school reforms. Following discussions of these findings in the plenary sessions, participants broke into workgroups to discuss schoolwide program implementation and make recommendations on how to increase the effectiveness of this Title I reform effort.

Creating Effective Schoolwide Programs: Next Step Recommendations

What ingredients go into the creation of successful schoolwide programs? Conference participants reflected on their own experiences in Title I programs and identified strategies relating to resource allocation, hiring practices, parental involvement, early intervention programs, and curricular innovations that have led to more effective schoolwide programs. They also contemplated the effects that portable entitlements might have on the future of Title I schools.

Resource Allocation

Much of the discussion on how to create effective schoolwide...
programs dealt with resource allocation. Schoolwide programs must make innovative use of staff, resources, and programs if they are to be successful. Often, resources are spread so thin that they are not used as effectively as they could be. Successful schoolwide programs use money creatively and aggressively seek partnerships with outside organizations to stretch their resources. The following strategies were identified as means of overcoming fiscal constraints:

- Schools should be allowed to craft their own programs by blending monies and developing creative approaches to program involvement.
- Principals need to become skillful financial managers to make the most of the various resources available to the school.
- The central district office must be lobbied to become an enthusiastic supporter of the school’s reform initiatives.

One key “resource” often overlooked in developing effective Title I programs is school morale. High school morale can cushion a school struggling against the inevitable fiscal and organizational problems encountered in implementing a schoolwide program. Schools can increase morale by taking an active role in encouraging the staff, parents, and the larger community to buy into the reform program. In particular, teacher morale can be improved by:

- increasing administrative support for teachers by compiling a cumulative database of the student body so that teachers can identify particular needs of the students at the beginning of the year,
- offering professional development opportunities to ensure that the reform effort is sustained and not watered down over time, and
- providing mentors for new teachers.

Teaching colleges also have a role in preparing their students to implement reform programs effectively by:

- providing teaching candidates with exposure to real-life situations,
- teaching students effective parental involvement strategies, and
- doing more to keep abreast of what schools need and becoming knowledgeable about their reform initiatives.

The Challenge of Finding Quality Teachers

The problem of teacher shortages and its relationship to the issues of teacher quality was an area of intense debate, and participants cited many factors that they believed were serious obstacles facing poor districts in the effort to provide their schools with high-quality teachers:

- Large, wealthier districts are able to pay higher salaries than small or poor urban districts.
- The burden of meeting Title I accountability requirements is a disincentive when hiring teachers in poorer schools.
- Even when qualified candidates are available, they often face obstacles to employment. Teachers who are older or have advanced degrees have a hard time getting hired because they cost too much.
- Often, school boards dictate salaries and hiring decisions and principals don’t get a chance to interview the candidates, so their input regarding appropriate personnel is missing from the process.
- The district places too much confidence in the entrance exams, but they don’t measure the ability of individuals to teach in front of the class.

- Teachers from small schools come unequipped to deal effectively with inner-city students.
- The tenure system prevents schools from making necessary changes in their staffing and hiring procedures.

It was roundly agreed that these structural problems must be faced at the district and state level in order for reform programs to meet their potential.

Parental Involvement

Participants readily agreed that parental involvement is crucial for the success of schoolwide programs and that the lack of involvement has been an obstacle in many reform efforts. They placed particular emphasis on the need for schools to take the initiative in cultivating better relations with parents and to extend these efforts to broader community outreach, especially in ethnically diverse neighborhoods where residents often do not feel welcome at the schools. There was also the recognition that schools need to improve their communication with parents to show that the school values their involvement and to explain clearly to parents how they can assist the school in furthering their children’s education.

The following suggestions were made concerning steps schools could take to improve their relations with parents:

- The staff needs to understand their role as ambassadors to the parents; hence, the front desk must present a welcoming atmosphere.
- Language barriers should be recognized and efforts should be undertaken to teach prominent community foreign languages to teachers and office personnel.
- Parents should be encouraged through newsletters, websites, and home visits to be more involved in their children’s schooling.

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Parents should be given significant roles in the school to implement the reform agenda.

A number of specific recommendations were made to foster effective parent-school partnerships:

- Develop specific guidelines to delineate parental responsibilities to advance student success.
- Offer parent workshops to encourage parents’ support of their children’s learning.
- Conduct parent academies to teach parents literacy and reading strategies.
- Tailor parent–school compacts to fit the unique needs of the school and involve the children.
- Acquaint parents with learning technologies by offering computer workshops and giving stipends to parents who participate in such workshops.
- Target parent events to particular grade levels and bolster support for these events.
- Open a district-wide resource center for parents and the community.

Community outreach is equally essential and can be pursued through efforts to involve local businesses, churches, and community centers in educational activities that support the school’s programs. Ideas for community outreach include the following:

- Develop school and community cohesiveness by encouraging parents to “adopt” other parents who are unable to come to school, thereby increasing the number of parents involved in the school.
- Network with hospitals and pediatrcians to furnish reading material to parents, especially first-time parents and English language learners.
- Work with the larger community to raise funds for afterschool clubs and athletic activities for children.

**Early Intervention Programs**

Efforts to promote reading are at the heart of early intervention programs. Participants concurred that it is important to ensure that all children can read on grade level by 3rd or 4th grade. Particular programs such as Reading Recovery, Assure Readiness for Learning, and Reading Academy were recommended to promote reading. Specific suggestions to address reading deficiencies include:

- Align the curriculum and reading program.
- Blend whole language and basal instruction.
- Use integrative computerized programs.
- Use flexible grouping with whole-group instruction.
- Alternate reading classes and set aside blocks of time for reading and writing.
- Reduce class size by using internship programs (e.g., The Balanced Literacy Program in Philadelphia).
- Try “looping,” in which teachers have the same children for two years.
- Start a “Bags of Books” program in which books go home with information about the 100 Book Challenge program.
- Conduct tutoring with Big Brother/Big Sister Programs.
- Include all childcare providers on committees to ensure coordination of services.
- Encourage parents to use technology at home to assist their children in reading comprehension.

**Subject Matter Priorities**

Education critics have sometimes complained that there is an overemphasis on literacy and math to the exclusion of other subjects such as science. Besides the priority given to mastering reading and math skills, schools often have weak science programs because of the increased difficulty of attracting competent science teachers. Hence, class sizes in science tend to be larger than in other disciplines. Among the suggestions made to improve science instruction were to:

- provide a balance of subject exposure through cross-curricular programming,
- integrate math and science so that the disciplines aren’t seen as separate,
- increase professional development opportunities for science teachers, and
- seek partnership programs with outside organizations to enrich the science curriculum.

**Portable Entitlements**

Many critics of Title I programs view portable entitlements as a means of rescuing students from failing schools. Under such proposals, funds would follow the student into alternative public or private school programs. Conference participants voiced concerns about the possible consequences for Title I schools affected by students departing for alternative programs. In addition to the loss of vital funding, participants feared that portability would increase the already high rates of student mobility and destroy a school’s consistency in operating and implementing reform programs. They agreed that more research is needed on how student transience affects the teaching staff and the school’s reform efforts.

A second concern focused on accountability standards for alternative programs. Successive waves of legislation have endeavored to raise accountability standards for Title I programs; therefore, alternative programs must be held to similar standards to ensure that public and nonpublic schools are on an “even playing field” in evaluating their academic effectiveness.
Using Standards-based Assessment for Title I Accountability and Program Improvement
Jerome V. D'Agostino and Ginger L. Stoker, University of Arizona

Since the Hawkins-Stafford reauthorization of 1988, testing in Title I has served to hold schools accountable for students' academic outcomes, indicate which schools are in need of improvement, and monitor school progress during the program improvement process. The 1994 Improving America's Schools Act (IASA) led to a number of Title I testing regulation changes. Testing shifted from a reliance on conventional norm-referenced tests to standards-based tests developed by states. Schools no longer were required to test in nearly every grade, as was the case prior to IASA. Nonetheless, the multiple and often conflicting purposes for testing remain.

As has been the case with achievement testing throughout the history of American schooling, Title I testing serves as a tool to fulfill both the political and professional models of reform. The political reform model is predicated on the belief that schools function to foster citizenship and, thus, should be scrutinized and held accountable by the public. Tests serve to produce school, teacher, and student performances that can be publicly reviewed and judged. The goal of testing is to yield results that can be used to compare schools, teachers, and students to their respective peers or against an arbitrary standard. Test contents must be understood and valued by the public. Thus, under the political reform model, tests are more for public consumption than teacher use.

Title I Program Evaluation
Title I of the Elementary and Secondary Education Act (ESEA) of 1965 required school districts that received program funds to test participating students at least annually to evaluate the effectiveness of the programs. The evaluation requirements were added to the law to ensure that schools would be accountable to parents. By 1974, it became evident that the results of various tests used by school districts were not comparable. The reauthorization of that year created a more uniform testing system and required districts to employ one of three evaluation design—a control-group comparison study, a regression discontinuity study, or a norm-referenced achievement gain model based on norm-curve equivalents (NCEs)—to determine adequate yearly progress (AYP). The evaluation system was more fully implemented due to the Title I Evaluation and Reporting System (TIERS), which was an outgrowth of the 1979 reauthorization. Due to the difficulty of conducting the comparison-group and regression-discontinuity designs, the NCE model became the design of choice. Title I evaluation based on NCE scores from conventional standardized achievement tests remained in effect until the mid-1990s.

The function of testing was broadened in 1974. Schools were encouraged to use their test results to improve their programs. This use of testing was established more firmly in the 1988 Hawkins-Stafford amendments, which required participating schools that did not demonstrate AYP to develop a Program Improvement Plan (PIP). Based on the logic of the equipercentile assumption, schools were placed in program improvement (PI) if their students, on average, had a yearly gain of less than zero.

Perhaps the most significant Title I testing changes occurred in 1994 with the passing of IASA, which required states to either develop or implement standards-based assessments. These tests were to reflect state standards in at least math and reading, and had to yield scores that indicated students' level of performance on the standards. At least three levels of student performance were required: partially proficient, proficient, and advanced. Furthermore, states had to set their own AYP indicators based on the performance levels, which was a departure from the national AYP criterion of "at least a mean NCE gain of zero."

State Plans for Title I Testing and Program Improvement
To allow schools adequate time to create their new testing and AYP systems, the IASA testing policies have only recently been enforced. The United States Department of Education currently is collecting and reviewing states' assessment and AYP plans. A majority of the states have elected to construct their own standards-based assessments. The new legislation requires that the assessments be administered in at least one grade in each of the following levels: 3–5, 6–9, and 10–12. Approximately 36 states plan to administer or are currently administering the standards-based assessments in this manner, while approximately eight states plan to administer or are currently administering the assessments in all grades.

Many states are looking at increases in performance in only the highest levels of proficiency. In order to make AYP in approximately 21 states, increases in performance only need to occur at the upper end of the spectrum.
However, approximately 12 states recognize the need to move the lower achieving students out of the bottom categories and require movement from the lowest categories as well as movement into the highest categories. Clearly, state testing and accountability models vary considerably.

Recommendations

It is far too early to judge if changes in the testing and accountability regulations embodied in the IASA represent an improvement over prior Title I procedures. Nonetheless, testing still is expected to serve both the political and professional models of reform in Title I, and it is quite evident that testing changes occurred in 1994 without consideration of how to develop tests so that teachers can use the results more effectively. True Title I reform likely will not result until new testing and PI regulations and guidelines consider the vital role of teachers in curricular and instructional decision making. Therefore, testing and PI guidelines should be written based on the following considerations:

- **Accessibility and Awareness.** Rather than merely informing the principals, states should be required to notify all teachers and staff that their school has been identified for PI and explain why their school did not make AYP.

- **Buy in.** Many of the teachers interviewed did not think that standards-based tests were developed with their interests, knowledge, and concerns taken into consideration. Many teachers believe that the standards movement is a mechanism designed to make them look bad and hold them solely accountable for student learning.

- **Clarity.** Teachers find it difficult to understand how much improvement their students must make for the school to be removed from PI. Title I regulations should be amended to require states to provide teachers and staff with this information as well.

- **Consequences.** Many teachers in PI schools do not know about the potential consequences that might ensue if their schools do not get off PI or do not believe consequences will occur if they fail to improve. Along with providing a list of possible consequences for continued failure, states should also be required to choose a minor consequence for schools that are making some insufficient gain and a major consequence for schools making no improvement.

- **Direction.** Teachers need to know which specific objectives students must attain to move to the next performance level. States should be required to provide teachers in PI schools detailed information about the structure of test content. Guidelines should be included that encourage schools to develop their own internal assessment systems that mirror the state standards but that can be administered in little time and with little cost.

- **Equity.** Teachers in PI schools often suspect that the tests do not accurately measure their students’ academic skills and are beset with racial and socioeconomic biases. Teachers are also aware that subsequent cohorts of students at tested grades (such as 3, 5, and 8) might fluctuate demographically across years, which would make it impossible to isolate school effects as indicated by test scores. Regulations should be added that stipulate uniform standard-setting procedures and require states to provide schools PI identification exemptions if their student bodies change dramatically within one or two years.

- **Feasibility:** In many states, AYP may be set at a rather unrealistic level, which has led many teachers to wonder if their students will ever be able to reach it. States can be encouraged, through new guidelines, to check the difficulty levels of their performance standards and AYP criteria to ensure that goals are reasonable and attainable within a four- or five-year period.

Increasing Title I testing and PI guidelines places the federal government in a precarious situation. The 1994 changes shifted responsibility to the states to promote a greater sense of local control, so adding more federal guidelines would be a shift back toward more national uniformity and less state control. Additional guidelines should be added to Title I law to offer states more structure in how to develop comparable and just, testing and accountability procedures. The question of how to motivate teachers to improve must also be addressed if PI is to be an effective conduit for constructive school change. 

In the next

CEIC Review

"Closing the Achievement Gap: Success Strategies"

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Implementation In New American Schools: 
A Longitudinal Analysis
Sheila Nataraj Kirby, Mark Berends, and Scott Naftel, RAND

Spurred by the piecemeal approach to school reform that had produced little change in the nation’s test scores, New American Schools (NAS), a private nonprofit organization, launched its efforts in 1991 to partner with jurisdictions that would commit to five-year partnerships with NAS design teams to implement schoolwide reform programs. The participating schools were required to have their students assessed against district- and state-mandated tests.

While each NAS design has unique features, the designs tend to emphasize school change in the following areas: organization and governance, teacher professional development, content and performance standards, curriculum and instructional strategies, and parent and community involvement.

All of the school sites have been implementing the designs for two years, and many have been implementing for three or more years. A survey of teachers and principals in the NAS schools was conducted in 1997 and 1998, the second and third year of NAS’s scale-up phase, to assess their progress.

The Analysis Sample

This study includes all schools that began implementation of a NAS design during the school year 1995-1996 or 1996-1997 in the seven jurisdictions with which NAS partnered at the beginning of the scale-up phase: Cincinnati, OH; Miami-Dade County, FL; Memphis, TN; Philadelphia, PA; San Antonio, TX; and the states of Kentucky and Washington. The analysis was limited to a sample of 104 schools that were implementing designs in both 1997 and 1998 and that had complete data from teachers and principals in both years. The teacher sample consisted of 2,100 teachers.

Overall, the NAS schools in the analysis sample were predominantly high-poverty, high-minority, large, elementary schools located in low-performing, urban school districts. The teachers in the sample were mostly middle-aged, white females with Master’s degrees.

The early years of implementation saw many changes in both the designs and the assistance provided as the teams and the schools gained experience. Implementation appears to have increased across the NAS schools between the first and second year, but not between the second and subsequent years. The lack of consistent increases in the implementation index over time is troubling. It may point to problems with keeping the level of design-based assistance and support from tapering off beyond the second year, maintaining a stable and supportive school and district environment that would allow implementation to deepen, or implementing a complex design not well suited to the school’s needs.

Findings and Policy Implications

Implementation of NAS designs vary. Implementation is affected by a myriad of social, economic, and political factors. The process of changing entire schools to improve educational opportunities is complex because so many actors are involved and so many factors have to be aligned to support change.

Teachers’ perceptions matter. Teachers’ attitudes and perceptions about students’ readiness and ability to learn are critical for implementation. Teachers who report that students’ lack of basic skills and inadequate support of parents are not obstacles to learning also report higher levels of implementation. Individual characteristics of teachers are not associated with implementation once other factors have been taken into account, although African American teachers tend to report higher levels of implementation when compared to non-Hispanic White teachers.

The size, level, and leadership of schools affect implementation. Implementation levels were higher in smaller schools and elementary schools when compared to large or secondary schools, which are more likely to resist organizational change. Schools with strong principal leaders also had higher levels of implementation than those schools that did not. Schools that face challenges in terms of poverty, which is often highly correlated with a disproportionate number of minority students, may inhibit restructuring efforts such as whole-school designs. Yet, because federal funding such as Title I is oriented towards disadvantaged students and schools, the effects of socioeconomic and minority composition are likely to be mediated.

Clear communication by the design teams and teacher support is necessary. Clear communication by design teams to schools was positively related to implementation and teachers’ judgments about the effects of the designs on student achievement. Findings also show that the greater the teacher support for the design in their school, the higher the level of implementation. Most of the NAS designs required
75–80% of the teachers to vote in favor of the design.

District support is critical. Research underscores the importance of the external environment, especially district support and stability of leadership, in the process of change. The district can facilitate and foster change by providing resources for the school and for professional staff development and by showing active support for schools implementing designs. Among the jurisdictions studied, there was a great deal of variation in implementation. Kentucky and Memphis tended to rank higher on all the implementation indicators, whereas San Antonio and Philadelphia consistently rank near the bottom on most of the indicators. Kentucky, during the scale-up phase, was implementing a design that closely fits the demands of state reform legislation.

A great deal of attention has been paid to Memphis City Schools because of the strides made there in implementation and performance. Key aspects of Memphis support for scaling up NAS and NAS-like designs include the stability of the district leadership, the centrality of the NAS effort there amidst other possible reforms, the lack of a severe crisis (e.g., budgetary or union strikes), and the district focus on professional development and performance results.

San Antonio, while experiencing dramatic test score increases over the past few years, ranked low on the NAS implementation indicators. During the scale-up phase, not only was San Antonio scaling up NAS designs, but the district was also implementing rigid district-mandated curricular and instructional programs that conflicted with NAS design team activities.

Although there has been a broad diffusion of designs since 1995, pursuing effective district partnerships remains a key component of NAS strategy. However, district office authorities have posed frustrating challenges to NAS in establishing effective partnerships with districts. Particularly in low-performing districts in high stakes accountability systems, the centrality of the NAS initiative vis-à-vis other programs is dependent on district leadership and is often fragile.

Based on these findings, it is clear that reforms of a similar nature, such as the Comprehensive School Reform Demonstration program and other schoolwide Title I programs, can be implemented and come to fruition only with significant changes in district-level policy and support. The federal government will need to take an active role in encouraging districts to support school-wide programs. To that end, the federal government must clarify what constitutes comprehensive school reform, evaluate the efficacy of the approach, and document the need for a supporting infrastructure to ensure implementation.

Appropriate allocation of critical resources is important for successful implementation. This study found that greater resource availability—materials to support instruction, professional development, time for planning and collaboration, consultants to advise and provide support, and funding—was related to higher levels of implementation. Resource availability is largely an issue of resource allocation. Districts and schools control many resources that can supplement the federal funds, so it is important for program schools and districts to rethink existing funding streams to support schoolwide reform.

Variation in implementation can be largely ascribed to a variety of district, school, teacher, and design team factors. An important issue that could not be addressed with the survey data was whether the variation in implementation was due to certain inherent characteristics of the design itself that made it more difficult to implement.

More research is needed to determine how the implementation of a NAS design becomes a schoolwide reform effort. This analysis shows that many of the differences among teachers occur within rather than between schools, at least when considering implementation and teacher-reported effects of the designs on student achievement. As the designs continue to provide assistance and as teachers continue to become more familiar with the design team activities in their schools, there should be increases in implementation levels and agreement among teachers within schools. However, the data between 1997 and 1998 reveal that the levels of implementation did not increase much, if at all, and the variation within schools did not decrease.

The question remains as to how the designs can become school-wide. A danger in educational reform initiatives—especially those within urban settings with many complex economic, political, and social challenges—is that the NAS designs may be another program that is turned on and off at selected times during the school day, week, or year. As time goes on, the designs may be at risk of being turned off altogether, especially if districts and schools lose their focus on schoolwide programs such as NAS and turn to some other reform effort. The role of the district—and state—is critical in fostering an environment in which these whole-school reforms can succeed.
Teacher Quality and Educational Inequality: The Case of Title 1 Schools
Richard M. Ingersoll, Graduate School of Education, University of Pennsylvania, Philadelphia, PA

Few educational problems have received more attention in recent times than the failure to ensure that elementary and secondary classrooms are all staffed with qualified teachers. This is especially true for Title I schools that serve predominantly disadvantaged, poor and minority students. Critics have argued that students in these kinds of schools—the most needy students in the United States—are most likely to be taught by the least qualified teachers. Unable to match the salaries, benefits, and resources offered by more affluent schools, these critics hold, disadvantaged schools are not able to compete for the available supply of qualified candidates. As a result, these schools have unequal access to qualified teachers and, hence, to quality teaching, which is one of the key reasons for unequal results in student educational and, ultimately, occupational outcomes.

In response, numerous reforms have been enacted over the past decade to upgrade the quality and quantity of the teaching force teaching, especially in schools serving Title I and disadvantaged students. Reformers in many states have pushed for tougher teacher training and certification standards, and a host of initiatives and programs have sprung up that are designed to recruit new candidates into teaching, especially in disadvantaged schools.

This study examines the extent to which students, especially those in Title I and disadvantaged schools, have less access to qualified teachers than do other students. Like most previous empirical research on this problem, this study focuses on cross-school variation in standard indicators of teacher qualifications, such as teachers’ degrees, teaching certificates, and experience. Although a college degree or a teaching certificate does not guarantee that someone is a quality, or even a qualified, teacher, it is a valuable resource and a necessary minimum prerequisite. Unlike most previous research, however, this study empirically explores the reasons why particular kinds of schools have less qualified teachers.

The assumption underlying this study is that understanding the problem of unqualified teachers requires not only examining the quantity and quality of the teaching force, but also examining the administration and management of the schools that employ teachers. From this perspective, the manner in which teachers are employed and utilized can account for as much of the problem of underqualified teaching as do inadequacies in teacher training or the supply of teachers. More specifically, this study focuses on a little recognized but important cause of underqualified teaching: the problem of out-of-field teaching—teachers assigned to teach subjects for which they have little training or education. This is a crucial issue because highly qualified teachers may actually become highly unqualified if they are assigned to teach subjects for which they have little training or education. This problem has been little recognized, however, largely because of an absence of accurate data—a situation remedied with the release, beginning in the early 1990s, of the Schools and Staffing Survey (SASS), a major new survey of the nation’s elementary and secondary schools and teachers conducted by the National Center for Education Statistics. The present study, based on seven years of research with this survey, profiles the qualifications of the nation’s elementary and secondary teachers, examines the problem of out-of-field teaching, and identifies the levels and the sources of underqualified teachers.

Research Findings

LEVELS OF TEACHER QUALIFICATIONS

The data show that most public elementary and secondary teachers in the United States have basic education and training. Ninety-nine percent of all public school teachers hold a bachelor’s degree, almost half have obtained master’s degrees, and 94% have regular or full state-approved teaching certificates. The data also show that students in disadvantaged and Title I schools often have less access to qualified teachers. For instance, in disadvantaged schools, twice as many teachers are beginners, and beginning teachers in these schools are less likely to have regular teaching certificates.

However, the data show that the most prominent source of unequal access to qualified teachers is not a lack of education or training of teachers but a lack of fit between the preparation of teachers and their course assignments. Especially in disadvantaged schools, a significant proportion of qualified teachers are assigned to teach in fields for which they have little formal education or training. For instance, at the secondary level, in advanced schools almost 90% of classes are taught by teachers with at least an undergraduate or graduate minor in the subject taught, but in disadvantaged schools this is true for only about three quarters of the classes. These disparities hold across different fields. A third of secondary-level English students in
high-poverty schools, as opposed to 16% in low-poverty schools, are taught by teachers who do not have at least a minor in English, or a related field such as English education, language arts, literature, reading, communication, or journalism. A quarter of secondary social studies teachers in high-poverty schools, as opposed to 16% in low-poverty schools, do not have at least a minor in social studies, history, or one of the social sciences. Hence, the key question is why so many otherwise qualified teachers are assigned to teach out of their fields, especially in disadvantaged schools.

The Sources of Out-of-Field Teaching

Contrary to conventional wisdom, the data show that teacher shortages do not account for most out-of-field teaching. Shortages cannot explain the high levels of out-of-field teaching in fields such as English and social studies, which have long been known to have surpluses. Furthermore, out-of-field teaching often takes place in schools that do not have difficulties finding qualified candidates to fill their teaching openings. For example, just under one tenth of secondary schools had difficulty filling their openings for English teachers in 1993-1994, but almost a quarter of all public secondary-school English teachers were uncertified in English in that same year. Likewise, in that year about one sixth of secondary schools reported problems filling their openings for math teachers, but a third of all math teachers had neither a major or minor in math.

The data also show that, while out-of-field teaching is widespread, districts and schools differ greatly in the extent to which they have this problem. This study focused on the SASS data of the secondary-school level, Grades 7-12, to ascertain what characteristics of the districts and schools could account for these large differences in levels of out-of-field teaching. The data show that—after controlling for the characteristics of the students, such as the student poverty level, and also for the characteristics of teachers—several characteristics had a pronounced impact on levels of out-of-field teaching.

School districts vary in the extent to which they impose standards on the teacher hiring process. The data show that schools in districts that have formal regulations concerning minimal training requirements for new hires (e.g., require new hires to hold a major or minor in the field to be taught) have less out-of-field teaching. The data also show that an additional factor that is strongly associated with the degree of out-of-field teaching in a school is the leadership and effectiveness of the principal. Schools with highly rated principals have less out-of-field teaching. Moreover, how school administrators chose to cope with difficulties in obtaining suitable candidates is important. In the face of trouble filling a teaching position, school administrators have a range of options and often face difficult trade-offs. For example, some administrators resort to hiring underqualified teachers or reassigning teachers trained in another field to teach in the understaffed area, resulting in more out-of-field teaching. Moreover, the face of trouble filling a teaching position, school administrators have a range of options and often face difficult trade-offs. For example, some administrators resort to hiring underqualified teachers or reassigning teachers trained in another field to teach in the understaffed area, resulting in more out-of-field teaching.

Implications for School Reform

The research shows that most of the current teacher quality reforms, while worthwhile, will not solve the problem of underqualified teachers because they do not address the issue of out-of-field teaching. Recruiting more teachers or mandating more rigorous certification requirements will help little if large numbers of these teachers are assigned to teach subjects other than those for which they were educated or certified. Solving this problem will require an understanding of how the management of teachers once on the job as well as the organization of the school affects the quality of teachers.
Effective Implementation of Title I Schoolwide Programs: Developing Procedural Knowledge in Policy and Practice
Margaret C. Wang, Temple University Center for Research in Human Development and Education, and Kenneth K. Wong, University of Chicago

The 1994 Improving America’s Schools Act (IASA) established an ambitious agenda for systemic improvement in schools with a high concentration of students from at-risk backgrounds. The legislation promotes the schoolwide program as a way to reduce curricular fragmentation and enhance instructional effectiveness for the school as a whole.

While the schoolwide approach to reform is clearly at the forefront of the national agenda to improve schooling quality for children who are at risk of academic failure, the research base is sorely lacking. Since the inception of the Elementary and Secondary Education Act (ESEA), the results of Title I/Chapter 1 schoolwide program implementation have been mixed. Preliminary findings suggest that, as a group, Title I students in schoolwide program schools perform better than their peers in more traditionally organized services, such as pull-out programs. Nevertheless, nationwide evaluations suggest that schoolwide projects have continued to encounter a wide range of implementation difficulties.

The National Study of Effective Title I Schoolwide Programs

The National Study of Effective Title I Schoolwide Programs was initiated to fill the research gap on how schoolwide programs affect teaching, learning, and student outcomes as well as provide assistance to schools, districts, and states in their efforts to implement and maintain schoolwide programs. This study is a collaborative project of the Laboratory for Student Success (LSS) and four other Regional Educational Laboratories: Appalachia Educational Laboratory, North Central Regional Educational Laboratory, Northwest Regional Educational Laboratory, and Southeastern Regional Vision for Education.

Two provisions of the IASA have significant implications for schooling opportunities. The first mandates that district-wide performance standards must apply to all students, including recipients of Title I services, and indicates that Title I, bilingual education and dozens of other federal programs must become integral to, not separate from, state and community education reforms that center on high standards. The second provision promotes a schoolwide initiative in Title I schools in which at least 50% of the students are low-income.

The National Study of Effective Title I Schoolwide Programs is designed to contribute to the research base on effective policy and practices for achieving student success in Title I schoolwide project schools. The goal was to identify Title I schoolwide program schools with comparable demographic characteristics in school districts that were interested in participating in the study across varied geographic regions. The core database used to determine site selection included the school-by-school data on achievement test scores, percent of students qualified for free and reduced-price lunch, enrollment, racial characteristics, and grade levels of the schools. “More effective” and “less effective” schools were identified by the data from the participating school districts with statistical modeling of the expected academic performance of the schools, controlling for the income level. In addition to using the demographic and achievement data routinely collected by the school and district, the study collected additional data using multiple methods, including observation of classroom practice, interviews with school staff, and surveys of school staff and parents.

During the 1997–98 academic year (Year 1), researchers from the collaborating Regional Educational Laboratories gathered data from 32 schools in 9 urban districts and 3 countywide districts. Sixteen were identified as more effective schools and 14 were identified as less effective schools. Data collection during Year 2 was less extensive. The study collected surveys from 9 principals, 250 teachers, and 484 parents.

Highlights of Findings from Year 1 and Year 2 Data

1. Some Title I schoolwide schools show higher performance.

More effective Title I schoolwide program schools across the geographically dispersed study sites showed a greater mean achievement level than expected, given the schools’ socioeconomic characteristics.

2. The district plays a key role in raising academic standards for schoolwide program schools as a whole.

Schoolwide programs are more integrated with the district-wide vision of educational accountability and are no longer at the margin of system-wide reform. Several districts in the sample have developed strategies that facilitate scaling-up efforts for schoolwide reform, using such reform initiatives as the Children Achieving Reform (Philadelphia, PA), Success for Every Student (Montgomery County, MD), and Essential Learnings (Tacoma, WA).

3. Federal dollars are critical, but state funding can be substantial.

Federal revenues make up about 10% of the total school funding in the big-city systems. In Chicago, federal funds accounted for 13.4% of the total revenues in 1995–96 whereas, in Montgomery County,
MD, federal dollars comprised only 3% of the total spending. The importance of state support varies among the districts in the study. Detroit and Trenton were heavily dependent on state dollars, which accounted for over 70% of the total school funding. In contrast, Montgomery County, MD, Denver, CO, and Atlanta, GA relied more on local funds. In the case of Title I schoolwide programs, schools enjoy substantial discretion in using the supplemental funds to purchase curricular models that they see useful to meet their students’ academic needs.

4. The more effective Title I schoolwide programs are more ready to meet the IASA legislative expectations. More effective schoolwide programs show stronger components in their implementation of student performance goals, academic standards and assessment, enriched curriculum, student-centered instruction, evaluation, availability and usefulness of professional development, resource allocation and availability, accountability, and parent involvement. Teachers from more effective schools rate teacher-student relationships, colleague relationships, low school problems, and student attitudes toward schooling significantly higher than teachers from less effective schools.

Teacher reports supported the finding that the more effective Title I schools participating in this study chose to actively evaluate student performance rather than passively conform to less stringent standards. Also, these teachers pointed out that the district has been supportive of them in meeting the legislative expectations pertaining to professional development, technical support, and academic initiatives.

5. Discretion in resource allocation and curricular focus at the site level. Schoolwide program sites tend to adopt a distinct curricular focus in their implementation. Such schools were likely to combine federal and local/state revenues to hire specialized staff to meet particular curricular needs or enhance professional development. Teachers in effective schools commented on the importance of matching instruction to assessment and using a variety of assessment tools, such as daily observations, journals, writing folders, teacher-made tests, standardized tests, and projects.

6. Whole-class instruction is prevailing. Teachers in schoolwide programs spent over 60% of their time using whole class instruction rather than the more student-focused approaches such as providing instruction in small groups or working with individual students. Students from more effective schools spent more time working independently than those from less effective schools. While whole-class instruction may continue as the dominant mode of teaching, interview data suggest that teachers recognize the importance of working with students individually or in small groups.

Less effective schools had a greater number of special intervention programs and projects than did their more effective counterparts. While they may create new opportunities for teaching and learning, schools that manage too many special programs can encounter organizational fragmentation and disjointed programming.

7. Greater efforts should be made to engage parents, especially non-native English-speaking parents. Year 1 findings show that parents who are bilingual or speak a different language at home were much less satisfied with student performance goals, parent involvement, teacher-student relationships, principal leadership, school problems, and satisfaction toward school. In particular, nonnative English-speaking parents from less effective schools tended to be most dissatisfied with the school climate.

Schools generally recognize the importance of parent involvement and are making serious efforts to encourage parents to participate in school activities such as workshops, PTA meetings, and family entertainment nights. However, parents’ attendance rates at these events are relatively low. Further, many schools have not been able to actively mobilize parents in support of student learning activities, such as homework assistance and other literacy projects. Parents were also not well aware of their roles in Title I schoolwide programs, particularly with regard to decision making.

Statistical analysis of parent survey data further supports the finding that the more effective schools are more likely to adopt the IASA legislative expectations. The results suggest that more effective schoolwide programs show stronger components in their implementation of parent involvement.

8. Programmatic fragmentation remains at some schools. There is a lack of collaboration and communication among classroom teachers and additional staff such as Title I coordinators, which can cause confusion among teachers and students. Lack of staff stability and high student mobility were found to be barriers to effective program implementation. Another condition that may contribute to programmatic fragmentation is a lack of coordination between districts and schools in the scheduling of professional development activities and the provision of funding for Title I schoolwide programs.

The schools in this study indicate that they emphasize the use of technology to meet an objective of Goals 2000; however, teachers and parents expressed concern that this focus on technology not replace the priority of mastering basic skills such as reading and math.

9. There is a need to monitor the extent to which a “within school” performance gap persists. Although it is clear that schools in the study are moving toward adopting more
inclusive practices, evidence suggests that some programs are being used for targeted children or targeted grade levels. There is a need to monitor the extent to which a “within school” performance gap persists among different socioeconomic and racial or ethnic groups. For instance, the proficiency percentages for the Montgomery County, MD district and schools disaggregated by race and ethnic group show a large gap between White and African American and Latino students. In most cases, the district-wide gap is smaller than the school-wide gap (34 and 39 percentage points in reading and 33 and 44 in math, respectively), but it is still large and remains relatively the same for the three years of the study. Interestingly, some schools are experimenting with mixed-ability groupings as a way of solving this problem.

10. There is an ongoing need to improve the quality of teaching. There appears to be a gap in the content, opportunity, and delivery of professional development that address schoolwide implementation. There is a lack of consistent Title I schoolwide funding to plan and implement the programs, and teachers and principals are concerned about frequent changes that cause a discrepancy between school planning and delivery.

Policy Implications and Recommendations

Findings on the implementation of schoolwide programs suggest that Title I can be a part of national efforts toward systemic improvement. Several districts in this study have developed aspects of a comprehensive accountability framework, whereby academic standards are defined that apply to all schools, including Title I schoolwide programs. As urban districts raise the accountability standards, they must provide additional resources and professional development in order to maintain an infrastructure of support for schoolwide programs.

Drawing from this study, the following recommendations seek to improve accountability at the district and school level:

- Strengthen the Accountability Functions of the District. Title I program services need to be aligned with the state and district content. The schoolwide program design offers a built-in organizational mechanism through which the Title I legislative expectations can be linked with the ongoing standards-based reform efforts of the school, school district, and state. Simultaneously, schoolwide programs also create a context in which the roles of principals and district staff can be reevaluated.
- Establish a District-wide Assessment-Centered Evaluation and Monitoring Framework. Educators and policymakers at all levels need to work together to raise the expectations of schoolwide programs for all students. To this end, districts can design and implement strategic plans aimed at narrowing the “within school” learning gap among racial, ethnic, and income groups.
- Build a Knowledge Base on Procedural Knowledge. District and school professionals need to collaborate on building a procedural knowledge base on ways to achieve a high degree of program implementation of Title I schoolwide programs in varied settings across the district and state.
- Create Incentives for Schoolwide Programs to Select Comprehensive Reform Models. There is a need for more training in accountability, assessment, and instructional strategies as well as greater effort to facilitate whole-school reform in Title I schoolwide schools. These measures will reduce the programmatic fragmen-
tation experienced at some schools.

- Improve the Quality of Teaching. There appears to be a great deal of unevenness in the content, opportunity, and delivery of professional development among schoolwide programs, and there is a lack of funding allocated to improve program planning and evaluation.

