

THE Term Paper

News and Analysis on School Reform from The Piton Foundation

VOLUME II, NUMBER 2 • November 2003

Study: Early Education Program Boosts Future Achievement

By ALAN GOTTLIEB

Denver Public Schools children who participated in a high-quality DPS pre-kindergarten and kindergarten program consistently outperformed their peers several years later on standardized tests, a new analysis of district data shows.

Characteristics of the roughly 1,600 students in the program make the results particularly notable. Early Education Collaboration Project participants were chosen for the program because they were the lowest-scoring children on a developmental screening test given at each school prior to enrollment. About 65 percent of them were from low-income families, as measured by eligibility for federally subsidized lunches.

"There are many explicit indications that Denver students who participate in a quality early education program are doing better (than their peers) despite the fact that they tested low at the beginning," said Catherine Felknor, the statistician who conducted the data analysis for The Piton Foundation.

Felknor examined third-, fourth- and fifth-grade Colorado Student Assessment Program (CSAP) reading scores for students who had been in the Early Education Collaboration Project as four- and five-year-olds. She then compared those scores to those of DPS third, fourth and fifth graders as a whole.

Results were substantially stronger for children who participated in both a high-quality pre-kindergarten and kindergarten program than for those who were enrolled in only one or the other. Children who enrolled only in quality kindergarten outperformed other district children, while those in the pre-kindergarten program but not the kindergarten program did not measurably outperform district children as a whole.

The data strongly suggest that high-quality pre-kindergarten followed by high-quality kindergarten offsets the

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EARLY ABILITY TO RECOGNIZE LETTERS — A PRECURSOR TO LITERACY — GETS A BOOST FROM QUALITY PRE-KINDERGARTEN PROGRAMS.

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FROM THE EDITOR

Compelling Evidence Supports Universal Pre-Kindergarten

The facts by now are undisputed: Providing at-risk children with quality early childhood care and education reduces the achievement gaps that otherwise plague them later in their school careers.

Study after national study has proven this point, and now new Denver data reinforces it (see accompanying article). Up to now, however, no one in Colorado has led a statewide charge to publicly fund pre-kindergarten for all four-year-olds whose families choose to seize the opportunity. In fact, Colorado's modest-sized Colorado Preschool Program has suffered significant cuts during the current state budget crisis.

That may be about to change. Momentum is building among government and education leaders across the ideological spectrum to launch a universal pre-kindergarten initiative in Colorado, similar to ones that have been successful in Georgia and Florida and in several cities across the country.

Proponents of such an initiative face some key questions as they ponder whether to move forward:

- Is there enough support for this ambitious undertaking?
- If so, how do we make it happen? What are possible funding streams? Would such a program serve all kids or only low-income children?
- If Colorado is not yet ready, what would it take to persuade voters and opinion leaders that this is not only educationally sound but fiscally responsible as well?

This issue of *The Term Paper* examines these questions in detail. Articles include:

- New local data showing how exposure to quality pre-kindergarten programs has boosted the performance of Denver children on the Colorado Student Assessment Program (CSAP) test.
- A primer on research that makes a convincing case for the efficacy of early childhood care and education in boosting the school performance of all children, but especially those from low-income backgrounds.
- Polling data showing the challenges to passing a statewide initiative, and the intriguing possibilities for getting it done.

- An examination of how Georgia's publicly-funded pre-kindergarten program has led to strong gains in student achievement, particularly among low-income children.
- Details on what distinguishes a high-quality pre-kindergarten program from a more run-of-the-mill program, focused on excellent Denver pre-kindergarten centers.

No other school reform strategy — with the exception of socio-economic integration — has the proven ability to close achievement gaps between low-income and more affluent students. Many implementation challenges and political pitfalls lie between where we are now and where early childhood care and education advocates would ultimately like to be. But in Colorado, the debate has been joined, and momentum is building.

One note: The field of education of very young children is rife with jargon, much of it overlapping and confusing. In an effort to simplify matters, we will use the term *Early Childhood Care and Education* to denote the broadest possible universe of models — from

traditional daycare to highly structured pre-kindergarten education programs. When we use other terms, we will define them. Pre-kindergarten, for example, means a program for four-year-olds.

We hope this issue of *The Term Paper* provides readers with useful information on this vitally important topic.

The Term Paper is The Piton Foundation's newspaper on education issues. With it, we intend to spark debate and provide credible, in-depth analysis and data, embedded in compellingly written stories. Ultimately, we would like to nudge forward the ongoing Denver debate on education reform.

We would hope readers will approach this publication expecting what a term paper ideally should offer: a breadth of research and a depth of thought that passes knowledge on to those who read it. We hope that you find *The Term Paper* a stimulating, provocative read. Please let us know what you think, by e-mailing us at termpaper@piton.org, or calling the editor, Alan Gottlieb, at 303-825-6246.

— ALAN GOTTLIEB

Georgia: A National Trendsetter in Universal Pre-K

By ALAN GOTTLIEB

ROSWELL, Georgia — Edye Summerfield's office in Roswell, Georgia, fits in the trunk of her navy-blue Toyota Corolla.

Detailed files on 126 publicly funded pre-kindergarten programs across northern Georgia share the compact space with boxes filled with resource materials for preschool directors and teachers. Summerfield, one of Georgia's 16 state-employed Education Program Analysts, spends her working days driving from school to school. Her job: helping the state of Georgia ensure that its Pre-K programs are healthy and delivering quality services to the state's four-year-olds.

Summerfield performs two to three "Program Quality Assessments" each day. These painstakingly detailed evaluations of Pre-K programs help Georgia maintain a standard of quality that has led to notable leaps in student achievement since the Georgia Pre-Kindergarten Program launched in 1995.