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Sustaining Investments in Technology: Strategies to Close the Digital Divide
Ronald E. Anderson, University of Minnesota

For most of the past two decades, schools have endeavored to incorporate computer technology into their instructional programs. Although the vast majority of this effort has been devoted to building the hardware infrastructure of computers, peripherals, and network connections, there has been a growing awareness that the quality of the technological implementations is more critical than the quantity. The conventional wisdom in education now acknowledges that how students use the technology—the context for using technology—is much more important than how much.

The variation in the quality of contextual support for technology in schools may be responsible for the deepest digital divide in education. Although compensatory programs like Title I have ensured that poorer American schools have almost as many computers per student as the wealthier ones, other indicators of technology penetration and utilization reveal the persistence of a digital divide due to socioeconomic disparities. This report documents some of the gaps in U.S. education with respect to the quality of support, organizational climate, and other elements of the critical context for implementing educational improvements with the help of technology.

Technology Study
This study is based on data from "Teaching, Learning, Computing: 1998" (TLC), a national survey of more than 4,000 teachers and 800 technology coordinators in 1,100 U.S. schools. Roughly 75% of the schools sampled chose to participate in the study, and the teacher, technology coordinator, and principal response rates averaged about 70%.

It can be estimated that the total technology expenditures in FY98 for the K–12 system nationwide were about $7.2 billion, which is about 2.7% of the total expenditures for that year. The average school spent $113 per year per student on technology, with only $22.50 of that for teacher support services, about $8 for software, and the remainder for hardware. An average of 74% of the technology budget was spent on hardware; however, when questioned about their preferred distribution of spending, technology coordinators thought that only about 40% of the budget should be spent on hardware while the relative amount spent on software and support should be much greater.

Forty-six percent of the funds for school technology (including hardware, software, and support) were from the district budgets while 54% were spent out of the school budgets. It is notable that districts are more likely to be the source of funding for hardware, whereas schools are more likely to be the source of funds for software and support services.

Although some schools have a technology budget for which they have sole discretionary authority, a majority (54%) did not have their own budget for technology. Those schools having their own technology budget spent 50% more on technology overall during the previous five years.

The Digital Divide in Spending
The highest 40% of the schools in terms of community income levels spent well over twice as much as the lowest 10%. While big differences in computer density do not exist in schools across income groups, the higher spending patterns of the wealthier schools will yield future inequities due to the greater current spending.

A somewhat similar pattern was found by comparing schools that differ on the percentage of students eligible for Title I support. The quartile of schools with the fewest eligible students spent twice as much as the quartile with the most eligible, and those schools having the largest number of students eligible for Title I funding spent on average only $4 per student on support—about one fifth of that spent on support by the schools with the fewest students below the poverty line.

However, when looking at the expenditures over the previous five years rather than the last year, the differences across the schools depending upon their Title I eligibility were not great. Title I and other compensatory funding programs over the longer run have tended to equalize the technology resource base or infrastructure across richer and poorer schools. But these programs have not closed the digital divide in spending for leading-edge technologies such as high-speed Internet access and multimedia components.

Technology Spending and Teaching Practices
Spending on software and support services tended to be significantly correlated with indicators of teacher utilization of technology for instructional improvement. The effect of spending is not likely to affect outcomes directly so much as it is likely to help build the support structures and leadership that make the effects possible.

Technology Leadership
Everyone associated with a school is a potential technology leader, but the principal stakeholders are the administrators and teachers. Technology leaders who view their school as a learning organization will attend not only to setting goals and coordinating activities, but also to designing and participating in
learning processes for themselves as well as all others in the school. Data from this study was used to develop a taxonomy of educational technology leadership decisions that distinguishes decisions pertaining primarily to the infrastructure from those that deal primarily with the instructional processes, although many decisions apply to both. The taxonomy divides decisions into six functions:

- Strategic Planning and Goal-Setting,
- Budgeting and Spending,
- Organization,
- Curriculum,
- Evaluation, and
- External Relations.

Each of these decisions identified as characteristic of technology leadership may have a measurable outcome in terms of the degree of technology integration in the school.

**Leadership In Technology Integration**

While the technology infrastructure is important, administrative leadership and decision making is equally important in maintaining a successful technology program. To become an effective “technology learning organization,” it is essential to create a school environment in which administrators, teachers, students, and parents together work to devise strategies on how best to adapt new technologies to the improvement of learning.

Quality technology support entails both instructional and technical content. The former is concerned with pedagogies, instructional strategies, and implementation of different teaching methods while the latter encompasses all aspects of the technology, such as the operation and troubleshooting of hardware and software. Another dimension of technology support concerns the methods used to deliver technology support services, including not only facilities and support staff but also professional development, one-on-one consulting, and incentives.

**Variations In Quality of Technology Support**

The availability of technology support has a significant impact on teachers’ uses of technology. The quality of technology support was based on measurements including availability of individualized help, widespread teacher participation in professional technology development programs, and the access and skills of teachers to evaluate and use appropriate technology resources.

Schools were compared across age levels, school control, and socio-economic status (SES) categories. Elementary-school teachers reported lower levels of support in place than their colleagues working in middle schools and high schools. Only 13% of teachers are at schools having high levels of support. The most striking finding is that teachers in schools located in high SES areas have significantly higher quality technology support than those in average SES and low SES areas. Teachers in schools with high-quality technology support use technology more frequently and in a variety of ways.

**Implications for Technological Development in Schools**

Technology support in America’s schools typically comprises access to equipment, dedicated staff, and professional development programming. Data from the 1998 TLC survey indicate that teachers’ use of technology is positively related to the quantity and quality of such support.

When technology support is designed with the instructional needs of teachers in mind, the effect on use is pronounced. This underscores the need for a systematic approach to creating support. Support is multifaceted, comprising elements as general as routine maintenance and as specific as individualized training. Technology leaders must recognize that technology support is not simply technical support but also covers the instructional domains of support. Each of these domains helps to facilitate the integration of technology into the classroom.

Technology support programs are more effective when directed by well-trained technology coordinators. Technology coordinators must be trained to bridge technical ability with classroom teaching experience. Their leadership and administrative capacities as well as their aptitude for instructional design should be developed. Technology leaders must provide teachers with convenient access to educational technology resources and unfailing support for their use.

High-quality technology support is comprehensive, entails extensive coordination of resources, and encompasses both technical and instructional aid. Teachers report that they do not receive adequate instructional support. To increase the integration of technology into the classroom, technology leaders will need to create professional development opportunities and learning environments that emphasize the instructional uses of educational technology.

**Overall Conclusions**

Title I programs have made a large difference in the past few years in helping many schools build their technology programs. But with respect to new technologies, the digital divide continues to widen. Since technology rapidly becomes obsolete, the most effective investments will be in developing an ongoing, stable organization around technology.

Although this research does not show a direct effect of spending on instructional reform, the results suggest that spending is effective only if there is quality technology leadership, including broad support for teachers in their use of technology. Along with increased funding for resources, technology leadership will also be crucial in any effort to close the digital divide.
The Use and Effectiveness of School-Parent Compacts, and Implications for Comprehensive School Reform
Laura Desimone, American Institutes for Research, and Alan Ginsburg, Planning and Evaluation Service, U.S. Department of Education

Thirty years of research have shown that family involvement in education is one of the most powerful predictors of student success in school. Yet many high-poverty schools still have low levels of parent involvement and experience little success in their efforts to increase it. Students from high-poverty families are also less likely to spend time at home on learning-related activities that reinforce their schoolwork.

Federal Support for Parent Involvement

To address the less-than-optimal level of parent involvement, especially in high-poverty schools, federal legislation designed to support systemic and comprehensive reform efforts has included parent involvement strategies as a mechanism to increase the achievement of all students. Many states and districts have taken advantage of this support to build their parent involvement strategies.

Title I schoolwide reforms include parent and community involvement as a key component of efforts to increase student achievement. The federal government’s 1997 Comprehensive School Reform Demonstration program requires the grantee to nurture meaningful parent and community involvement. The new regulations for Title I, the Goals 2000: Educate American Act as well as the School-to-Work Opportunity’s Act of 1994 delineate guidelines for states, district, and schools in developing parent involvement initiatives. The legislation supports multiyear funding for school–family–community partnerships that allows flexibility and time for implementation and encourages the coherence of parent involvement programs across groups of children.

Goals 2000 helps foster parental involvement by authorizing grants to nonprofit organizations to develop and implement parent centers that provide information, training, and support to parents. According to a 1997 survey conducted by the Council of Chief State School Officers (CCSSO), 94% of the states use Goals 2000 funding to support their family involvement activities.

Parent Involvement That Effects High Student Achievement

Parent and community involvement sponsored by Goals 2000 has focused more on community inclusion than in developing partnerships with parents to aid in the child’s learning. States have used their Goals 2000 funds to sponsor meetings, conferences, and discussion groups to increase the community’s understanding of education reform and standards-based reform.

Since the 1960s, when parent involvement became the focus of efforts to increase the achievement of disadvantaged students, there has been a wide range of parent involvement initiatives advocated by schools, districts, states, and the federal government. These activities include participating in parent advisory roles, volunteering at school and in the classroom, providing learning activities to do with their child at home, attending parent training, and visiting resource centers.

Recent research has shown that the parent involvement strategies that have the strongest direct relationship with student success are ones in which the parents participate in learning activities in the home with their child; have a supportive, nurturing, authoritative parenting style; and have high expectations and aspirations for them. Several studies have shown that these parental practices are better predictors of student achievement than parents’ socioeconomic status.

Using School–Parent Compacts to Foster Parent Involvement

Research has also shown that the school can play an important role in supporting parent involvement and in developing shared goals between the teacher and parent for the student by means of family-school compacts. Ideally, the compacts are written agreements specifying the shared responsibilities of families and schools to undertake together with the common aim of attaining high student achievement to high standards. Responsibilities focus on student learning and school quality and often include expectations about attendance, instruction at home and at school, communication between teacher and parent, monitoring of student progress, and parent volunteering. For these compacts to work, there must be mutual trust and respect between parents and schools, an ongoing exchange of information, agreement on goals and strategies, and a sharing of rights and responsibilities.

Title I legislation requires the use of school–parent compacts for learning. As of 1998, about 75% of Title I schools use school–parent compacts. A national survey found that schools with a high concentration of poverty and/or minority enrollments were much more likely to prepare compacts for all parents than were schools with lower concentrations of poverty. Of the schools that reported preparing voluntary written agreements for only some of their students, 45% prepared them for parents of Title I students and 80% prepared them for various other special-needs groups of students.

Most schools using compacts report that these arrangements positively influence parent involve-
ment and are related indirectly to higher student achievement. Research shows that parents in schools that implemented comprehensive parent involvement initiatives that included engaging parents in learning compacts, asking parents to sign homework completion sheets, encouraging parents to attend school and classroom open houses as well as parent–teacher conferences, and providing learning resources in the home, were more involved with their child’s learning at home. Not all reports of the effects of parent compacts are positive. The compact may conflict with parents’ support for their children in ways not defined by the compact. Therefore, it is important to ensure that the compact allows flexibility and responsiveness to a diversity of family cultures, values, and beliefs.

Compliance with the compacts can be used as a way of attracting only the most involved parents to charter schools, which may in turn, be related to socioeconomic status, race, and ethnic background. One study indicated that charter schools with high-poverty, low-achieving students were more likely to have contracts with “fail-to-comply” clauses, indicating that the student could be transferred if the parent does not fulfill the contract. In some schools, the compacts represent a limited view of family-school relationships in that they view the compacts more as a vehicle for obtaining parental compliance rather than encouraging inclusion and shared goals.

The Implications of Compacts for Comprehensive School Reform Efforts

Nearly every comprehensive school model includes parent involvement as one of its components; however, the implementation research on comprehensive school reform generally does not pay much attention to the role of parents in model adoption and implementation. Research suggests the following lessons regarding the use of parent compacts in comprehensive school reform efforts:

- Using the school–parent compact along with a set of comprehensive parent involvement strategies is effective in fostering parenting practices associated with increased student achievement.
- Compacts can serve as mechanisms to provide details about at-home learning activities for parents and can inform parents about how they can work with the school to meet the demands of a particular comprehensive reform effort.
- School–family compacts should be developed as a collaborative effort between parents and schools to foster a true partnership between school and family.
- Since active teacher involvement facilitates the effectiveness of the compacts, teachers need training to develop and implement these compacts effectively.
- Compacts can operate as a fundamental mechanism to change power relationships between parents, teachers, and administrators, which is at the heart of school reform efforts.

Challenges To Implementing Compacts

Efforts focused on using family involvement as a mechanism to improve student learning must acknowledge and address several challenges:

- Differences by race and class affect the development, implementation, and effects of compacts and other parent involvement initiatives.
- Local politics can affect the success of parent involvement efforts so it is vital to have strong parent and community support when implementing parent compact efforts.
- Parents and teachers are busy and it is often challenging to find time to engage in communication and collaborative efforts. It is important to integrate parent involvement mechanisms into the operation of the school and prioritize them.
- Teachers, parents, and principals sometimes lack the knowledge and support necessary to successfully implement compacts and other parent involvement strategies. The availability of information about how to use the compact correctly is helpful.

Future Research Directions

Much work needs to be done to increase our understanding of what mechanisms are most effective in fostering the type of parent–teacher collaboration that works to increase student achievement.

Rigorous research that investigates the effect of the compacts on parent involvement and student achievement, especially in low-income populations, would contribute greatly to our knowledge about how the compacts work. The federal government, states, and districts might encourage schools to institute more formal mechanisms for both implementation and evaluation of the school–parent compacts. Pre-service teacher education might focus more on how to develop and implement successful compacts and other mechanisms for fostering parent involvement in the student’s learning. Finally, more research is needed on the features that make compacts effective, such as sequential activities linked to school lessons and activities that are slightly too complex for the child to accomplish without assistance from an adult, giving parents the opportunity to support and listen to the child. Studies of the effectiveness of the school–parent compacts for learning and their implementation would go a long way in helping us understand how the compacts operate as well as providing guidelines for teachers and parents who would like to work together to improve student achievement.
Title I in California: 
A Focus on English-Language Learners 
Diane August, August and Associates, and Dianne Piche, Citizens’ Commission on Civil Rights

Since 1965, Title I of the Elementary and Secondary Education Act has provided federal assistance to schools to meet the educational needs of disadvantaged students. In the 1994 reauthorization of the now $8 billion program, Congress substantially overhauled the program by shifting from a focus on remediation to high standards and accountability for higher achievement. For the first time, the law spelled out requirements for full inclusion of students with limited English proficiency in Title I programs, assessments, and accountability systems. California is an especially important state with respect to Title I reforms because it receives substantially more Title I funding ($829,978,270) than any other state. With 1,406,106 English Language Learners (ELLs), it enrolls 40% of the nation’s students with limited English proficiency. Twenty-five percent of California’s children fall below the federal poverty line, and the achievement of its students—especially its poor—African American, and Latino students, has lagged behind the rest of the country.

In 1997, the Citizens’ Commission on Civil Rights initiated a project to monitor and assess the progress made by the federal government and by targeted states and school districts in carrying out the 1994 amendments to Title I. In prior studies, the Citizens’ Commission reported that California’s early implementation of Title I lacked coherence and failed to ensure high standards for all students. Recent legislative and executive branch policy initiatives, however, have sought to raise standards across the state, to hold educators accountable for improving student performance, and to increase state resources in areas like class size) to schools. To examine the implementation of the new law from the federal government to the California Department of Education (CDE).

State Context
California is one of the most critical states in the nation for the standards-based reform movement but it has had an inconsistent record of addressing the needs of its students. State court rulings in the 1970s sought to level the playing field by equalizing per-pupil expenditures statewide, but Proposition 13 (property tax limitation) has led to the state’s current ranking near the bottom of all states in the country in per-pupil expenditures for elementary and secondary education. However, California districts have seen an influx of new funding in the last several years. The state plans to hike general-fund spending on education for the fiscal 2000 budget by $1.6 billion over the previous year to $26.4 billion, a 6.6% increase. The average spending per pupil will rise to $6,025, a figure still substantially below the national average of $7,583.

To alleviate the large disparity between the resources afforded poor and affluent schools, $96 million will be allocated to help 430 low-performing schools, an additional $96 million will be used to reward schools that improve on state performance indicators, $50 million will be spent to help districts raise the minimum teacher salary to $32,000 for fully certified teachers, and $50 million will be used to provide bonuses of up to $25,000 per teacher at low-performing schools where students show academic improvement.

Student Outcomes
California has consistently lagged behind the rest of the country in student achievement. The state ranks near the bottom of states on the National Assessment of Educational Progress (NAEP). Only 20% of California’s fourth-grade students were at or above proficient on NAEP in reading, and among poor and minority students only 7% of Black, 8% of Hispanic, and 7% of free/reduced price lunch-eligible students were at or above proficient. Moreover, the state’s record on high school completion is poor. One third of its ninth graders in 1993 failed to graduate from high school four years later. The numbers for Black and Latino students are higher; 45% of Black and 46% of Hispanic ninth graders failed to graduate on time, or at all.

Results of statewide achievement testing in Spring 2000 indicate that California is doing an average job of educating fluent-English speaking students, but not nearly as well with the one million English language learners and 1.5 million low-income children. At the fifth grade level, only 9% of English-language learners were above the national average in reading. In math, 52% of all English-fluent eighth graders met or surpassed the national average compared with 15% of ELLs.

Class-Size Reduction and English-Only Instruction
In 1996 California implemented a class size reduction program, reducing class sizes from 30 to 20 in the kindergarten through third grade in public schools. Studies have found that third-grade students enrolled in reduced-size classes performed slightly better than those who were not and that the gains were found across all socioeconomic levels. There has been some criticism of the program, however, because the program prompted the rapid hiring of an additional 28,500 teach-
ers in California, many with little or no experience.

Proposition 227, a ballot measure passed in 1998, requires most bilingual education programs in California to be replaced with one-year English immersion programs. By the end of the first year of implementation, the percentage of ELLs in California schools that were enrolled in bilingual programs dropped from 29% to 12%. There is considerable controversy in the state regarding the outcomes of this legislation; proponents of English-only instruction attribute ELL students' gains in some school districts to the legislation while proponents of bilingual education maintain that the gains are due more to reduced class sizes and greater accountability. Furthermore, a study by University of California researchers found that Proposition 227 resulted in many teachers teaching ELLs in English without requisite training and materials.

State Content and Performance Standards

As of 1999, the State Board had adopted state standards by grade-level for language arts, math, science, and history-social science. The state established the 50th percentile as its standard for grade-level performance on the Standardized Testing and Reporting (STAR) test for 1997–98.

School districts and individual schools are required by federal law to provide evaluation and accountability data that indicate specially funded students are learning the district's core curriculum. State laws and regulations also require that a district have results of an annual evaluation which demonstrates that each of its participating schools is implementing consolidated programs which are effective under criteria established by the local governing board. Furthermore, districts must also assemble individual and group data to show that ELLs are acquiring English proficiency and progressing in the district's core curriculum at a rate that will enable them to meet grade level academic standards within a reasonable period of time.

The CDE also strongly encourages districts to establish a standards-based evaluation system. The state indicates that the standards adopted for ELLs and former ELLs and immigrant students in the core subjects should be the same standards as those required for mainstream students. ELLs are expected to receive English language development until they are redesignated as fluent in English.

Assessment

State legislation requiring mandatory assessment began in the 1998–99 school year. Districts are required to use the STAR test—Stanford-9, Form T—for state accountability purposes. Students in grades 2–8 must be tested in the basic skills of reading, spelling, written expression, and mathematics. Students in grades 9–11 must be tested in reading, writing, math, history, social science, and science.

The SAT-9 test has been augmented so that language arts and math items on each grade-level test are aligned with state standards. An assessment that requires each student to write on a specified topic will be administered in grades 4 and 7 in Spring 2001 as part of the California Standards Test (STAR augmentation). The California Standards Test in history/social science will be administered for the first time in Spring 2001 in grades 9 through 11. California Standards Tests in science in grades 9 and 11 will be administered for the first time in Spring 2001. In addition, all students will continue to take the Stanford 9 test in science appropriate to grade level enrollment.

Legislation passed in 1999 requires that the state implement a high school exit examination beginning in the 2000–2001 school year. Each pupil is required to take the high school exit exam in grade 10 beginning in the 2001–2002 school year and may take the examination during each subsequent administration, until each section has been passed.

The State Board of Education has approved a long-term plan for the state testing program that should lead to a more coordinated and efficient assessment system. The plan envisions a "completed" state assessment system by 2002–2003 and describes a timeline for the development of the system.

English Language Learners

In addition to taking the designated test in English (the Stanford-9), ELLs who are enrolled in California public schools less than 12 months must also take a test in their primary language if one is available. The Department's Standards, Curriculum, and Assessment Division is in the process of responding to a recent California law that requires the identification or development of an English language development standardized testing and reporting test to assess English learners' language proficiency in listening, reading, speaking, and writing.

The CDE guidance further suggests that, whenever possible, assessments of subject matter areas such as mathematics, science, social science, health, and other courses required for grade-level promotion should be administered to ELLs in the language in which they are best able to demonstrate their knowledge of the subject matter.

State Versus Local Assessments

For their local accountability system, districts are encouraged to use multiple measures in reading/language arts and in mathematics for all students. Thus, while state-level accountability for 1999–2000 was based on the SAT-9 only, the State Superintendent of Instruction strongly encourages districts to continue to develop and organize
local standards-based accountability systems.

The U.S. Department of Education has informed the CDE that the state’s assessment program may not be in compliance with Title I requirements for final assessments. Key requirements in the federal law that must be met by California education officials by the 2000–2001 school year include uniform statewide policies to ensure full inclusion of all students in assessments, disaggregation of assessment results by major racial and ethnic groups as well as migrant status, and compliance with Title I’s requirement for the use of multiple measures.

Accountability

The Public Schools Accountability Act (PSAA) of 1999 has three main components: the Academic Performance Index (API), the Immediate Intervention/Underperforming Schools Program (II/USP), and the Governor’s Performance Award (GPA) program. The law requires that test results constitute at least 60% of the API.

Schools receiving an API score between 200 and 1000 are ranked in 10 categories of equal size (deciles) from one (lowest) to 10 (highest). A school’s API score and ranking are compared to schools statewide and to schools with similar demographic characteristics. An API score of 800 will serve as the interim growth target for all schools until state performance standards are adopted. Growth targets are set for each significant ethnic subgroup and the school as a whole. The annual growth target for a school is 5% of the distance between a school’s API and the interim statewide performance target of 800.

An intervention program was developed for the 430 schools scoring in the lower half of the statewide distribution in 1998 and 1999. Schools that meet or exceed growth targets will be eligible for monetary and non-monetary awards. For the 2000–2001 school year, $21.5 million is available to support a second group of 430 schools that did not meet their 1999–2000 growth targets. Schools already in II/USP that continue to fall below their targets or do not show significant growth may be subject to local interventions or eventually to state sanctions.

Alignment with Title I Accountability

The CDE reports it is working to align state and federal requirements into a single state accountability system. In general the state expects that a Program Improvement School will be a Title I school that is low-performing on the API. In the future, the state expects that the API will include multiple measures of student performance aligned with California’s performance standards.

During the 1999–2000 cycle for identifying Program Improvement schools, Title I schools ranked in the lowest decile on the API were in Program Improvement. Title I schools in the second decile on the API were candidates for Program Improvement and might be subject to further review based on local accountability data. Beginning in 2000–2001, Title I schools will be identified for program improvement when they have failed to make adequate yearly progress for two consecutive years.

Conclusion

Notwithstanding recent progress, California still has a long way to go before it is in full compliance with federal requirements. The state has yet to:

- demonstrate that the statewide test (the SAT-9) is aligned with state content and performance standards. This is important because California has chosen to use a nationally norm-referenced multiple-choice test as the centerpiece of its new school accountability program.
- develop valid and reliable multiple measures of student performance. The current statewide standards for determining “adequate yearly progress” are based solely on the schools’ SAT-9 scores and do not yet incorporate multiple measures of student performance required by Title I.
- provide for appropriate inclusion of ELLs in the assessment and accountability program. At present, ELLs are assessed largely by the SAT-9 in English even though state law requires students to be tested in the language in which they are most likely to yield accurate and reliable information on their skills and knowledge.
- provide the resources, capacity-building, and other assistance to schools and districts to ensure that all students have the opportunity to learn and to achieve high standards. In particular, class size reduction reforms have left many children in high-poverty schools without fully qualified teachers or adequate classroom space.

California’s plans for the final Title I assessments for accountability purposes are pending before the U.S. Department of Education for approval, conditional approval, or rejection. The law requires these measures to be in place in the current 2000–2001 school year and to apply to assessments administered in the spring of 2001. There is reason to doubt whether the corrections and improvements needed to come into compliance with federal law can be made in time to satisfy statutory deadlines. Both state and federal education officials are challenged to devise a compliance and implementation plan for California that will make good on the promise of the new Title I to ensure that all students reap the benefits of standards-based reform.
A major and pressing problem facing educators, particularly in the context of the current national reform agenda of achieving schooling success for each student, is the consistent finding of differential correlation among low, mid-range, and high academic achievement in different groups of ethnic minority students. The research base shows a striking achievement gap between Asian American and European American students on the one hand, and, on the other, African American, Latino, and Native American students, who tend to score lower on tests that measure scholastic aptitude and intelligence, as well as on those that test vocabulary, reading, and mathematics abilities. This gap, which appears early in life and persists into adulthood, cannot simply be attributed to race, however. The research base indicates differences in achievement potential between African American and Latino males and females; between Caribbean- and Continental-born Blacks; and between middle- and lower-class minority students. Most troubling is the finding of increasing differences even for those students who are economically advantaged. Some school districts known for their tradition of academic excellence are now faced with the challenge of serving an increasingly diverse student population, including minority students from relatively affluent families who are showing major gaps in their patterns of academic achievement.

Traditional explanations for the gap, such as social-environmental and genetic-hereditary causes, have not gone far in understanding and closing the achievement gap. The articles included in this issue of the CEIC Review will summarize the state of our knowledge about the factors that influence the achievement of ethnic minority children, including some relatively new explanations. The synopses are of papers that were commissioned for a National Invitational Conference report on Closing the Achievement Gap: Success Strategies, sponsored by the Laboratory for Student Success at Temple University Center for Research in Human Development and Education, the Johnson Foundation, and the National Task Force on Minority High Achievement of the College Board, held on May 31–June 2, 2000, at Wingspread, the Johnson Foundation’s conference center in Racine, Wisconsin. The papers discuss implications for policy, programs, and practices in light of research findings.

Several of the papers discuss the nature of the immigrant experience as it relates to achievement in schools and access to higher education. Two papers look specifically at nurturing successful minority collegians, both with broader implications for improving academic performance among secondary schools. Another paper suggests better ways to identify and support gifted students among minority populations, while another deals with a notable gender issue: the underrepresentation of female students in the sciences and in mathematics. The initial two papers call for a fundamental reorientation of, in the first instance, how we
regard the economically disadvantaged and the under-educated and, in the second, how we regard the nonanalytical intelligences.

Conference organizers brought together education leaders and scholars known for their differing views. Also represented were teachers, principals, superintendents, and state and federal officials. The overall goals were (a) to develop an integrative synthesis of what is known about effective and promising policies and practices associated with high academic achievement among students from minority backgrounds and (b) to develop an action plan for the implementation of effective intervention programs that reduce the achievement gap among minority students.

What is the Current State of Knowledge Regarding the Underachievement of Ethnic Minority Children?

- For research to be useful, it must accurately reflect the complexity of the problems that students and teachers face. For example, demographic information on the transformation of many parts of the country into highly diverse areas is important information for leaders to have when they do their planning.
- Information on the history and experiences of children and families is critical to implementing and sustaining change. Because populations of school districts are likely to be diverse, each school district will be unique and its problems and their solutions will differ across areas.
- Promising practices must be translated wider; schools need to be aware of what research says about the most promising practices.
- For large urban school systems that serve many poor children, the task is difficult. They need to be monitored closely for success.
- More information is needed on how to document outcomes.

What Are the Key Characteristics or Components of Effective Programs That Are Associated with the High Achievement of Ethnic Minority Youngsters?

- Effective programs target children for special instruction before they can be mainstreamed.
- Educational systems and practices must change to reflect the belief that all children are capable of learning. Educators must make certain that all children are equally well served.
- Successful programs provide counseling for language- and economic-deprived students.
- The roles of principal, school board, and superintendent in the implementation of change need to be clarified.
- Ongoing opportunities need to be given for practitioners and researchers to meet and discuss the range of issues concerning students’ achievement.

What Are the Implications of Program Development, Program Modification, and Expansion of the Knowledge of Effective Programs for Wide-scale Dissemination and Implementation?

- Leadership, particularly in urban districts, must be stabilized.
- Partnerships must be created between school districts and foundations that focus on closing the achievement gap.
- Teachers must have a thorough understanding of the different forms of intelligence.
- Clear and high expectations need to be established.
- Student talent needs to be used in designing instruction and school programs.
- The image of schools as a hostile environment must be reduced for both students and teachers.
- Data should be used to reduce the mismatch of professional development and the actual needs of students and staff.
- Create more teams of teachers to reflect and collaborate on critical challenges and design strategies for implementation. Researchers should play a critical advisory role.
- Family and community partnerships must be increased by pairing teachers and students.
- District support of schools needs to increase.
- Students are a valuable resource that should be maximized.

In upcoming issues of the CEIC REVIEW:

Can Unlike Students Learn Together?

Social-Emotional Learning and School Success
In the summer of 1958, in a talk at a public hall on 125th Street and Lenox Avenue in Harlem, W.E.B. DuBois contemplated his 1903 claim that the “problem of the twentieth century is the problem of the color line.” In 1958, he was beginning to consider the possibility that the line between the have-nots, greatly confounded by color, could emerge as a more critical problem. DuBois was correct both in 1903 and in 1958. The twentieth century was marked by considerable turmoil associated with racist values and DuBois’ color line, but it was also marked by monumental declines in the significance of the color line and the increased significance of the inequalities in the distribution of income and wealth.

Skin color and other sources of cultural identity continue to be the basis for troublesome social divisions in the United States as well as in other places throughout the world. The unequal distribution of resources or the perceived threat of loss of “my share” also provides fertile ground for cultural, gender, racial, and religious biases to surface and flourish. Racism was not eliminated with the civil rights revolution, but enormous strides were made in moving this nation and other parts of the world away from the worst expressions of racial discrimination. During that period, when masses of people not only saw their prospects improve, but also an increased opportunity for their children to have lives better than their own, most people in this country were more willing to share broadening opportunities. When the perception that things were getting better for our children and ourselves began to decline, however, we saw increasing antagonism toward organized labor, toward equality for women, and toward Blacks, Spanish-speaking persons, and others who seemed divergent from what was passing for “standard American.” It is not surprising, then, that tax revolts and the rescindment of affirmative action ensued in the 1990s. These are the reactions of a desperate populace who have been frightened by the export of production jobs, by the necessity of two or more family members working in order to support a family of four, by the downsizing of the work force while profits and the economy soar, and by realistic estimates that the next generations will not live as well as the current. DuBois was right: The line between the haves and the have-nots is indeed challenging the color line as one of the key problems of the twenty-first century.

To understand the magnitude of this problem, it is necessary to look more closely at what it means to “have” and to “have not.” In many of the available analyses, income distribution has been the variable of focus. For individuals, inequality in the distribution of and inadequacy of access to income is a critical factor; but for groups, the problem of inequality in the distribution of wealth may be even more critical. This holds true because, while income may provide limited access to available resources, it is wealth that provides access to power, control, and essential human resource development capital. Some are beginning to believe that it is impossible to achieve meaningful participation in an advanced technological society without the capital to invest in human resource development. What exactly is the nature of that capital that so badly needs to be invested?

- **Health capital**—physical developmental integrity, health and nutritional condition, etc.
- **Financial capital**—income and wealth, family, community and societal economic resources available for human resource development and education
- **Human capital**—social competence, tacit knowledge, and other education-derived abilities
- **Social capital**—social networks relationships, social norms, cultural styles and values
- **Polity capital**—societal membership, social concern, public commitment, participation in the political/economic process
- **Personal capital**—dispositions, attitudes, aspirations, efficacy, sense of power
- **Institutional capital**—access to political, educating, and socializing institutions
- **Pedagogical capital**—supports for appropriate educational experiences in home, school, and community

Obviously, wealth is more than money. It is the accumulated accessibility and control of resources. Schools and other social institutions seem to work
best when the people they serve bring a variety of these capitals that enable and support human development. If the availability of financial capital invested in human development is, in part, responsible for the effectiveness of schools and other human resource development institutions, then there is a need for political and social development.

Until recently, society has accepted the assignment of preferential treatment to designated categories of persons as special rewards for service to the nation, to compensate for unusual prior disadvantage, or simply as the entitlement associated with one’s status. These various forms of affirmative action are currently under increased attack, in large measure, because of their public and colloquial association with minority group membership. Admittedly, it is also under attack because of abuses in its practice. Instead of an effort to ensure that qualified persons are not disqualified because of ethnicity or gender, affirmative action is often perceived as a program to privilege “unqualified” persons over those who are “qualified.” The preoccupation with race may be a part of the problem. In a racist society, all social arrangements are likely to be designed to reflect racist values. To try explicitly to subvert those values is bound to be met with open resistance. Thus, affirmative action that is directed at gender differences has been more successful.

Several adjustments should be made to the current thinking about affirmative action. Rather than targeting ethnic or gender groups for affirmative action, a much larger and more diverse group should be targeted—those groups that are low on wealth and wealth-derived capital resources. Education and employment opportunities could be regarded as instruments of human resource development rather than agencies for the credentialing and rewarding of the “most able.” Rather than merely protecting the opportunity to enter, let us ensure the opportunity to develop and qualify. In addition to a program of affirmative action, a program of affirmative development of academic abilities should be utilized.

An important affirmative action effort in the history of the United States was the Veterans Preference Program. The components of that program ensured that veterans had ample opportunities to improve their educational and health status. They were a protected group with respect to vocational skill development and employment. They were assisted in the acquisition of wealth as represented by assisted home ownership, and the social ethos even gave them privileged positions in the political arena where they were enabled to access political capital through the jingoistic and patriotic bias of the populists. This national effort may have begun as a reward for service in the nation’s defense, but in reality it was a massive human development endeavor that positioned the nation’s labor force for the economic and technological expansions of the latter half of the twentieth century. The affirmative development of the nation’s underutilized human resources is in the best interest of the entire United States.

The affirmative development of academic ability should include such components as:

- Generic interventions, viz., excellent pedagogy, adequate and equitable opportunities to learn, and ubiquitous support for academic development;
- Customized diagnostic and targeted remediation;
- Academic acceleration and enhancement;
- Personalization;
- Expectations and rewards;
- Early exposure to rigorous instruction;
- High-performance learning communities; and
- Explicit socialization of intellect to multiple cultural contexts.

Income and wealth have greatly reduced the significance of the color line in our society. Race continues to be important, but economic, political, and social planning may be more appropriately directed at reducing the growing disparities between the haves and the have-nots. Thus, the twenty-first century requires a quantum leap in the development and utilization of all people. It will require the affirmative development of large numbers of persons who would not necessarily be selected because of their developed abilities, but because, in the maldistribution of human resource development capital, they have undeveloped abilities that the nation needs to have developed. Rather than race, such an effort would favor the lower and under classes in our society.

Unfortunately, classism may be a more recalcitrant illness than racism. While it is, at times, acceptable to talk of racial justice, the same is not true of economic justice. However, the pursuit of universal economic justice may be critical for the survival of our democratic nation.
Developing Successful Intelligence in All Children
Adding Creative and Practical Abilities to Analytic Thinking
Robert J. Sternberg, Yale University

Successful intelligence is defined as the ability to achieve success in life in terms of one's personal standards, within one's sociocultural context. The field of intelligence has, at times, put "the cart before the horse," defining the construct conceptually on the basis of how it is measured rather than vice versa. This practice has resulted in tests that stress the academic aspect of intelligence, but the construct of intelligence needs to serve a broader purpose that accounts for the bases of success in all of one's life.

The use of societal criteria of success (e.g., school grades, personal income) can obscure the fact that these measures often do not capture people's personal notions of success. Although scientific analysis requires analysis of group data, success is defined on an individual basis. In the theory of successful intelligence, however, the conceptualization of intelligence is always within a sociocultural context. Although the processes of intelligence may be common across such contexts, what constitutes success is not. For example, being a successful member of the clergy of a particular religion may be highly rewarded in one society and viewed as a worthless pursuit in another culture.

The ability to achieve success depends on capitalizing on strengths and compensating for weaknesses.

Theories of intelligence typically specify some relatively fixed set of abilities. Such a fixed specification is useful in establishing a common set of skills to be tested. But people achieve success, even within a given occupation, in many different ways. For example, successful teachers and researchers achieve success through many different blendings of skills rather than through any single formula that works for all of them.

Success is attained through a balance of analytical, creative, and practical abilities.

Analytical abilities are the abilities primarily measured by traditional ability tests. But success in life requires not only one to analyze one's own ideas, but also to generate ideas and to persuade other people of their value. This necessity occurs in the world of work, as when a subordinate tries to convince a superior of the value of his or her plan; in the world of personal relationships, as when a child attempts to convince a parent to do what he or she wants or when a spouse tries to convince the other spouse to do things his or her preferred way; and in the world of the school, as when a student writes an essay arguing for a point of view.

Balancing of abilities is achieved in order to adapt to, shape, and select environments.

Definitions of intelligence traditionally have emphasized the role of adaptation to the environment. But intelligence involves not only modifying oneself to suit the environment (adaptation), but also modifying the environment to suit oneself (shaping), and, sometimes, finding a new environment that is a better match to one's skills, values, or desires (selection).

Not all people have equal opportunities to adapt to, shape, and select environments. In general, people of higher socioeconomic standing tend to have more opportunities than people of lower socioeconomic standing. The economy and political situation of the society can also be factors. Other variables that may affect such opportunities are education and literacy, political party, race, religion, and so forth. For example, someone with a college education typically has many more possible career options than does someone who has dropped out of high school in order to support a family. Thus, how and how well an individual adapts to, shapes, and selects environments must always be viewed in terms of the opportunities the individual has. Children from challenging environments may acquire important adaptive and other skills, yet not those skills most schools currently value and reward.

Teaching and Assessing for Successful Intelligence

In order to help remedy this situation, work has been done at Yale University to try to restructure the processes of ability testing, instruction, and assessment of achievement. A group-administered research version of a test, the Sternberg Triarchic Abilities Test (STAT), was developed. There are two levels currently available for
research purposes: one for children at the high school level (roughly ages 15-18) and one for children at the intermediate, fourth-grade level (roughly ages 9-10). A variety of abilities, including conventional, is measured.

One third of the test measures the kinds of memory and analytical abilities evaluated by conventional tests of intelligence and scholastic abilities. Another third of the test measures abilities more germane to creative thinking and coping with novelty—the ability to think in novel ways. And the last third of the test measures practical abilities of the kinds needed to adapt to everyday life.

When high school students were selected for a summer program on the basis of this test, some interesting things happened. Students all around the country took the test. They were classified into five groups: high analytical, high creative, high practical, high in all three abilities, low in all three abilities. The first finding was unexpected: the high-analytical group looked pretty much like a standard high-ability group: mostly White, middle-class, and attending strong schools. But the high-creative and high-practical groups were much more diverse in terms of ethnic, socioeconomic, and educational background. In other words, more minority students were selected not through any program of affirmative action, but through a program of recognizing and valuing abilities that schools typically neglect, both in their instruction and in their assessments.

The test was also found to be reliable and predictively valid. In a study of a summer program at Yale, the analytical, creative, and practical sections all predicted achievement in a high-school psychology course. This course had been taught in different ways to value analytical, creative, or practical abilities. So, for example, an analytical task might involve analyzing the strengths and weaknesses of a scientific theory or experiment; a creative task might involve generating a new theory or experiment; and a practical task might involve applying a theory or experiment to one’s own life. In the study, the best predictor of performance was analytical abilities; the poorest was practical. However, all three test components—analytical, creative, and practical—predicted achievement.

It was also found that students who were placed in an instructional program that matched their pattern of abilities outperformed those who were mismatched. In other words, if students are taught in a way that at least partially values their strengths, they perform better than if they are taught in standard ways that always value the same abilities—namely, the abstract-analytical ones and memory. Ultimately, the goal is to help students recognize and capitalize on their strengths and to correct or compensate for their weaknesses.

Perhaps it is not always feasible to match instruction to students’ patterns of abilities. In anticipation of this problem, a study was designed that taught either third-grade social studies or eighth-grade science in one of three ways: in the traditional way, with an analytical (critical-thinking) emphasis, or with a three-prong emphasis on creative and practical as well as on analytical abilities. The achievement of all students was assessed via analytical, creative, and practical performance assessments, but also via standard multiple-choice assessments that emphasized the kinds of memory-learning that are emphasized in most standardized achievement tests and statewide mastery tests. It was found that the three-prong instruction not only resulted in better scores on the performance assessments, but also on the multiple-choice memory-based assessments. In other words, by allowing students to learn the material in three different ways, and thereby make the most of their patterns of abilities, students learned better, even when achievement was measured in conventional ways.

To effect change in education, not only the ability tests but also the instruction and the achievement tests need to be changed. When all three kinds of abilities—analytical, creative, and practical—are emphasized, it will become apparent that many of the students who now seem rather inept actually have abilities that, under traditional systems of testing and instruction, remain hidden and ultimately go to waste.

Since teachers already know how to teach analytically, creatively, and practically, the change can be made with relatively little effort. Nevertheless, teachers are often afraid to make the change lest their students not do well on mastery or other conventional tests. However, students will actually perform better on all tests when given a chance to learn in a way that best allows them to bring their strengths to bear on their classroom learning. ☎
The Conversion of Natural Groups into High-Performance Learning Communities
Edmund T. Gordon, University of Texas, and Edmund W. Gordon, Yale University

In contemporary America, we are confronted with the problem of academic underachievement in some groups of ethnic minority students. A considerable amount of attention has been directed at the low performance of low-income and otherwise disadvantaged populations. In fact, the sole focus on disadvantaged youngsters has obscured the reality that African American, Hispanic American, and Native American students at each social class level tend to do less well than their European and Asian American counterparts. That is, there are important within-social-class achievement differences among groups. However, this paper focuses not on the generic problems of ethnic minority underachievement, but specifically on the problem and possible solution to the problem of Black male underachievement at historically White elite institutions of higher education in this country.

Black Males at Predominantly White Universities

Black students who attend predominantly White universities are usually from high socioeconomic level families and among the most academically accomplished Black young adults in this country. Nevertheless, historically, Black students have not done well at these institutions. In comparison with White students, they tend to experience more adjustment difficulties, more limited academic success, and higher attrition rates with definite consequences for their aspirations.

The University of Texas at Austin (UT) can be used to illustrate the disparity in achievement among Black university students. UT prides itself as being one of the top research and academic institutions in the United States. It has higher admissions standards than any other state school and feels that it admits Texas’ elite graduating high-school seniors. Year after year, many of the most qualified Black students from the state enter UT. These students have all achieved academic success in high school (with the exception of highly recruited athletes). They usually graduate in the top 10% of their high-school classes, score well on their SATs, and are often leaders of student government. The choice of UT, with its appalling reputation as a racist institution in Texas’ Black community, indicates that these primarily middle-class students are confident in their abilities to succeed and are not considered politically resistant as they enter college.

Unfortunately, despite their bright prospects and histories of academic success, many do not fair well at UT. By almost any standard (retention rates, GPA, graduation rates, etc.), Black students are not as successful as other races. Moreover, by some standards, Black men achieve less than Black women. For example, for the three years 1997–99 the graduation rates for Black female students were 58%, 53%, and 61% respectively, while only 37%, 34%, and 44% of Black male students graduated.

From interviews with Black males at UT, it is clear that there are a number of factors that contribute to the difficulties that Black males encounter at the university. First of all, even though these students did well in high school, at UT they are competing with other high achievers who may have had better academic preparation. Furthermore, part of their previous academic success was based on critical support groups such as family, certain teacher role models, and community support groups that are generally unavailable for them at UT. This, combined with the high level of alienating racial tensions that exist on campus and the stereotypes of Black underachievement, creates a situation in which academic success is problematic.

Although these problems apply equally to Black women and Black men, the men are spurred toward insubordinate, oppositional, or resistant male cultural practice. Most Black students think the university and many of its members are racist; UT is perceived as a hostile environment stacked against them. In this context there is a strong move to create an alternative community where there is both clear identification with other Black students and large amounts of time dedicated to social activities. Therefore, Black gospel groups, Black political and cultural organizations, and Black fraternities are formed. It is within these alternative peer groups that Black males are able to create masculine status for themselves. We believe that such alternative communities could be the basis for the formation of high-performance learning communities that can serve not only to create Black male status on their own terms, but also to enhance academic achievement.

High-Performance Learning Communities

As we conceptualize them, high-performance learning communities are not formal institutions, but close-knit associations between people (peer groups) in which relationships are nurtured, where commitment to high academic achievement is a
shared purpose, where academic socialization occurs naturally, where pro-academic and pro-social mores and values are promoted, where members are committed to learning how to support the academic development of others, achieving academic and personal excellence, and where academic achievement is positively related to the other core interests of the group. Formation of such groups or communities can best accomplished by converting already existing Black peer groups into high-performance learning communities where the application of one's intellective competence to high-level academic endeavors is culturally and socially encouraged.

These high-performance learning communities must reflect three characteristics:

a. They must provide positive social conditions for academic learning such as cooperative learning experiences, organized tutorial and study groups, the use of athletic-style academic coaching, and the creation of ubiquitous high expectations.

b. Through the actions of an organized collective, high-performance learning communities should enhance the capacities of the group to advocate for and obtain a variety of resources (health, financial, social, political, personal, institutional, etc.) and to place them at the disposal of their members for academic and personal development.

c. Black students must be provided additional support that many affluent and more academically sophisticated White students receive, such as:
   - Targeted academic guidance and tutorial assistance;
   - Explication and development of the specific behaviors that are associated with serious academic work such as time on task, task engagement, energy deployment, resource utilization, and learning skills and strategies;
   - Supportive cultures and environments for the pursuit of serious academic work;
   - Models of excellent academic work and examples of high academic standards;
   - Access to the supplementary cultural, educational, and material resources that are essential to high-level academic work; and
   - Adult advocates for and supporters of students' academic pursuits.

Only when these characteristics are reflected will high-performance learning communities enable more Black male students to succeed academically.

SAAB: Natural Community to High-Performance Learning Communities

SAAB (Student African American Brotherhood) is an organization of Black male students at UT. Its mission and motto are to "embrace the principals of Accountability, Proactive Leadership, Self-discipline, and Intellectual Development." Over the years, SAAB has played a leading public role in Black politics on campus; it also organizes parties and social outings for its members and others of UT's Black community in which the "difference" of African American culture is emphasized.

While SAAB is a natural community that was created as a refuge from perceived racism and alienation on UT's predominantly White campus, it has clearly developed some of the components of what we have termed a high-performance learning community.

The members of SAAB see their function as primarily social. Most of the members interviewed stated that the organization had not had a major impact on their lives. However, clearly, its mission statement emphasizes qualities that are basic for academic achievement. The organization has a standing "Academic Commitment" committee that organizes study groups and study hours. It also creates a sense of group and community pride and accountability that encourages members to pay more attention to academics. In general, members stated that the organization's "business-like" attitudes had helped them to get more serious about many things, including academics.

Conclusion

In general, we advocate the evolution of high-performance learning communities from student communities that already focus on the practical politics of student life. This could be the racial politics of high schools or universities, grassroots neighborhood politics, local electoral politics, or any combination thereof. In these high-performance learning communities, emphasis should be placed on acquiring the research and critical thinking skills necessary to assess the problems to be addressed, developing political strategies to effect social change, and engaging in political activities suggested by this process. The creation of high-performance learning communities along these lines will eliminate a number of the impediments to academic achievement for minority students. In these programs, students will, through the service of resistance, develop critical thinking, literacy, and other skills and knowledge that can also be utilized to achieve academic success. In short, the programs show students that the politics of cultural resistance can become the politics of academic achievement.
Intergenerational relations in immigrant families are managed and shaped within divergent contexts of reception and incorporation and with differing sets of resources and vulnerabilities. Still, even after accounting for these objectives, circumstances within which children of immigrants are coming of age, there is substantial and unexpected variance in the children’s interpersonal and intrapersonal responses. This paper explores these dimensions of their adaptation process which can mold motivation and achievement: the ways immigrant children perceive their relationships with parents and families, their school experiences, their school engagement, and the way they imagine their educational and occupational adult futures. It also probes some patterns and predictors of their educational achievement.

The CILS Study and Sample Characteristics

The Children of Immigrants Longitudinal Study (CILS) has followed the progress of a large sample of teenagers representing 77 nationalities in two main areas of immigrant settlement in the United States: Southern California (San Diego) and South Florida (Miami and Fort Lauderdale). The initial survey, conducted in 1992 (“T1”), interviewed 5,262 students enrolled in the eighth and ninth grades in public schools in these two regions, as well as in private bilingual schools in the Miami area. The principal nationalities represented in the San Diego CILS sample are Mexican, Filipino, Vietnamese, Laotian, and Cambodian, with smaller groups of other Asians (mostly Chinese, Japanese, Korean, and Indian) and Latin Americans. In the South Florida sample, the principal national-origin groups were Cubans, Haitians, Jamaicans, Nicaraguans, Colombians, Dominicans, and others from Latin America and the Caribbean.

The sample was drawn in the junior high grades, a level at which dropout rates are still relatively low. Students were eligible to participate in the study if they were American-born but had at least one immigrant (foreign-born) parent, or if they themselves were foreign-born and had come to the United States at an early age (before age ten).

Several years later, in 1995-96 (“T2”), a second survey of the same group was conducted—supplemented by separate in-depth interviews with their parents. The purpose of the follow-up, which succeeded in reinterviewing 82% of the baseline sample, was to ascertain changes over time in their family situation, school achievement, educational and occupational aspirations, language use and preferences, ethnic identities, experiences of discrimination, and psychosocial adjustment.

Family Cohesion, Conflict, and Change

In immigrant families there are systematic differences that range from situations where parental authority is fully preserved to those where it is undermined by generational gaps in acculturation—in English knowledge and the degree of children’s retention of their parents’ language. These patterns should be reflected in the degree of intergenerational cohesion or conflict between immigrant parents and their children, the extent to which these youths report being embarrassed by their parents, and the degree of attachment to them by filial duty.

The study found significant differences in family structure by national origin and socioeconomic status (SES). The higher the parental SES, the more likely it is that families remain intact and experience fewer stressful life events over time. Asian-origin families are more likely to remain intact and to experience fewer family change events (except the Hmong and Cambodian refugees), followed by the European/Canadian and Latin American groups, who occupy a middle position in these indicators of family stability. Among the Latin Americans, upper-middle-class Cubans whose children attend private Miami schools are most advantaged, while the Dominicans are the only Latin nationality to exhibit the pattern of high family structural instability seen among the Haitians and West Indians.

Without exception, the Latin American nationalities exhibit the most cohesive families as well as the lowest levels of parent–child conflict. Most of the Latin groups also exhibit lower proportions of youths who report being embarrassed of their parents, with the lowest (14%) found among the Mexicans and Dominicans. By contrast, all of the Asian, European/Canadian, and Black Caribbean groups were below the average (34%) in their percentage of high-cohesion families and nearly all of the Asian and Black Caribbean groups scored above the average (40%) for high-conflict families. The lowest family cohesion scores were found among the Haitians and Cambodians, and the highest parent–child conflict scores were found among the Hmong, Haitians, and Cambodians. Those same groups—along with the Chinese and other Asians—also showed the highest
percentage of students who reported feeling embarrassed by their parents.

Language dominance was measured by the students’ varying levels of proficiency in both English and the parental language. The data show that as the youth’s level of acculturation increases, the level of parent-child conflict and of embarrassment over parents’ ways increases, while that of family cohesion and of familialistic attitudes decreases. Students who are fluent in English but not in the parental language exhibit much higher parental conflict and embarrassment profiles, and much lower family cohesion than youths who are fluent in the language of their parents.

School Environments and Peer Groups

Until they complete their formal schooling, children and adolescents spend more time in schools than in any other setting outside their homes. Therefore, schools play a critical role in their development, shaping what they learn as well as their motivation and aspirations to learn. American public schools serve as quintessential agencies of acculturation for children of immigrants, making its environment particularly significant.

Nearly 30% of students reported a high degree of unsafe and disruptive conditions at their school. In particular, 39% perceived that there were many gangs at their school and 42% noted frequent fights between racial-ethnic groups. San Diego participants experienced the most unsafe conditions, with the Hmong, Lao, and Cambodian students reporting the highest prevalence of gang activity and violence in their schools, followed by the Vietnamese and the Filipinos. At the other extreme, Cuban students in Miami private schools reported the safest learning environment, as well as the highest quality of teaching. This is, in large part, a function of parental socioeconomic resources. Thus, the lower the family SES, the less safe the school environment and the greater the incidence of gangs and violence.

However, a very different pattern is seen in exposure to illegal drugs and the drug scene. Twenty-six percent of the sample reported at least one or more incidents with drug sellers. Colombians reported the most frequent involvement (43%), followed by Europeans and Canadians (35%), and Cubans in public schools (34%)—all of these were from the Miami area. The Haitians, Jamaicans, and all of the Asian-origin groups except one were well below the average reporting such drug-related incidents (hovering between 10 and 15%). In this instance, parental socioeconomic status again plays a significant role, but, ironically, in a negative sense. The higher the family SES, the more likely it is that students have the disposable income to buy illegal drugs and to become connected with the drug trade. Thus, while SES is linked to safer and better suburban schools, it is also linked to drugs. Moreover, the data make clear that such involvement with drugs is significantly related to associations with peer groups that disparage academic achievement. That is, the greater the level of connection with the drug scene, the more a respondent’s close friends were likely to have dropped out of school—regardless of their families’ socioeconomic advantage.

School Engagement and Effort

School success and failure are influenced by complex factors, but among the most fundamental are those which involve the students’ motivation to learn and their willingness to engage in schoolwork with the effort needed to achieve educational goals. In this sample, the children of immigrants almost universally value the importance of a good education. In fact, 90% in the second survey ranked a good education as “very important,” and another 85% deemed becoming an expert in one’s field “very important,” while only 41% equally valued “having lots of money.” Fifty-six percent of the respondents in both surveys scored high on school engagement (defined as the percent of students for whom grades were “very important” at both surveys); 26% regularly practiced it by putting in a high level of effort into their schoolwork. Yet, 24% spent excessive time each day in front of the television. There are significant differences by nationality on all three indicators. On school engagement, the Haitians and the Latin Americans had the lowest percentages, and the West Indians and all of the Asian groups had the highest. On sustained schoolwork discipline, the intergroup differences become much wider, with all of the Asian groups putting in at least twice the amount of time on homework as the Latin Americans, the Europeans/Canadians, and the Haitians. Forty-eight percent of the Hmong reported spending over two hours a day on homework—as did about 40% of all of the other Asian-origin groups. In contrast, only about one sixth of the Cubans, Colombians, Dominicans, and Mexicans devoted two or more hours a day to homework.

In general, family cohesion significantly correlates with each of these indicators. The greater the level of family cohesion, the greater the level of high school engagement and schoolwork discipline, and the lower the proportion of youth who spend an excessive amount of time watching television. Paradoxically, however, Latin Americans, who show the greatest family cohesion, had among the lowest rates of school engagement and effort; while the Asian groups, who show less family
cohesion, had among the highest rates of school engagement and effort.

These differentials are still more pronounced by the types of close friends with whom the students associate. Those with friends who plan to attend a 4-year college engaged in school more and watched TV less. And parents’ educational aspirations for their children make a difference. The more ambitious the children perceive their parents’ aspirations, the greater the children’s level of school engagement and effort.

Imagining the Future: Aspirations and Expectations

Aspirations and expectations are not the same thing. Aspirations refer to desired levels of future performance (what people want to happen); expectations are beliefs about a probable future state of affairs (what people think might happen). Aspirations are less realistic than expectations, since desires tend to exceed rational expectations. In this study, the percentage of students aspiring to an advanced degree (67%) is much higher than the percentage who realistically expected to attain it (44%), although both figures reflect a very high overall commitment to the pursuit of ambitious educational goals by second-generation youth. Interestingly, the study showed remarkable stability and resilience of students’ aspirations and expectations, which remained virtually identical for the sample as a whole over the span of several years from the end of junior high to the end of high school.

Clearly, there are significant differences by national origin in both the level of educational ambition and in the direction of change over time of these students. The most ambitious groups were the Cubans in bilingual private schools and the Chinese and “other Asians” (Japanese, Koreans, and Indians), followed by the Europeans/Canadians and the West Indians. In the middle were the Vietnamese, Filipinos, and the remaining Latin American groups; and at the bottom were the Dominicans, Mexicans, Laotians, and Cambodians. The Hmong, who come from the poorest immigrant families in the country, are perhaps the most poignant example of the gulf that can open up between educational desires and probable realities. While 54% of Hmong youth aspired to an advanced degree (reflecting a robust increase of 14% since the initial survey), a miniscule 6% realistically expected that they would be able to attain it (reflecting a decrease of 6% since 1992). As this ethnic ranking suggests, parental socioeconomic status plays a major role in explaining these differentials, with the gaps between lower- and higher-SES groups becoming wider in the students’ expectations of what they will achieve.

Much more so than family structure, the quality of family relationships was strongly associated with the youths’ ambitions. Educational expectations significantly increase as the level of family cohesion increases and the level of parent–child conflict decreases. By language abilities, fluent bilinguals exhibit the highest aspirations and expectations, followed by English-dominant students. Strong associations are also evident by the measure of sustained schoolwork discipline: the greater the number of daily homework hours averaged by the students, the higher their aspirations and expectations. Conversely, the greater the number of daily television hours averaged by the students, the lower their aspirations and expectations.

Results show that school environments and peer groups influence the manner in which these youths imagine their educational futures. Educational aspirations and expectations are lowered in school environments that are perceived to be unsafe and in which learning is regularly disrupted. The same goes for involvement with drugs, with the added observation that aspirations and expectations increased over time for students with no involvement with drug dealers, whereas they decreased for those reporting any level of involvement. Finally, 85% of youths who perceived that their parents wanted them to obtain an advanced degree aspired to do so and 58% realistically expected to be able to achieve that goal. Among youths who perceived that their parents did not expect them to graduate from college, only 29% aspired to an advanced degree and a mere 15% realistically expected to be able to earn that degree.

Patterns of Achievement

A key question raised by this study was how the immigrants’ children compared to the children of non-immigrants. On one issue of central public policy concern—school dropouts—a major finding is that, in both school districts on both coasts, a significantly greater proportion of students district-wide drop out of school than do the youth from immigrant families. The multi-year dropout rate for grades 9-12 in the Miami-Dade schools was 17.6%, about double the rate of 8.9% for the entire sample of children of immigrants there. On the other coast, the dropout rate in the San Diego schools was 16.2%, nearly triple the rate of 5.7% for the CILS sample there. Lower dropout rates for children of immigrants were seen for both males and females, and for every racial-ethnic category.

Although children of immigrants generally also outperformed their native peers in GPAs, there are clearly very large differences in (Children, continued on p. 13)
Family and Neighborhood Environment and the Adjustment and Achievement of African American Adolescents
Ronald D. Taylor, Temple University

This paper reviews and discusses research linking African American adolescents' social environments with their social adjustment and achievement. It focuses on the associations between important aspects of the home and family and adolescents' behavior and well-being. For example, it is known that the economic resources of the home are linked to children's and adolescents' social behavior and that parenting style and practices in the home are linked to African American adolescents' behavior and adjustment.

Families with few economic resources are more likely to have adolescents who have behavioral problems, who are psychologically distressed, and who do less well in school. Parental behavior and psychological well-being in less adequately resourced homes partially explain adolescents' poorer functioning. Parents in economically deprived homes are more distressed, inconsistent, and harsh in their parenting, and are less likely to create an organized and structured home environment. All of these can lead adolescents to display psychological distress.

In linking home environment and parenting to adolescents' behavior, empirical work has not kept pace with conceptual formulations on the factors that may shape parenting practices. Arguments have been made that parenting behavior is shaped by parents' assessment of the attributes adolescents will need in the family's social environment. Findings on this theory are in short supply. But research has shown that parents' emotional support, control, supervision, and home organization are positively linked to adolescents' psychological well-being and functioning. Also, African American parents with higher academic expectations for their adolescents and who prepare them for the experience of racism and discrimination tend to have adolescents who perform better in school.

Findings on the effects of neighborhoods suggest that factors reflecting the economic status of the neighborhood (median income, percentage of professional workers, percentage of abandoned houses) are associated with adolescents' psychological functioning and likelihood of engaging in problem behavior. Processes mediating these relations are less clear but suggest that lower emotional support may explain some of the problematic behavior.

The prevention of some of the problems of poor adolescents and their families calls for the investment of social and financial capital in disadvantaged communities. Many of the problems of poor, inner-city families may be rooted in the absence of both jobs and people working for pay at regular hours. It is argued that the lack of employment means that individuals do not have regular, legitimate forms of income, models of persons using their skills to lawfully maintain a living, or activities that structure the flow of events in the community.

The investment of capital may also include the introduction of resources into communities (markets, stores, banks, schools) that will enhance the quality of life of its residents. The presence of greater capital would likely lead to a reduction in the stressful conditions of inner-city communities (e.g., lower crime, greater availability of resources) and families. Consequently, parents—less psychologically distressed than before—would engage in better parenting that would result in fewer adjustment problems for adolescents.

Inner-city ethnic minority families and their children, without the introduction of increased resources, are at increased risk for problems. Thus, it is important to assess the socioemotional functioning of poor, ethnic minority youngsters and the circumstances that pose a threat to their well-being. Comprehensive, family-centered child development programs in urban communities could, with parent consent, regularly assess the well-being of children and adolescents. It is important that such programs be designed with an awareness of the relationships between neighborhood characteristics, family environment, parenting, social networks, and adolescent adjustment. For example, adolescents identified with behavioral problems may also have problems at home that are rooted in the risky circumstances and stressors of their neighborhood. Therefore, treatment of the adolescents' problem behavior would need to consider the possibility of initiating changes in multiple domains.
A more concerted effort must be devoted to using empirical research to assist at-risk families. For example, research has shown that the lack of availability of vital resources in neighborhoods is associated with less adequate functioning in families. This indicates the important need of neighborhood revitalization in terms of community resources for families and their members. Mothers' psychological distress has also been shown to be positively associated with the lack of availability of medical or financial resources. Thus, the introduction of these needed resources to communities would mean lower levels of distress and anxiety for caregivers. Less caregiver distress is likely to result in more positive interactions with youngsters in the home. Similarly, mothers experiencing financial problems are prone to depression because they are not hopeful about the future. As a result, mothers and adolescents may experience problems communicating that lead to adolescents' depression. So two goals of intervention should be the improvement of the economic opportunities and the development of resources for such families, including the creation of therapeutic services aimed at both mothers' sense of hopelessness and parent–adolescent communication problems.

There is a positive association between social support and the functioning of adults and children. It is important that—whether through churches, schools, social agencies, or other media—information on important family practices, such as organizing a structured family environment, be conveyed to families. Indeed, the creation of an organized and structured family environment among at-risk families helps buffer the impact of stressors they face. Family organization is positively associated with more adequate parenting practices and adolescent adjustment. That being the case, it is possible that, by creating or utilizing mechanisms in the community (schools, churches, support groups) through which families may access social support, families may function more adequately. Also, when they are linked to support networks, parents and adolescents may develop community ties that had not existed before.

Finally, it is important to acknowledge that there are limits to the resilience of individuals and the power of social institutions to overcome poverty or race problems. As important as social support may be to families, it may not enable families to overcome all of the challenges they face. For example, individuals facing discrimination in the workplace may not be as depressed as expected because of support they receive from family. However, the fact remains that such discrimination limits the individual's capacity for job advancement and increased financial resources for the family. Indeed, there has been an over-reliance on services in the United States when many problems of poor families have their roots in social and economic policies and practices that may require controversial political solutions.

(Children, continued from p. 11) educational outcomes by national origin—results which portend a significant ethnic segmentation of the socioeconomic trajectories of these youths as they go on (or not) to post-secondary education and make their transitions into the adult labor force. Chinese students on both coasts finished high school with by far the highest GPA (3.65) and the lowest dropout rate in the study. They were followed by other Asian-origin immigrant groups—the Indians, Japanese and Koreans, then the Vietnamese and Filipinos, Laotians and Cambodians. Jamaicans and other West Indians had lower GPAs, and the Haitians much lower still, but their dropout rates clustered around the CILS average. Overall, the poorest performance was registered by Latin American youth, with the lowest GPAs in the sample found among the Dominicans, and, unexpectedly, the highest dropout rates among Cuban youth in Miami public schools (10.1%), followed by Nicaraguans in Miami (8.9%) and Mexican-origin youth in San Diego (8.8%).

CILS results illuminate the challenges confronting children of immigrants. They differ in their social, cultural, and economic origins; face complex circumstances that add to the developmental stressors of adolescence; and display wide variations in achievement among national origin groups. Nonetheless, despite these added challenges, and despite the paradoxes of acculturation observed, the overall picture that emerges from this study is one of noteworthy achievement. Whether that level of achievement can be sustained as these increasingly acculturated young adults make their way into the world of work and form new families of their own remains an open empirical question. A follow-up survey of all the CILS respondents, who are now reaching their mid-twenties, was begun in early 2001 to address this question.
In the United States, as each group of students moves from high school to college, the percentage of Latino and African American students shrinks, a pattern known as the “academic pipeline problem.” However, the elementary school years represent a critical time in the lives of Latino students as children begin to look ahead in their own lives and look up to older siblings, peers, and adults. Some children’s pathways lead them toward college, while others lead toward school dropout and the risks of “underground” occupations. By the third grade, large gaps emerge between Latino children and national norms in reading, written language, and math. Unfortunately, these gaps often widen in subsequent years. In 1995, 30% of Hispanic young people were school dropouts, compared with 9% of non-Hispanic White youth and 12% of non-Hispanic Black youth.

This paper reports findings from ongoing research partnerships with inclusive classrooms and with selective and competitive outreach programs that seek to bridge school, college, and college-based occupations for Latino and other underrepresented youth. It focuses on immigrant families from Mexico because they represent the largest group of immigrants in the United States. Findings draw on qualitative methods (interviews, field observations, and case studies) and quantitative methods (surveys, grades, test scores, and statistical analyses) involving over 700 students. This study sought to respond to the following questions:

a. What are the immigration histories/history and parents’ education of these students?

b. What challenges do students’ families, peers, schools, and communities present, and what resources do these different “worlds” provide?

c. What are students’ pathways through the classes required for college eligibility?

d. How do students’ family backgrounds, resources, challenges across worlds, and school pathways predict college eligibility and enrollment?

In answering these questions, five key findings on how Latino children build pathways to college were discovered.

Finding 1: Demography Is Not Destiny, but Democracy Requires Vigilance

The demographic profiles of students participating in the competitive outreach programs revealed very different patterns for African Americans and Latinos. The African American students in the competitive program sample, all but one born in the United States, were likely to have college-educated, American-born parents. The Latino students, more than 20% of whom were born outside the country, were likely to have immigrant parents with a high-school education or less. Thus, African American youth in the sample were following their parents’ pathways to college, and Latino youth were beginning to exceed their parents’ education. However, in other research studies, differing rates of participation across social class, generation of immigration, and gender in university outreach programs have consistently been found among African American and Latino youth, who are underrepresented in the same way in four-year colleges throughout California; and there is concern as to why more low-income African American youth and second- and third-generation Latino youth were not participating in outreach programs. One possibility is that the Saturday and summer academies of the outreach programs conflicted with students’ work schedules; another is that the information distribution and recruiting of outreach programs do not reach all families equally.

When factors predicting students’ long-term school pathways were examined, little predictive power was found in family demographic backgrounds for either Latino or African American families. Other research shows correlations between parents’ education and children’s academic success, so why were none found here? One possibility is that parents’ education generally predicts activities like getting children into programs such as those in this study. Focusing only on students in such programs may have prevented detecting the impact of parental education. But families’ actions may matter more than demographic background.

Finding 2: Ethnically Diverse Youth, Including Latino Youth, Start Developing Career and College Goals in Childhood from Unique Challenges and Resources across Their Worlds

One hundred sixteen Mexican-descent sixth graders applying for the selective community college outreach program described their dreams of becoming doctors,
lawyers, nurses, and teachers, as well as secretaries, police officers, firefighters, and mechanics. The challenges children saw to achieving their dreams included not having enough money to pay for school, as well as the expectations of family members ("my parents wanted me to work in the [farm] field") and peers ("friends who will pressure me to take drugs"). The children saw their greatest resources in their families, including parents, siblings, and cousins; their school teachers, counselors, and coaches; their friends; and themselves.

**Finding 3: Math Pathways to College Diverge Early but Some Get Back on Track**

Math classes and grades are useful indicators of university eligibility and career opportunities. In the competitive program sample, slowly declining, rapidly declining, increasing, and “back on track” pathways (declining then increasing) were found. Youth who stayed on track or got back on track to university eligibility and enrollment found resources from families, teachers and counselors, tutors, or youth workers and reported challenges from siblings’ and parents’ modest levels of education.

**Finding 4: Challenges and Resources across Family, Peer, School, and Community Worlds Affect Students’ Program Participation, College Eligibility, Enrollment, and Progress**

Addressing these realities of students’ lives is crucial to program improvement and cost-effectiveness.

**"The Good Moral Path"**

In the inclusive classroom sample, parents considered moral guidance of their children as their primary role and sought to protect their children from negative peer influences. To these parents, a strong moral upbringing includes supporting academic achievement. Mexican immigrant parents held high aspirations that their children become doctors, lawyers, or teachers, yet many were unaware these goals required a college education.

**Schools: Gatekeepers and Educational Brokers**

Teachers and school counselors can act as institutional gatekeepers when they assess students against standardized benchmarks of achievement that determine eligibility for college-prep, vocational, or remedial classes. When elementary school teachers and counselors disproportionately place Latino students in special education classes and low reading and math ability groups, they send these students towards remedial tracks in middle and high school. But teachers and counselors—from any ethnic background—can also act as cultural brokers who help Latino children succeed in school and achieve their dreams.

**Community Organizations**

Students report that religious, sport, and outreach organizations and leaders influenced them to take jobs that would help their community. For these reasons, underrepresented youth and their families often benefit from emotional and instrumental support of community organizations that bridge school, college, and college-based occupations.

**Finding 5: Ingredients of Effective Bridging Programs**

Beginning in elementary school, teachers can discuss the links between career dreams and going to college, define grade point averages and scholarships, and explain practical college issues like dormitories that would be meaningful to school-aged children. Such education can excite young children about college and help them set realistic goals for getting there.

At the middle-school level, tutoring by college students, parent involvement activities, and academic advisement can help “at-risk” students stay on track to college. Continuing these programs into high school, as well as increasing minority enrollment in college preparatory classes, will also help amplify the number of college-bound students.

**Effective Programs Create Intergenerational Pathways**

In helping Latino youth find pathways to success, programs can forge links across generations that encompass senior staff, young adults, and the families they serve. These loosely knit networks can foster new leadership with cultural skills today’s children need to succeed in an increasingly diverse world.

**Young Adult Front-Line Staff Link Home and College**

The young adults whom Latino children encounter in programs play key roles that help them feel confident and safe in their neighborhoods, learn alternatives to violence, gain educational experiences, and acquire bicultural skills for success in school. Young adult staff also provide children a chance to talk and write about their dreams for careers, education, families, and their communities. Young adults value students’ home communities, and many share a common language and family

(Bridging, continued on p. 22)
Sisters in Science
Confronting Equity in Science and Mathematics Education
Penny L. Hammrich, Temple University

In the context of broadening the concept of teaching and learning for all students, Temple University’s College of Education and Center for Intergenerational Learning developed the Sisters in Science (SIS) program, which is based on an Experimental Project for Women and Girls in Science, Mathematics, and Engineering, a program sponsored by the National Science Foundation. SIS is one of over 40 science education programs for women and girls sponsored by NSF.

SIS is a two-year intervention designed to address the achievement inequities in mathematics and science for females. In year one, fourth-grade female students, their teachers, and families participate in the program. In year two, the fourth graders continue to participate with their fifth-grade teachers.

The SIS program provides fourth-grade girls with cooperative interdependent science exploration. The rationale is that when girls are allowed to work in a manner that is intrinsic to their collective learning style (i.e., with the manipulation of materials), learning will occur. Additionally, the program’s designers are interested in the reformation of girls’ perceptions of science education and science as a career option. At the core of the design is a program of research on fostering young females’ positive attitudes toward science by building connections among schools, parents, and the community.

The program also provides support for parents and professional development opportunities for inservice and preservice teachers. In this intergenerational program, women who are currently employed in or retired from careers in science, engineering, or mathematics and female university students who are pursuing careers in science and science education serve as role models for the girls and share life and work experiences. In addition to acting as individual and small group mentors, the role models also serve as resources for teachers on a continual basis and facilitate student and teacher understanding of how classroom experiences translate into employment experiences in urban environments.

Goals and Objectives
In year one, SIS seeks to:

a. Improve fourth-grade females’ attitudes toward, interest in, and achievement in science and mathematics;

b. Create a more positive learning environment for fourth-grade females and their families on academic and community/social levels; and

c. Increase the knowledge base and understanding of the influence parents and teachers have in promoting females’ interest in science.

Program Components
In order to attain these goals, the SIS program has three major components: an in-school constructivist and gender-sensitive science program; an after-school enrichment program; and a “city rivers exploration” summer camp.