Georgia's quality-control efforts provide a relevant case study for Coloradans pondering the possibility of implementing a publicly-funded, universal Pre-K program in Colorado. For any such effort to be worth the time and money necessary to implement it, enforcing quality standards must be a key component.

The Georgia program provides funding to Pre-K classrooms operated by public schools systems, non-profits and for-profit businesses. Any program that accepts state funding also subjects itself to the Office of School Readiness' stringent quality-control system.

The program, funded from the proceeds of the state lottery, is serving 66,000 four-year-olds this year, at a cost of about \$216 million. Whether public or private, state-funded Pre-K classrooms are expected to run 6.5 hours per day, and 180 days per year.

Although Pre-K is optional for parents, any family that decides to use the program must commit to regular attendance, and to having their children arrive on time each morning. There is a lengthy waiting list for slots; any family that doesn't abide by these simple rules can lose its slot.

Experts in pre-school programs and child development have long stressed the vital importance of quality programming for young children. The benefits of pre-school education are widely known and well-researched. But many of these benefits evaporate if the programs delivering education to young children are of poor quality.

A new study conducted by Georgia State University found incontrovertible evidence that the state's emphasis on quality had a positive impact on Pre-K students' readiness for kindergarten.

"The consistent high quality of Georgia's Pre-K Program is a primary factor that reduces the initial gap between private preschoolers and lottery funded Pre-K children to statistical insignificance by the beginning of kindergarten," the authors wrote in the study's executive summary. "Across the board, the developmental outcomes of four year-olds were raised by high quality preschool experiences."

The study also found that low-income students in the Pre-K program made gains toward kindergarten readiness that exceeded students in the Georgia Head Start program, and in some cases, bettered more affluent students in private programs. By the end of their pre-school year, low-income four-year-olds in the Pre-K program, who began the year below national norms on school readiness assessments, exceeded national norms by four percentage points.

Requiring minimum teacher qualifica-

tions are an important element of the Pre-K program's quality control. Last year, according to the Georgia State University study, 80 percent of teachers in the Pre-K program had a bachelor's or advanced degree, compared to 13 percent of Head Start teachers and 25 percent of teachers in private centers not involved in the state-funded program.

And, the study concluded, the built-in quality control mechanisms enforced by people like Edye Summerfield make a huge difference. "The efforts that Georgia's Pre-K Program expend in monitoring, technical assistance, and training support seem to be integral to achieving high quality classrooms for four year-olds," the authors wrote.

Spending a day with Edye Summerfield helps people unfamiliar with the Georgia program understand just how strictly the quality enforcement elements of the program are enforced.

A typical day for Summerfield begins an hour before most Pre-K classrooms open at 9 a.m. On a cloudy, sultry September morning, Summerfield wheeled into the steeply pitched parking lot of the North Fulton Child Development Center, about 15 miles north of downtown Atlanta. She had last visited in May, and though this center was significantly better than average, she said, there were some lingering concerns, particularly on assessing children, that she hoped had been addressed.

Summerfield usually arrives unannounced for her twice-yearly assessment inspections. This makes it more difficult for centers to paper over any glaring weaknesses. In any case Summerfield, who has been on the job five years and previously ran her own child care center, has too practiced an eye to be easily deceived.

North Fulton's population has become increasingly low-income and Spanish-speaking over the past decade. Currently, 90 percent of the children are classified as "Category 1" (low-income) and 47 percent are native Spanish or Portuguese speakers.

Barbara Reed, the center's long-time director, seemed genuinely pleased to see Summerfield. She said the assessment visits, while grueling, also are a growth experience for the center.

"We have learned a lot," Reed said, seated in her cluttered office. "The demands the state has made have gradually increased — on classroom environment, curricular improvement, materials, equipment, you name it. But our staff has grown along with these demands."

Program funding is tight, Reed said, but workable. For 40 state Pre-K children, the center gets \$120,000 in state funds per year. The six percent limit on administrative expenses is onerous, given the amount of paperwork required, Reed said. The state requires centers to spend a minimum of \$1,200 per year on material and supplies. "There is plenty of money to provide an enriched environment," she said.

After visiting with Reed, Summerfield headed into the center's two Pre-K classrooms. For the next three and a half hours, she meticulously filled out the Program Quality Assessment form she helped develop with her 15 colleagues.

She combed through the classroom records, examined books on the shelves, made sure each activity center was stocked with ordered, accessible, clean materials, checked the display of student art work, observed child-teacher interactions. She missed nothing; no detail was too small to escape her sharp eye.

In one classroom, Summerfield noted that all of the children's artwork on display carried the same two dates. And most paintings were of the children's families,

as if it were an assignment. This suggested to her that painting was not an activity made available to the children at any time. Since the state guidelines require that "children have a choice of materials and have created items without teacher direction," this looked like a violation.

In the other room, Summerfield noted that dress-up clothes were in scant supply (they were being laundered), that the

to pepper Summerfield with detailed questions about effective methods for assessing children.

Two of the teachers were young and appear eager to please, and a bit nervous about doing everything perfectly. Summerfield soothed them. "Just do one observation for each activity," she counseled.

"Don't kill yourself trying to do more."

After an hour of give and take, the



Chris Tokag

HIGH-QUALITY PRE-KINDERGARTEN PROGRAMS ENGAGE CHILDREN AND BUILD SKILLS THAT LEAD TO SCHOOL SUCCESS.

flannel board was missing, and that materials to measure length, weight and time had vanished.

But Summerfield considered these relatively minor violations. She noted them on the assessment form, and pointed them out to Reed, but did not express serious concern.