The components of the program work in concert to provide fourth graders with a physical environment that is both psycho- logically, emotionally, and socially safe and accessible to all students. The activities clearly connect subject matter to real-world issues that are culturally relevant to students. Whereas in the past, “a curriculum” has often meant a set of answers to be transferred from teacher to student, the SIS curriculum is a set of questions to be posed to a class. In this way, the process of inquiry is co- constructed by the students and teachers and fosters a true community of learners. During each component of the program, students take responsibility for generating and gathering data, posing questions and problems, generating possible explanations, and proposing methods for evaluating the best explanations. Across all of the events, teacher, parents, volunteers, and Temple University students are providing a level of mentoring that extends the students’ learning base beyond the walls of the classroom.

In-school Program
The in-school program was conducted for two hours a week for each classroom at six participating schools. Classroom activities focused on the urban environment and used gender-sensitive approaches to teaching science/mathematics. As part of the program’s teacher-enhancement component, students in science education methods courses at Temple University facilitated the program sessions with the classroom teacher. The preservice teachers’ coursework explored gender-equity issues in the classroom, the constructivist approach to learning, and the
community service learning concepts presented in the program.

**After-school program**

The after-school program was conducted from 3:00-4:30 p.m. one day per week in each of the six schools. The program coordinator facilitated the after-school component with assistance from graduate and undergraduate elementary education students and intergenerational volunteers. The after-school component extended the classroom activities by focusing on the concepts of systems, constancy/change, model, and scale. The students also engaged in reflection activities designed to help them better understand their personal learning, challenge stereotypical notions about science, and develop critical thinking skills. These reflective activities included writing and interactive discussions.

**Summer program**

The summer program was conducted for two weeks during July to reinforce learning that occurred during the academic year. Fourth-grade girls spent two weeks exploring the city rivers. Activities included taking four field trips to environmentally focused sites in the area, mapping local waterways, creating model rivers, and designing improvement plans to prevent the city rivers from becoming polluted. At the end of the summer program, the participants shared their learning with their families and other students from neighborhood elementary schools.

**Program Evaluation**

Conducted at six schools located in inner-city Philadelphia, the program's first year involved 577 fourth-grade girls in six elementary schools, an intergenerational corps of 10 women volunteers, 182 under-graduate elementary education students, and nineteen inservice teachers.

Pre- and postprogram questionnaires regarding changes in participating students' science and mathematics skills, attitudes toward science and mathematics in school, and perceptions of scientists were administered to students at the start of the first and second inschool sessions and again during the final two sessions of the SIS program. It contained 30 items, each with a 5-point Likert response scale (strongly disagree, disagree, neutral, agree, and strongly agree).

To measure the increase in science and mathematics achievement, a science process skills and mathematics skills instrument was employed. These two instruments were validated in one or both of two ways. The skills instruments, developed from material contained in the current fourth-grade curriculum documents of the School District of Philadelphia, involved skills deemed to be critical, and thus were held to have content validity. In addition, reliability figures were calculated on a test-retest correlation model, and confirmed using the Kuder-Richardson (formula 22) procedure. Another measure of achievement was to review the Stanford Nine scores at the fourth-grade level.

**Summary of Findings**

Results showed that the girls’ attitudes toward science and the possibility of pursuing a career involving some aspect of science and/or mathematics were positive before program implementation. Anecdotal information regarding the girls revealed that, while they enjoyed science and perhaps someday wanted to become a doctor or have a career in science, they were not aware that it was necessary to take science classes in the future. Therefore, their attitudes did not match their understanding of how science courses fit into their eventual career path. However, their expressed positive attitude towards science is consistent with research that states girls at this age level tend to enjoy science. What remains to be documented is if the fourth-grade girls will continue to have positive interest in year two of the program.

Achievement was also measured using the grade four Stanford Nine science scores. All fourth graders tested at each of the six schools saw an increase in their scores over the years of SIS intervention. There was a range of growth scores for the six schools from 1.2 to 14.9 with the average gain score 7.9 overall. The rate of change was 50% higher for SIS than non-SIS fourth-grade schools in the district. While it is not possible to single out the SIS intervention as the only contributing factor to the increase in scores, principals at all schools were very generous in their praise for SIS intervention being a contributing factor for their schools’ score increases.

**Implications**

The SIS program seeks to increase elementary girls’ interest and achievement in science and mathematics, to create a more positive learning climate for minority school girls and their families on academic and community/social levels, and to increase the knowledge base and understanding of parents with respect to their influence in promoting girls’ interest and achievement in science and mathematics. Findings to date show that the girls started the (Sisters, continued on p. 22)
About one half (47%) of students in San Diego City Schools (SDCS) live below the poverty level, and one in every three children who enroll in SDCS is an English-language learner (ELL). Prior to Project EXCEL and Project First Step, the ELL students had to wait until being fluent in English before they were considered for testing in the district's all-English Gifted and Talented Education (GATE) program.

In 1986, the Developing Gifted Potential Project (DGP) was established at the 10 elementary school sites with the highest percentage of minority students. ELL students posed a special problem, however, since they could not be tested in English. Projects EXCEL and First Step focused on early intervention, set about to provide an appropriate educational experience to low-income culturally diverse gifted students, and facilitated their successful transition into the GATE program. Project EXCEL operated officially for five years, from 1989-1994, with a focus on Hispanic ELLs. Project First Step operated from 1992-1995, and its participants included African American, Asian, Filipino, Hispanic, Indochinese, and White students. These students were either English-only speakers or English-language learners.

The projects aimed to identify and develop the potential of low-income culturally diverse primary-age students by providing a developmentally enriched curriculum for grades K–5 in EXCEL and grades preK–2 in First Step. The intent was to have the students participate in an enriched curriculum prior to formal identification for entry into the program for the gifted.

**Evaluation Study of Project EXCEL**

Evaluation questions addressed over the five-year funding period of Project EXCEL were:

a. Did students in the project talent pool demonstrate greater achievement over time in Spanish, reading, and math, as compared to the control students?

b. Did the identification of gifted Hispanic ELLs increase at the project schools?

c. How did the project influence teachers' professional development over time? and

d. How did the project influence parents over time?

**Evaluation Design**

The study design utilized two experimental and one control group format (referred to hereafter as the “project talent pool students,” “project non-talent pool students,” and the “control students”) to report various measures of student progress (most specifically, scores on Aprenda, a standardized achievement test in Spanish, and GATE identification). Hispanic students who were English-language learners and enrolled in project classrooms comprise the experimental groups. The one control group was comprised of Hispanic English-language learners who attended project schools but were not enrolled in project classrooms.

**Achievement instruments.** To measure achievement in Spanish, reading, and math, project students who demonstrated limited English-language proficiency were administered Aprenda, a standardized achievement test in Spanish. The academic achievement of project students was assessed, in part, by comparing the Aprenda reading scores of project students with those of the control students. The students' progress in reading during the project's fourth year was measured by comparing their 1993 Aprenda scores with baseline data from 1992 when Aprenda replaced La Prueba (the former Spanish standardized achievement test formerly used by the district).

**Gifted identification procedure.** During each year of the project, GATE staff psychologists administered a nonverbal/spatial test instrument, the Raven Progressive Matrices, to students in project and in non-project classrooms who were recommended for testing to determine eligibility for the gifted program.

**Teacher and parent surveys.** Survey data from teachers were collected in order to assess their opinions about various aspects of the project, including the teacher training program, the implementation of newly acquired instructional strategies, and student performance. Similarly, data from a parent survey provided information regarding parents' attitudes and opinions about the project and its implementation, student performance, and parents'
participation in the project workshops.

**Evaluation Findings**

Longitudinal Aprenda results from spring 1992–spring 1993 indicate that project talent pool and project non-talent pool students at all grade levels—except grade three—increased proficiency in Spanish reading. Furthermore, both groups of second-grade project students showed the greatest gains, followed by students in grades five and four. A separate analysis compared 1993 Aprenda results for all project students who were in the project for one, two, and four years, and these data indicate that performance was highly correlated with number of years of participation in the project.

**Gifted Identification**

By the end of the first year, 34 project talent pool students were identified for participation in GATE. In comparison, none of the ELL comparison group students were identified as gifted. In the second year, 46 additional project students were identified as gifted, and 41 of the project talent pool were GATE identified during the third year. In the fourth year, an additional 49 project talent pool students were identified as gifted, compared to only four students in the control group during this same year.

**Project Teachers**

A survey of the 19 teachers was conducted in the first year of the project. These returns suggested that the typical level of use of instructional strategies by the participating teachers was “once a week,” and inservice training was modally rated by the teachers as “very useful.” An external consultant made three classroom observations per teacher. The consultant’s findings indicated that teachers continued to try out the strategies throughout the first year.

**Effect on Parents**

One of the significant impacts of this project was on parent involvement in school activities. Project First Step’s activities ranged from formal presentations to parents about the program to specific instruction in talent development to museum visits that provided parents a model for enriching experiences for their children.

Parents in First Step also reported greater participation in school conferences, helping their children with homework, taking their children to the library, buying books, encouraging achievement in school, and planning for college. The parents were even willing to make decisions about where they will live on the basis of the availability of the program and/or trained teachers.

**Effect on Project Staff**

Staff development is an integral part of model projects that attempt to institute new programs in school settings. The classroom practices of teachers, as assessed with teacher interviews and reviews of action plans, have become more child-centered, are more open-ended and inquiry-oriented, use more higher-order questions, and group problem solving, and incorporate more independence in learning. Teachers gave students more time to explore and engage in problem-solving activities, allowed extended periods of time on a single activity, and encouraged student self-directed learning.

One other very positive effect of Project First Step was the development of teacher leadership (Application, continued on p. 22)
Minority Academic Achievement in a Selective Public University
The Role of the Campus Environment
Melanie Domenech Rodriguez; Angela Stewart; Ana Mari Cauce; Phyllis Sanchez, University of Washington; and PALIS

Twenty years ago, the nation’s goal of having college enrollment rates for all youths of color equal that of Whites was within reach, but now it is rapidly fading. The incessant threats against affirmative action in college admissions call even further attention to the relatively small numbers of underrepresented minorities that attend selective colleges or complete college—any college—with a four-year degree. While there are some programs that have proven effective in helping poor and/or minority students get into college, they do not typically raise students’ academic profiles enough for them to be considered for selective colleges. States where affirmative action legislation has been introduced are investing millions of dollars to get minority students “into the pipeline,” but there is little evidence that, when selectivity of college is taken into account, this works. These dual factors—the stagnation in academic achievement among underrepresented minorities and the waning of affirmative action—have combined to call the attention of both researchers and policymakers to college achievement amongst these groups.

PALIS and the University of Washington

The study reported here was conducted in order to help define those factors in the college campus environment that help or hinder the academic achievement and retention of college students, with a special focus on underrepresented minorities. The study was conducted by the Post Affirmative Action Legislation Impact Study Group (PALIS), which was established in the fall of 1998, just after the State of Washington passed Initiative-200, effectively ending affirmative action in college admissions. PALIS is comprised of a small number of faculty members, professional staff, and graduate students at the University of Washington who were concerned about tracking the impact of Initiative-200 on the campus climate generally, but especially in terms of how changes in campus climate might affect the achievement of underrepresented minorities.

The University of Washington represents an ideal place in which to address today’s most urgent and compelling questions about what helps or hinders the academic achievement of underrepresented minorities. As a selective, public university, it is exactly the kind of higher educational institution that will be most affected by anti-affirmative action legislation.

The focus on campus climate in this study was chosen both because it has been found to be an important predictor of African American student achievement and retention in other studies, and because it is an aspect of college campuses that will change as fewer students of color attend selective colleges as a result of bans on affirmative action. In this sense, it is worth noting that a secondary purpose of this study was to collect baseline information on campus climate and other potential correlates of college student achievement before Initiative-200 took effect.

Data was collected from about 10,000 college students chosen to represent a cross section of the University of Washington student body. Underrepresented minorities were overrepresented in the sampling in an effort to track the correlates of achievement and retention.

SELECTIVITY
Like UCLA and Berkeley in California, the University of Washington is the state’s most selective university.

PUBLIC VS. PRIVATE
Only public universities are at the mercy of voter initiatives and court rulings where affirmative action is concerned. Private universities, including selective private universities like Harvard, Yale, and Stanford, may continue to practice affirmative action. However, unlike private universities, which largely offer opportunities to the economic or academic elite, selective public universities serve as a conduit for high-achieving, middle-, working-, and lower-class underrepresented minorities into the professional ranks. For example, about 50% of African American students at the University of Washington came from homes with earnings of less than $40,000 a year, compared to 26% of White students. While going to Harvard or Stanford may be out of reach, and will continue to be out of reach for many of these students, there is now good evidence that going to a selective institution increases the earning
prospects and college completion rates of underrepresented minorities.

**Campus Climate**

While many factors, ranging from past educational background to family income, have been found to affect educational achievement, the focus of this study was the campus social climate. The social climate of college campuses, especially with regard to discrimination and racism, is often cited as a factor that stands in the way of minority student achievement and retention. Indeed, even when minority students make it into college, they are much less likely to leave with a college degree. Admission test scores and college grades explain very little of the variance in either grades or retention. Thus, other factors, such as the experiences of such students on campus, are likely candidates for examination, and there is some evidence to suggest that this is a fruitful avenue for exploration.

Numerous studies have found that campus climate affects the educational experiences of African American students at predominantly White campuses. More specifically, institutional support and affiliation and perceived discrimination from administrators, faculty, and peers have been found to affect the achievement of African American students at these campuses. However, we know relatively little about the link between campus climate and achievement for other students of color. For example, most of the research on the effects of campus climate has focused exclusively on African American students. Indeed, much of this work has been conducted to expand the knowledge base on why African American students do so much better at historically Black colleges than at predominantly White colleges.

Research on the correlates of college achievement for Latino students is only just beginning, and it is still virtually absent when Native Americans are the focus.

Moreover, while there is a great deal of research trying to better understand the factors behind the high achievement levels of Asian American students, relatively few investigations have included a specific focus on Asian Pacific American students whose achievement levels are not particularly high. For example, Filipino Americans comprise one of the largest Asian Pacific American groups in several West Coast cities, but we know little about the correlates of their academic attainment.

**Findings**

Analysis of Variance (ANOVA) was used to examine the group differences between ethnic groups on their perceptions of racial climate. Differences between groups were found to be significant. African Americans perceived a more negative racial climate on campus than all other groups. Other ethnic minority groups—Latinos, Native Americans, Asian Americans, and Filipinos—perceived a significantly less negative racial climate than the ratings of African American students. White students had the least negative climate perceptions.

In order to further examine whether ethnic group differences in perceptions of campus climate varied by more specific aspects of the campus atmosphere, an item-by-item analysis was conducted. Results suggest that, with regards to most negative aspects of campus climate, whether perceiving racial conflict and tension, being exposed to overt racial discrimination, or believing that there are different expectations by ethnicity/race, students of color perceived more negativity or discrimination than White students. Moreover, African American students generally perceived a more negative climate than did Latinos, Native Americans, Asian Americans, or Filipino Americans.

Do the differences we just observed in ethnic group perceptions of campus climate affect their academic achievement or retention? Institutional commitment was examined because previous studies have found it to be highly related to student retention. That is, students who report higher levels of institutional commitment are more likely to graduate, and more likely to graduate from the same university they are attending.

Results indicate that campus climate is significantly related to academic achievement, as represented by GPA, for African American students, accounting for about 11% of the variance. However, campus climate was not related to GPA for any other ethnic group. In contrast, campus climate was related to institutional commitment amongst all ethnic groups, accounting for between 13% and 20% of the variance in this measure.

**Conclusions and Implications**

The widening gap between the college achievement of White students and that of underrepresented students of color (Minority, continued on p. 23)
history with the children. Many have learned to be bicultural and can pass on their understanding of how to retain community traditions while entering and succeeding in schools, colleges, or local government. In the selective program sample, it was found that, like Latino parents, young adult staff defined success in life both in moral terms and in terms of school success. In guiding youth, staff drew on positive and negative aspects of their past experiences. They understood the importance of grades, helped children with homework, and offered a broad view of schools, college, and other mainstream institutions that helped children link their family, school, and community with their personal dreams and fears for the future.

Conclusion

Our common goal is to enhance access to higher education for children of diverse ethnic, racial, economic communities. The capacity of the United States to be a nation “where diversity works” rests on customizing outreach programs for communities while attending to common goals and collaborating among diverse stakeholders—students, families, schools, community organizations, legislators, the business sector, and media. These goals will be achieved by building clear conceptual models of change, testing them with evidence, and strengthening communication among stakeholders.

Students’ progress through the academic pipeline from kindergarten to college and careers is often portrayed like a ball rolling straight through a sturdy pipe. On the contrary, unlike the ball, which remains unchanged as it moves through the pipe, students change as they progress through elementary, junior high, and high school towards college and adulthood. Unlike the ball’s direct route, students’ developmental pathways look more like those of explorers navigating through unmapped territories, here the worlds of families, peers, schools, and communities; as students pursue their school, career, and other personal goals, they encounter barriers that may divert or stop their progress. Finally, unlike sturdy pipe, the programs that offer bridges across the gaps or barriers in students’ pathways are themselves changing in response to funding resources, pressures, and losses, as well as shifting political sands.

(Sisters, continued from p. 17) program with positive attitudes and perceptions of science and about science career possibilities. There was a significant increase in their science and mathematics skill levels after participation in the program. It could be stated that the girls’ achievement scores on the skill test increased significantly because the girls’ attitudes and perceptions were high before program implementation. If their attitudes and perceptions were low to begin with, perhaps their skills would not have increased significantly.

In the successive years of the program, the researchers will attempt to look at longitudinal effects on the girls’ attitudes, perceptions, and achievement levels. Since the girls held positive attitudes towards science before the program implementation, it may warrant a closer look at the cultural and familial factors that may have contributed to the girls’ attitudes. Researchers will also attempt to document more substantive qualitative data to shed more information on the achievement gains achieved in the first year.

While year one of the program has been promising, many more questions still remain and new ones have developed.

(Application, continued from p. 19) skills. For example, teachers were given increasing responsibilities for conducting parent workshops that helped increase teachers’ self-confidence.

Student Outcomes—Testing

In Project First Step, the outcomes for the first year of the project were assessed using Aprenda. The scores of students in the talent pool increased an average of 17 percentile points in comprehension (from the 67th to the 84th percentile), and an average of 14 percentile points in vocabulary (from the 71st to the 85th percentile). In the project classrooms where teachers had been using the strategies from the training with all children, students increased an average of 18 percentile points in comprehension and an average of 31 percentile points in vocabulary. In contrast, comparison groups (those not in project classroom) gained only an average of 7 percentile points in comprehension and an average of 27 points in vocabulary. It should be noted that, since the talent pool students started with higher percentile rankings, changes for them in percentile points are more difficult to attain statistically than for those closer to the mean (non-talent pool and comparison group students).

Conclusions and Recommendations

Projects EXCEL and First Step were part of a major change in the San Diego City Schools Gifted and Talented program.
demanded by the community. Identification procedures were modified throughout the district. Overall, the number of GATE-identified Hispanic ELLs at the six project schools increased by a factor of 9 over the project’s five-year history. This significant increase was due in no small part to a change from traditional testing instruments, including such tests as the Henman-Nelson, DCAT, WISC-R, and Stanford-Binet (LM), to tests like the Ravens Progressive Matrices that measure fluid intelligence without relying on English proficiency alone. These changes also reflect the influence of the projects on the district’s GATE program. Today there is an effective program in place in the ten project schools to educate young gifted children. Projects EXCEL and First Step brought attention to the promising practices of programming for identification and academic competence.

The long-term effects of these projects have extended to teachers and parents. Primary grade and bilingual teachers of the gifted not only have access to the GATE program, they now play a dual leadership role as trainers in the long-standing GATE teacher certification program. Also, the parents of low-income culturally and linguistically diverse students have acquired the knowledge base to demand appropriate programs for their children.

School districts eager to serve the culturally and linguistically diverse gifted learners must make a long-term commitment. This kind of ongoing commitment will require a collaborative effort among categorical programs to ensure that the educational principles of each program—state preschool, bilingual, regular education, and gifted—are honored. Finally, school boards must hold gifted programs accountable for the inclusion and participation of minority students.

(Minority, continued from p. 21) combined with a number of increased threats to affirmative action make it imperative that we focus our energies on improving the achievement and retention of those students of color who do make it to college. This imperative is particularly strong for selective public institutions, which have traditionally served as a conduit into the professions and other positions of influence for working- and middle-class students. The present study was conducted to shed light on the role that campus climate might play in helping or hindering achievement and retention, especially among underrepresented students of color. This is one of the first studies to look at this question using an ethnically diverse sample of students attending a selective, public institution, the type of institution most impacted by anti-affirmative action legislation.

Our results suggest that campus climate plays a significant role in the achievement of African American students. For these students, campus climate predicted 10% of the variance in their college grade-point averages. While this a modest level of prediction, it is a stronger prediction than we get from SAT scores (e.g., 9.5% of the variance), or high school GPA (5% of the variance). Furthermore, campus climate significantly predicted the commitment of all students to the institution, accounting for up to 20% of the variance. Institutional commitment has been found, in other studies, to be a strong predictor of retention and graduation.

It is important to note that most students, including students of color, reported low levels of negative racial climate and high levels of a positive educational climate at the University of Washington. But the ethnic group differences in these scales suggest that there is still room for improvement in these areas for students of color. Improvement of these aspects of the campus climate for students of color, especially African American students, represents a promising avenue for supporting and improving their academic achievement and retention in American higher education.

The CEIC REVIEW

Lydia Hoag
Editor

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Can Unlike Students Learn Together?
Research and Recommendations on Grade Retention, Tracking, and Grouping
Arthur Reynolds, University of Wisconsin-Madison; Margaret C. Wang, Distinguished Professor, Founder and Director, Temple University Center for Research in Human Development and Education; and Herb Walberg, University of Illinois at Chicago

With school districts' increased dedication to raising academic standards and abolishing social promotion, tremendous pressure has been placed on teachers and students to raise standardized test scores. While this may appear admirable from afar, its practical and real-life implications are not often as glowing. In fact, the push toward higher standards often leads to tracking, ability grouping, and grade retention—all of which have inherent problems.

Tracking, grouping, and retention are widely practiced in the United States and in many other countries, and they are founded on both theory and research. Tracking, most often practiced in secondary schools, groups students into courses or sequences of courses of various levels of difficulty suited to their levels of achievement. Ability grouping, most often practiced in primary schools, assigns students within classrooms to homogeneous groups of like ability. Grade retention requires students who have not attained achievement standards to repeat one or more grades. All three practices are based on the belief that children of like abilities or levels of achievement can learn together more efficiently than can heterogeneous students.

Other theories and research suggest that these practices may be inefficient and unwise. Some argue, for example, that students retained in grade may suffer declining self-concept which may deter their progress so that they are less likely to catch up with grade level standards. This is due, in part, to the fact that, by itself, grade retention does not address the causes of academic failure. Others counter that, to the contrary, such students would eventually fall further behind and drop out whether or not they were retained. To "socially promote" ill-prepared students would depreciate the value of the high school diplomas of those who meet rigorous standards. Similarly, some argue that it is more efficient to teach subjects such as mathematics when students share similar abilities. For example, it would seem difficult for consumer mathematics and calculus to be learned efficiently in one group.

Still, it may be argued that faster-learning students may benefit from helping slower-learning students. Schools might also provide more classroom time and intensified instructional services to at-risk students for remediation or to prevent them from falling behind in the first place.

The articles included in this issue of the CEIC Review will summarize some of the most recent theories and research emerging from the analysis of tracking, ability grouping, and grade retention. The synopses are of papers that were commissioned for a National Invitational Conference on Can Unlike Students Learn Together? Grade Retention, Tracking, and Grouping, sponsored by the Laboratory for Student Success and the National Center on Education in the Inner Cities.
Cities at Temple University Center for Research in Human Development and Education, held on October 18–19, 2000 in Alexandria, Virginia. The papers discuss research findings in light of implications for policy, programs, and practices.

The conference organizers invited education leaders and scholars known for their differing views. Also represented were teachers, principals, superintendents, and state and federal officials. In addition to addressing the key issues framed by the commissioned papers, conference participants devoted much time to small work groups. The work groups discussed what is known from research on grade retention, tracking, and grouping, the impact these policies have on student achievement, and alternatives that can be implemented at the schoolwide and classroom level. In addition, the work groups offered next-step recommendations for helping unlike students learn together.

The recommendations fell into two categories. The conferees did not reach complete consensus on all issues and interpretations of findings, but agreed that the major issues and views had been expressed in the papers and the work groups.

Retention

While there is no magical cure for the ails of retention, alternatives must be examined before it's too late—that is, before a student is about to be retained. By studying the experiences of successful students and making findings available to practitioners, researchers can help teachers focus on using teaching strategies that have been proven successful. The following recommendations could also be helpful.

- Encourage preschool enrollment in order to reduce retention rates.
- Require full-day kindergarten.
- Provide remediation that is proportional to children’s academic needs without regard to whether they are retained.
- Develop a strong advisor network that will allow faculty to get to know the students.
- Maximize peer relationships through cooperative learning and tutoring.
- Shift to interest-based learning where high school students are exposed to career-based or project-based education instead of the lecture and test-taking practices now used.
- Extend the academic calendar either to year-round schooling or longer school days.
- Focus on retaining motivated and qualified teachers.
- Hold teachers to expectations of higher levels of curriculum and instruction.

Researchers’ and practitioners’ voices aren’t the only ones that should be heard. Parents must also become more involved in helping their children avoid retention. Some ways to boost parent involvement are:

- Develop “tip sheets” that have helpful hints on how parents can get more involved in their child’s education.
- Develop parent education and outreach programs.
- Don’t wait until students are at risk of failing; begin communication with parents at an early stage.

Grouping and Tracking

Why does neither retention, grouping, nor tracking enhance the academic progress of most children? Unfortunately, in many schools, grouping and tracking have led to stagnant and generalized courses designed to meet minimum curriculum standards. In order for true progress to be made, the intent, purpose, and design of grouped classes must be examined and a high level of integrity maintained. The following recommendations deserve further consideration.

- Consider multi-age classrooms as a way to enrich children’s learning and development.
- Prioritize collaborative efforts among schools, employers, and higher education in supporting academic excellence.
- Have goal conferences with students. Integrate students’ self-assessments into decisions on their grouping.
- Provide stronger teacher and principal preparation coursework that will address diversity in learning rates and styles.
- Keep grouping flexible.
- Grouping should include high expectations, rigorous curriculum, and equitable access to high-quality instruction.
- Promote cultural awareness that will help teachers meet the diverse needs of their students.
- Promote public awareness. Educate the community on the best ways to group students.
- Hold administrators, teachers, parents, and students accountable. All must work together to achieve the optimum level of student success.
Dropout in Relation to Grade Retention
An Accounting from the Beginning School Study

Karl L. Alexander, Johns Hopkins University; Doris R. Entwisle, Johns Hopkins University; Susan L. Dauber, The Spencer Foundation; and Nader Kabbani, U.S. Department of Agriculture

This paper examines the relationship between retention in the primary grades and high school dropout from the perspective of the Beginning School Study (BSS), a panel of Baltimore school children who began first grade in the fall of 1982 in 20 city public schools. It extends earlier work on effects of grade retention, which investigated consequences for children's academic performance and socio-emotional development through the middle-school years.

When children are not keeping up, is it better to hold them back or move them ahead? That is the question addressed in earlier work. For answers, the experience of first-, second-, and third-grade repeaters, and, as a group, children held back in grades four through seven were examined. Their academic progress and attitudes were monitored from the fall of first grade, before anyone had been held back, to the end of seventh grade (in the case of repeaters) or eighth grade (in the case of children never retained).

Retention rates in the BSS panel are quite high: almost 17% of the cohort was held back at the end of first grade, and over 5 years (ordinarily the end of elementary school) the figure stood at 40% retained at least once, with many double retentions in the mix. The study monitored these children's academic and socio-emotional standing as their school careers were being launched in 1982, and BSS fieldwork has continued an intensive schedule in following years.

The analyses reported in the authors' 1994 work spanned the first 8 years of the group's schooling; the present paper extends that time frame to the end of high school and to a rather different outcome: high school dropout. The earlier study generated considerable interest, and some controversy. Retention's effects were assessed in a host of ways and, though the results were complex, it was concluded that repeaters in most instances were doing better in elementary school after retention than they had been doing before, and that these advances generally held up for a number of years (although in diminishing measure). The experience certainly did not set them back academically (as reflected in achievement test scores and report card marks). Nor was there evidence of great stigma attaching to grade retention. Instead, in most of the comparisons, repeating a grade was associated with improved attitudes toward self and school. These findings contradicted the results of most similar contemporary studies. However, despite the benefits of retention on school achievement and self-esteem, retained students are more likely to drop out of school. In fact, repeating a grade in the BSS increases dropout risk, and later the risk of noncompletion, from three- to eight-fold.

The standards for judging an educational intervention often are left implicit, as though the appropriate criteria were self-evident. In fact, the issue is far from straightforward—is improvement sufficient, for instance, even if that improvement does not bring poor performing students up to desired levels? One principle seems fundamental: an intervention intended to help should "do no harm," and there can be no doubt that elevated dropout risk of the magnitude seen in these results qualifies as "harm." This challenges earlier conclusions on the merits of grade retention, and an accounting of the dropout results in light of those earlier findings is offered.

Age-Grading and the Dropout Dynamic

Children held back in the upper grades and multiple repeaters are especially prone to leave school without degrees, but single repeaters are also at elevated risk. The 1994 study concluded that double repeaters and first-grade repeaters were helped least by repeating a grade, so for them to have elevated levels of dropping out and non-completion is not surprising. But single repeaters who were held back in second grade also drop out in numbers greater than expected, and in at least one comparison so do third-grade repeaters. If repeating a grade in elementary school boosts children's school performance and shores up their self-regard, as exhibited in the BSS, why would it later increase dropout risk?

The fact that this risk is especially pronounced among repeaters held back in grades 4–7, as we find, is significant. When
these children were held back, they were not as academically far behind their promoted classmates as were children held back earlier. If retention were simply a proxy for relevant academic difficulties, then repeating first or second grade, and not grades 4–7, would pose the greatest problems later, but that is not the case.

If not academics, then what? The social side of schooling seems a likely candidate. Grade retention takes children off the prescribed timetable of grade progressions in a rigidly age–graded system. This makes them conspicuous and complicates their social integration. Being “off-time” in school can cause problems at any age, but conditions peculiar to adolescence, the onset of puberty, and the impending transition to middle school very likely heightens them.

The early adolescent years (typically age 12–14) are a time of heightened self-consciousness, when “fitting in” is paramount, but “fitting in” is not easy for late repeaters. The separation from their friends is still fresh when the time comes to change levels of school, and the disruption of peer groups they suffer is two-fold—their age-peers move on to middle school while they are left behind with younger classmates whom they may view as lower on the age/status hierarchy. Since repeating is less common in the upper elementary years than in first and second grade, there are relatively few age-peers available in late repeaters’ classes to help ease their adjustment.

Repeaters’ academic standing began to slide when they moved from elementary to middle school. Reflecting transition shock, their marks and test scores began to trail off at that point, and although they usually remained ahead of where they originated, there was little room for them to absorb additional setbacks.

Thus, repeaters’ situation in middle school was precarious, and even greater challenges awaited them at the transition into ninth grade. Any school transition is hard, but the transition to high school is especially difficult. Relative to middle schools, high schools are larger, more bureaucratic, impersonal, and academically demanding. Under such circumstances, even high-achieving, well-integrated students often experience difficulty. And what of repeaters? Their academic and social standing are low, which leaves them especially vulnerable. Consider this one “symptom”: in their ninth year of school, future dropouts in the BSS averaged 46.8 absences compared with an average of 13.5 absences among nondropouts. With 47 recorded absences, these students were missing about one day out of every four, which was interpreted as a signal that the dropout process already had begun.

**Some Thoughts on Policy and Practice**

The new evidence presented here showing that grade retention elevates dropout risk certainly reinforces the conviction that retaining children ought to be a last resort. But as before, it is still believed that repeating a year may be appropriate when extra time is needed to consolidate skills and master material missed the first time through.

Still, for most children under most circumstances, traditional retention (i.e., grade repetition without supplemental services) ought to be rare. But candidates for retention typically are far behind academically and often exhibit serious behavior problems. Absent an effective intervention, many of these children are on a path that will lead to dropping out whether they are held back or not. Ignoring the problem (i.e., simply moving them ahead to the next grade level) and hoping for the best certainly is a formula for failure. Children who are far behind and struggling don’t suddenly spurt ahead, even though a spurt is what is required for them to catch up.

The first priority should be to keep children from reaching the point where they are retention candidates in the first place. Many poor and minority children start school already behind, but it is known that high-quality preschool programs can enhance school readiness. More of those programs are needed, and more disadvantaged children need to have access to them. Likewise, there is a need for high-quality, full-day kindergarten and supplemental services to help preserve the gains realized as a result of those early interventions.

Children learn at different rates. Yet all are expected to be “ready” for first grade at age six; they are expected to move in lockstep annually thereafter from one grade to the next; and within the year, they are expected to master the curriculum in roughly the same time frame: nine months, fall to spring. The current calendar-driven model of schooling sets a severe pace; children who aren’t caught up when the teacher (Dropout, continued on p. 12)
Grade Retention and School Dropout
Another Look at the Evidence

Judy Temple, Northern Illinois University; Arthur Reynolds, University of Wisconsin-Madison; and Suh-Ruu Ou, University of Wisconsin-Madison

Despite the current emphasis on grade retention as an educational policy designed to help low-achieving students, the majority of empirical studies suggest that grade retention does not benefit most of the students it is designed to help. Years after being retained, students have significantly lower achievement than similar students who were not retained. Many retained students never catch up to their promoted same-age peers with similarly low test scores. Whatever performance advantage retained students have over their younger, same-grade peers is short-lived, as they typically fall behind these students after one or two years.

Even more striking is the strong positive correlation between grade retention and dropping out of high school. Several longitudinal studies indicate that, relative to low-achieving students who are promoted to the next grade, retained students are significantly more likely to drop out of school. After accounting for socioeconomic status and prior performance, dropout rates for retained students often exceed comparable promoted students by 50% or more.

The Present Study

Using data in the Chicago Longitudinal Study (CLS), this paper addresses the following questions:

1. After children’s growth rates in achievement prior to retention (and other factors) are taken into account, is grade retention associated with significantly lower levels of school achievement and higher rates of school dropout?

2. Among children who are retained during the early school years, is participation in a comprehensive instructional intervention associated with improved school achievement and a lower likelihood of dropping out of school? Does this participation lead to better performance than promotion with remediation?

The Chicago Longitudinal Study

The Chicago Longitudinal Study is an ongoing investigation of 1,539 low-income, minority (93% African American) children born in 1980 who attended kindergarten programs in 25 Chicago public schools in 1985-1986. Most children attended the Title I Child-Parent Center (CPC) Program, a comprehensive preschool and school-age preventive intervention for children from high-poverty neighborhoods. Children in the CLS completed the elementary grades (eighth or ninth grade) in 1995 before the new retention policy in Chicago was enacted in 1996.

The study sample for this paper includes 1,267 students who enrolled in the Chicago public schools for at least six years (from kindergarten to ninth grade) and whose school dropout status was known by age 20. Children who have left the study or cannot be located are similar to those that remain in the sample on measures of kindergarten achievement and socioeconomic status.

Since 1986, the CLS has collected data from multiple sources. Information on grade retention and high school completion as of January 2000 were obtained from school records. School records provided descriptive information on children including gender, race, and name of the school in which the student is enrolled at the end of each school year. Standardized test scores in reading and math were obtained annually from the beginning of kindergarten (1985) through ninth grade (1995). Teacher and parent surveys were used to obtain information on classroom adjustment, parent involvement, and family background.

Two measures of educational attainment were used in analyzing the effects of retention. Data were collected from school records, surveys, and interviews from youth and, if necessary, their parents. “School dropout” measured whether youth left their formal education or diploma-granting high school prior to graduation for any reason other than death or school transfer. Students who graduated from high school or were active in high school were defined as nondropouts. “High school completion” measured whether youth completed their secondary education with an official diploma or were awarded a GED. All others, including those who remained in high school as of January 2000, were coded as noncompleters. School records from kindergarten to eighth grade measured grade retention.
Characteristics of Retained and Promoted Students

Of the 1,267 youth for whom school dropout status was known, 360 (or 28.4%) were retained at least once from kindergarten to eighth grade. Importantly, the retained students had higher dropout rates and lower completion rates than promoted students. The two groups of students are also different in other ways. Students who participated in the Child-Parent Center program were less likely to be retained, and students who were retained had lower achievement levels both before retention occurred and years later (as of age 14).

Relatively few kindergartners repeated a grade (n = 12), while the largest group of students was retained in first grade (n = 134), followed by third grade (n = 71), second grade (n = 76), and fourth grade (n = 48). Fewer numbers of students were retained in fifth to eighth grades.