The more substantive problem related to assessment of the children. This is an issue that plagues many centers, Summerfield said. Because the state does not mandate use of a particular assessment tool, some teachers don't know what's expected of them.

North Fulton has been marked down in the past for weaknesses in its assessments. So Summerfield wasted no time moving to the children's files and checking at random to see how the assessments looked. She was not satisfied. In one classroom, each file contained an assessment checklist, as it should. But in the margin beside each item (for example "exhibits book-handling skills"), the teacher had marked a simple yes or no. She hadn't recorded the date, commented on progress or included any details that would help others understand the child's developmental level.

"I don't want to see this become standardized, because teachers need to learn their own ways of assessing kids," Summerfield said as she returned the files. "But they're not getting it, and I'm afraid the state is going to move toward standardization."

Before Summerfield left the center, she briefed Reed on her findings. Although it was a mixed assessment, Reed took it in stride. "You've got easy things to fix," Summerfield assured her. "Except the assessment."

From the high-poverty environment of North Fulton, Summerfield moved on, in a driving rainstorm, to the Northpoint Prep center in the town of Alpharetta. Here, she was to perform her other major job responsibility: providing technical assistance to teachers and directors who are seeking guidance in specific areas.

Northpoint Prep boasts a world-class playground and spacious, well-appointed facilities adjacent to an upscale shopping center. On this particular day, teachers had a chance to plan while the children stayed home. They seized the opportunity

teachers seemed relieved and reinvigorated. They thanked Summerfield profusely as she headed out into the deluge.

It was time for her to head to her home office for paperwork and phone calls. First, she offered her visitors a parting thought:

"The way we ensure that we have quality Pre-K programs in Georgia is that we're in your face all the time."

Georgia Pre-Kindergarten Program Facts

What it is: Funded by the state lottery, Georgia's Pre-Kindergarten Program offers free schooling to any four-year-old child in the state whose parents desire it.

Number served: This year, roughly 66,000 four-year-olds are enrolled. When Head Start's 11,000 students are added in, 61 percent of Georgia's four-year-olds attend a publicly subsidized Pre-K program.

Public vs. Private: Children may attend any of the 3,152 Pre-K classes offered by 1,683 accredited providers at no tuition cost to the child's family for the 6.5-hour a day instructional program. Private, for-profit providers offer the largest number of classes (1,460), but are closely followed by local public school systems (1,325), which together offer 88 percent of the classrooms.

Payments to centers: Flat payment ranges from \$2,200 to \$3,475 per student per year, but varies slightly based on program location and lead teacher credentials. For example, payments for students in a classroom with a teacher certified in early childhood education are slightly greater than payments for students who have a lead teacher with lesser credentials. In addition, Georgia's Office of School Readiness funds transportation subsidies (\$165 per student per year) for providing transportation to children classified as economically disadvantaged.

A Primer on Early Childhood Care and Education

By TERI PINNEY AND ALAN GOTTlieb

Early childhood care and education involves more than gathering a group of young children, sitting them in a circle, singing songs, eating graham crackers, drinking milk and taking naps.

True early childhood care and education nourishes the mental, physical, social and emotional development of children from birth through age five.

In Denver, formal, licensed early childhood care and education takes place at more than 550 child care centers, homes and schools. But the definition of early childhood care and education is broad enough to encompass more informal educational settings as well. Early childhood care and education of a sort occurs at home, at neighbors' houses, at grandmother's and at other "unofficial" sites.

Wherever it takes place, early childhood care and education is vitally important to the future school success of young children. It needs to be of high quality, or its educational benefits dissipate.

Recent advances in brain research show that early childhood care and education needs to begin at the earliest age possible, especially for low-income children. According to the *KidsCount in Colorado!* report funded by the Annie E. Casey Foundation and managed by the Colorado Children's Campaign:

- The brain develops more rapidly before age one than at any other point in a person's life.
- Brain development is extremely susceptible to environmental influence.
 - The quality and variety of the physical environment are vitally important.
 - Studies of children raised in unhealthy environments show that they have cognitive deficits of substantial magnitude by 18 months of age. Full reversal of these deficits may not be possible.

Early childhood care and education offers broader societal advantages as well. In fact, there are three compelling reasons to support widespread early childhood care and education:

1. Early childhood care and education prepares young children, especially those from low-income backgrounds, to succeed in school. It helps counteract the brain development deficits described above.
2. It provides families with a safe and stimulating environment for children so that parents can work.
3. Despite the up-front investment, early childhood care and education ultimately saves society significant amounts of money.

Let us examine each of these reasons in some detail.

Preparing young children for school success

Colorado kindergarten teachers report that at least one-third of their students come to school unprepared to learn, according to a 2002 survey of kindergarten teachers conducted by Educare Colorado and the Colorado Children's Campaign.

In Denver, public school students enter kindergarten with a wide range of knowledge and skills. Some can already read; some do not know even a single letter of the alphabet in their native language. Low-income children, who comprise 68 percent of DPS elementary students, tend to know less when they

begin kindergarten than their more affluent peers. This means they are behind from the start. Research shows that children who start behind usually remain behind.

An abundance of studies demonstrates that high-quality early childhood care and education helps close this gap. It improves the performance of low-income children in the K-12 system and beyond.

There are three well-known and scientifically rigorous studies that document these findings:

- **The Carolina Abecedarian Project.** This North Carolina-based research study found that low-income children who were in high-quality early childhood care and education from infancy through age 5 benefited in significant ways, as did their families:

- Children had higher cognitive scores from the toddler years to age 21 than their peers who were not in high quality programs;
- Children were more likely to attend college than their peers;
- Mothers whose children participated in the program achieved higher educational and employment status than mothers whose children were not in the program. These results were especially pronounced for teen mothers.