Predictors of Grade Retention

Before investigating the association between grade retention and high school completion or dropout, a comprehensive set of predictors of retention was examined, including child and family background, early adjustment indicators (kindergarten and first-grade academic performance and achievement), and intervening school experiences (e.g., school mobility and special education placement). In order of magnitude, the following factors increased the odds of being retained: low family income (2.22; children eligible for a subsidized lunch had twice the risk of retention than those not eligible); sex of child (2.04; boys had twice the risk of retention), and number of school moves from ages 10 to 14 (1.28).

The following factors decreased the odds of being retained: overage at kindergarten entry (0.17), number of years of average or better parent involvement in school (0.76), reading and math achievement in first grade (0.97), grade in reading in first grade (0.67), and math achievement in kindergarten (0.99). Findings that the number of school moves increases the risk of retention and parent involvement in school decreases the risk are relatively new, and especially significant. Variables such as race/ethnicity, parent education, years of CPC intervention, residence in a high-poverty school attendance area, and special education placement were not associated with retention.

Discussion

Findings indicate that grade retention—no matter when it occurs—is associated with significantly lower levels of school achievement and higher rates of school dropout. The students who were retained fell further behind their similarly low-achieving former classmates as early as kindergarten and first grade. By the end of their eighth-grade year, retained students were 1 to 2 years behind these former classmates. Retained students had a rate of school dropout that was 25% higher than that of promoted students (controlling for preretention achievement growth and other factors).

Does grade retention harm students, or are the large estimated adverse effects of grade retention due at least in part to the difficulty in controlling for observed and unobserved differences between retained and promoted students that may be correlated with later educational attainment? The main strength of this study was the inclusion of a variety of preretention control variables such as achievement at different times that take account of such differences. Results indicated that, although there were substantial differences between the unadjusted and adjusted models, both indicated a significant link between grade retention and school dropout rates as well as lower rates of school completion.

Retention Plus Remediation

The finding that students who were retained in the first three grades did not benefit academically from 1 to 3 years of participation in the Child-Parent Center program suggests that retention plus remediation strategies may not prevent the typical achievement declines that have been shown for simple grade retention without remediation. Indeed, the CPC follow-on intervention is more comprehensive and longer-lasting than most remedial services that retained students receive under many current retention practices in schools. Moreover, comparable students who were promoted (instead of retained) and then participated in intervention for 1 to 3 years had substantial performance advantages over retained students who participated in the intervention.

The Missing Link: Prevention of Learning Difficulties

Grade retention is a response to academic problems. Little (Retention, continued on p. 21)
"Flunking," "retained," "being held back," and "grade retention" refer to the practice of requiring a student who has been in a given grade for a full school year to remain at the same grade level for a subsequent year. There is an abundance of research and scholarly analysis examining the efficacy of grade retention. Research published between 1900 and 1989 produced mixed results regarding the efficacy of early grade retention on ameliorating children's socio-emotional and achievement needs. Concerns regarding the quality of many studies of grade retention have been presented in several reviews and reiterated in recent publications. These methodological concerns include: (a) data collected 30-40 years ago may be outdated; (b) characteristics of comparison groups are rarely delineated; (c) comparing pre- and post-test scores of retained students rather than employing a comparison group may pose problems; (d) most studies do not consider socio-emotional outcomes; (e) remedial services during the repeated year are rarely documented, and (f) most studies do not examine the long-term outcomes associated with early grade retention. These methodological considerations limit unequivocal conclusions from any single study; however, the confluence of results clearly warrants further consideration. This study provides a meta-analysis of empirical studies published between 1990–1999 examining the efficacy of grade retention.

Methodology Used in Present Study
This project began with a systematic search of the literature to identify studies of grade retention published between 1990 and 1999. Descriptors used to search reference databases included grade retention, grade repetition, nonpromotion, grade failure, flunked, failed, retained, and other related synonyms. Computerized reference databases searched included the Psychological Information Abstracts (PsychINFO) and the Education Research Information Center (ERIC). Results of these searches yielded over 400 references between 1990–1999. In addition, other studies were identified through a review of references in each publication obtained, resulting in nearly 450 references for consideration.

The following selection criteria were used to reduce the bibliography to a core set of research appropriate for this review. To be included in this review: (a) the research must have been presented in a professional publication (e.g., journal article or book); (b) the results must have addressed the efficacy of grade retention (i.e., academic achievement, socio-emotional and behavioral adjustment, socio-economic status (SES), and gender); (c) the age/grade at which retention and the measurement of outcome variables occurred; (c) the designation of the location of the sample population; (d) a review of analyses comparing retained students to a matched group (i.e., academic achievement and socio-emotional and behavioral adjustment); and (e) the overall conclusion of the author(s) regarding the efficacy of grade retention.

Summary of Each Study
Each study was examined to identify the variables used for matching and the grade level at which the outcomes were studied. Most studies included only students retained during kindergarten, 1st, 2nd, and 3rd grades, however, a few included students retained kindergarten through eighth grade. Population samples for these studies are distributed across the nation.
Statistical meta-analysis is based on the concept of effect size (ES). Computation of the effect size is a statistical procedure that allows researchers to systematically pool the results across studies, to examine the benefit or harm of an educational intervention. Meta-analysis procedures result in a measure of the difference between the two groups expressed in quantitative units that are comparable across studies. Each effect size is standardized with respect to the comparison group standard deviation; thus, it is possible to combine the results from different measures at different grade levels. A negative effect size suggests that an intervention (retention) had a negative effect relative to the comparison group of promoted students.

Consistent with past meta-analyses of grade retention, the effect size was defined as the difference between the mean of the retained group, $X_r$, and the mean of the comparison (promoted) group, $X_p$, divided by the standard deviation of the comparison group, $S_p$ ($ES = (X_r - X_p)/S_p$). Group means adjusted for past differences were used when available and calculated when possible. In studies where the necessary group means and standard deviations were not included in the publication, the authors were contacted to provide the necessary data. For a few analyses, the effect sizes were estimated by working backwards from the reported significance tests.

Many of the results examined in the meta-analysis fell into two categories: (1) academic achievement and (2) socio-emotional/behavioral adjustment. Academic achievement analyses included language, arts, reading, mathematics, and grade point average. Socio-emotional/behavioral adjustment analyses included social (e.g., peer competence), emotional (e.g., internalizing problems), and behavioral (e.g., externalizing problems). Analyses also included self-concept, general academic adjustment, and attendance.

Because some studies yielded one effect size and others yielded as many as 25, additional analyses were performed to discern whether any single study had produced substantial distortions in the effect sizes. For each study, all individual effect sizes were summed and averaged. These means were used to recalculate the effect sizes for each of the outcomes. This procedure gives each study equal weight in determining the overall result. Effect sizes weighted by study were not found to differ significantly from reported effect sizes weighted by the number of effects; thus, they do not appear in the results.

Brief Overview of Findings

Most studies published during the past decade utilized a combination of IQ, academic achievement, socio-emotional adjustment, SES, and gender to match groups or control analyses between the comparison group and the retained students. Of the 19 studies included, 15 examined outcomes through grade seven; only five included outcomes during eighth grade and beyond. Overall, results of the meta-analyses yielded average effect sizes indicating that the retained groups were .30 standard deviation units below the matched comparison groups. The average effect size for socio-emotional/behavioral adjustment (-.19) and academic achievement (-.40) favored the matched comparison group over the retained group of students. The results indicate that the greatest differences between groups were evident on measures of attendance, reading, mathematics, language, and emotional adjustment (-.65, -.56, -.49, -.40, and -.25, respectively).

In regards to the authors' conclusions pertaining to the efficacy of grade retention as an intervention, of the 19 studies comparing retained students with a matched control group, the authors of 15 studies (79%) concluded that grade retention is ineffective as an intervention for academic achievement and socio-emotional adjustment.

In Sum

This meta-analysis includes studies published between 1990 and 1999 provides additional information regarding the effectiveness of grade retention. The results of research published during the past are very similar to findings reported throughout the remainder of the century. In particular, these studies fail to demonstrate that grade retention provides greater benefits to students with academic or adjustment difficulties than does promotion to the next grade. Thus, it seems practical to move beyond the question "to retain or..."
Can Unlike Children Learn Together?
A Question that Goes to the Heart of Democratic Public Schooling
Jeannie Oakes, UCLA and Martin Lipton, UCLA

The question “Can unlike children learn together?” goes to the very heart of democratic public schooling. This paper argues that for most of the 20th century, schools have constructed multiple categories of “unlikeness” or unlike ability, and that these categories were created or soon appropriated to mean “children who cannot learn together.” Important evidence collected throughout the century, but most especially in the past twenty years, reveals that school categories favoring children’s likeness, rather than their “unlikeness” promise to improve educational fairness and the country’s educational quality.

Ability grouping has been bolstered by the argument that equal opportunity in a democracy requires schools to provide each student access to the kind of knowledge and skills that best suit his or her abilities and likely adult lives. To make the argument more palatable in a culture that, rhetorically at least, values classless and colorblind policies, educators and policymakers have reified categorical differences among people. So, in contemporary schools, there are “gifted” students, “average” students, “Title I” students, “learning disabled” students, and so on, in order to justify the different access and opportunities students receive. Assessment and evaluation technology permits schools to categorize, compare, rank, and assign value to students’ abilities and achievements in relationship to one another (as well as to students in other schools, states, and countries—past and present).

Deep Seated Myths and Prejudices and the Internal Organization of Schools

Homogeneous grouping began in earnest early in the 20th century. It matched the prevailing IQ conception of intelligence, behavioral theories of learning, a transmission and training model of teaching, and the factory model of school organization. It fit with schools’ role in maintaining a social and economic order in which those with power and privilege routinely pass on their advantages to their children. Homogeneous grouping embodied a belief that permeated schooling during the 20th century—that we understand most about students when we look at their differences, and the more differences that can be identified, the better our understanding and teaching.

Homogeneous grouping provided policymakers and educators a way to “solve” an array of problems attributed to the growing diversity of students. New immigrants needed to learn English and American ways. Factories needed trained workers. Urban youth needed supervision. And schools needed to continue their traditional role of providing high-status knowledge to prepare some students for the professions. Policymakers defined equal educational opportunity as giving all students the chance to prepare for largely predetermined and certainly different adult lives. Concurrently, two phenomena shaped a uniquely American definition of democratic schooling: (1) universal schooling would give all students some access to knowledge; (2) IQ could justify differentiated access to knowledge as a hallmark of democratic fairness.

IQ and Testing

While most current grouping practices don’t rely on IQ—at least exclusively—the early dependence upon it set a pattern that continues today. Standardized achievement tests, strikingly similar to IQ tests, play an important role in dividing students into ability groups and qualifying students for compensatory education programs; standardized language proficiency tests determine which class “level” is appropriate for limited English students. In conjunction with other measures, IQ remains central in the identification of gifted and cognitively disabled students.

The Press for Universal Education

Over the course of the 20th century, compulsory education laws and the necessity of a high-school diploma drew more and more students to school—even those previously considered uneducable. States and local school systems developed an array of special programs for students who, in earlier times,
simply would not have been in school. By the 1960s, the federal government had turned to special categorical programs as its principal way to guarantee education for all American students. The Elementary and Secondary Education Act (ESEA) provided categorical funding for “educationally deprived” students. Lau et. al. v. Nichols et. al. was brought on behalf of Chinese students in San Francisco and led to legislation requiring that all schools provide special assistance to their students whose native language is not English. The Individuals with Disabilities Education Act (IDEA) provided funds to classify students with physical and neurological problems and provide these students with special education programs when it was believed that they could not be accommodated in regular programs. Advocates for “gifted” students increasingly used the “bell curve” logic to argue that the gifted and the cognitively disabled are like a pair of bookends, and that those at the high end of the curve also required special support because they are as different from “normal” students as the disabled.

Educators responded in culturally predictable ways. They identified students who were “different,” diagnosed their differences as scientifically as possible, and assigned them to a category. They then grouped students for instruction with others in the same category and tailored curriculum and teaching to what each group “needs” and what the culture expects. So, today, educators routinely assign “normal” students to “regular” classes at different levels (e.g., high, average, slow). They place the others in “special” programs for learning disabled, behavioral problems, gifted, limited English, poverty-related academic deficiencies, and more. Within homogenous groups, teachers assume students can move lock step through lessons and that all class members will profit from the same instruction on the same content at the same pace. Lurking just beneath the surface of these highly rationalized practices, however, are the illusion of homogeneity, the social construction of classifications, the prevailing biases of race and social class, and self-fulfilling prophesies of opportunities and outcomes.

Socially and Politically Constructed Categories

The considerable student differences within supposedly homogenous classes are obvious and well documented. And yet, for most people, the characteristics and categories by which students are sorted remain more salient than the “exceptions” that impugn those categories. Many educational constructs, including those used to classify students, began as narrowly defined, highly specialized, technical terms or measures. However, as they make their way from research to professional journals and teacher preparation programs to popular media to the everyday talk of policymakers and the public, they loose their narrow definitions and specialized uses. What may have begun as specific technical concepts or as informal notions such as “at risk,” “gifted,” “high ability,” “college prep,” “attention deficit,” “hyperactive,” “handicapped,” etc. are quickly reified and become a deeply embedded feature of students’ identities in their own and others’ minds.

Race and Social Class Bias

African American, Latino, and low-income students are consistently overrepresented in low-ability, remedial, and special education classes and programs. They are less likely to participate in “gifted” programs. This is not surprising, given that grouping practices grew from the once-accepted practice of preparing students of different racial, ethnic and social-class backgrounds for their separate (and unequal) places in society.

In part, placement patterns reflect differences in minority and White students’ learning opportunities that affect their preparation and achievements. But they also reflect the fact that US schools use White, largely middle-class standards of culture and language styles to screen for academic ability and talent. Teachers and school psychologists sometimes mistake the language and dialect differences of Hispanic and Black students for poor language skills, conceptual misunderstandings, or even poor attitudes. An additional hazard for students of color is that schools often confuse cultural differences with cognitive disabilities, particularly retardation.

Researchers have noted for the past 25 years that students with identical IQs but different race and social class have been
Despite the visible popularity of policies to end social promotion, little is known about the prevalence of grade retention in American schools or about the effects of race–ethnicity and other social and economic background characteristics on retention. This paper reports analyses of race–ethnic differences in age–grade retardation, or enrollment below the modal grade level for a child’s age using data from the October Current Population Surveys (CPS) from 1972 to 1998. Age–grade retardation is employed here as a convenient measure of grade retention (and no broader meaning is either intended or implied); at older ages, school dropout is treated as a component of age–grade retardation. The analysis focuses on dependent children at selected ages from 6 to 17. These ages span the period between normative entry to grade school and the later years of high school. Typical developmental patterns of retention and of differentials in retention can be observed by looking at several ages. By combining data from 27 annual surveys, trends in retention practices across three decades are identified.

From 1972 to 1998, the October CPS data files include between 57,500 and 63,500 cases at each age. The data are drawn from a specially prepared file that attaches characteristics of households and of householders to demographic characteristics and enrollment data for school-age youth and ensures uniformity in the measures from year to year. For each youth in the sample, sex, race–ethnicity, enrollment status, grade level, region of residence, and metropolitan location can be determined. We have linked several social and economic characteristics of the household and householders to each child or youth’s record: family income, number of children in the household, single-parent household, education of household head and of spouse of head, head or spouse without an occupation, occupational status of head and spouse of head, and housing tenure.

**Retention in the Primary and Secondary Grades**

National rates of age–grade retardation were examined by age, sex, and race–ethnicity for three-year age groups at ages 6 to 17 from 1971 to 1998. Age–grade retardation increased in every age group (6 to 8, 9 to 11, 12 to 14, and 15 to 17) from cohorts of the early 1970s through those of the middle to late 1980s. Age–grade retardation increased at ages 15 to 17 after the mid-1970s despite a slow decline in its early school dropout component throughout the period. That is, grade retention increased while dropout decreased. Peak rates occurred earlier at older than at younger ages, suggesting that policy changes occurred in specific calendar years, rather than consistently throughout the life of successive birth cohorts. Among cohorts entering school after 1970, the percentage enrolled below the modal grade level was never less than 10% at ages 6 to 8, and it exceeded 20% for cohorts of the late 1980s. Increased ages at entry to the first grade are probably due, in part, to changes in legal ages at school entry as well as to retention in kindergarten and the primary grades. The trendlines suggest that age–grade retardation has declined slightly for cohorts entering school after the mid-1980s, but rates have not approached the much lower levels of the early 1970s. Overall, a large share of each birth cohort now experiences grade retention during elementary school. By the end of high school, over 35% of students aged 15 to 17 in the last cohort for which complete data exist are below the modal grade for their age.

**Social Differences in Retention**

While there are similarities in the age pattern of grade retardation among major population groups—boys and girls and majority and minority groups—there are also substantial differences in rates of grade retardation among them, many of which develop well after school entry. The gender differential gradually increases with age from 5 percentage points at ages 6 to 8 to 10 percentage points at ages 15 to 17. That is, boys are initially more likely than girls to be placed below the modal grade for their age, and they fall further behind girls as they pass through childhood and adolescence.

The differentiation of age–grade relationships by race and ethnicity is even more striking than that by gender. Here, unlike the case of gender differentiation, the rates of age–grade retardation are very similar among Whites, Blacks, and Hispanics at ages 6 to 8. However, by ages 9 to 11, the percentages enrolled below modal grade levels are typically 5 to 10 percentage points higher among Blacks or
Hispanics than among Whites. The differentials continue to grow with age and, at ages 15 to 17, rates of grade retardation range from 40 to 50% among Blacks and Hispanics, while they have drifted up more gradually from 25% to 35% among Whites.

Race-ethnicity, Geography, and Social Background

These patterns in the gross distributions for different social groups are quite stark. In order to analyze the causes and correlates of age-grade retardation in more detail, and to separate gross differences from net effects, a logistic regression analyses has been carried out on enrollment below modal grade level vs. enrollment at or above modal grade level for ages 6, 9, 12, 15, and 17. At these ages, the modal October grade levels are 1, 4, 7, 10, and 12. In these models, the net influence of geography and social background on trends and differentials in school retention can be explored.

At age 6, many of the effects of social and economic background characteristics are small. Mainly, this reflects the lack of social differentiation at school entry. One strong and expected effect is that of gender: The odds of boys’ enrollment below the first grade, other things being equal, are 40% higher than those of girls. At each successive age, social and geographic differentials become more pronounced: gross race-ethnic differentials become larger, the effects of socioeconomic background variables increase, central cities become notably more likely to have overage students than suburbs, and regional differences between the South and all other regions become sharper (with students in the South significantly more likely to be below modal grade for age).

There is a geographic pattern to the ordering of cities: southern cities have the highest rates of age-grade retardation, while northern and western cities have the lowest rates. Also, there is increasing differentiation between central cities and their suburbs with increases in age. By age 17, rates of age-grade retardation are roughly 20% higher in central cities than in suburbs, controlling for social background characteristics.

Perhaps most striking in these results are the net effects of social background vis a vis race-ethnic differentials. Once the full set of social background and geographic characteristics have been controlled, the major differences among race-ethnic groups disappear. The only exception pertains to 17 year olds. Although most of the very large race-ethnic differential at age 17 is explained by the other variables in the model, there remain modestly larger odds of age-grade retardation among minorities.

Conclusion

With or without these details, one main finding is strong and clear: during the period from 1972 to 1998, social background, along with geographic location, accounted for almost all of the large race-ethnic differentials in age-grade retardation. Although the odds of falling behind are about twice as great in minority groups as among Whites, the race-ethnic differentials are small after social background and geographic location are controlled. At present, there is little evidence of direct race-ethnic discrimination in progress through the elementary and secondary grades. However, given the large and ubiquitous race-ethnic differentials in achievement test scores, the recent movement toward high stakes testing for promotion could magnify race-ethnic differentials in retention.

(Dropout, continued from p. 4)
Race Differences in Ability Group Effects on Achievement
Moving beyond the Myths
Maureen Hallinan, University of Notre Dame

Most middle and secondary schools group students by ability. Ability grouping is believed to be an efficient and effective way to instruct a large population of students. The method’s efficiency stems from the fact that it provides a fairly straightforward basis on which to assign students to classes. It is effective because it permits teachers to gear instruction to the ability level of their students and to utilize pedagogical techniques appropriate to the students’ level of understanding.

Despite its pedagogical advantages, ability grouping has many critics. A major criticism is based on the belief that students learn less in low-ability groups than in higher ability groups. Critics claim that ability grouping channels unequal learning opportunities to students. Empirical research provides support for this belief by showing that students assigned to higher ability groups make greater gains in achievement than those assigned to lower ability groups, controlling for student ability.

A further criticism of ability grouping is based on a fear that the practice discriminates against minority students. Empirical data show that minority students are disproportionately assigned to low-ability groups that have fewer learning opportunities. Thus, the practice of ability grouping is believed to be discriminatory.

Given the somewhat widespread concern that racial or ethnic biases influence the assignment of students to ability groups, several empirical studies have examined this assignment process. These studies identify several factors that influence ability group placement, including standardized test scores, grades, previous course history, teacher and counselor recommendations, parental choice, and student choice. In addition, organizational factors—such as the availability of teachers, the size of classrooms, the master schedule, and school resources—affect placement decisions. Virtually no evidence has been found that race or ethnicity affects ability group placement. Indeed, some studies imply the opposite: that at the elementary- and middle-school levels, principals and teachers tend to expand the size of higher ability groups to ensure racial and ethnic diversity in these groups.

Despite the failure of critics to find evidence of racial or ethnic bias in the assignment of students to ability groups, the belief that ability grouping disadvantages minority students continues to influence the debate about the equity of this practice. In an effort to shed new light on this debate, this paper takes a different approach. The research examines whether race affects the amount of change in a student’s achievement when the student is moved to a higher or lower ability group.

Research Approaches
Previous research examining race differences in ability group effects on learning investigated two aspects of the practice: the assignment of students to ability groups, and achievement differences in student achievement across ability groups. The approach to the study of race and ability grouping taken in this paper differs from these previous strategies. Based on the author’s previous finding that virtually all students make achievement gains when moved to a higher ability group, the analysis examines whether Black and White students make equivalent gains in a higher group. The analysis will determine whether Black and White students respond in a similar manner to a more demanding academic environment. If the results reveal race differences in achievement gains in higher ability groups, then the study might suggest that ability grouping disadvantages minority students in a previously unrecognized way.

Methodology and Sample
The empirical analysis uses survey data obtained from students in five secondary schools in an urban school district in the Midwest. Two cohorts of students were followed from ninth through eleventh grade. Background information on these students, as well as their previous test scores, grades, and ability group assignments from eighth grade, were obtained. Since Asian, Hispanic, Native American, and other non-White, non-Black
students comprised less than five percent of the sample, these non-Black students are classified as White for the analysis. Twenty-seven percent of the sample was Black and 23% qualified for free lunch, a measure of low socioeconomic status. Special education students, those for whom English was a second language, and students who were not taking English or Mathematics in ninth grade were excluded from the sample.

**Variables**

The dependent variable for the analysis is a student's percentile scores on a standardized test in English and Mathematics. The test was administered annually, on a statewide basis, to third-, sixth-, eighth-, ninth-, and eleventh-grade students in the school district. A national sample was employed as the reference group. The students in the sample took the test in the spring of eighth and ninth grades.

Independent variables for these analyses include measures of student background: gender, race, age (minus an appropriate integer for that year), number of days absent first semester, and free lunch status. The exogenous variables included eighth-grade ability group, eighth-grade grades, and eighth-grade standardized test scores in English and Mathematics.

The middle schools in the district had three ability group levels in eighth-grade English: Basic, Regular, and Honors; and four levels in eighth-grade Mathematics: Basic, Regular, Honors, and Advanced. In ninth grade, an Advanced English group and a Very Basic Mathematics group were added. Ability group membership for eighth and ninth grades were obtained from school records. Student percentile test scores in eighth-grade in English and Mathematics also were obtained from school records, as were student grades in these subjects. Grades were converted into the usual four-point scale with A = 4.0, B = 3.0, C = 2.0, D = 1.0, and F = 0.0.

**Results**

The results show a strong race difference in the change in English and Mathematics achievement when a student is moved to a higher or lower ability group. White students show greater gains in achievement when moved to a higher group and greater losses in achievement when moved to a lower group than Blacks. These results suggest that Black students do not benefit as much as White students when they are placed in a more challenging learning environment.

Three possible causes for the race differences in achievement gains and losses have been suggested: learning differences, differences in teacher expectations and peer influences, and ability differences. With respect to the first explanation, the analyses show no significant race differences in how Black and White students learn when assigned to the same ability group. The second explanation cannot be tested directly. However, teacher expectations and peer influences influence student motivation, which is likely correlated with eighth-grade test scores and grades which are controlled for in the analysis. Since the results show no race difference in the effects of previous achievement factors, the data suggest that teacher and peer influences do not account for race differences in ninth-grade predicted achievement gains.

The third explanation is that it is not race per se that accounts for the differential effect of movement to a higher or lower ability group, but rather ability. The analysis reveals that the pattern of gains and losses accruing from assignment to higher or lower ability groups is similar whether the students are divided by race or by prior ability and achievement. However, the patterns are more pronounced and consistent for the ability comparison. These results indicate that prior ability, not race, explains the differences in achievement gains and losses.

**Conclusions**

The criticism that Blacks and other minorities have been discriminated against in the assignment of students to ability groups has been a major factor driving the effort to detrack schools. Educators and community members have noted that minority students are disproportionately assigned to the lower ability groups compared to their White peers. If the distribution of Black achievement is indistinguishable from that of Whites, then the fairness of assigning relatively more Blacks than Whites to lower ability groups is called into question. 

(Race, continued on p. 22)
Classroom Organization and Instructional Quality
An Examination of Tracking and De-tracking
Adam Gamoran, University of Wisconsin-Madison

When teachers divide students into separate classes or groups on the basis of prior performance, they do so because they think students are best served by receiving instruction targeted to their particular levels of accomplishment up to that point. Consider the case of first-grade reading: Some children enter school without knowing the alphabet, others are familiar with the letter sounds, and still others are already strong readers. To accommodate these differences, teachers typically divide students into reading groups. Another example would be ninth-grade mathematics: Some students enter high school with eighth-grade algebra under their belts, others have yet to master arithmetic, and many others are in between. In response, high schools commonly divide students for ninth-grade mathematics into general math, pre-algebra, algebra, and geometry classes. To most teachers, these divisions make sense. They make it possible to think about instruction as organized in a clear sequence, to find each student’s place in the sequence using criteria they consider objective, and to provide instruction intended to move each student along the instructional hierarchy. In short, ability grouping seems like a neutral device for matching instruction to students’ needs.

Despite this sensible logic, there are three reasons why ability grouping cannot be viewed as neutral. First, it leads to divisions that go beyond academic differences. Because of inequalities outside of schools, which are perpetuated as students move up the ladder of grade levels, when teachers divide students on the basis of academic performance, they tend to separate students who differ from one another by race, ethnicity, and social class. Students from disadvantaged backgrounds tend to score lower on tests for a host of reasons, many of which are unrelated to schooling, and therefore the division of students on the basis of academic performance results in social as well as academic segregation. Second, when teachers create classes that are relatively homogeneous in student performance, they eliminate much of the diversity that might foster rich and productive conversations in classrooms. Although grouping students by performance level may make it possible to sharpen the delivery of instruction to meet students’ levels of skills and knowledge, that sharpening may be double-edged, as it eliminates the very differences that some teachers build upon in their instruction. Third, although teachers may intend to provide instruction of equal quality at all levels, in practice that rarely occurs. Instead, compared to their peers in higher-ranked classes, students in lower-ranked classes and groups encounter instruction of lower quality. Consequently, instead of helping low-achieving students catch up, ability grouping tends to result in widening achievement gaps over time.

Although the problems of grouping and tracking can clearly be identified, eliminating these practices is not easy, because detracking is also associated with problems of instructional quality, and successful de-tracking is rare. Consequently, after we examine the challenges to instruction associated with dividing students by performance level, it will be equally important to consider the instructional challenges associated with mixed-ability grouping.

Tracking and Instruction
Quantitative studies, ranging from elementary to high school, support the contention that instructional differences across groups and tracks contribute to achievement differences. At the high school level, students in college-preparatory programs enroll in more academic courses, and particularly more advanced courses in mathematics and science, and this contributes to their achievement advantages in those subjects. In elementary school, students in higher-ranked reading groups cover more new words and read more stories over the course of a school year, making the reading gap between high- and low-ranked groups wider at the end of the year than it was at the beginning of the year. Two students who start the school year at similar reading levels, but who are assigned to different reading groups, end up...
with different reading achievement at the end of the year depending on whether they were assigned to a higher or a lower group. Thus, although providing different instruction to different groups seems like it would help low-achieving students catch up, usually that is not what happens; instead they fall further behind.

Can Tracking Help Instead of Harm Low Achievers?

Not all uses of grouping and tracking are damaging to the prospects of low-achieving students. Catholic high schools, for example, produce less inequality between tracks than do public high schools. This occurs because Catholic schools place more academic demands on students who are not enrolled in the college-preparatory program than do public high schools. Case studies also suggest that a school climate of effort and caring common in Catholic schools enhances teacher and student motivation in both low- and high-track classes. Of course, Catholic schools have the advantage of being able to select their students, and low-achieving students who attend Catholic schools may be more responsive to academic demands than those who attend public schools.

Public school programs in New York and California that aimed to improve the quality of high school mathematics instruction for low-achieving, low-income youth also achieved some success. Students were still sorted into separate classes, but teachers provided instruction that bridged the gap between elementary and college-preparatory mathematics. More rigorous course content contributed to achievement benefits over the general math classes that were being replaced.

Although it is not what usually happens, it may be possible to group students in a way that promotes equity instead of inequity. Maintaining high standards seems a key to success; providing a rigorous curriculum, communicating expectations, teaching with passion, and avoiding a system in which less-experienced teachers are relegated to lower-level classes all played important roles in these rare success stories.

Detracking and Instruction

Even the most successful uses of grouping still encounter the problem of separating students of different social backgrounds. Social and economic inequalities outside schools contribute to substantial differences in test scores inside school. The result when educators divide students by achievement level is classes that differ by social background. For this reason, many educators would prefer to avoid the practice altogether rather than trying to use grouping more effectively.

However, detracking offers its own set of challenges. While tracking often results in poor instruction for low achievers, it also tends to sustain high-quality instruction for high achievers. Thus, efforts to detrack seem to confront the classic tension between excellence and equity. Can this tension be surmounted? Ultimately, it may come down to a question of values: Is it worth sacrificing some opportunities for the highest achievers for the sake of more equitable opportunities for all students?

Research can still contribute much to resolving this dilemma by showing what the tradeoffs are and what it might take to provide equitable opportunities without sacrificing high standards of excellence. Can the same high-quality instruction that is now typical in high-track classes be provided in mixed-ability classes?

Resistance to detracking among teachers seems strongest in subjects such as mathematics and foreign language where they perceive the curriculum as rigidly sequential, so that students must master one topic before they proceed to the next. It is difficult to know whether these perceptions are inherent in the subject matter, or if they reflect ingrained beliefs that might be successfully challenged if teachers could be shown that high-quality instruction in mixed-ability classes is possible.

Conclusions

Both practitioners and researchers can respond to research findings about classroom organization and instructional quality. The first reaction from practitioners may be to strengthen their inclinations to reduce grouping and tracking, because these practices are associated with unequal classroom instruction and unequal achievement. The research is clear that some forms of tracking should be eliminated because better alternatives are available. For example, the
Tracking, De-tracking, and Skill Grouping
Conclusions from Experimental, Ethnographic, and Regression Studies
James Kulik, University of Michigan

Reformers used to encourage school systems to develop comprehensive schools with an academic track for college-bound students, a vocational track for students headed for jobs, and a general track for students with less definite goals. But views are different today. Many reformers view tracking as one of education’s major problems, and they advocate the complete de-tracking of American schools. This paper presents a summary of research findings relevant to the de-tracking debate. Three types of studies have been reviewed: experimental studies, ethnographic studies, and regression analyses.

Experimental Studies
Experimental studies are currently the only dependable guide to the effects of grouping on children. They show that effects depend on both the type of student and the type of grouping that is involved. Different types of programs have different effects on different students. For example, higher aptitude students benefit academically from ability grouping. The academic benefits are positive but usually small when the grouping is done as a part of a broader program for students of all abilities. For example, in XYZ classes where students are divided by ability but taught with the same materials and according to the same curriculum, the test scores of higher ability students are raised by about 0.1 standard deviations. Within-class and cross-grade programs, which entail curricular adjustment, boost test scores of higher aptitude students by about 0.2 to 0.3 standard deviations.

Benefits on higher aptitude students are usually largest in special accelerated and enriched classes. The largest gains are usually associated with acceleration. Classes in which talented children cover four grades in three years, for example, usually boost achievement levels a good deal. Test scores of children accelerated in this fashion are about one year higher on a grade-equivalent scale than they would be if the children were not accelerated. Enriched classes, in which students have a varied educational experience, boost student achievement by more moderate amounts. The average gain on a grade-equivalent scale is 4 months in a typical program.

Grouping programs usually have smaller effects on middle and lower aptitude learners. XYZ classes, for example, have virtually no effect on the achievement of such students. Test scores of middle and lower aptitude students learning in XYZ classes are indistinguishable from those of similar students in mixed-ability classes. Cross-grade and within-class programs, however, usually raise test scores of middle and lower aptitude pupils by between 0.2 and 0.3 standard deviations. The clear adjustment of curriculum to pupil ability in within-class and cross-grade programs may be the key to their effectiveness.

Experimental studies fail to support the charge that students in the lower tracks suffer irreparable damage to their self-esteem. Students in the high groups drop a little in self-esteem; the self-esteem of students in low groups actually increases in ability-grouped classes. The finding is inconsistent with the labeling or stigma theory, which predicts a drop in self-esteem for the lower-status groups. It is consistent, however, with predictions of the social comparison theory, which states that people make self-evaluations by comparing themselves to those around them. The theory predicts that slow learners will feel more adequate in a slow-learning group and that fast learners will feel less special in a fast-learning group.

Ethnographic Studies
Although some ethnographic studies include quantitative data, most provide only qualitative observations. Ethnographers try to uncover the subjective meaning of events and patterns of life in schools through rational analysis of their observations.

Ethnographers have reached four main conclusions:

- Instruction is conceptually simplified and proceeds more slowly in lower tracks.
- More experienced teachers seem to be disproportionately assigned to the higher tracks.
Teachers' views of high-track students are more positive than their views of low-track students. Most of a student's friends are found in the same track. While ethnographers have reported that the curriculum is debased, teachers are inexperienced, and instruction is poor in lower track classes, careful scrutiny of the ethnographic evidence provides little support for such interpretations. When ethnographers have quantified their observations, for example, differences between instruction in upper and lower track classes actually appear to be small.

What is more important, the interpretation of the differences is unclear. The reported differences between upper and lower track classes may simply indicate that teachers try to adjust the pace of their instruction to the preparation of their students. Thus, the true yield from these ethnographic studies is rather slim. They show that the amounts of time on-task are different in upper- and lower-track classrooms, and they also suggest that there are differences in teachers, in teacher reactions to students, and in instructional emphasis. But ethnographic studies do not show what lies behind these differences. Differences in instruction for fast and slower students may be appropriate adjustments, or they may reflect real differences in instructional quality in different curricular tracks.

Regression Studies
Regression analyses show that the achievement gap between students in upper and lower tracks is due mostly to student self-selection. A second, less important factor that may contribute to the achievement gap is the different number of advanced courses in core subjects taken by students in collegiate and noncollegiate tracks. A third factor may be the difference in the way that the same courses are taught for collegiate and noncollegiate students. Regression analyses do not provide conclusive evidence on the second and third factors, however. The controls for self-selection in these analyses are not adequate, and so conclusions from regression analyses are tentative at best.

The main goal for most regression analysts of tracking data has been to determine whether academic ability or socioeconomic status plays a more important role in track placement. Although estimates of the importance of ability, socioeconomic status, and other influences on track placement differ somewhat from one study to the next, the pattern of results is fairly consistent. Four points emerge from the studies reviewed:

- Personal preference seems to be the most important determinant of curricular track.
- After personal preference, the strongest determinant of curriculum placement is academic ability.
- Social class plays a less significant role in high school curriculum placement, except insofar as it influences test scores. All studies indicate that the direct effect of ability is larger than is the direct effect of socioeconomic class, but the importance of socioeconomic status varies across studies.
- Race and gender play a smaller role in track placement. Blacks have a higher probability of ending up in the college preparatory track than do Whites of equivalent aptitude and socioeconomic status.

Reviewers have criticized the studies that produced these findings on methodological grounds. Most of the studies, for example, compared achievement of students in academic and nonacademic programs. The observed differences in aptitude of students in these programs are so great that attempts to equate the group statistically may be futile.