For more information on this study visit the following web site: http://www.fpg.unc.edu/%7Eabc/executive_summary.htm

- **Chicago's Child-Parent Centers Program.** A study of this program showed that children who participated when they were 3 or 4 years old were:
 - more likely to finish high school than their peers who were not in the program;

- less likely to be held back a grade than were their peers;
- less likely to be arrested as youths than youths who did not participate in the program.

Find more information on the Chicago study at: <http://www.waisman.wisc.edu/cls/Chicago.htm>

- **High/Scope Perry Preschool Project.** Research conducted in Ypsalanti, Michigan, showed that par-

A study conducted by Simmons College in 1997 found that reliable early childhood care and education allows working parents to arrive at work on time, miss fewer days of work, be more productive on the job and stay employed.

But herein lies a major problem: quality early childhood care and education is not affordable even to many middle-income parents. Full-day early childhood care and education carries a price

tag of between \$6,000 and 10,000 a year. That's *two to three times* as expensive as in-state tuition at the University of Colorado at Boulder. Early childhood care and education tuition is equivalent to a second mortgage payment for a family making the Denver County median income of \$39,500.

If the costs associated with early childhood care and education burden non-poor parents, they

are impossible for the working poor to bear, without significant help. This suggests that ongoing welfare-to-work reforms face insurmountable problems in the long term without adequate, affordable early childhood care and education for working parents.

Some financial help already exists for families in need of early childhood care and education. Families who pay federal and state income taxes may claim child care tax credits. A family with two children making the Denver County median income of \$39,500 could claim about \$1,000, less than two months tuition for a toddler.

Families who fall below the federal poverty level (about \$18,000 per year for a family of four) can qualify for Early Head Start (for children ages 0-2) and Head Start (for children ages 3-4). The program is free to families, because federal money flows directly to local programs.

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RECENT BRAIN RESEARCH SHOWS CONCLUSIVELY THAT EARLY CHILDHOOD CARE AND EDUCATION SHOULD BEGIN AT THE EARLIEST POSSIBLE AGE.

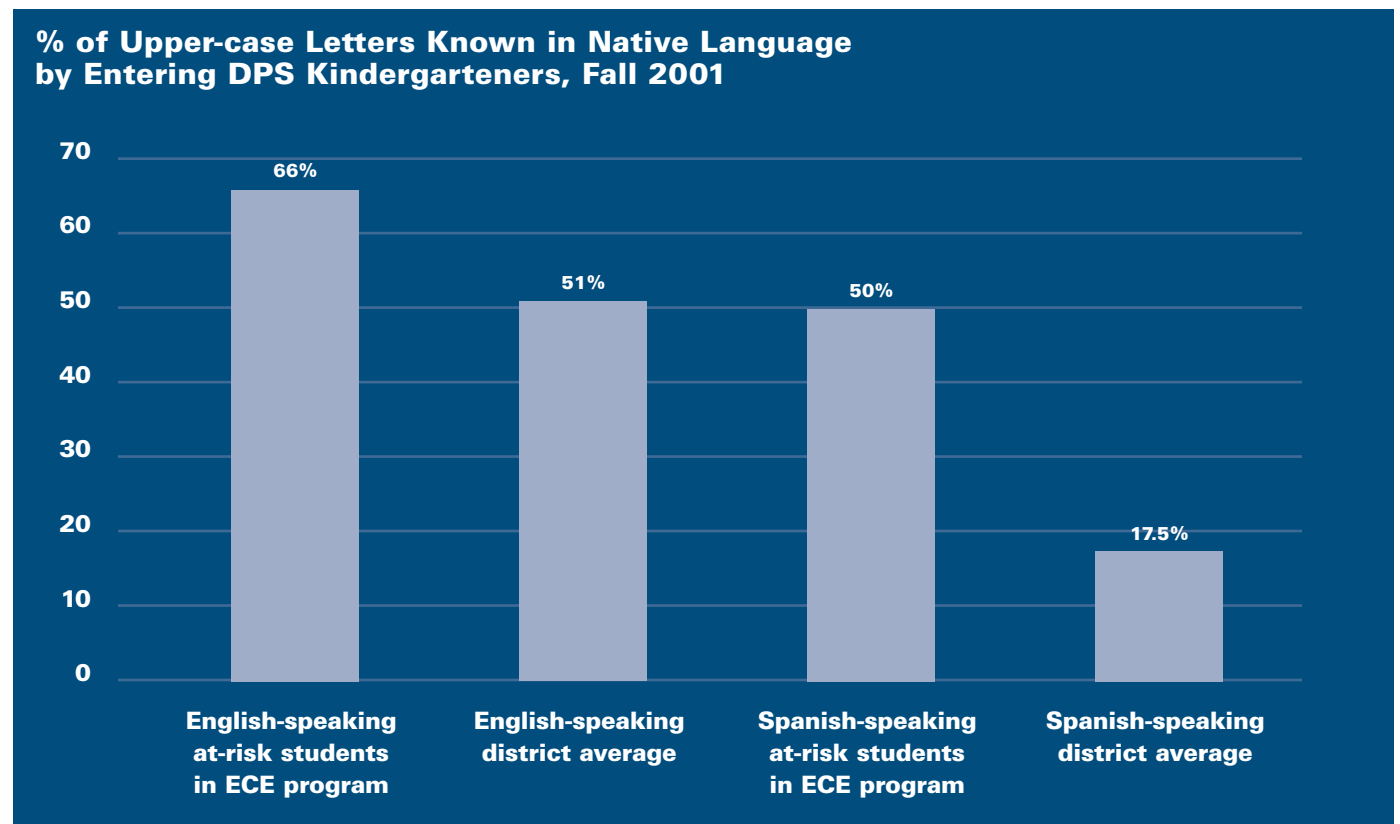
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- participating children:
 - were more likely to finish high school than non-participating peers;
 - had higher earnings than their peers;
 - had greater commitment to marriage than their peers;
 - had fewer criminal arrests than their peers.