Although it is true that regression methods can produce misleading results when academic and nonacademic students are being compared, they are more reliable when vocational and general students are being compared because vocational and general students are similar in important characteristics that influence school outcomes. Comparisons of these groups have seldom received much attention in research on curricular tracking, however.

De-tracking
The effects of de-tracking would vary according to the type of grouping program that was eliminated. If typical XYZ classes were eliminated from all schools, the achievement level of
Understanding Research on the Consequences of Retention
An Overview of the Research
Lorrie Shepard, University of Colorado at Boulder

Current no-social-promotion policies reflect an urgent desire to improve the quality of education in America. Policymakers are dismayed by examples of students' low performance such as fast-food restaurant servers who can't make change, the poor showing of U.S. seniors in the Third International Math and Science Survey, and complaints from business leaders about the inadequate skills of entry-level workers—and they attribute this poor performance to low standards and the willingness of educators to promote students to the next grade whether or not they have mastered requisite skills.

Like the majority of educators and lay citizens, policymakers are convinced that by ending social promotion they can improve student learning. But what policymakers may not realize is that the lowest scoring students were most likely retained, some more than once.

Retention rates and social promotion rates are only loosely coupled. Therefore, it is possible for both rates to be quite high in a given year out of the total number of students in that grade. Annual rates vary from an average of 1.4 students retained in grade in Indiana to 9.8% of students retained each year in Mississippi. By following the same group of students from the time they enter school, it is possible to see how small annual retention rates add up to a large cumulative rate.

Given the serious consequences of grade retention for dropping out of school, discussed next, many school systems have policies against double retentions or at least require that a second retention not occur within the same level of schooling—i.e., within the primary, intermediate, or middle school grades. Following this same reasoning, it is the cumulative rate that is most relevant for policy analysis, because it reflects the proportion of students affected by retention at sometime during their school career. The annual data, however, help to illustrate why there can be a high percentage of social promotion decisions at the same time that such a high proportion of students are retained. In principle, promotion-retention decisions are made 13 times in a student's career (14 times) if they repeat a grade. Thus, it is very likely that a retained student will also be a social promotion statistic in years following retention unless retention ensures a permanent improvement in achievement.

Grade Retention and School Dropout
A large number of studies have documented the link between retention and dropping out. Given that a third variable, poor academic performance, predicts both retention and dropping out, the most rigorous
studies use statistical adjustments to control for prior achievement and attendance as well as background variables such as socioeconomic status, sex, and ethnicity.

Across all studies, in both the retention and dropout literatures, retention has been shown to substantially increase the rate of school leaving beyond what would be expected based on poor achievement alone. Direct effects of grade retention on increased dropout rates have also been documented in evaluation studies of earlier no-social-promotion interventions such as the New York City Gates Program and Chicago’s crackdown of the 1980s.

The conclusion that repeating a grade increases a student’s risk of dropping out is not controversial among researchers. However, the implications of these findings for educational policy depend on the viewpoint of policymakers and the underlying purpose of no-social-promotion policies. If grade retention is intended as an educational intervention aimed primarily at raising the achievement of retained students, then dropping out must be considered a serious side effect of such medicine. However, some policymakers appear to believe that an increased dropout rate is a necessary (or at least a tolerable) corollary of raising standards.

Effects of Grade Retention on Achievement

Major reviews of research on retention have consistently concluded that there is no reliable body of evidence showing that grade retention is more beneficial than grade promotion for students with serious academic or adjustment difficulties. For example, in 47 studies that measured academic outcomes, repeating a grade had a negative effect on the achievement of retained students compared to promoted students matched initially for equally low achievement.

Recent, large-scale studies have seemingly found some positive effects from retention, although there is still no consistent evidence that retention improves achievement.

- In Baltimore, dramatic gains in the repeat year itself disappeared when students went on to new material.
- In Chicago, the no social promotion policy improved achievement for at-risk students who were threatened by retention but were not retained. For retained students, the finding was the same as in previous studies. There was no improvement either in achievement or an acceleration of school leaving.
- In Texas, much touted gains for retained students may or may not be valid once researchers make adjustments for differences in starting points for the retained and control groups and for generally rising TAAS scores across years.
- In a national sample, the view of retention effects as positive or negative depended on the comparison used, with retained students appearing to have closed the achievement gap when compared to students in their new grade (not in comparison to students in their original cohort).

Models for Evaluating and Weighing Evidence on Retention

Grade retention is intended to cure (or at least to improve) poor achievement. If retention were evaluated by the Federal Drug Administration, would it be judged to be a safe and effective treatment? The FDA approval process asks two questions:

- Do the results of well-controlled studies provide substantial evidence of effectiveness?
- Do the results show the product is safe—which means that the benefits of the drug appear to outweigh its risks?

By FDA standards, grade retention would not be approved for use. At best, controlled studies show that retention does not harm achievement. But, retention has not been proven effective in improving achievement in subsequent grades. And, it has serious negative side effects, namely students’ poorer attitudes toward school and substantially increased risk for dropping out of school.

Given their track record, other treatments for poor achievement have a greater chance of success. After-school programs, tutoring, summer school, and one-on-one reading instruction are more effective in raising achievement than repeating a grade, as shown by large positive results in their research literatures.
Dropout, continued from p. 12) down these barriers requires somehow relaxing the overly tight link between “age” and “grade.” Doing so would likely improve the graduation prospects of children who are a year or two behind, and it certainly would give educators more options for addressing their needs. Under this accounting, the problem isn’t so much grade retention as it is the structure within which grade retention is embedded, a structure that makes deviants of otherwise perfectly normal children.

Retention, continued from p. 6) attempt is made to address the underlying conditions such as low motivation, poverty, poor nutrition, or inadequate instruction that cause underachievement. It would be surprising if retention or limited retention-plus policies substantially altered children’s achievement. Underachieving children require educational experiences that affect their rates of early learning.

Contrast this reactive approach to intervention with prevention. Instead of waiting until the early signs of academic failure are evident, proactive education support would seek to promote the skills and attitudes needed for mastery of the grade-level curriculum before learning difficulties are observed. Prevention programs do this by addressing the underlying causes that give rise to underachievement such as building language and literacy skills before formal reading instruction, instilling pride in achievement, enhancing motivation to learn, and promoting family-school partnerships to help reinforce learning at home. Not surprisingly, programs that succeed in these areas are associated with higher levels of school achievement and lower rates of grade retention.

The importance of prevention is easily lost in an era of school accountability and high-stakes testing, which highlight children’s learning difficulties. Given the consistent evidence that retention is not an effective strategy for improving children’s school success and growing evidence that retention plus remediation strategies do little to enhance children’s achievement, the alternatives to retention appear to deserve much higher funding priority than they currently receive. Among these alternatives are universal access to high-quality preschool education, full-day kindergarten programs, reduced class sizes in the early grades, family-school partnerships that provide family resource centers in schools, and school restructuring programs. Investments in preschool education have shown among the most positive long-term effects on the school success of children at risk. One of the most consistent findings in the 35 years of research is that participation in preschool programs for low-income, at-risk children reduces the need for grade retention in the elementary grades. Only increased funding for such programs can help break the cycle of school failure that many children face.

Analysis, continued from p. 8) not to retain?” as we enter the new millennium. Available evidence suggests that neither social promotion nor grade retention will solve our nation’s educational ills nor facilitate the academic success of children.

Instead, attention must be directed toward empirically supported prevention and remedial programs. It is suggested that educational professionals, scholars, and politicians commit to implementing and investigating specific prevention and remedial intervention strategies designed to facilitate educational achievement and socio-emotional adjustment of children at risk of school failure. It is time to move beyond the rhetoric regarding retention and social promotion; we should seriously consider the results of empirical research examining the efficacy of grade retention. Educational research provides valuable insight regarding the effectiveness of various prevention and academic intervention programs, these studies warrant further consideration as we attempt to enhance the educational outcomes of at-risk children. Considering the results of research from the past decade, grade retention fails to demonstrate effectiveness and would not be considered to be an empirically supported intervention.

Unlike, continued from p. 10) classified and treated very differently in special education placements. By the late 1970s, the misidentification problem triggered both federal and state court decisions requiring that potentially disabled students receive due process. In a far-reaching decision, the California courts ruled in Larry P. v. Wilson Riles (1979) that schools could no longer use intelligence (Unlike, continued on p. 22)
tests to identify minority students as mentally retarded. However, substantial problems remain and new ones emerge, including recent evidence that African American boys are disproportionately identified as having Attention Deficit Hyperactivity Disorder (ADHD).

Self-fulfilling Prophecies

Placement in a low class becomes a self-fulfilling prophecy of low expectations, fewer opportunities, and poor academic performance. Poor performance begins the cycle anew, giving additional justification to schools to reduce expectations and opportunities. Extensive research makes clear that, in every aspect of what makes for a quality education, kids in lower tracks typically get less than those in higher tracks and gifted programs.

Finally, grouping practices help shape students' identities, status, and expectations for themselves. Both students and adults mistake labels such as "gifted," "honor student," "average," "remedial," "learning disabled," and "mild mental retardation" for certification of overall ability or worth. Everyone without the "gifted" label has the de facto label of "not gifted." The resource classroom is a low-status place and students who go there are low-status students. The result of all this is that most students have needlessly low self-concepts and schools have low expectations. Few students or teachers can defy those identities and expectations.

We Have Much to Do

Since the late 1980s, policymakers, educators, and advocacy groups have responded to problems with homogenous grouping by recommending that schools dismantle it. These recommendations reflect growing support for heterogeneous grouping as necessary to ensure that all students have access to high-quality curriculum, teachers, and learning experiences. For example, early analyses of the disappointing performance of U.S. students on the Third International Mathematics and Science Study (TIMSS) support mounting concerns that the low scores stem, in part, from the tracking of most American students in less academically demanding math and science classes. Increasingly, educators and policymakers are developing an awareness that schools cannot teach or achieve social justice unless they eliminate grouping practices. A number of school desegregation cases have cited the practice as a source of continuing racial discrimination. However, this goal will not be accomplished quickly, and policy reports will simply gather dust unless enlightened educators understand and act to change the norms and political relations these grouping practices embody. There is a long, hard road ahead.

In the next CEIC REVIEW...

Social-Emotional Learning and School Success

(Race, continued from p. 14)

However, empirical evidence shows that Blacks lag behind Whites in achievement. When ability or prior achievement is controlled, the effect of being Black on ability group assignment virtually disappears. These results remove one of the major criticisms of ability grouping. Nevertheless, discrimination against Black students is still possible within ability groups. The instructional processes and learning conditions that characterize ability groups might be more supportive of White students than of Blacks. Several studies show that, within ability groups of any level, Black students generally score lower than White students.

The analyses presented in this paper shed further light on whether ability grouping discriminates against Black students. Based on previous research showing that all students benefit from assignment in a higher ability group, the study examined whether the advantages of higher group placement benefit Black and White students equally. The analysis showed that, on average, White students make greater gains in achievement than Black students when assigned to a higher ability group. This finding could be interpreted as a contextual effect on Black learning. If conditions in higher ability groups were more conducive to White achievement gains than Black gains, then Blacks would be disadvantaged relative to Whites even in the more demanding learning environments.

To address this issue, the achievement gains of Black and
White students at both ends of the ability distribution in each ability group were examined. The results show that students in the lower quarter of any ability distribution achieved less growth in achievement than their peers in the top three fourths of the distribution. The pattern of these results was more pronounced than when Black and White achievement growth were compared. Both Black and White students are found in the lower and upper parts of the ability distribution in each ability group, but Blacks are somewhat more likely than Whites to be found in the lower part of the distribution. Thus, the results indicate that it is ability, not race, which is governing the differences in achievement growth.

While arguments can be made to detrack schools, racial bias should not be among them. Of greater validity is the argument that the practice of ability grouping, as it is presently practiced, discriminates against slow learners. These students, regardless of race, are offered fewer learning opportunities in lower ability groups. If the educational resources and positive learning climate evident in most higher ability groups were recreated in the lower groups, a major concern about the equity of ability grouping would disappear.

At the elementary level, research also indicates that the practice of rigid tracking of students in elementary school for the entire school day on the basis of a sole criterion should cease. Practitioners can consider whether to maintain less extreme versions of tracking, or to eliminate all divisions among students. The research is inconclusive as to which alternative is better, and practitioners must consider their own unique circumstances in deciding which approach best fits their school. One view holds that, as has occurred in some Catholic schools and in some restructured public schools, some divisions among students for particular subjects are appropriate as long as teachers hold students at all levels to high standards of accomplishment. Another view holds that all such divisions should be eliminated. To adopt this approach, it will be necessary to develop curricula and pedagogies that are suited to mixed-ability classes.

The lack of conclusive evidence on alternatives to traditional tracking structures also shows where researchers must direct their attention. It is most essential to examine a broader range of schools engaged in responding to the tracking problem, so that we can move beyond “existence proofs” to a more generalizable conclusion about the advantages and disadvantages of each policy choice.

(Tracking, continued from p. 18)

The country’s brightest students might fall by a trivial amount, but the effects would not be noticeable on most other students. If the grouping programs that were eliminated were ones that actually adjusted methods and materials to student aptitude, the damage to student achievement would be greater, and the effects would be felt more broadly. Both higher and lower aptitude students would suffer academically from such de-tracking. But the damage would be truly profound if, in the name of de-tracking, schools eliminated enriched and accelerated classes for their brightest learners. The achievement level of such students would fall dramatically if they were required to move at the common pace. No one can be certain that there would be a way to repair the harm that would be done. The CEIC REVIEW
Lydia Hoag
Editor

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Social-Emotional Learning and School Success
Maximizing Children’s Potential by Integrating Thinking, Feeling, Behavior
Joseph E. Zins, University of Cincinnati; Roger P. Weissberg, University of Illinois at Chicago; Margaret C. Wang, Temple University; and Herbert J. Walberg, University of Illinois at Chicago

Although schools historically have addressed topics such as citizenship, social responsibility, and moral character, recent years have witnessed a dramatic increase in attention to the related area of social and emotional learning (SEL). What is different today in this instruction is that social-emotional education is provided in a more carefully planned, sustained, and systematic way using comprehensive, multi-year, multi-component approaches. In addition, there is a difference in how this instruction is conceptualized. Promoting social-emotional goals is viewed now as being an integral component of our schools’ overall educational program rather than as a good but not essential aspect of education. Educators recognize that SEL must be incorporated into children’s educational experiences to maximize their potential to succeed now, as well as later in their lives. Also noteworthy and encouraging is that the current climate of support and interest in the topic within education and in the general public may be greater than at any time in recent decades—a climate which presents an opportunity for educators and policy makers to consider seriously the implementation of SEL programs.

Within this context, an historic, national invitational conference was held at Temple University in October, 2000. Convened by the Mid-Atlantic Regional Laboratory for Student Success (LSS), a U.S. Department of Education regional laboratory, and the Collaborative to Advance Social and Emotional Learning (CASEL), an international group devoted to promoting SEL in schools, a group of researchers, policy makers, and practitioners discussed the implications of recent scientific findings regarding SEL and school success. Presenters focused on how social and emotional factors that encourage students to come prepared for class, that motivate them to exert more effort, that support them for working cooperatively with one another, that make participating constructively in class reinforcing, and the like, can effect educational outcomes such as students’ attendance, completion of homework assignments, and academic knowledge and achievement. Participants concluded that schools that emphasize SEL skill development are more likely to have students who succeed in school and, ultimately, in life.

What is SEL?
Social and emotional learning is the process through which children enhance their ability to integrate thinking, feeling, and behavior to achieve important social tasks. They learn to recognize and manage their emotions; establish healthy relationships; set positive goals; meet personal and social needs; make responsible decisions; and solve problems. They are taught to use a variety of cognitive and interpersonal skills to achieve in an ethical manner developmentally and socially relevant goals. Further, environmental supports are created to foster the development and application of these skills to multiple settings and situations. Among the relevant SEL skills fostered are stress management; problem solving, decision-making, communication, social, and conflict resolution skills; self-management; and so forth, all of which can contribute to school success. The bottom line is that these skills should enable students to become knowledgeable, responsible, caring, productive, non-
violent, and contributing members of society.

Importance of Social-Emotional Instruction

Social-emotional education efforts cannot solve all of the problems facing schools and society. For that reason, the conference had a specific focus, that is, the emerging evidence and promise of SEL’s relationship to school success, which we view broadly and see as far more encompassing than the results of standardized test scores. In many respects, success in school lays the foundation for overall success in life. Examples of SEL’s potential influences include primary behavioral academic outcomes such as successfully mastering subject matter (academic achievement); sustaining motivation to continue learning; improving student attitudes toward and interest in school; fostering engaged time; enhancing bonding to school; reducing suspensions, expulsions, and grade retentions; improving attendance and graduation rates; building peer leadership skills; and achieving constructive employment. Secondary outcomes include improved self-efficacy and cooperation; abstinence from delinquency; development of prosocial skills and problem solving; better effort and self-regulation; increased attributions of perceived control; community bonding; healthier living, including decreased substance abuse; decreased interpersonal violence; and more constructive family life.

Challenges to Social-Emotional Education

A very significant challenge facing schools is that although they may recognize the need to bolster students’ social-emotional development, at the same time the public is demanding that these institutions be ever more accountable for students’ academic achievement. Accordingly, there is greater emphasis placed on test scores and various related standards. These seemingly conflicting forces are causing schools considerable distress.

Although educators recognize that both SEL and academic achievement are important, they are less likely to attend to the former unless they see a clear relationship to the latter. They experience too much pressure to meet various standards, to have their students pass proficiency tests, and to deal with other mandates, and consequently do not have the time or energy to devote to anything that keeps them from meeting these other demands. In addition, many educators are uncertain about how to address SEL issues most effectively. Therefore, by exploring the relationships between social-emotional learning and educational outcomes, the conference, this issue of the Review, and the related book to be published next year provide guidance regarding the centrality of SEL to academic success. By identifying these associations and how to promote SEL skills, educators, policy makers, trainers, researchers, and practitioners have important tools to improve the lives of today’s and tomorrow’s citizens.

Recommendations

As customary at Laboratory for Student Success book-conferences, previous versions of the conference papers were pre-circulated to the chapter authors, other scholars, and educators who gathered to discuss them in both small groups and in larger plenary sessions. In this case, about 100 school teachers, administrators, state and federal education officials, psychologists, and scholars in other disciplines discussed the papers in small groups and reported their recommendations in a final plenary session. Although not everyone agreed on all points in their group discussions, nor did all the groups focus on the same topics, several recurring themes emerged in the recommendations from the discussions groups. Within the broad theme of social and emotional learning and school success, these recommendations are grouped below under key topics.

Research and Evaluation

As exemplified in the conference papers, investigators have produced much convincing research linking social and emotional learning and school success. This work, however, can be extended and refined in several ways.

Although the conference papers reveal common elements among SEL programs, their practices, and their theoretical bases, there is less agreement and detail on how these elements have been implemented and measured. To the extent that common ideas and procedures are employed in multiple studies, the research results will become more comparable and useful. Further development and use of assessment tools that measure a broad range of academic outcomes are needed to measure such things as higher order thinking skills and analytical, creative, and practical skills. Instruments are needed not only for the measurement of SEL and outcomes but for selection and readiness of teachers, schools, and school districts for SEL programs, degree and fidelity of implementation, and self-assessment tools for program developers, administrators, teachers, and other end users. Comprehensive and uniform measures employed in future studies would allow greater comparability of effects for various SEL programs. A catalog or handbook of measures would well serve the field.

For greater certainty about the magnitude and universality of SEL effects, large-scale randomized field trials as in medical research are necessary. The summed evidence from small-scale studies, though convincing, has insufficiently established the full magnitude and breadth of the effects of SEL on school and life success. Large-scale studies allow estimates of the effects of SEL under different conditions, in different kinds of schools, and for children of various ages and demographic characteristics.
Since randomized field trials are difficult to conduct, some research must compare groups that have and have not implemented various SEL programs. Because such research is subject to “selection bias,” that is, the tendency for schools with inspired leaders, in difficult circumstances, and other characteristics to differ from others, studies that are designed to eliminate such bias are needed.

Moreover, detailed descriptions of the features of SEL programs, how they were implemented, and how they affect school outcomes would enable researchers, policy makers, and educators to better understand the causal mechanisms that link SEL and school outcomes. Meta-analyses of the existing research and future research would allow investigators, educators, and policy makers to estimate the comparative effects for various programs, how the degree or fidelity of program implementation affects outcomes, and how well SEL works for different students on both short- and long-term outcomes.

Vital but often overlooked components of decision-making are costs, cost-effectiveness, and cost-benefit considerations. Obviously, school budgets are constrained, and, other things being equal, educators should rationally choose cheaper programs. But other things other are never equal, and they should raise cost-effectiveness and cost-benefit questions: What is the ratio of outcomes to costs and of monetary benefits to costs. Even though causation, outcomes, and monetary benefits are difficult to estimate, policy makers and educators, nonetheless, increasingly want information relevant to such considerations even though the answers may be somewhat uncertain.

Qualitative or case studies are also in order. In particular, it would be desirable to know about barriers to successful program implementation. Why does SEL work in some circumstances and not others? Is principal and superintendent leadership the key, or is teacher “buy in” the crucial factor? Are some pre-existing circumstances inhibitors of successful implementation? What can be done about them? Answers to these and similar questions would reveal the best ways to design SEL programs and to disseminate and implement them more effectively. In addition, students are increasingly learning in non-traditional circumstances such as on the Internet, in small groups, on field trips, in museums and other settings. How can SEL programs and principles be incorporated in such efforts? This is a new challenge for program developers, educators, and researchers.

PROFESSIONAL PREPARATION
If SEL is to be widely and well implemented, preparation of new and in-service teachers is necessary. Such preparation should include field experience for teachers-to-be and the modeling of positive, supportive classroom environments for new and veteran teachers. These experiences should be thoroughly grounded in the disciplines of psychology, education, and related fields of study. School leaders and other professionals within state departments of education, district central offices, and schools can promote their effectiveness in planning, encouraging, and operating SEL programs. All such professionals can develop their own effectiveness in these efforts by employing SEL behaviors themselves. State and local school board members should benefit from similar experiences.

Leaders should provide the means and setting for dialogue within the community of practice. They can identify, educate, and provide experiences for mentors and coaches. They should also identify exemplary SEL schools in urban, suburban, and rural contexts, videotape them, and share the videos with others as visual models of successful practice. People who led successful SEL efforts can describe the story of change in their schools, what they did to make it happen, and how their practices follow from SEL principles. Case studies and websites afford further means of professional training.

Collaboration with existing professional groups can bring SEL programs and principles into schools. Several groups influence, if not control pre-service teacher education. These include state departments of education, testing agencies, several groups that accredit schools, colleges, and departments of education, and state legislators that often determine certification procedures for individual teachers. SEL presentations before such groups are promising ways of bringing SEL into pre-service and in-service educator preparation.

IMPLEMENTATION
It should prove useful to develop selection criteria and assessment of readiness for teachers, schools, and school districts. Similarly, guidelines for quality implementation and self-assessment tools for schools should increase fidelity with SEL programs and principles. To increase the probability of success, SEL activities should be integrated into curricula and daily instruction. These implementation features are likely to require SEL-trained professional staff, possibly using present school staff. They need skills in bringing SEL programs to scale and developing supportive network to promote research, implementation, and collaboration. Case studies should be useful in illustrating criteria for successful implementation.

DISSEMINATION
The conferees believed the work of the conference should be continued to accomplish several purposes. (Recommendations, continued on p.26)
Implications of Social and Emotional Research for Education

EvidenceLinking Social Competence and Academic Outcomes
Michelle R. Bloodworth, Roger P. Weissberg, University of Illinois at Chicago; Joseph E. Zins, University of Cincinnati; and Herbert J. Walberg, University of Illinois at Chicago

A number of research studies have demonstrated links between social and emotional factors and school performance as well as other behavioral outcomes. For example, low commitment to school, low achievement motivation, poor relationships with teachers and peers, low expectations for educational accomplishments, disruptive classroom environments, and negative school climates relate to poor academic achievement and school dropout. These variables also increase the risk for later substance abuse, delinquency, teen pregnancy, and violence. Although correlational studies indicate relationships among social, emotional, and academic variables, the question remains whether school-based promotion of social and emotional learning (SEL) positively impacts school success. This chapter reviews those SEL studies that have examined various academic outcomes and found positive program effects.

The Link Between Social and Emotional Factors and Success in School

Several types of evidence link students' social and emotional competence to academic performance. Research studies show that social skills and prosocial and empathic behavior relate positively to academic outcomes. Also, better social skills have been shown to correlate with students' greater time-on-task and with higher achievement scores and better grades. One study, an exhaustive analysis of the factors affecting school learning—including variables such as student aptitudes, classroom instruction, school climate, program design, school organization, and state and district characteristics—concluded that the social and behavioral attributes of the children themselves constitute an important influence. A related study has concluded that student motivation determines effort, perseverance, self-control, and self-regulation. Other research has show that, in turn, both student motivation and academic performance are affected by factors such as classroom climate, emotional support from teachers, student instructional choice, structure in the classroom, and cooperative learning groups. Furthermore, there is evidence suggesting that children need to feel autonomous, socially connected, and competent to be academically motivated. The degree to which these needs are met contributes to student engagement in school, which leads students to think and feel positively about school and experience academic success.

Effective SEL Interventions to Promote Healthy Behavior and Academic Success

The findings above suggest that social and emotional factors affect students' academic performance. In addition, growing evidence indicates that effectively implemented, high-quality, multi-year, coordinated, school-based SEL programs can produce a variety of positive outcomes. They improve students' social and emotional competence, which is their primary focus, and also can aid in the prevention of drug use, high-risk sexual behavior, violence, and other maladaptive behaviors. Thus far, however, the majority of school-based SEL programs target single-problem behaviors, and few have devoted significant efforts explicitly toward improving students' academic performance or the evaluation of the program's impact on academic outcomes, which is especially important given schools' primary mission of educating students. Below, we review examples of school-based SEL programs that have measured academic variables, progressing from circumscribed, single target programs to more inclusive and integrative ones. For each, we highlight the academic outcomes, even though these programs typically targeted other behavioral, social, and health outcomes as well.

One study evaluated an assertiveness training program that focused on promoting fourth- through sixth-grade students' social, emotional, and behavioral skills to deal effectively with interpersonal problem situations. This program resulted in improved assertiveness, problem solving, and grades.

Teen Outreach, a nationally disseminated program with a developmental focus, includes structured service experiences in the community, as well as classroom-based discussions of the service component and the social-developmental tasks of adolescence. Students in this program were reported to have fewer pregnancies, school suspensions, and failed courses compared to controls.

One of the largest school-based violence prevention programs in the country—Resolving Conflict Creatively Program (RCCP)—has also demonstrated positive academic outcomes. The curriculum is designed around several core skills: communicating and listening; expressing feelings and dealing with anger; resolving conflicts; cooperating; appreciating diversity; and countering bias. An evaluation of 5,000 RCCP children in grades two through six found that in high-implementation groups, hostility and aggressiveness significantly declined as their prosocial behavior, emotion regulation, and reading and math scores on standardized tests significantly increased.

Similar results have been found in other conflict resolution training programs that target social and...
emotional skills as a core part of their intervention. Studies of these projects reveal that integrating subject area learning with conflict resolution and peer mediation procedures can also increase students’ academic achievement. For instance, Teaching Students to be Peacemakers integrates conflict resolution into an English literature unit among seventh and eighth graders. Students in a group receiving conflict resolution training in a cooperative context showed the greatest acquisition of negotiation skills and achieved the highest eight-week retention, indicating that the combination of conflict resolution training in a cooperative context was more powerful than either alone. This and similar conflict resolution programs demonstrate that the integration of SEL with an academic unit can both increase skills and simultaneously and significantly impact students’ academic achievement. Further, these findings suggest that skills are acquired when students are motivated to learn them, when skills are broken into manageable components, when successful performance of the skills is demonstrated or modeled, when students have opportunities to practice the skills, and when they receive active feedback and reinforcement for their performance of the skills. These axioms suggest that the most powerful way to promote the development of social and emotional competencies is through their integration into the entire school day.

The Improving Social Awareness-Social Problem Solving Project promotes social competencies such as decision-making, self-control, group-participation, and social-awareness skills. Discussions and scripted, programmatic lessons involving role-playing skills, combined with problem-solving and social-awareness activities, are integrated into the regular classroom routine. After five years, students in medium- and high-implementation groups exceeded students in the control group on social skills and in achievement on the Comprehensive Test of Basic Skills. Students in the high-implementation group scored significantly higher in language arts and mathematics and had significantly fewer absences compared to the control group.

The Promoting Alternative Thinking Strategies (PATHS) curriculum, a program for elementary schools that teaches self-control, emotional awareness, and social problem solving used in the classroom throughout the day, has a central focus on emotional recognition and regulation for effective coping and skill development. Compared to controls, children in PATHS showed improved efficiency on cognitive problem solving, as well as significant and sustained differences in emotional understanding and social problem solving.

The Responsive Classroom integrates the teaching of academic skills and social skills as part of school life. Although additional evaluations of this program are needed, there are preliminary indications that students in the Responsive Classrooms may have improved their social skills and achieved greater gains on the Iowa Test of Basic Skills than did a control group.

Another approach to the promotion of social and emotional competence and academic success is the Child Development Project (CDP), a comprehensive elementary school program in which teachers and administrators build supportive relationships with and among students. The project emphasizes, proactive classroom management, students’ critical thinking about social and ethical issues, cooperative learning, classroom and schoolwide community building activities, and child–parent activities. The CDP produced significant increases in conflict resolution skills and prosocial behaviors, significant reductions in alcohol use, increases in commitment and attachment to school, and significantly improved academic achievement.

Evidence suggests that schools’ environments also affect students and that these contextual influences are primarily social and emotional in nature. The School Transitional Environment Project (STEP) seeks to reduce students’ vulnerability to the development of academic and emotional difficulties often associated with the transition to a new school environment. By restructuring the role of homeroom teachers to increase the amount of instrumental and affective social support and reducing the flux of the social setting confronting the student, the program sought to increase students’ feelings of accountability and decrease their sense of anonymity, and to increase access to information about school expectations and rules. By the end of ninth grade, project participants showed significantly better attendance records and grade point averages, more stable self-concepts, perceived greater clarity of expectations and organizational structure and higher levels of teacher support and involvement than did non-project controls.

Conclusions

Although the preliminary data from the programs reviewed here suggest that attending to social and emotional factors at school can help to promote healthy development of these competencies and promote success in school, caution is needed in interpreting these results because of the small number of SEL programs that target or evaluate academic outcomes. It is likely that not all SEL programs produce positive impacts on academic outcomes, and those that do differ in the degree of their impact, depending on many factors, including the specific social and emotional competencies promoted or the programs’ explicit focus on academics or the school environment. The model of social and emotional influences on school success suggests that the pathway to improved academic (Implications, continued on p. 27)
Family-School-Peer Relationships, SEL, and Academic Learning
Engaging At-Risk Students in the Check & Connect Program
Sandra L. Christenson and Lynne H. Havsy, University of Minnesota

Improving the rate of school completion for all students has received national attention as part of Goals 2000, but national reform efforts to raise academic standards, end social promotion, and implement high stakes testing has made this challenge more difficult. Current statistics indicate most states have not reached the goal of a 90% graduation rate, and for some populations the rate of graduation is significantly lower. School-related factors—such as failing and especially a student's engagement in school and learning—are most important for predicting a student's decision to drop out. These factors are integrally related to the student's sense of belonging, his or her motivation and receiving consistent support for learning at home and school. The Check & Connect program is one intervention that has helped students who are at risk for educational failure improve both their academic standing and their sense of belonging in schools.

Student Engagement at School and with Learning
Students in danger of dropping out typically demonstrate school disengagement, characterized by irregular attendance, low motivation, a sense of alienation—as demonstrated by limited participation in school activities—and few positive relationships with peers and staff. They often exhibit behavior and disciplinary problems and a poor self-concept. In contrast, successful graduates held positive attitudes and engaged much more often in behaviors related directly to learning (e.g., being prepared and participating) than did school completers with poor academic performance or dropouts. These attitudes and behaviors include a stronger sense of belonging, which research tells us correlates with improved motivation, attendance, and better grades and standardized test scores.

A number of conclusions about factors that promote engagement can be drawn from the research base on school policies and environments, family support, and extracurricular learning.

School Policies
School policies and practices influence levels of student engagement: Tracking, retention, and rigid and punitive rules negatively affect student engagement. Other school practices and policies—for example, maintaining smaller school sizes, allowing students to express creativity in completing assignments, and explaining the relevance of school curricula to students' later life goals—enhance levels of engagement. Students in rigid schools find them less supportive, participate less in classroom and school activities, and have poorer attendance than students in schools with less punitively structured policies. In addition, school and teacher practices have been found to be a stronger predictors of parent involvement—a critical factor in academic success—than were parents' educational level, income, or ethnicity.

School Environment
Caring school environments enhance opportunities for student engagement by developing supportive relationships and by increasing opportunities for participation in school life. Furthermore, schools with an orderly environment, a committed faculty, and an emphasis on academic pursuits have been associated with lower rates of absenteeism and dropping out.

Relationships between students also play a key role in school engagement. Students who are more socially integrated have a significantly greater sense of belonging than do those with less peer acceptance. Having friends at school supports involvement and engagement; conversely, mobility negatively influences engagement. When students move frequently from one school to another, they have less time to form personal bonds or become invested in succeeding in the school environment.

Family Support and Involvement
The empirical base showing a positive relationship between family support and involvement and academic success is strong; these two factors are also associated with student engagement. Several conclusions derived from the research base can be drawn concerning the family's home environment and activities as they relate to the support of children's learning.

Home environment. When parents are involved, students show higher attendance rates, lower dropout rates, and fewer suspensions. These changes are accompanied by an improved attitude toward schoolwork, improved behavior, self-esteem, academic perseverance, and participation in classroom learning activities, and better grades and test scores.

Family process. Family process variables (what parents do to support learning) predict scholastic ability better than do family status variables (who families are). Parents' attitudes, guidance, and expectations for their children's education; the quality of parent-child verbal interaction; participation in cultural and learning-related activities; and stability in the home have been shown to have greater impact than socioeconomic status on school performance. Furthermore, three factors over which parents exercise authority—attendance, variety of reading materials in the home, and amount of television watching—explain nearly 90% of the difference in mean achievement of students.
EXTRACURRICULAR INFLUENCES

Students' involvement in learning activities outside of school is critical, and supportive guidance from adults and peers, not just families, have been identified as a determining factor for the availability of these activities. One study, in fact, has found that the availability of educational resources (e.g., books, computers, learning opportunities) has the greatest impact on children's academic progress during the summer, resources which low-income families are less likely to secure.

Cross-Contextual Factors Influencing Academic Success

Student perspectives on their experiences at home, at school, and in peer worlds combine to affect engagement in classrooms and school. Our recent comprehensive literature review of alterable family, school, and community influences on children's learning in grades K-12 found a remarkable similarity in the kinds of contextual influences that enhance student learning in home and school environments:

- High but realistic standards and expectations
- A routine that includes priority for schoolwork and an academic, task-oriented focus
- Opportunities to learn, both inside and outside school, including the availability of learning resources and a variety of learning tasks
- Supportive encouragement and motivational strategies emphasizing student engagement and reaching personal goals, and providing frequent feedback
- Adults at home and at school modeling desired behaviors and signaling their commitment to and valuing learning and working hard in their daily lives
- Positive parent–child and teacher–student relationships; family harmony is consistent with cooperative learning environments in the schools.

Promoting Student Engagement with Check & Connect

Check & Connect is a systematic monitoring procedure designed to promote student engagement with school, to address the social-emotional and academic needs of students, and to build capacity within families to assist their children's educational performance. Monitors collaborate with students and families over an extended period of time, regularly checking on the educational progress of the student, and intervening in a timely manner to re-establish and maintain students' connection to school and learning. Currently, Check & Connect is being implemented with elementary, middle, and high school students at-risk for educational failure and dropping out. We speculate that a unique feature of the Check & Connect model is not the specific interventions per se, but the fact that the interventions are facilitated by a person who is trusted and known by the student and his or her family and who has demonstrated concern for the school performance of the youth persistently and consistently overtime.

The Check component continuously assesses student engagement by measuring school attendance, social/behavior performance, and academic performance and is intended to keep intervention efforts focused on the student's educational progress. The Connect component consists of two levels of student-focused interventions: basic interventions, which are the same for all students and delivered once, and intensive interventions, which are much more frequent, individualized, and designed for students showing signs of disengagement. A critical goal of Connect efforts, particularly at the elementary level, is working with families as partners to increase their active participation in their children's education.

Key findings across the last 9 years of intervention suggest that Check & Connect promotes school engagement among youth at high risk for school failure. We have identified seven essential elements that guide monitors: (a) relationship building, (b) and c) persistent and systematic monitoring, (d) individualized and timely intervention, (e) problem solving, (f) facilitating students' participation in school-based activities before, after, during school, as well as learning activities during the summer, and (g) interventions that attempt to follow students when they relocate.