For more information, follow this web link: <http://www.highscope.org/Research/PerryProject/perrymain.htm>

Allowing parents to work

Across the nation, a majority of parents of children under age five are working outside the home, according to the 1999 National Household Education Survey and the 2000 US Census. In Denver, out of almost 38,000 children under age 5, about 21,000 children need some form of early childhood care and education because their parents are working.



By Any Measure, Quality Is the Key

By ALAN GOTTLIEB

If early childhood care and education offers the closest thing to a “magic bullet” for closing the educational achievement gap, then ensuring that early childhood care and education programs are of high quality amounts to the magic bullet’s magic bullet.

Over the years, research studies have shown conclusively that preschool programs must be of high quality to be effective in boosting the future academic performance of low-income children. Low-quality programs do not adequately prepare children for the rigors of elementary school, research shows, and so money poured into such programs is not well spent.

The bad news is that a 1996 study by the University of Colorado at Denver found that 85 percent of licensed early childhood care and education centers in Colorado were of poor to mediocre quality. The good news is that over the past seven years childcare advocates here have been systematically building a system to monitor and improve the quality of childcare and preschool across the state.

In 1997, a coalition of business, philanthropic, political, religious and community leaders founded Educare Colorado, a non-profit organization with a mission to improve child development and early learning experiences for all children birth to kindergarten. Educare was charged with making this happen by creating a statewide system that:

- supports parents as teachers and decision makers;
- promotes high-quality child-centered care;
- is fully funded and permanently sustainable;
- is appropriately monitored and evaluate.

Educare uses a variety of instruments and in-person observations to rate child-

care centers and homes that have volunteered to participate. Programs receive a baseline rating on a one- to four-star scale, as well as a detailed profile that identifies strengths, weaknesses and strategies for improvement.

By early 2004, Educare will make its ratings public on its web site, <http://www.educarecolorado.org>.

The Quality Rating is based on five key measures of quality:

- **Classroom Environment.** The physical setting, interactions between providers and children, activities and materials available, safety.
- **Parent Involvement.** How the provider engages and supports parents as their children’s first teachers through communication, parent education, home learning activities, and opportunities for participation and leadership.
- **Staff Credentials.** To receive high quality ratings, providers must have considerable formal training in early childhood education and classroom experience.
- **Staff-to-Child Ratios.** Programs with more adults available to children generally provide better quality.
- **Accreditation.** To receive the highest possible rating — four stars — providers must be accredited by a nationally recognized professional association such as the National Association for the Education of Young Children (NAEYC) or the National Association of Family Child Care (NAFCC).

For a more detailed and parent-friendly description of quality indicators, follow this link to the Colorado Office of Resource & Referral Agencies web site: http://www.corra.org/InfSta/Content/Maze_Web.pdf. The quality descriptors are listed on page nine of the document.

In Denver, at least two centers have received the lofty four-star rating from Educare. The full list will become public

early in 2004. One of the four-star centers is The Clayton Foundation. Another is The Hope Center. Both are located in low-income neighborhoods in northeast Denver.

At Clayton, President Meera Mani, who also serves as co-chair of the Educare Board of Trustees, oversees a tightly-run center that serves 320 children from birth to age five. Most of the children come from low-income backgrounds.

Maintaining high quality is an ongoing challenge, but one that is eminently achievable, Mani said. “Accountability drives everything,” Mani said on a summer morning, seated in one of the foundations stately brick buildings. “People who come to work here tend to be evangelical about it.”

Under Mani’s leadership, Clayton pioneered a quality control system called Continuous Improvement. Essentially, Continuous Improvement consists of a systematic collection of classroom data that is analyzed to discern trends and needs. These findings then drive professional development offered to the center’s 30 classroom teachers.

Mani identified key components to Clayton’s success, similar to the Educare indicators. Among them:

- A strong emphasis on professional development. The center is closed one day each month for teacher training.
- “Restricted ratios” of adults to children. Clayton’s ratios, one adult for every three infants, and one adult for every eight preschoolers, are significantly lower than the state requires.
- An ongoing focus on parental involvement. This includes monthly parent meetings, held in the evenings, developed with parents, and centered on issues of concern to parents, such as discipline and literacy development.

Less than a mile northeast of Clayton, the Hope Center operates another four-star center for 225 preschool-age children. Executive Director George Brantley said Hope succeeds by walking the talk.

“The center aspires to academic excellence. It’s that simple,” he said, while guiding a visitor through the center’s bright hallways, where children’s artwork is displayed at adult knee-level. “A lot of places say they aspire to excellence, but they don’t act it out.”

Like Clayton, Hope places strong emphasis on professional development. Fifteen of the center’s teachers returned to school to get associate’s degrees in early childhood education. Hope also stresses parental involvement.

“As a private agency, we can make some demands on parents, unlike the public schools,” Brantley said. “For instance, we can say to a parent that their child needs more sleep if they are to be successful. If the parents don’t want to cooperate, they can go elsewhere.”

Among the innovative programs Hope offers is a pre-kindergarten program for children who have tested as gifted and talented. Brantley said Hope started the program five years ago after noting that in Denver Public Schools’ program for the highly gifted, “there is a total underrepresentation of kids of color. You have to ask, ‘what’s wrong here?’” he said.

The program has boosted the number of children of color testing into the DPS program, Brantley said.

Over 95 percent of Hope’s children are from low-income backgrounds, and received subsidies from sources including the Colorado Preschool Program and the Denver Department of Human Services.

One Hope teacher described the center’s philosophy as “inviting children to become independent. We gently move them toward the power of independence.”

Study: Early childhood, continued from page 1

negative effects of poverty on school performance more effectively than either pre-kindergarten or kindergarten alone, Felknor said.

For example, of the 76 children who entered the pre-school program in 1998 and kindergarten in 1999, 64 percent scored proficient or advanced on the third-grade reading CSAP in 2001. That same year, 50 percent of all district third graders scored proficient or advanced on that same test.

The following year, as fourth graders, 54 percent of program students scored proficient or advanced, compared to 37 percent of all DPS fourth graders.

And students who entered the program as pre-kindergarteners in 1999 performed even better. Some 72 percent of them scored proficient or advanced on the 2003 third-grade CSAP reading test. District-wide, 55 percent of third graders tallied similar scores.

Even more significant, data show that the program’s greatest benefit went to low-income children. For example, program students in the subsidized lunch program who entered pre-kindergarten in 1998 outperformed all DPS low-income children by a statistically significant margin in both third (2002) and fourth grade (2003) CSAP reading tests.¹

Such data provide compelling evidence that the combination of high-quality pre-kindergarten and kindergarten is

what makes the difference, Felknor said. If children coming out of an excellent pre-kindergarten program enter a mediocre kindergarten classroom, some of the benefits of pre-kindergarten may be erased.

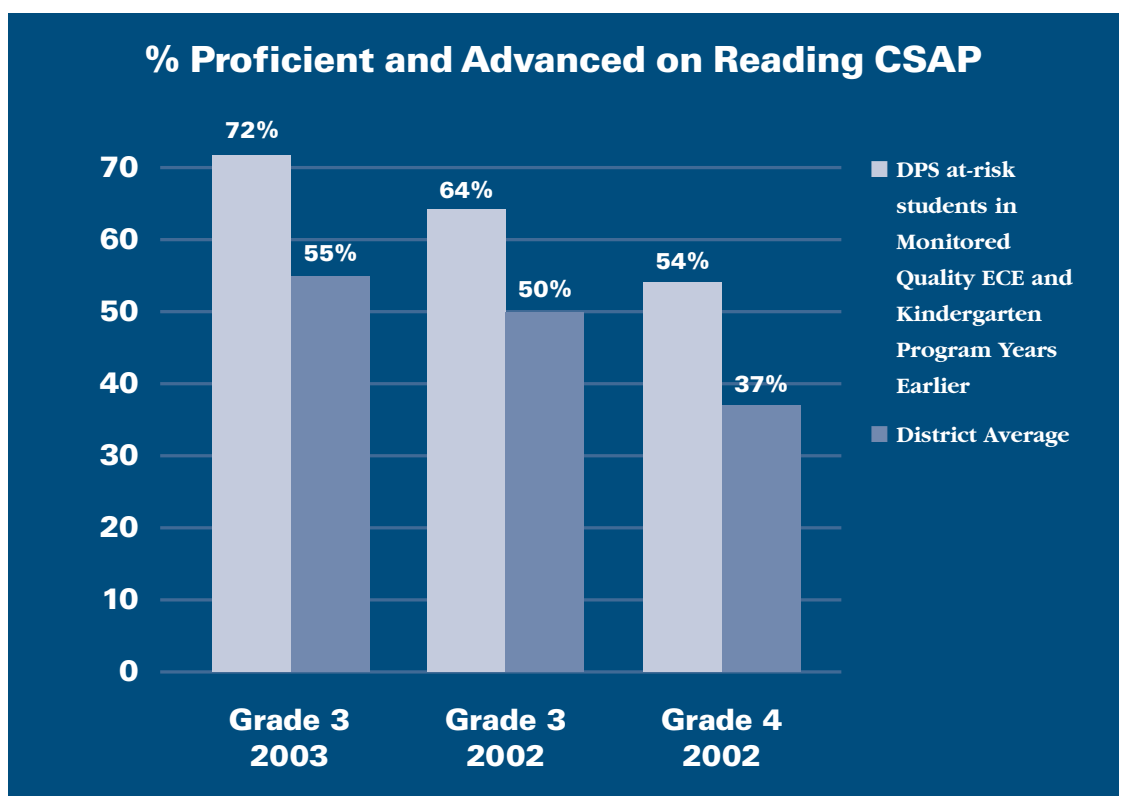
“The district needs to be out there mentoring and monitoring to make sure that all their kindergarten programs are of the quality provided by the Early Education Collaboration Project,” Felknor said.

This local data echoes findings in much larger studies conducted over the past 20 years across the country. Such studies consistently show that high-quality pre-kindergarten programs offer perhaps the greatest hope for elevating the prospects of low-income children and others at substantial risk of school failure. (See accompanying article “A Primer on Early Childhood Care and Education Research.”)

At the start of the 1995-96 school year, the Early Education Collaboration Project began offering a carefully con-

trolled, high-quality learning environment for selected pre-kindergarten and kindergarten classrooms. Mary Ann Bash, who directed the project, said coordinators monitored the quality of classrooms in several ways. First, they paid an extended visit to each classroom at least once a month. They worked with each teacher outside the classroom once a month as well.