Students receiving intervention in grades 7–9 were more likely to be enrolled at the end of ninth grade, persist in school, and be on track to graduate than students in the contrast group. Students in grades 9–12 with serious emotional disabilities who received Check & Connect were more likely to be enrolled in school and have articulated goals and pursue school activities than were control students. Finally, incidences of tardiness to school and absences from school have declined for elementary school students.

Conclusion

The goal in working with students who are at-risk for dropping out is two-fold: (a) acquisition of academic and social skills and (b) fostering engagement in learning. Increasing students' engagement and enthusiasm for school involves supporting students in meeting the defined academic standards of the school, as well as underlying social and behavioral standards. If students are engaged with school and learning, they should not only graduate but also complete school with academic and social competence and demonstrate the behaviors and attitudes in school that are desired by both parents and teachers.

To alter the culture of failure for many students—students who perceive school (and learning) is an "interruption in their day"—an emphasis must be placed on reciprocal influences: Both the family and school must support learning and learners and must deliver a congruent message about learning. Both must conceptualize students as social, emotional, and intellectual systems.
The Learner-Centered Psychological Principles
A Framework for Balancing Academic and Social and Emotional Learning
Barbara L. McCombs, University of Denver Research Institute

The importance of balancing the demands for more accountable schools and higher student achievement with demands that schools also address students' social and emotional needs has become dramatically and sometimes tragically apparent in the past three to four years. Increases in school violence, bullying, dropping out, depression, suicide, rising rates of drug use, childhood depression, emotion-related illnesses, and expressions of fear and hopelessness underscore the need for integrating social and emotional learning (SEL) programs into comprehensive school reform models. The research-validated, learner-centered psychological principles developed by the American Psychological Association provide a framework for integrating SEL with efforts to improve academic achievement through school reform. At the same time, these principles also provide a well-validated justification for increasing the role of SEL programs in academic reform models; they show that instruction alone is not sufficient to assist students in developing into knowledgeable, responsible, caring, and academically competent learners.

What is Learning?
A growing body of evidence from neurological, psychological, sociological, and biological research suggests that in meaningful and sustained learning, the intellect and emotion are inseparable. Brain research, for example, has demonstrated that affect and cognition work together synergistically, with emotion driving attention, learning, memory, and other important mental or intellectual activities. Recent research is also revealing the social nature of learning, that many elements of learning are based on relationships, which are in turn, of course, based on the social and emotional intelligence of individuals. In consequence of these research findings, many educational theorists now approach learning from a more integrative, holistic perspective.

Studies of learning in a variety of contexts reveal that it is often characterized as playful, recursive and non-linear, engaging, self-directed, and meaningful, and therefore self-motivating from the learner's perspective. The natural processes of motivation and learning as seen in real life situations are rarely seen in most school settings because schools too often impose conditions regulating the content, structure, and process of learning, thereby denying students the choice and control necessary for self-directed learning. Rote compliance is the result; and students are increasingly bored, alienated, and frustrated, perceiving teachers as uncaring, angry, and stressed.

What is the Purpose of Education?
Educators and others promoting SEL as a framework for quality school programs conceive the primary purpose of schools as preparing students to become knowledgeable, responsible, and caring citizens. This purpose is compatible with a number of other recent theories of teaching and learning that advocate person-centered learning and which seek to reconnect learners with their peers and with teachers in challenging learning experiences. Therefore, maintaining high standards in the learning of desired content and skills must be balanced with an equal emphasis on the learner, the learning environment, and the learning process—a balance essential to preparing students for productive and healthy futures. This balance also responds to students' feelings that school is irrelevant and to their feelings of alienation from their teachers and peers.

Integrating the Philosophy and Practices Associated with SEL into the Teaching and Learning Process
The failure of most schooling to provide supports for students' basic psychological needs—competence, autonomy, and relatedness—and the resulting negative trends noted above clearly call for the rebuilding of learning communities based on personal relationships between students and teachers and on respect for the unique way each student perceives the world and learns. Social and emotional learning programs, supported by the research base linking cognition and the five dimensions of emotional intelligence—self-awareness, managing emotions, motivation, empathy, and social skills, all key factors in establishing and maintaining positive relationships, problem solving, and intellectual and social development—can provide for students' needs and ameliorate those negative trends. Research now confirms that a focus on personal and motivational outcomes addressed by SEL programs balanced with a focus on high achievement and challenging standards is vital in today's schools.

The Learner-Centered Principles as a Foundational Framework for SEL
Research has demonstrated the benefits of associating social and emotional education with educational outcomes, including the positive academic effects of feeling cared for and safe, experiencing positive peer and adult relationships, having high self-efficacy, and being able to engage in effective social problem solving. These findings can be
effectively applied to SEL programs through a research-validated framework of learner-centered educational principles. Learner centered education couples a focus on individual learners—their backgrounds, experiences, perspectives, talents, interests, capacities, and needs—with a focus on learning, incorporating the best available knowledge about learning and how it occurs and about teaching practices that are most effective in promoting the highest levels of motivation, learning, and achievement for all learners.

The application of learner-centered principles in designing SEL programs and practices will enable such programs to attend holistically and systemically to the needs of all learners—including students, their teachers, administrators, family, and community members. When teachers derive their practices from an understanding of the principles, they include learners in decisions about how and what they learn, value each learner’s unique perspectives, and treat learners as co-creators and partners in the teaching and learning process. The adoption of this research-validated, learner-centered approach will transform education and provide a framework for the best use of SEL programs and their assessment in support this new vision of education.

Implications for Practice in Integrating Learner-Centered, SEL Programs in Comprehensive School Reform

- The integration of learner-centered SEL programs has a number of implications for practice. A key implication is that the larger context of education must support and value individual learners as well as learning outcomes, that the purpose of education goes beyond academic competence and content knowledge. Restoring a sense of community is the fundamental way to provide social and emotional support that is required in this new shared vision of education. A sense of community has been strongly correlated with student achievement, prosocial attitudes, social skills, and sense of autonomy and efficacy; these correlates in turn are negatively related to students’ drug use and involvement in delinquent behavior. Second, practices which nurture empathy and self-discipline and help students develop social skills and moral values must be developed. Another critical implication for practice is that attention must be given to the role of students’ perceptions and their input for reshaping school climates. Fourth, a culture of caring must be developed in learning communities. Caring does not replace high expectations and standards for learning, but it represents a core set of beliefs about relating to other people and offsets students’ feelings of frustration with or alienation from school, low self-esteem, poor school attendance, irresponsibility, and depression.

Implications for Policy

In order to achieve the learner-centered educational program that addresses both the intellectual and emotional and social development of the student, a number of policy changes will need to take place at all levels of administration. First, policies must balance efforts to achieve high standards with meeting the individual learning and motivational needs of diverse students. This balance must be a criterion of comprehensive school reform. Second, policies should focus first on the individual student, then the group and organization. They should be directed at embracing both continuous change as an operating principle in systems and also learning as a holistic process that involves intellect and emotion. Third, policies must emphasize leadership roles and empower teachers and students alike to take increased control over their own learning and development. Fourth, policies must value diversity and pluralism at all levels of the educational system. Fifth, policies must embrace inclusive dialogue, the building of respectful relationships, and the emergence of individually tailored models that are owned by all participants rather than “externally-ready” models. Sixth, policies governing educational systems design must balance three concerns: (a) standards and learning outcomes; (b) how standards are implemented and assessed; and (c) assumptions about human nature, learning, and the capacities of individual learners. These policies must take seriously research findings that show the value of programs based on the new understanding of intelligence and the powerful role of interest and emotions in learning and achievement. Finally, policies must value educational outcomes that go beyond academic achievement to motivational, emotional, and social outcomes that include enhanced social and self-identities, reduced prejudicial and “better than” thinking, and increased personal and social responsibility. This new responsibility includes greater attention to those working with schools as caring learning communities.

Conclusion

In order to bring harmony and balance to conflicting views on how to promote high student achievement, it is necessary to acknowledge the holistic needs of all people in the system. To be effective, educational reform must be constructive and build individual and group capacity to handle negative emotions, frustrations, and fears while maintaining hope and the commitment to future positive possibilities. High learning standards and quality teaching must be balanced with a concern for supporting all learners and their teachers. School pressures and alienation will thereby be reduced rather than increased. In this context, SEL programs and practices can be positively evaluated as a framework for defining quality programs. **
The Three Cs of Promoting Social and Emotional Learning
Cooperation, Conflict Resolution, and Civic Values
David W. Johnson and Roger T. Johnson, University of Minnesota

A person's interpersonal effectiveness largely determines the quality and the course of his or her life. The social competencies—both interpersonal and small group skills—necessary for interacting effectively with others are central to the quality of family life, educational achievement, career success, and social and emotional well-being in general. Because of changes in family and community life in the late twentieth century, it is now largely in schools that many children and adolescents are taught the interpersonal and small group skills and prosocial attitudes and values that are needed to interact effectively with other people, achieve mutual goals, and solve shared problems.

Like all social systems, the successful school is a cooperative system in which faculty/staff, students, and parents work together to achieve mutual goals. Working cooperatively with peers, resolving conflicts constructively, and internalizing prosocial values are experiences essential for the children's positive development and their social and emotional learning (SEL). One program that has achieved considerable success in providing these experiences is the Three Cs Program. Based on cooperation and conflict theories, the Three Cs Program has been validated by a great deal of research, and the international implementation of the program in all types of schools gives it a generalizability not found in most educational programs.

The First C: Cooperative Community

Social and emotional learning begins with establishing a learning community based on cooperation in achieving mutual goals rather than on competition or individualistic efforts. Structuring situations cooperatively results in students promoting each other's success; structuring situations competitively results in their opposing each other's success; and structuring situations individualistically results in no interaction among individuals. These interaction patterns affect numerous variables, which may be subsumed within the three broad and interrelated outcomes:

1. Effort to Achieve. Cooperation promotes considerably greater effort to achieve—including productivity, long-term retention, higher-level reasoning strategies, motivation, transfer—than do competitive or individualistic efforts.
2. Interpersonal Relationships. Cooperation generally promotes positive relationships through interpersonal attraction and social support and does so to a greater extent than do competitive or individualized efforts. Because stronger effects have been found for peer support than for superior (teacher) support, it is difficult to overemphasize the importance of these findings:
   - Secondary students need friends.
   - Friends are a developmental advantage.
   - Students who do not have friends are at risk for antisocial behavior, deficient social-cognitive skills, such as perception of peer group norms and response to provocation. Children referred to child guidance clinics, for example, experience peer difficulties at roughly twice the rate as do nonreferred youngsters.

The more positive relationships among students and between students and faculty, the lower the absenteeism and dropout rates and the greater the commitment to group goals, motivation, and persistence.

3. Psychological Health. Our research indicates a strong relationship between cooperativeness and psychological health. Psychological health is the ability to build, maintain, and appropriately modify interdependent relationships with others to succeed in achieving goals. People who are unable to do so often become depressed, anxious, frustrated, and lonely, feel afraid, inadequate, helpless, hopeless, and isolated. They often rigidly cling to unproductive and ineffective ways of coping with adversity; they have little energy to contribute to relationship building.

Interpersonal and Small Group Skills

An essential aspect of SEL is the mastery of the interpersonal and small group skills needed to interact effectively with other people. Interpersonal skills usually concern communication, trust-building, and self-disclosure skills aimed at building and maintaining relationships; small group skills focus on leadership, decision making, goal setting, and social influence skills necessary for group members working toward joint goals.

Students master their interpersonal and small group skills in cooperative contexts. For example, a number of studies have found that socially isolated, withdrawn, emotionally disturbed students all benefit from cooperative learning. More generally, cooperation promotes more frequent, effective, and accurate communication than do competitive and individualistic situations.

Basic Elements of Cooperation and Cooperative Learning

These outcomes result only when cooperative learning is effectively implemented. Effective cooperation requires that five basic elements be carefully structured into the situation:
(a) positive interdependence through mutual goals, rewards, divided resources, complementary roles, and a shared identity; (b) individually accountable for a fair share of the work; (c) promoting each other's success by assisting, encouraging, and
praising others' efforts; (d) interpersonal and small group skills; (e) group discussion of progress toward its goals and maintaining effective working relationships.

To create a learning community, interdependence must be structured at all levels of the school: Numerous strategies, such as rewards, classroom government, "reading buddies," or whole school/neighborhood projects, can be applied to achieve interdependent learning groups, classrooms, and interclass sessions; and interdependent school, school-parent, and school-neighborhood communities.

Cooperative learning uses small groups of students working together to maximize each other's learning. Any assignment in any curriculum for any age student can be done cooperatively.

The Second C: Constructive Conflict Resolution

For a cooperative community to exist and promote the SEL of its members, conflicts must occur and be managed constructively. When managed constructively with clear procedures, skillfully used and encouraged and supported by the group, conflicts can have many benefits for individuals and for group efforts. Faculty and staff, therefore, need to teach students (and learn themselves) three strategies for managing conflicts: academic controversy, problem-solving negotiation, and peer mediation procedures.

Academic Controversies

To promote SEL, teachers can frequently inject controversies into the curriculum and teach students how to resolve them creatively. In our program, two pairs of students in cooperative groups (1) research, learn, and prepare positions, (2) present and advocate positions, (3) engage in an open discussion in which there is spirited disagreement, (4) reverse perspectives, and (5) synthesize a solution on which all members can agree.

Research indicates that carefully structured intellectual conflicts that occur within cooperative learning groups create higher achievement, more high-level reasoning, greater motivation to learn, more positive interpersonal relationships, greater social support, and higher self-esteem. The most important benefits are learning to view issues from different perspectives and learning that conflicts can have positive outcomes—when people listen to each other and work cooperatively to reach solutions.

Conflict Resolution through Problem Negotiation and Mediation

Students must also learn how to resolve conflicts of interests, conflicts that arise when the actions of one person attempting to maximize his or her wants or benefits prevents another person from maximizing his or her wants or benefits. The Teaching Students To Be Peacemakers Program teaches students how to resolve conflicts of interests constructively through structured, problem-solving negotiations or mediation by their classmates. When students are unable to negotiate a resolution to their conflict, they may request help from a mediator, typically a neutral peer who helps them resolve their conflict, usually by negotiating an integrative agreement.

Implementing and the Program

The Peacemaker Program is implemented once students understand how to negotiate and mediate. All students in the class or school serve as mediators for an equal amount of time, initially, in pairs. Students' skills may be extended and refined through integrating negotiation and mediation training into academic lessons. Almost any lesson in literature and history, for example, can include role playing in which the negotiation and/or mediation procedures are used. The Peacemaker Program is a 12-year program of increasing sophistication and complexity and results in a person with expertise in resolving conflicts constructively.

Benefits of Conflict Resolution and Peer Mediation Programs

Classroom management problems tended to be significantly reduced, and students, among themselves, resolved conflicts. Discipline problems teachers have to deal with decreased by about 60%, and referrals to administrators dropped about 90%. Conflict resolution procedures tended to enhance the basic values of the classroom and school. When integrated into academic units, the conflict resolution training tended to increase academic achievement and long-term retention of the academic material. Academic units, especially in subject areas such as literature and history, provide a context in which conflicts may be understood, methods of resolving them practiced, and insight into the material gained.

The Third C: Civic Values

Both a cooperative community and constructive conflict resolution are based on civic values that recognize and support the long-term benefits of working together and contributing to the welfare of others and to the common good. For a community to exist and sustain itself, members must share common goals and values; therefore, a learning community cannot exist in schools dominated by competitive or individualistic self-interest. Rather, students need to internalize those civic values underlying cooperation and integrative negotiations—such as commitment to the common good. Civic values may be taught by direct instruction, modeling and identification, enactment of assigned and voluntary roles, group influences, and by the hidden curriculum existing in daily school life.

Conclusion

Changes in family and community structure have reduced the social support and quality of relationships experienced by many children, and school has consequently become the primary place where children are involved with peers and adults. Consequently, integrating the Three Cs into the school environment is essential for their development of the caring relationships, social competencies, and coping skills required to grow and develop in healthy ways and to deal with adversity.
Emotional Intelligence and Social-Emotional Learning
Assessing Emotional Intelligence and Developing Skills and Flexibility
Paulo Lopes and Peter Salovey, Yale University

This paper addresses four questions: What is emotional intelligence? How can it be measured? What are some of the challenges of social and emotional learning? And on what skills should educators focus? Education and psychology have long neglected emotional skills. In 1990, Peter Salovey and John D. Mayer provided a framework for delineating these skills and called it emotional intelligence, a term made widely familiar in Daniel Goleman’s 1995 book of the same title. Emotional intelligence is the set of abilities that underlie competency in dealing with and acting upon emotion-relevant information. It includes the ability to perceive, appraise, and express emotion accurately and adaptively; the ability to understand emotion and emotional knowledge; the ability to use feelings to facilitate cognitive activities and adaptive action; and the ability to regulate emotions in oneself and others.

Social and emotional learning (SEL) programs usually encompass a much broader set of skills. They are often expected to contribute to children’s adjustment and success in life, as well as to the prevention of a wide range of social problems, such as violence, drug abuse, and teenage pregnancy. A number of SEL interventions have yielded encouraging results, and programs are multiplying. However, we should bear in mind that understanding of the development of social and emotional skills is still limited. So is knowledge of the best ways to promote these skills. Further research will need to identify which components of SEL programs are most important and most effective; that research will also need to determine whether it is the programs that lead to improvements or the quality of the teachers who deliver the programs; and that research will also need to discover the extent to which skills acquired in school generalize to other settings and situations.

Measuring Emotional Intelligence
Self-report inventories—mostly for adults—of various aspects of emotional intelligence have proliferated, but these are, at best, scales of self-confidence in one’s emotional abilities. The most fruitful approach for assessing emotional intelligence is the use of task-based, ability measures that directly assess the various competencies that underlie emotional intelligence. The first comprehensive, theory-based battery for assessing emotional intelligence as a set of abilities was the Multifactor Emotional Intelligence Scale (MEIS). A refined successor to the MEIS, called the Mayer, Salovey, and Caruso Emotional Intelligence Test (MSCEIT) is now available and takes about thirty minutes to complete. This test measures the four dimensions of emotional intelligence outlined above: (a) perceiving and expressing emotions; (b) using emotions to facilitate thought; (c) understanding emotion; and (d) managing emotion in self and others. Studies using the MEIS suggest that emotional skills can be adequately mapped into these four, interrelated dimensions. Consistent with the idea that emotional intelligence is a set of abilities that are developed through learning and experience, scores on the MEIS improve with age. Emotional intelligence is associated with self-reports of empathy and parental warmth, and negatively related to social anxiety and depression. In recent work at the University of Southern California, adolescents scoring higher on the MEIS were less likely to smoke cigarettes or drink alcohol.

Challenges of Emotional Learning
People can learn to be more aware of emotional processes, and to understand, reason with, and regulate emotions adaptively. However, educators face numerous challenges in teaching social and emotional skills.

Developing Skills
We view emotional intelligence as a set of abilities that people can develop and improve upon. In order to be most effective, emotional skills, like any other skills, have to be practiced to the point that they become nearly automatic, especially in stressful situations. The development of emotional intelligence can be viewed as a long and effortful process. Habits of emotional regulation are often hard to change because are deeply entrenched and associated with other aspects of the self. Even maladaptive strategies often serve protective functions that make these tactics difficult for people to abandon. For SEL programs to have lasting impact, educators must therefore work with children on their social and emotional skills over several years.

People’s ability to manage emotions reflects processes that they may not even be aware of, and that may be difficult to convey through explicit instruction. To a large extent, children acquire these skills through personal experience. They learn by doing. It is therefore important for educators to capitalize on informal learning, by helping children to learn from their everyday interactions with others and, more generally, by establishing a school atmosphere conducive to social and emotional learning.
DEVELOPING FLEXIBILITY

Another challenge of social and emotional learning is that intelligent behavior, in general, and emotional regulation, in particular, needs to be flexible and responsive to situational demands. People need to be open to their feelings in order to learn from their emotions, but they need to shift attention away from their feelings when further rumination about a problem would prove unproductive. This type of flexibility is difficult to teach. Too much self-control can be just as problematic as lack of adequate control over one’s emotions. Excessive restraint can undermine the speed and immediacy of emotional reactions. In friendly interactions, overly constrained behavior can be viewed negatively. Overly controlled children tend to develop internalizing problems, such as anxiety disorders and social inhibition.

Ideally, SEL programs would help children to develop a large repertoire of coping strategies that they could draw upon flexibly according to circumstances. Creating opportunities for children to practice these strategies in diverse contexts and situations, and to discuss their feelings and experiences in small and supportive groups, under adult supervision, may help to promote flexibility and generalization of skills.

MOLDING TEMPERAMENT

Other limitations to developing effective emotional regulation have to do with biological constitution and temperament. Research suggests that emotional dispositions are partly inherited and influence the development of personality traits such as social extroversion, cheerfulness, and emotional instability. However, temperamental dispositions do not rigidly determine developmental outcomes. Experience and environment are important as well. Children can learn to cope with, and compensate for, their temperamental predispositions.

Broader Perspectives on Social and Emotional Adaptation

One of the advantages of an ability-based model of emotional intelligence is that it distinguishes the emotional skills that one can learn and develop (what we call emotional intelligence) from temperamental dispositions and personality traits influencing broader conceptions of social and emotional competence. In order to advance scientific research in this area, emotional intelligence should not be confounded with other psychological concepts such as personality. To understand the development of social and emotional competence, however, we may need to adopt a more holistic perspective. Broadly conceived, emotional regulation can be thought to encompass a very wide range of skills, touching upon almost every aspect of psychological functioning. It involves problem-focused as well as emotion-focused coping, proactive and reactive coping. For example, one way to deal with anxiety is to solve whatever problem is generating that feeling. Also, some people manage their lives so as to avoid distressing circumstances; such avoidance tactics, of course, often achieve the immediate goal but ultimately prove unproductive. In daily life, social and emotional processes, emotional, analytical, and practical intelligence, are often closely intertwined.

What Skills Should We Teach?

Given the broad range of skills and resources that contribute to social and emotional adaptation, how should we focus SEL programs? Because school time and educational resources are limited, investing in one set of skills is likely to detract from investment in others. How should educators choose the skills on which to concentrate?

There are several ways to address this question. One is that SEL programs should be tailored to the needs of the local student body, and the problems these students face at school, at home, and on the streets. If preventing violence is a crucial goal, then educators should choose a program that emphasizes social and emotional skills that have been shown useful for reducing violent behavior.

Another, more general way to address the same question is to focus on skills that are likely to generalize across domains and that are important for the development of further abilities. Preliminary evidence in support of our model of emotional intelligence suggests that there is a core set of interrelated emotional skills that SEL programs should promote. Helping children to overcome deficits in basic emotional abilities may promote self-understanding and the capacity to interact with others. It may forestall vicious cycles whereby early shortcomings become compounded over time, undermining opportunities for social interaction and learning. In addition, cognitive self-management skills, including planning and deliberation, monitoring and evaluating one’s course of action, may be important for emotional regulation and for learning from experience. These skills are likely to generalize across contexts, and evidence suggests that they are important for preventing violent behavior.

In relation to other competencies, the repertoire of skills that people use in social interaction is very large, and many of these abilities may be context-specific. Evidence suggests that social skills are not closely interrelated, raising concerns about the extent to which specific skills will generalize across situations. It may not be possible or effective to address all relevant skills through formal instruction, and that is another reason why SEL programs should capitalize on informal learning. Programs should emphasize self-management skills, involving control over one’s thinging process, planning monitoring, and evaluating one’s course of action. These skill are likely to contribute to self-regulation and problem solving across domains.
Social and Emotional Learning in Teacher Preparation Standards
A Comparison of SEL Competencies to Teaching Standards

Jane E. Fleming and Mary Bay, University of Illinois at Chicago

Many teacher educators recognize that training preservice teacher candidates to teach and model social and emotional learning (SEL) skills in the schools has numerous potential benefits, such as improving classroom climate and reducing drug use, high-risk sexual behavior, and violence. However, compliance with national, state, and local performance-based standards for teacher preparation often leaves little room for consideration of SEL in teacher education programs. This curricular argument against SEL training is reinforced by the unexamined supposition that SEL content is incompatible with the performance-based standards prospective teachers need to learn. The result is that very few colleges of education have incorporated SEL training into their teacher preparation programs.

Comparing SEL Competencies to the Illinois Core Professional Teaching Standards

In an effort to test this "incompatibility theory," we compared the eleven Illinois Core Professional Teaching Standards (hereafter, Illinois standards)—and the subsets of knowledge and performance indicators associated with each of the standards—with the teacher competencies appropriate to SEL as identified by the Collaborative to Advance Social and Emotional Learning (CASEL). The Illinois standards were selected because they are aligned with national standards for teachers, especially for new in-service and pre-service teachers, having incorporated the standards of the Interstate New Teacher Assessment and Support Consortium, standards which have also been adopted by the National Council for Accreditation of Teacher Education. The Illinois standards were also selected because they are used to focus Illinois' teacher training programs on the knowledge and skills teachers need in the classroom, and they form the basis for assessing students in teacher education programs. The collection of teacher skills identified by CASEL as critical to students' social and emotional development can be organized into four categories, which are in turn based on the four major competency areas of SEL skills: (a) awareness of self and others; (b) positive attitudes and values; (c) responsible decision making; and (d) social interaction skills. The teaching and modeling of these skills must also be accompanied by a school climate that values positive social interaction and prosocial behavior and collaboration and coordination with families and communities.

The results of the comparison exceeded our expectations of the consistency and compatibility of the key social and emotional competencies for teachers with the Illinois standards. SEL competencies are included in 10 out of 11 of the standards. Of these 10, nine of the standards incorporate multiple SEL competencies. Moreover, each of the SEL teaching competencies outlined by CASEL is represented in one or more of the Illinois standards, indicating a clear integration of social and emotional learning principles in the core professional standards that all teachers must meet. The alignment of specific SEL competencies with the first eight standards—those most directly impacting students—are discussed in more detail below.

Standard 1. Content Knowledge

Standard 1 of the Illinois Core Professional Teaching Standards involves the content knowledge that is central to a teacher's particular discipline, including the use of a variety of methods in teaching subject matter that take into account "students' conceptual frameworks and misconceptions." While this does not necessarily involve the promotion of SEL skills among students, it does imply a degree of SEL competence on the part of the teacher in terms of awareness of self and others. In order to adjust one's teaching methods to account for "common misunderstandings that impede learning," one must be cognizant of student misconceptions and reflective on one's own teaching practices.

Standard 2. Human Development and Learning

Standard 2, which focuses on human development and learning, has explicit connections to social and emotional learning competencies, requiring that teachers "design instruction that meets learners' current needs in the cognitive, social, emotional, ethical, and physical domains at the appropriate levels of development" [italics added]. The standard also states directly that a teacher should "understand how students...acquire skills" in these various domains, those skills in the social and emotional domain being awareness of self and others, positive attitudes and values, responsible decision making, and social interaction skills.

Standard 3. Diversity

Standard 3 stresses skills for teaching in diverse settings and requires that teachers are prepared to create instructional opportunities for culturally, socially, economically, and academically diverse learners. This standard mandates that teachers "facilitate a learning community in which individual differences are respected" and therefore involves SEL by focusing on students' positive attitudes and values about themselves and others. It also ensures that teachers have an understanding of how "family
and community values” influence learning, and that teachers access “information about students’ families, cultures, and communities as a basis for connecting instruction to student experiences.”

**Standard 4. Planning for Instruction**

Standard 4 focuses on instructional planning and calls for teachers to be skilled in designing instruction that draws upon knowledge of the discipline, the students, the community, and the curriculum goals. Standard 4 is most closely aligned with the SEL principles of school-wide coordination and school–family and school–community partnerships. The standard calls on teachers to develop interdisciplinary approaches to learning, requiring that teachers create learning experiences that “relate to students’ current life experiences,” are “relevant to the students,” and are “based on students’ prior knowledge” in order to build “an effective bridge between student experiences and career and educational goals.”

**Standard 5. Learning Environment**

Standard 5 places a strong emphasis on SEL, explicitly calling for teachers to engage students in activities that enhance their social and emotional development. The standard calls on teachers to establish a learning environment that is characterized by positive attitudes and values including “mutual respect” and student “support for one another.” Teachers should also create opportunities for students to “assume responsibility for themselves and for one another.” Furthermore, Standard 5 establishes the expectation that teachers engage students in activities that promote SEL skills, including responsible decision making and development of social interaction skills. In particular, teachers should use strategies to create a smoothly functioning learning community in which “expectations and processes for communication and behavior” have been established and students (Preparation, continued on p. 27)

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**CASEL Key Social and Emotional Competencies for Teachers**

1. **Developing Student Awareness of Self and Others**
   1a. Awareness of feelings: The capacity to accurately perceive and label one’s feelings
   1b. Management of feelings: The capacity to regulate one’s feelings
   1c. Constructive sense of self: The capacity to accurately perceive one’s strengths and weaknesses and handle everyday challenges with confidence and optimism
   1d. Perspective taking: The capacity to accurately perceive the perspectives of others

2. **Promoting Positive Student Attitudes and Values**
   2a. Personal responsibility: The intention to engage in safe, healthy, and ethical behaviors
   2b. Respect for others: The intention to accept and appreciate individual and group differences and value the rights of all people
   2c. Social responsibility: The intention to be honest and fair in one’s dealings with others, contribute to one’s community, and protect the environment

3. **Supporting Responsible Decision Making**
   3a. Problem identification: The capacity to identify situations that require a solution or decision and assess risks, barriers, and resources
   3b. Adaptive goal setting: The capacity to set positive and realistic goals
   3c. Social norm analysis: The capacity to critically evaluate social, cultural, and media messages pertaining to social norms and personal behavior
   3d. Problem solving: The capacity to develop positive and informed solutions to problems

4. **Fostering Student Social Interaction Skills**
   4a. Active listening: The capacity to attend to others both verbally and non-verbally in order to demonstrate to others that they have been understood.
   4b. Expressive communication: The capacity to initiate and maintain conversations, express one’s thoughts and feelings clearly both verbally and non-verbally
   4c. Cooperation: The capacity to take turns and share within both dyadic and group situations
   4d. Negotiation: The capacity to resolve conflict peacefully, considering the perspectives and feelings of others
   4e. Refusal: The capacity to make and follow through with clear “NO” statements, to avoid situations in which one might be pressured, and to delay acting in pressure situations until adequately prepared
   4f. Help seeking: The capacity to identify the need for support and assistance and to access available and appropriate resources

5. **Supporting School-Wide Coordination of Instruction**
   5a. Joint planning by teachers
   5b. Development of a school climate characterized by mutual support and trust between teachers and students
   5c. Specifying roles in program planning for nonteaching personnel, such as those providing student health and mental health services

6. **Developing School-Family Partnerships**
   6a. Establishing regular communication channels between schools and families
   6b. Building family members’ capacity to be supportive of and involved in their children’s education both at home and in the classroom

7. **Building School-Community Partnerships**
   7a. Enhancing students’ understanding of and ability to use community resources
   7b. Encouraging members of the community to participate in classroom instruction and provide service learning opportunities for students
How Social and Emotional Learning is Infused into Academics in the Social Decision-Making/Social Problem-Solving Program

Maurice J. Elias, Rutgers University

A great deal has been written about social decision-making and social-problem-solving process. As an approach to education, it has an extensive lineage, going back to the work of John Dewey (1933). In recent years, the work of the Social Decision-Making/Social-Problem Solving Project (SDM/SPS), begun at Rutgers University in 1973, has been in the vanguard of this approach. The SDM/SPS Project's collaborative field research and development with teachers, administrators, and parents have led to the development of curriculum, instructional approaches, and extensive implementation strategies; the program now is being used in hundreds of classrooms in nearly half the states.

Children who were participants in SDM/SPS, relative to controls not in the program, derived many benefits from the training, including:

- greater sensitivity to others' feelings
- better understanding of the consequences of their behavior
- increased ability to assess interpersonal situations and plan appropriate actions
- higher self-esteem
- more positive prosocial behavior
- better transition to middle school
- lower than expected levels of antisocial, self-destructive, and socially disordered behavior
- improved learning skills and academic achievement in areas which had been infused with social decision making
- improved self-control, social awareness and social decision making and problem solving, both inside and outside the classroom.

These original findings have recently been replicated, and the National Education Goals Panel designated the program as a model for Goal #7 (Safe, Drug Free Schools). The core of the project involves building the social and emotional skills of students. It focuses on self-control, group participation, and social awareness, and a decision-making strategy to use when faced with difficult choices under stress or when planning, all aimed at preventing problem behaviors and promoting successful social and academic performance. The Project demonstrates that the infusion of SDM/SPS—and attendant social and emotional learning skills—into the curriculum provides a natural augmentation of elements already present in academic learning.

The SDM/SPS—Academics Connection

Integrating SDM/SPS into academic work of students builds their social and emotional learning (SEL) skills and enriches their academic studies by linking these studies to social and emotional processes. The centerpiece of SDM/SPS is FIG TESPN, an acronym for a pervasive, sequential decision-making and problem-solving strategy, analogous to the strategies and purposes of both SEL and academic learning. FIG TESPN provides complete guide to the process of confronting and dealing with a problem or decision.

In the SDM/SPS approach, skills are taught to students through structured curricula, then reinforced through an extensive series of varied applications. The learning of these skills can be integrated into the teaching of literature, social studies, current events, and health education. Because much of what children read involves characters in stories making decisions, reacting to conflicts, coping with strong feelings, and navigating interpersonal situations, young readers' application of FIG TESPN to their literary reading makes use of a natural correspondence and improves comprehension. Both history and current events can be thought of as a series of decisions made by individuals or groups, often in response to actual or anticipated problems, accompanied by strong feelings, and reflecting certain goals, options, and consequences.

A Look Ahead: SDM/SPS and Instruction in Urban Schools

The integration of SEL—including programs like SDM/SPS—into urban schools, the places where youth are at highest risk for problem behaviors and poor academic outcomes, is sometimes hampered by other school reform efforts, especially programs narrowly aimed at improving reading—programs which usually ignore the effect of children's emotions on their learning. For example, certain vocabulary can negatively impact a child's ability to learn: SEL-deprived children confronting common words—"mother," "father," "sister," "brother," "home"—lack the skills to put aside their feelings and continue with the task at hand.

Social and emotional learning programs, like The Responsive Classroom and SDM/SPS, directly address such problems, providing emotional buffers by helping children differentiate conditions at home and conditions at school. Furthermore, when compared with the skills of emotional intelligence, the U. S. Department of Education's reading standards for grade 3—standards which imply those for other
Moving Toward Pre-K to Grade 12 SEL in Urban Schools

For the past 3 years, I have been working with the Plainfield, NJ, school district as it embarks on a 7-year effort to bring SEL into the schools from pre K–grade 12. As this has happened, we have had to simultaneously work with the district's adoption of Whole School Reform models, especially America's Choice and its highly prescriptive approaches to literacy. In this context, there have been clear revelations about the instructional processes needed to impact students' SEL in a way that will bring synergy to their reading abilities. Obtaining the kinds of integration of SDM/SPS strategies noted earlier is essential. This integration is founded on certain sets of instructional processes linked to building skills that children can readily access in everyday life decisions and contexts, particularly when under stress.

The most effective ways to teach students SEL skills and create an environment in which those skills are reinforced is through repetition and coordination with a variety of activities. The instructional process used in SDM/SPS to build a skill is as follows:

1. Determine the needs of the students.
2. Select a skill focus.
3. Prepare the students: describe situations in which the skill is used, explain the skill, and elicit a rationale for the importance of the skill; a rationale must be provided before instruction can begin.
4. Ask how students have handled similar situations before, what coping methods have they employed.
5. Break the skill down into its component parts.
6. Teach a prompt or name for the skill to use when cueing its practice.
7. Ask students to identify when the skill would be useful to them.
8. Teach the component parts through modeling.
9. Provide hypothetical situations (via stories, videos, role-play vignettes) for guided practice and rehearsal with feedback.
10. Encourage use of the skill outside of the lesson and integrate with other academic skills.
11. Begin subsequent meetings with reviews and testimonials to reinforce skills and monitor progress reinforce skills, and determine the next area of focus.

This process is similar to the instructional design of most empirically-supported, curriculum-based approaches to SEL, but often too little consideration is given to how material presented in curricular lessons will find its way into children's behavioral repertoire and be put to regular use, especially given the emotional state that many urban learners are in. Therefore, plans for promoting skills' application are as important as the lessons. For example, role playing and observing simulations are necessary parts of SEL efforts, and children must be encouraged to self-monitor via journals and checklists. It is also essential to relate social-emotional skills to instructional processes in the classroom and academic content areas. Examples include the application to students' participating fully in cooperative learning groups and otherwise ensuring that the classroom is a primary arena for normative SEL skills. Furthermore, it is unreasonable to expect children to learn SEL skills without an extended period of cueing and prompting, yet this phase of skill building is most often omitted. Prompts—posters, cue cards, or other signals established between a teacher and students—are used to elicit students' transfer of the skills outside the instructional setting, and might, for example, signal students to self-calm, to control impulses, or, in the case of SDM/SPS, to do problem solving: "Use FIGTESPN."