They also collected student work in portfolios and assessed children’s progress through careful examination of the work. Finally, Bash said, in close collaboration with principals, monitors examined student work, seeking patterns of strength and weakness that helped determine staff development needs of individual teachers. “Then we provided



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Coloradans Send Mixed Message on Universal Pre-K

By ALAN GOTTLIEB

Colorado taxpayers strongly support the concept of voluntary, universal pre-kindergarten education, according to a recent poll commissioned by The Piton Foundation.

They're just not convinced they should pay for it.

Poll results offer mixed signals to advocates pondering whether to ask voters to fund a state program offering free pre-kindergarten to all four-year-olds. On the one hand, it suggests that Coloradans have a clear understanding of pre-kindergarten's value, and the need for more affordable, high-quality options. On the other hand, results show a marked skepticism about a program funded and managed by the government.

In Colorado, the foundation exists for a successful campaign, according to pollster Floyd Ciruli, whose Ciruli Associates conducted the survey for Piton.

"We are at a point where this issue is ready to go," Ciruli said. "The question is, when? This will always be a close vote statewide. To move the issue will take a political dynamic, not just an appeal to altruism."

According to Ciruli's poll, Colorado voters would support a pre-school ballot initiative by a 57 percent to 35 percent margin with 36 percent in strong support.

But those numbers dwindle significantly when voters are asked whether they'd pay new taxes to fund the initiative. It would cost an estimated \$160 million annually to fund a program that could serve up to 50,000 children statewide.

Only 34 percent of Colorado voters

said the program would be a top priority, and one for which they would willingly pay more taxes. Some 41 percent said they would support the program, but only if funded within the current budget.

Among several tax options, Colorado voters viewed most favorably a partial restoration of the state income tax, which was cut from a flat 5 percent to 4.63 by Gov. Bill Owens. Bringing the flat tax rate back up to 4.9 percent would pay for the pre-school program.

Of those polled, 56 percent said they would prefer the income tax increase option to any other. But only 21 percent expressed a strong preference for this option. Increases in the state sales tax and local property taxes garnered significantly weaker support.

Colorado currently uses \$26.5 million in state general fund money for the Colorado Preschool Program, targeted at at-risk three- and four-year-olds. The state's budget woes prompted the legislature to cut the program by 2,000 slots in 2003 — from 11,050 to 9,050. Of that, Denver children receive 2,021, or 20 percent of the state's allotment of slots. The program covers only about 15 percent of the state's four-year-olds.

Several states across the country offer pre-kindergarten programs for a targeted population of pre-kindergarten students. Georgia is the only state that makes state-funded pre-kindergarten available to all four-year-olds, regardless of family income (see story in this issue). Voters recently approved a similar program in Florida, but left it to the state legislature to find the money to pay for it.

According to the poll, 73 percent of Colorado voters recognize that quality

pre-kindergarten costs too much for many middle- and lower-income families to afford. Fifty-six percent believe the state lacks quality programs.

The reasons most frequently cited for supporting universal pre-kindergarten were:

- The first five years of life are the most important in terms of brain development.
- Low-income families in particular need help to send their children to quality programs.
- Such a program would provide working parents with a good learning environment for their four-year-olds.
- Children who go to high-quality pre-kindergarten do better in school and have fewer social problems.

If the state were to launch a universal pre-kindergarten program, voters overwhelmingly (over 90 percent) support allowing parents to choose the program their child attends; say the programs should be geared toward aiding parents help their children be prepared for kindergarten and beyond; and believe the programs should emphasize honesty and getting along with others.

Despite data that suggest full-day pre-kindergarten programs are the most effective in preparing young children for school, 68 percent of those polled preferred the half-day option, while only 10 percent favored full-day.

The poll of 601 registered Colorado voters conducted in August had a four percent margin of error.

Some questions about statewide pre-kindergarten

There are many ways to fund and implement a statewide pre-kindergarten initiative. Options range from comprehensive and costly to targeted and moderately-priced. Money could come from new or increased taxes, or a reallocation of budget priorities.

Here are some of the questions decision-makers and opinion leaders might want to ponder:

- Should the program be free of cost to all four-year-olds regardless of family income? Or should there be a sliding scale fee structure?
- Should parents be able to choose from the widest possible variety of providers — public schools, private childcare centers, religious institutions — or only non-religious programs?
- Should the program run for a full day (six hours) or half day?
- Should the program run year-round, or only during the school year?
- Should parents get vouchers to take to their school of choice, or should state funds follow students only to those public, private and religious centers and schools that meet state-set standards?
- Does the state regulate quality through regulations, inspections, etc., or does the market self-regulate?
- Does Colorado start a new tax earmarked for this program, or use existing funds? A mix of the following possible existing funding sources could yield the necessary \$160 million per year, possibly without new taxes:
 - Title I, Head Start, other federal dollars
 - Amendment 23
 - Prison and transportation budgets
 - Elimination of one year of high school to fund pre-kindergarten instead with existing K-12 dollars, a policy advocated by, among others, the Maryland State Superintendent of Schools.



Chris Takagi

GOOD PRE-KINDERGARTEN PROGRAMS HELP LOW-INCOME CHILDREN ENTER SCHOOL READY TO EXCEL, RESEARCH SHOWS.

Study: Early childhood, continued from page 4

differentiated staff development based on what we saw in the work, and set goals for each teacher based on the student data," Bash said.

The project ended in 2002-03, as the new district-wide literacy plan launched and specialists dispersed throughout the district to work on staff development at all grade levels. However, Bash said, despite the loss of specialists focused on the program, the new literacy plan has resulted in a net gain for children exposed to the high-quality program.

"This new literacy curriculum is more supportive of the early start these kids

got than anything else we've done as a district," Bash said.

¹Dr. Felknor subjected this CSAP scale-score data to a statistical "t-test," which found a significance of .001 for year 2001-2002 third-graders and .01 for 2002-2003 fourth-graders. In addition to Dr. Felknor's analysis, Dr. Bonnie Camp performed a Chi Square statistical analysis of CSAP reading and writing scores for Denver Public Schools third and fourth graders for 2001-2003. She found that children who participated in the ECCP program for two years outperformed district children as a whole by statistically significant margins ranging from $p < .0001$ to $< .01$.

THE
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ECE: Let's start from the beginning

BY CRAIG RAMEY

The United States in 2003 is the most powerful country in the history of the world. We enjoy a standard of living that is arguably the high-water mark of civilization. And yet we still face a number of serious problems. Many of those problems can be traced to education, and specifically the varying amounts and quality of education to which different segments of our society have access.

This is an issue that affects us all. What John Donne wrote in the 17th century is truer than ever today: No man is an island. If we are to have a participatory democracy, a civil public life and a collective sense of security, then we must rely on one another in some fundamental ways. When you walk into a convenience store in the middle of a robbery or when you have your car break down in the middle of someplace you wish you weren't, what happens to you is going to depend in large part on who else is around.

It is clear that we are a country of haves and have nots. Success in school predicts, to a high degree of accuracy, on which side of this divide a given individual will fall. If we are to narrow

this gulf, then I would argue that early childhood education is a fundamental part of any solution we might choose.

Let's be clear: Early childhood education is not the one and only solution — it's not the single strategy that's going to eliminate all crime or economic problems or have families always living harmoniously together. But how children start their lives makes an enormous difference. The evidence is clear: with high quality ECE, we can do something positive for those children who start life without the advantages that more affluent children enjoy.

We know from many different sources that the public believes K-12 education is one of our most pressing domestic issues. But the public school system is like a novel that begins in the middle. It brings kids in at age five or six. But what happens in the earlier years of life helps determine how children engage the school system.

If we're to do something serious and positive about helping the K-12 system reach its true potential, that something must involve paying attention to what happens before kindergarten, and doing those things I know we can do to have children prepared to succeed

in school.

We have a large amount of scientific literature about what children need to become socially skilled, intellectually competent and morally alert:

- Children must be encouraged to explore.
- They need to be mentored in basic skills — that is, they need someone to tell them, with caring and love, how the world works.
- They need to have their developmental advances celebrated, to have the opportunity to rehearse and extend their new skills. Almost nothing that we learn that's complicated can we master in one trial.
- They need to be protected from inappropriate disapproval, teasing or punishment.
- They need to develop a rich and responsive language system in which they learn how to use language in the proper context for the kind of conversations they have — at the dinner table, on the playground, in the car.

- They need, particularly after 12 months of age, to have their behavior guided and limited into socially appropriate modes of expression — to develop the mores, the ethical behaviors that we use to judge one as civilized.

Whether a child is of Latino, African-American, Irish, or French descent — as far as we can tell all of these developmental needs exist. We know that some kids get more of these needs met than others. That's why a quality early childhood education experience is so vitally important — it provides all children with what they need to succeed in school, and to start down the road to a productive and fulfilling life.

Craig Ramey is a professor of Health Studies at Georgetown University in Washington, D.C. Ramey specializes in the study of factors affecting the development of intelligence, social competence, and academic achievement in young children. Previously he led the Carolina Abecedarian Project. This is an excerpt from a presentation he delivered in Denver in August 2003.

Primer, continued from page 3

In addition, working poor families can qualify for the Colorado Child Care Assistance Program or CCCAP. The program is funded with federal money that flows through the state and on to counties. In Denver, to qualify, a family of four can make no more than 185 percent of federally set poverty wages, or about \$33,000. Currently, budget woes have forced Denver to freeze the number of families who can participate in the program. No new families are being accepted.

Unfortunately, all forms of assistance combined fall far short of meeting demand. These programs are also heavy on bureaucracy, which burdens both families and child-care providers.

Saving society money

According to researchers Steven Barnett and Leonard N. Masse, every \$1 spent on early childhood care and educa-

tion now saves between \$4 and \$9 dollars later in:

- Reduced need for expensive special education services. Barnett and Masse found that school districts could save \$11,000 per student when children attended a quality early childhood care and education program, because those students ended up in special education programs far less frequently than their peers who did not attend such programs.
- Lower health care costs.
- Less crime, fewer arrests and fewer incarcerations. It costs Denverites twice as much — about \$15,000 — to incarcerate one prisoner for a year as it does to send one toddler to early childhood care and education.

Early childhood care and education is one of the few interventions proven to break the cycle of poverty. Studies show that adults who had quality early childhood care and education as low-income

children have higher lifetime earnings than those who didn't.

The quality imperative

All of these findings, however, carry one significant caveat: For early childhood care and education to work its magic, programs must be high-quality. High quality means low student-teacher ratios (ideally one adult per every three infants, and one adult per every 8-10 preschoolers), appropriate materials in the classroom, positive interactions between teachers and children and well-trained and educated teachers, and parents who are actively engaged in their child's development.

Teacher quality is perhaps the most important of these indicators. Quality early childhood care and education requires trained, educated, literate teachers, because children learn from adults and through structured play. Adults set up activities and stimulating activities to enhance learning. To be effective educa-

tors of infants, toddlers and preschoolers, teachers must talk to the children, read to them, ask them questions.

The abysmal salaries most early childhood educators receive — less than janitors and bus drivers — make maintaining consistently high teacher quality a daunting challenge, even for the best centers.

Early childhood care and education is not babysitting. Television and videos are not adequate substitutes for human interaction. Language development is the precursor to literacy, and to develop vocabulary, children must be engaged in conversation by interested adults.