The immediate goal of such prompts may be to interrupt potentially disruptive situations and to stimulate emotional regulation and problem-solving thinking. The eventual goal is to build students' ability to regulate their own emotional reactions. Unless students are given proactive strategies to regulate their emotions and direct their energies toward learning, it is unlikely that added instructional hours or days will eventuate in corresponding amounts of learning.

Conclusion

Curriculum-based SEL lessons provide structured opportunities for skill instruction and practice that can then combine with students' self-monitoring of their own skill development, and ongoing external prompts by adults to promote skill use. These skills must also be integrated into everyday academic instruction if generalization is to be maximized. It is also essential that the broader classroom and the school context—including parents, bus drivers, community sports coaches, for example—reinforce the use of skills. The combination of these elements yields positive student outcomes and significant behavior change.

The SDM/SPS approach—like other approaches discussed in this volume—provides a framework that introduces continuity amidst the extraordinarily diverse topics and mandates and coping challenges with which children, teachers, and parents must contend. It builds competence and confidence by concentrating on a basic set of skills which are taught explicitly while applications to social and academic areas are made with regularity. Because one cannot prepare children for every problem they will face, providing students with strategies results in continuity over time and across experiences.

Perhaps most important, however, is that these approaches provide the tools for educators at all levels to move decisively from the question of whether to enhance children's social competencies and life skills to confronting the task of how this goal is to be accomplished and in a way that simultaneously lifts all students' academic potential.
Social Development and Social and Emotional Learning
The Seattle Social Development Project
J. David Hawkins, Brian H. Smith, and Richard F. Catalano, University of Washington

As the social and emotional learning (SEL) field has developed, it has moved away from short-term, sporadic programs focused on specific problems and towards comprehensive, multi-year interventions designed to impact a wide range of behavioral and academic outcomes. Fueling this development is a growing recognition that the teaching of social and emotional competence is most effective when supported by the child’s larger environment. The application of a model of social development to the design of SEL programs can help focus on creating the conditions that lead youths to build strong prosocial bonds in that environment, thereby enhancing their social and emotional development and their academic success.

Social and Emotional Learning
Social and emotional learning encompasses a wide range of personal and interpersonal abilities: self-motivation and persistence; self-management of impulses and moods; decision making, including resisting negative, limiting influences and delaying gratification; and effective communication. Educating children to achieve competence in these abilities entails helping them understand and manage their emotions and develop effective social skills in order to build positive relationships and make healthy choices. The development of emotional competence develops one’s ability to cope with stressful situations, leads to improved brain development, and plays an integral role in learning through its role in focusing attention. The development of social competence enables children to form positive relationships; those that do exhibit fewer problem behaviors. These competencies are inseparably related and form the foundation for academic success: Peer acceptance and socially appropriate behavior are strongly influenced by a child’s emotional regulation, and, in turn, a child’s social relationships play a powerful role in adjustment and success in school.

A Theory of Social Development
Our social development model (SDM) describes how children learn patterns of behavior and how social systems of opportunity and reward in their environment guide children either toward or away from positive behavior and school success. The model asserts the importance of social bonds in shaping behavior. The SDM proposes that children develop bonds of attachment and commitment to school to the extent that they consistently experience opportunities to be actively engaged in learning and experience rewards and recognition for their learning efforts. Children’s social and emotional competencies are important in producing reinforcement from the school environment that leads to bonding. Because bonding can operate in interactions with both prosocial and antisocial others to the extent an individual bonds to prosocial others—and thereby invests in the values and beliefs they represent—that person is less likely to violate expectations by engaging in antisocial behavior. In contrast, studies show that children who bond with drug-involved family members are more likely to engage in drug use themselves. Some students who lack the competencies required for successful prosocial engagement may find that the skill threshold for antisocial behavior is more easily achieved.

Commitment and attachment are more stable qualities than rewards. They are emotional and personal investments in social units, and the concept of investment implies a degree of stability and future orientation, the promise of future involvement. Such investments are built up through each day’s involvements and rewards, the cumulative weight of the investment is more than the sum of that day’s rewards.

Social Development and Social Emotional Learning
If social and emotional competencies are to lead to social bonding, children must be provided with developmentally appropriate opportunities to practice these skills and must be rewarded for exercising those skills successfully. The creation of opportunities for prosocial interaction allows children to use their social and emotional competencies while developing powerful protective attachments to positive social influences. The conditions required for developing prosocial attachments specified by the SDM are consistent with the best practice recommendations of SEL researchers, which emphasize that opportunities should take place in a range of social contexts. But to create attachment to prosocial groups and individuals—which in turn motivates students to become involved in the classroom or other prosocial environments—participation must be competent, and their behavior must produce positive reinforcement.

Implications for Developmental Interventions
Preschool children’s prosocial or antisocial development depends on the quality of their interactions with parents and other adult caregivers. Competent caregiving facilitates healthy development, but low interpersonal, educational, and financial resources of caretakers...
increase the risks for cognitive delays, which increase the risk for school failure and for psychopathology. Preschoolers’ constitutional endowments, such as low birthweight, or personal characteristics, like positive temperament, can also influence development.

The interaction patterns established during the preschool years form the foundation for the patterns of bonding and behavior that develop in early elementary school. In the early elementary years, teachers largely determine the opportunities for prosocial involvement and rewards available in the school setting. The structure of the classroom, how lessons are taught, the way recess is managed, and the overall school climate all interact with children’s attitudes and skills to determine the level of prosocial bonds that students develop during the elementary period, bonds that lead to a commitment to schooling and academic success.

The types of social bonds children have established in preschool and early elementary school powerfully influence the choices they make as they develop peer networks. Children who have formed strong prosocial bonds will be less likely to form friendships with peers who are involved in drug use and delinquency. The bonds to prosocial or antisocial peers and adults that developed in middle school have a powerful role in determining youths’ behavior and choices in high school.

Social and emotional competence is the bridge that allows youths to become successfully engaged with prosocial environments. At each developmental stage, children’s skill at reading others and managing their own emotions and behaviors helps them recognize opportunities to participate and gain rewards in academic and social situations. The competencies gained through social and emotional learning programs provide children with the skills for participation leading to a commitment to prosocial actions and relationships.

Seattle Social Development Project

We know that improved social and emotional competence helps children cope with stress, develop healthy cognitive abilities, focus attention, and form relationships with peers and adults. We also know of many successful strategies that have increased opportunities for active involvement of young people, strategies that have produced positive behavioral and academic outcomes: adult and peer tutoring and mentoring, community service, classroom management, cooperative learning in classrooms, and buffered transitions to middle and high school.

In developing The Seattle Social Development Project (SSDP)—a school-based test of a set of interventions based on the principles of our social development model (SDM) and the kinds of strategies listed above—we hypothesized that increasing opportunities, skills, and recognition for positive involvement in school and family during the elementary grades would set children from high-crime neighborhoods on a positive developmental trajectory toward more positive academic outcomes and fewer health-risk behaviors later in adolescence.

The classroom component of SSDP trained teachers in four key areas to promote of the children’s social competence: (a) classroom management to minimize of disruptions and negative behavior and reward positive behavior; (b) making clear expectations and explicit instructions concerning attendance, classroom procedures and behavior; (c) interactive teaching techniques to increase student-teacher involvement; and (d) cooperative learning methods. Also, first graders were provided training in Interpersonal Cognitive Problem Solving, a social competence program focusing on building communication, decision-making, negotiation, and conflict resolution skills. In the sixth grade, students received training to help them recognize and resist negative social influences.

The SSDP sought to support students’ social development by enhancing the family environment as well. In the first and second grades, parents were offered training in child behavior management skills. In the second and third grades, parents were offered another program to improve parent-child involvement and to provide a supportive learning environment at home. The parents of fifth and sixth graders were offered a program effective in protecting children ages 9-14 from substance abuse by increasing prosocial bonding, setting and reinforcing clear expectations for children’s behaviors, teaching children to resist negative peer influences, reducing family conflict, and controlling emotions.

Studies of the SSDP show that teachers’ use of the intervention teaching practices led to changes in students’ perceptions of the opportunity and reward structure of the classroom and resulted in stronger bonding to school and improved academic and behavioral outcomes. At the end of grade 6, girls from low-income families displayed significantly more classroom participation and more bonding and commitment to school than their comparison counterparts. Boys from low-income families were significantly more likely to report improved social skills, school work, and commitment to school, to have better test scores and grades, and were less likely to have antisocial peers than were comparison boys.

The long-term effects of their elementary grade interventions on both achievement and behavior are noteworthy. At age 18, six years after the intervention ended, teens who had been in the full intervention had significantly better school grades and academic success than did their control counterparts, and they were less likely to have repeated a grade in school. Moreover, significantly fewer had engaged in school misbehavior, violence, heavy alcohol use, and risky sexual activity by age 18. (SSDP, continued on p. 27)
Community in School as Key to Student Growth
Findings from the Child Development Project
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In the course of 20 years of work on the Child Development Project (CDP), we have come to believe that community building in school provides a powerful focus for improving educational practice, especially practice aimed at helping children become caring, principled, and interpersonally and interpersonally effective in a caring community of learners. But we also have come to believe, based on evaluation data gathered over time and described here, that a singular focus on community building may not be sufficient for promoting academic achievement.

Caring Community of Learners
For us, a “caring community of learners” exists when students experience themselves as valued, contributing, influential members of a classroom or school, which they perceive as dedicated to their welfare and growth. We regard the key components of a caring community of learners as:

- respectful, supportive relationships among students, teachers, and parents
- frequent opportunities to help and collaborate with others
- frequent opportunities for autonomy and influence
- emphasis on common purposes and ideals.

We advocate these four principles be deliberately factored into educators’ planning and decision making about school policy, pedagogy, structure, and content.

How Sense of Community Influences Children’s Development
Students have basic psychological needs for belonging, autonomy, and competence; and their level of engagement with school depends on whether these needs are fulfilled there. Various experiences associated with participation in a caring school community help students to satisfy their basic psychological needs and develop intellectual and sociomoral capacities, including knowledge of academic subject matter, reasoning skills, empathy with others, social skills, and understanding of values endorsed by their school and community. In CDP schools, these values include the worth of learning, self-motivation, and self-control, as well as ethical, democratic values.

The CDP Program
The CDP school improvement program focuses on making comprehensive change in the classroom, in the school at large, and in the links between home and school. In brief, the CDP program includes:

- a reading/language curriculum enabling children to explore the needs, behaviors, and perspectives others;
- cooperative learning both to master academic material and to work with others;
- classroom management that creates friendly classrooms, which in turn stimulate learning and help students learn self-discipline;
- home–school activities that invite families to shape the life of the school and support their children’s learning at home; and
- school service programs that help students establish caring, helpful relationships with each other.

A limited assessment of CDP provided positive results for the program and suggested sense of community is significantly related to many desirable student outcomes; however, no effects were found on standardized achievement test scores.

Recent Six-District Study
In 1991, we initiated a more extensive examination of the effects of community at 24 elementary schools in six school districts implementing CDP. The schools in this sample—two program schools and two matched comparison schools from districts across the United States—were diverse in size, economic and ethnic composition, and academic achievement.

RELATIONSHIPS OF SENSE OF COMMUNITY TO SCHOOL AND CLASSROOM CHARACTERISTICS AT BASELINE
Findings from our baseline assessment, conducted prior to the introduction of CDP, indicate that both students and teachers were less likely to feel themselves members of a cohesive school community in less affluent settings. The baseline data also showed that teacher characteristics (e.g., teacher warmth and supportiveness) and teaching practices (e.g., promotion of cooperation) were strongly related to students’ sense of community, and that these relationships were independent of the school’s poverty level. Students’ sense of community was strongly associated with numerous measures of student attitudes, motivational orientations, and behaviors, and was consistently associated with a positive orientation toward school and learning.

PROGRAM IMPLEMENTATION AND OUTCOMES IN THE SIX-DISTRICT STUDY
In this study, 5 of the 12 program schools showed significant implementation of the elements of the CDP program; seven schools did not. In these latter seven schools, student attitude, motivation, and classroom behavior measures generally declined relative to their comparison schools, as did some indices of achievement. For the five high-implementation program schools, over 50% of the student outcome variables showed significant effects favoring program students, including:
- Effects on student attitudes, motives, and inclinations, such as sense of school as community
- Effects on teacher reports of practices, attitudes, and perceptions, such as greater provision for student autonomy/influence.

**Effects on Student Achievement**

As a group, the five high-implementation schools showed no significant effects on the DSC measures of reading comprehension and inductive reasoning. Students in two of the five schools, however, showed large, positive differences from their comparison schools on a state performance assessment in reading, math, social studies, or science in one, two, or all three years of assessment.

**Modeling Analyses**

We also analyzed the effects of CDP program implementation on student outcomes over time. The findings clearly indicate that participation in CDP had positive effects on teachers’ classroom practices, that these practices in turn influenced students’ sense of community, and that these changes in sense of community brought about desirable changes in academic attitudes, motivation, and behaviors. However, we did not find a mediating relationship when we used our available achievement data to examine the possible role of sense of community in mediating academic achievement. We examined additional models in which engagement in class and student motivation were explored as alternative or additional mediating variables, and here, too, we did not find evidence of mediating relationships.

**Middle School Follow-Up Study**

In a recent four-year follow-up study, we tracked students from three high-implementation and three low-implementation program schools (all characterized as serving “high-risk” student populations) in three of the six districts, along with their comparison school counterparts, as they progressed through middle school. Former students from the low-implementation program schools fared significantly (p<.05) worse during middle school, relative to former comparison students, on 10% of 40 outcomes. Thus some of the negative effects found during the elementary years for these schools continued through the middle grades.

Former students from high-implementation schools significantly outperformed comparison students on fully 50% of the 40 outcomes. No differences favored their comparison students. Most interestingly, former program school students significantly outperformed comparison students on two key measures of academic achievement—grade point averages and achievement test scores—and eight of nine other outcomes related to academic attitudes and motivation (e.g., educational aspirations, respect for teachers).

**Conclusions**

Concerning the importance of community in school and the effectiveness of the CDP program, our research shows that:

- Schools differ in the extent to which students regard them as caring communities.
- Sense of community is positively related to a large number of desirable outcomes for students.
- A coherent set of teacher characteristics and practices is related to students’ sense of community.
- A challenging program to implement, CDP’s acceptance and adoption in schools turned out to be something of an all-or-nothing proposition.
- When consistently implemented within a school, the CDP increased students’ sense of community.
- CDP produced many benefits for students, through its mediating effect on community—on character-related outcomes, social and emotional outcomes, avoidance of problem behaviors, and academic motivation and aspirations. But CDP did not always promote academic achievement during the elementary years.

- Many CDP benefits persisted in middle school; some new effects materialized, notably a substantial effect on academic achievement. These findings point to the importance of school bonding as a mediator of healthy learning and growth. Students who experienced school as a caring community tended to become committed to the school’s goals and values, resulting in improved self-confidence, ethics, social skills, and academic motivation.

In light of academic assessment pressures on elementary schools, we have come to believe that those schools that wish to focus on building community must also establish two additional priorities for the full range of students they serve. These priorities are sometimes labeled “academic press” and “academic support”:

- **High expectations.** Recognizing that students differ in strengths and abilities, schools should work for every student’s continuing progress by tracking student learning.

  **Important and engaging learning opportunities.** Connect to students’ interests and prior experiences and tap the motivation to learn.

Others have investigated the relative importance of sense of community and academic press for boosting academic achievement. Our research now leads us to agree with other recent publications that have found that without an emphasis on academics, fostering community in school is inadequate for producing achievement gains among low-income, urban students.

A growing body of research indicates a relatively focused reform agenda can effectively attain both academic and social growth. That agenda—academic press, academic support, and a focus on building community in school—may meet the needs of both students and society. This agenda may be particularly beneficial for disadvantaged students. Challenging, engaging, and caring schools may provide the pivotal support needed by students who have been least likely to succeed.
The P(romoting) A(lternative) TH(inking) S(trategies) Curriculum
Theory and Research on Neurocognitive and Academic Development

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The study of child development has long had three streams of research with only occasional interface: cognitive development, language development, and social-emotional development. In spite of the absence of empirical integration, a number of theoretical models have clearly linked affect, cognition, and behavior, including psychoanalytic, educational, social-cognitive, and neurocognitive theories. Recent psychoanalytic theory, in conjunction with developmental neuropsychology, for example, postulates that the manner in which a child's brain becomes structuralized is highly dependent on the social-emotional interactions between the child and the child's significant others. Also, research in neuroscience indicates that the two areas of cognitive and emotion regulation in the frontal lobes of the brain are mutually inhibitory. As one area increases activity, the other reduces it. At a general level, these theories all support the notion that one's ability to regulate strong emotions (anger, anxiety, sadness) and to have self-awareness will directly impact one's performance, be it social or academic. Specifically, teaching children how to have better self-control and to more effectively utilize their cognitive and communicative skills should lead to better interpersonal functioning as well academic performance.

The PATHS Curriculum

Research strongly suggested that a comprehensive prevention program in the classroom setting had the potential to provide much needed assistance for both normally-adjusted and behaviorally at-risk students. In addition, we believed that the rapid and complex cultural changes of the past few decades, emotional and social competency, crucial requirements for adaptive and successful functioning of children and for their continuing adaptation as adolescents and adults. The PATHS (Promoting Alternative THinking Strategies) Curriculum was developed to fill the need for a comprehensive, developmentally-based curriculum intended to promote social and emotional competence and prevent or reduce behavioral and emotional problems. From its inception, the goal of PATHS focused on prevention through the development of essential developmental skills in emotional literacy, positive peer relations, and problem solving.

PATHS is designed to be taught by elementary school teachers from grades K–5 as an integrated component of the regular year-long curriculum. To ensure that children use skills in other contexts, generalization activities and strategies were incorporated. More recent literature reviews have indicated that successful school-based SEL programs (a) use a program of longer duration, (b) synthesize a number of successful approaches, (c) incorporate a developmental model, (d) provide greater focus on the role of emotions and emotional development, (e) emphasize generalization techniques, (f) provide ongoing training and support for implementation, and (g) use multiple measures and follow-ups for assessing program effectiveness. All seven of these critical factors have been incorporated into the PATHS curriculum and research.

Theoretical Rationale and Conceptual Framework

The PATHS program is based on four conceptual models, all integrated into the paradigm that is popularly known as "emotional intelligence." The first, the Affective-Behavioral-Cognitive-Dynamic (ABCD) Model of Development, focuses on the promotion of optimal integration between affect, behavior, and cognition/language. This integration is of crucial importance in achieving socially competent action and healthy peer relations. The second model incorporates an eco-behavioral systems orientation and emphasizes safe and caring classrooms and schools, that is, a learning environment that supports the children's use and internalization of the material in real-life opportunities to use its skills and structures. Recent psychoanalytic theory provides the third conceptual model on which we based PATHS. This theory indicates that learning experiences in the context of meaningful relationships during childhood influence the development of neural networks between different areas of the brain, which in turn affect self-control and emotional awareness.

The forth model involves the domains of neurobiology and brain structuralization/organization. The executive functions of the left and right frontal lobes (including such domains as attention, concentration, frustration tolerance, social problem-solving skills, self-control, and the management of affect) are crucial for both higher-level learning and for mature behavior. Deficits in the functioning of any of these areas can affect the development of other domains. Moreover, it is important to note that these abilities do not automatically develop but rather must be learned by each individual and are heavily influenced by environmental input.
throughout early childhood. To promote the development of executive control, PATHS teaches children to practice conscious strategies for self-control. We hypothesized that verbal identification and labeling feelings would powerfully assist with managing these feelings, controlling behavior, and improving hemispheric integration. Thus, we introduced several strategies that require both the affect recognition and labeling of the affect.

We also incorporated strategies in PATHS to optimize the nature and quality of teacher-child and peer-peer interactions that are likely to impact brain development as well as learning. PATHS encourages children to discuss feelings, experiences, opinions, in a supportive and respectful environment. These aspects of PATHS facilitate the internalization of feeling valued, cared for, appreciated, and part of a social group, which in turn, motivates children to value, care for, and appreciate themselves, their environment, their social groups, other people, and their world.

The PATHS prevention model contains a number of basic principles that are drawn from the theories previously discussed. First, the school environment is a fundamental ecology and one that can be a central locus of change. Second, to affect significant changes in children’s social and emotional competence, it is necessary to take a holistic approach that includes a focus on affect, behavior, and cognitions. Third, children’s ability to understand and discuss emotions is related to their ability to inhibit behavior by utilizing verbal self-control. Fourth, children’s ability to understand their own and others’ emotions is a central component of effective problem-solving and social interactions. Fifth, developmental models indicate that it is important to build protective factors (e.g., promote reflective thinking, problem solving, and the ability to accurately anticipate and evaluate situations) that decrease maladjustment. These skills, in turn, increase children’s access to positive social interactions and provide opportunities for a greater variety of learning experiences. As such, these skills should also contribute to the amelioration of significant underachievement and promote skills that are beneficial to the prevention of other types of adolescent problem behaviors in the future (e.g., aggression, substance abuse, dangerous risk-taking).

**Brief Description of the PATHS Intervention**

The PATHS Curriculum consists of an Instructional Manual, six volumes of lessons, pictures, photographs, posters, and additional materials. PATHS is divided into three major units: (1) the Readiness and Self-Control Unit (12 lessons), (2) the Feelings and Relationships Unit (56 lessons that emotional intelligence), and (3) the Interpersonal Cognitive Problem-Solving Unit (33 lessons). Two further areas of focus in PATHS involve building positive self-esteem and improving peer communications/relations. PATHS allows for flexible implementation of the lessons over a 5-year period.

**Evidence of PATHS Program Effectiveness**

There have been five clinical trials of PATHS. Four of these have involved special needs students: two interventions for students with behavioral problems and two for hearing-impaired children. Over 9,000 children participated in the five trials. Across these trials, PATHS has been shown to improve social cognitions and social and emotional competencies and reduce aggression and depression across a wide variety of elementary school-aged children. Students’ ability to solve social problems, interpersonal conflicts and dilemmas in a prosocial manner increased, as did their emotional recognition skills. In addition, these findings have shown cross-rater validity, as they have been reflected in teacher ratings, self-reports, and child testing/interviewing. Positive effects have also been found on some cognitive/academic skills. Students have shown greater efficiency in cognitive problem solving and flexibility and in the quality of their planning skills, including less impulsiveness.

Children in both the hearing-impaired cohorts showed significant improvement in reading; however, none of the four trials which measured mathematical achievement revealed any lasting improvements, which was contrary to our original hypothesis of the effects of the PATHS.

**Implications and Discussion**

The five studies conducted over the past two decades indicate that PATHS shows efficacy in improving the social competence and adaptation of a wide variety of children. We believe that a central reason for these findings is that PATHS is well grounded in a broader, interdisciplinary model of the developing child. Our theoretical paradigm regarding the integration of affective, cognitive, and linguistic development, our utilization of theoretical models from modern neuroscience and psychoanalytic thinking, and our conceptualization of the ecological behavioral interactions within the school, all drive the actual activities utilized in the PATHS Curriculum model. Further, both our data and recent findings in neuroscience point to the importance of considering social-emotional development as best (PATHS, continued on p. 26)
RCCP: History and Goals

The program began in 1985 in three schools in Brooklyn Community School District 15 as a collaborative project initiated by the district’s superintendent, Educators for Social Responsibility Metropolitan Area (ESR Metro), and the New York City (NYC) Board of Education. By 1993, it was serving 110 schools in NYC, and currently involves 175,000 children in 13 diverse school systems. The RCCP aims to teach youngsters in grades K-12 skills to deal positively with conflict and diversity and to help educators create collaborative and non-violent classrooms and school communities.

The RCCP started with what remains its core component: professional development for teachers—introductory and advanced training and classroom coaching—to support their implementation of the RCCP curriculum both in classroom lessons and throughout the school day. Over the years, the RCCP added other components, including peer mediation, training for parents and administrators, an intervention for high-risk youth, and training for staff to build capacity. For students, RCCP activities develop understandings and skills in a wide range of SEL-related topics including active listening, assertiveness, handling feelings, negotiation, celebrating differences, and countering bias.

Two independent, small-scale evaluations in 1988 and 1989 indicated, based on teacher reports, that the program was reducing violence-related behavior and promoting caring and cooperative behavior in classrooms. In 1994, a large-scale, short-term longitudinal, quasi-experimental study was initiated, and included data gathered directly from children, from children’s teachers, and from school records.

Evaluation Design and Results

Data for the study was collected at four times over a two-year period (1994-1996) from more than 5,000 children in grades 1-6 in 15 elementary schools drawn from four community school districts in NYC. Because the 110 schools implementing the RCCP were at various stages of implementation, the study was designed to capture and evaluate variation in RCCP as typically implemented within the NYC public school system. A Management Information System (MIS), developed by the RCCP practitioner and research team, enabled staff developers to collect and record data on (a) the amount of staff development (training and coaching) a teacher received and (b) the number of RCCP lessons a teacher taught.

In order to measure the influence of RCCP on children’s development, the practitioner and research team identified and measured four domains which might be affected:

1. Teachers’ reports of children’s aggressive and prosocial behaviors;
2. Children’s reports of their own behavioral symptomatology;
3. Children’s social-cognitive and interpersonal behavioral processes known to place them at risk for future aggressive and violent behavior; and
4. Children’s academic achievement in reading and math.

In order to test how exposure to RCCP affected children’s development, we collected data to estimate children’s growth trajectories (rates of development) in each of these four domains from ages 6 to 14. Independent of children’s demographic characteristics and participation in RCCP, two patterns of growth trajectories were revealed: (a) children’s hostile attribution bias (the tendency to attribute hostile intent to an ambiguous action on the part of another) and self-reported conduct problems both increase over time, and (b) children’s competent interpersonal negotiation strategies and teacher ratings of children’s aggressive behavior increase between the ages of 6.5 and approximately 9.0 years and then decline to age 14.

RCCP EFFECTS ON SEL AND ACADEMIC LEARNING

Our hypothesis was that the more RCCP lessons children received from their teachers, net of other factors, the slower would be their growth in negative outcomes (e.g., aggressiveness) and the faster their growth in positive outcomes (e.g., academic achievement). Our findings confirmed these predictions: High rates of instruction in the SEL curriculum were related to deflections in children’s social-emotional developmental trajectories away from a path of risk for future aggression and violence. For children in grades 3-6 receiving standardized math and reading tests in 1994, 1995, and 1996, high rates of instruction in the RCCP curriculum were also related to improved trajectories of children’s academic performance between the ages of approximately 7.5 and 14.
Students of teachers who received a relatively greater amounts (≥ 1 SD above mean) of Teacher Training and Coaching actually did less well. Both the RCCP staff and the research team interpret this as an indication that the most resistant teachers received the most training.

Because children were not assigned to teachers based on teacher participation in RCCP, these results are unbiased estimates of the effects of being in a “high lessons” classroom on children’s developmental and academic trajectories. But because teachers chose whether and how much to participate in RCCP—that is, the quasi-experimental design—we cannot be sure whether the effects on children’s SEL and academic achievement trajectories are due to the RCCP lessons per se, to unobserved characteristics of “high lessons” teachers, or to some combination of these.

The Relationship Between SEL and Academic Achievement

With this caveat in mind, we sought evidence that RCCP’s effect on children’s SEL accounts for RCCP’s effect on children’s academic learning by invoking two different models. The mediated effects model proposes that SEL mediates the effect of RCCP on academic achievement. The independent effects model, in contrast, hypothesizes that RCCP has separate effects on both SEL and academic achievement. To date, our results clearly support the independent effects model. While a final set of analyses testing whether these findings vary by features of children’s classrooms are still underway, we conclude that children’s high rates of exposure to RCCP lessons appears to have separate and independent effects on both children’s SEL and their academic achievement.

Implications

Critics of SEL fear more time and attention devoted to SEL would mean less for academic learning and result in lower achievement. Our findings offer clear evidence that the effects of RCCP on SEL and academic learning, while not causally related, are both positive. Children of “high lessons teachers” grew better both in social-emotional domains (like hostile attribution bias and interpersonal negotiation strategies) and in academic domains (reading and math achievement). Furthermore, the developmental effects of “high lessons teachers” are robust across most of RCCP’s wide range of student and school characteristics.

The implications of these findings for both practice and policy are great. Whether future research indicates teacher characteristics, and/or RCCP lessons to be the causal factor in positively influencing children’s developmental trajectories. If it is RCCP lessons, the practice and policy task is to train and support teachers to teach more lessons. Conversely, if it is teacher characteristics, teacher selection and retention warrant critical attention.

Practice

If the observed effects are associated at least in part with the amount of RCCP lessons taught, the key challenge for practitioners is to stimulate teachers to teach more lessons more consistently. The primary tool for promoting classroom implementation of the curriculum is through the professional development of teachers. Implementation may also be improved through more rigorous evaluation of potential program schools (e.g., assessing a school’s organizational readiness).

Policy

Academic achievement and SEL can go hand in hand. Children appear to learn better in an environment that promotes learning skills and taking responsibility for handling conflict well. To promote high-quality program implementation, school boards and superintendents need to establish SEL as a priority—valuable in itself and completely consistent with the current emphasis on raising academic achievement—and provide funds for professional development. Principals should be encouraged to develop effective programs in SEL tailored to the needs of their school communities. Colleges should better prepare teachers to promote SEL in their classrooms; courses in conflict resolution and intercultural understanding should be requirements for teacher certification.

Conclusion

Over the last few years, the educational ideology of standards-based curriculum and outcomes-based accountability has swept the nation. Proponents of this perspective on educational reform believe academic achievement is the paramount outcome by which to hold school systems and teachers accountable. The combination of these two beliefs has placed proponents of SEL on the defensive, arguing it is necessary to build academic success on SEL.

Our results, suggesting an independent effect of RCCP on the SEL and academic domains, however, do not prove that independent effects obtain for all programs. Other SEL programs may induce positive change in academic learning by promoting positive change in SEL. But even if most SEL programs demonstrate independent (and not mediated) effects on academic learning, it can still be argued that SEL programs are important for school success. SEL and the related concept of character development have always been a part of what parents and communities want from schools. Educational standards should include such goals, and the methods used here demonstrate that children’s progress toward these goals can be effectively measured.

There is more than one way to build school success on SEL. If we can demonstrate that SEL programs have independent effects on both social-emotional trajectories and academic trajectories, then we can turn our attention to promoting SEL outcomes as valued ends in themselves.
Additional policy makers, educational leaders, and teachers should further consider institutional obstacles to SEL implementation. One might be the choice of words that name and describe SEL programs, which in the past have been expressed in educational and psychological jargon. SEL ideas will be more appealing to educators and others if they use their language of potential "customers" or at least explain clearly the meaning of technical terms and the need for departing from ordinary language.

Another possible obstacle is the panoply of state- and locally- required curriculum requirements. Various federal programs, national groups, and special interests exert strong pressures on what is taught in schools. SEL disseminators need a better understanding of these requirements and pressures. Depending on state and local circumstances, they may need to analyze curriculum and activity requirements to help educators see where SEL programs and principles may fit in best.

Partnerships of educators with other professionals, such as mental health providers, can be useful if all keep in mind educators’ primary mission. Educators’ attention, time, energies, and budgets, however, are constrained; new programs require these scarce resources. In addition, organizational change imposes psychological and other costs, and teachers play a key role in making new programs successful. SEL should not become just another “reform du jour” to beleaguered educators.

SEL leaders also need to understand related efforts. In some respects, for example, SEL shares the goals and means of character education, although SEL draws more upon psychological research and character education derives to a larger extent from religious and humanistic traditions. Greater mutual understanding and linkages between the two efforts may benefit them both.

In explaining SEL, dissemination vehicles should be developed to address a variety of audiences, including parents, that should know about the programs. These vehicles should include brochures and short articles that make use of a question-and-answer format. Conferences and books similar to but extending the present work should be useful. It would be desirable for one of the U.S. Department of Education’s Regional Educational Laboratories to develop and maintain a focus on SEL while sharing more broadly the expertise of the other Labs and its own. Either this Laboratory or another national center should develop a proposal to carry out further research and development on how caring schools and communities can be integrated with efforts to achieve school success.

How can outreach be extended even more fully? For parent outreach, school—parent—community partnerships seem promising. National and local spokespersons in various fields including psychology, teaching, administration, and policy should be recruited to point out the feasibility and benefits of SEL programs to policy makers, business groups, and others. The program might be cast as both solving or preventing chronic and crisis problems and conditions.

A clearly articulated manifesto about SEL should be developed and shared with potential customers. It should explain the research-based principles, supporting structures, practices, and measures of SEL. This manifesto could be a core document for reaching the general public and potential donors supplemented with a media campaign and dialogues in forums with students and community members about what is needed for SEL and school success. Lobbying state and federal officials and a network of allied parent and professional organizations should be helpful. Whatever the its means, the wide dissemination of the SEL message should emphasize quality principles and evidence-based guidelines.

In our research focused on the evaluation of PATHS, we have begun to examine how social-emotional interventions might affect hypothesized cognitive processes as well as academic achievement. These efforts indicate that for academic achievement, it is likely that multiple years of intervention are necessary to achieve significant improvement; tests of academic achievement are notoriously difficult to alter (and they also tend to be relatively poor measures of how a child operates in a classroom context).

Conclusion

In summary, in developing and testing the effectiveness of social-emotional curricula or models, researchers should examine not only influences on behavioral adaptation, but also effects on neurocognitive development, personality maturation, emotional health, environmental domains (e.g., the classroom and the school), and academic achievement. We emphasize the need for the development of integrative models, as well as multidimensional research, to incorporate all of the important factors that contribute to healthy development and adaptive functioning, during childhood, as well as later in adulthood. Emotional literacy should provide beneficial results for many individuals if it is implemented in a thoughtful, caring, and integrated manner.
(Preparation, continued from p. 15)

"participate in decision making." Teachers must also analyze and make decisions about the classroom learning environment which will "enhance social relationships" through "cooperation," working "collaboratively," and engaging in "group learning activities."

**STANDARD 6. INSTRUCTIONAL DELIVERY**

Standard 6 emphasizes the use of a variety of instructional strategies to meet student needs. Included among these are strategies that "engage students in active learning opportunities" in order to promote the development of SEL skills related to responsible decision making, such as "critical thinking" and "problem-solving" skills. In addition, Standard 6 also addresses the teacher's obligation to employ teaching strategies that "help students assume responsibility" as learners, a key component of fostering SEL skills through promotion of positive attitudes and values.

**STANDARD 7. COMMUNICATION**

Standard 7 calls for teachers to use a variety of effective communication techniques to foster active inquiry, collaboration, and supportive interaction. The SEL competencies associated with these goals include student awareness of self and others and fostering social interaction skills by "practicing effective listening," while teachers model "effective verbal and nonverbal communication" and "effective conflict resolution skills," which involves a whole variety of social and emotional competencies, including expressive communication, negotiation, refusal, and help-seeking.

**STANDARDS 8. ASSESSMENT**

This standard requires that teachers involve students in self-assessments that will "help them become aware of their strengths and needs" and encourages them to engage in adaptive goal setting, all activities which are fundamental to SEL.

**Conclusion**

The alignment of the Illinois standards with CASEL's key social and emotional competencies for teachers is especially significant given that these core standards identify what all teachers in Illinois should know and be able to do. The importance of SEL was certainly not lost on the Illinois State Board of Education when, in developing these standards, it specifically emphasized supporting the "social" and "emotional" development of students—as well as the intellectual—and declared that the educational system "must guarantee" a learning environment that nurtures "understanding" and "respect," one in which there is "collaboration, cooperation, and shared responsibility." Clearly, social and emotional competencies are compatible with, if not central to, the Illinois standards—which are typical of teaching standards across the country. Because SEL is integral to what teacher educators, parents, teachers, administrators, and researchers have determined to be essential to the education of children, we have a responsibility to ensure teachers have access to the appropriate knowledge and skills necessary to support our children's social and emotional development.

(Preparation, continued from p. 15)

“In response to demands for students’ success in their academic and social lives, schools across the country are making policy and programmatic changes, but they do not necessarily have empirical evidence to support these changes. The challenge facing schools is especially difficult if outcomes in the areas of academics, social and emotional competence promotion, and healthy behaviors are viewed as distinct, unrelated goals. The evidence presented here suggests that these goals are related and can be successfully integrated into mutually reinforcing activities and comprehensive practices.”

(SSDP, continued from p. 19)

**Conclusion**

The Seattle Social Development Program shows that when strategies that increase opportunities and recognition for active involvement are brought together within a framework of a theory of social development, students can enhance and utilize their social and emotional competence to gain recognition and rewards, thereby developing prosocial bonds associated with positive long-term academic and behavioral outcomes. Consequently, social and emotional learning programs should continue to broaden their focus beyond skill development to include efforts to create school and family environments that support children’s healthy social development.

(Implications, contiued from p. 5)

performance is a complex one but that social and emotional competencies may operate as key mediators. These mediators must be tested before the validity of the model can be assessed.

The CEIC REVIEW

Stephen Page

Editor

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