The
VIRGINIA DEPARTMENT OF SOCIAL SERVICES
and
CHILD DAY CARE COUNCIL

Presentation to the Joint Commission on Administrative Rules
Tuesday, January 10, 2006

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Child Day Center Regulation (22 VAC 15-30, effective date 6/1/05)

Overview of Key Changes in Areas Requested by Joint Commission on Administrative Rules

ACTIVITY SPACE for CHILDREN

Purpose: Reduce accidents, physiological and social stress, over-stimulation, conflict, disorganization, and crowding related disease spread

NATURE OF CHANGE	EFFECTIVE DATE	NET EFFECT TO DATE	COMMENTS
Existing buildings: 1. **No change** (remains 25 sf per child); 2. **Remains** 25 sq. ft. if new licensee uses a building licensed prior to June 1, 2008	NA	None; no change	▪ Avoids impact on current capacity for decades ▪ Preserves/increases value of current licensees' investments
Current buildings if addition is constructed: ▪ 35 sf, which applies only to the addition portion	June 1, 2008	None; not yet in effect	
Applicants in buildings not currently licensed require 35 sq. ft. per child	June 1, 2008	None; not yet in effect	42 states require 35 or more square feet per child, and about 75% of VA centers already meet it, so the change should be manageable

CHILD to STAFF RATIO

Purpose: Promote cognitive and social development; promote learning skills and reading readiness; improve care-giver attention/oversight; reduce stress

NATURE OF CHANGE	EFFECTIVE DATE	NET EFFECT TO DATE	COMMENTS States differ in age groups for infant/toddler and school age, making exact comparisons impossible; chose best fit
No change for birth to 16 months (remains 1:4)	NA	None; no change	Average; matches 33 states; trails 3
No change for 16 months to 2 years (remains 1:5)	NA	None; no change	Average; matches 12 states; trails 11
Lower for 2 year olds (from 1:10 to 1:8)	June 1, 2006	None; not yet in effect	Still below 27 other states; previously in bottom 13
No change for three year olds	NA	None; no change	Within the average range of states
Lower for four year olds through age of eligibility to attend school, which is 5 years by 9/30 (from 1:12 to 1:10)	June 1, 2006	None; not yet in effect	Moves Virginia to top third of states; previously 18 states outranked
Lower for children from age of eligibility to attend school through 8 years (from 1:20 to 1:18)	June 1, 2006	None; not yet in effect	Was in bottom 17; with change will still trail 25
No change for children nine through 12 years of age (remains 1:20)	NA	None; no change	Trails 31 states
Lower for balanced mixed age groups of children ages three to six (from 1:15 to 1:14)	June 1, 2005	In effect; no reported compliance problems	Lack clear national data; states handle issue differently; many reverting to youngest child ratio.

KEY PERSONNEL TRAINING, KEY PERSONNEL QUALIFICATIONS

Purpose: To promote knowledgeable, appropriate, sensitive, engaged caregiver interactions with children; to increase children's access to stimulating cognitive and social learning environments; to enhance sound, beneficial management of centers

NATURE OF CHANGE	EFFECTIVE DATE	NET EFFECT TO DATE	COMMENTS
Increased **general care staff** annual training requirements from previous 8 hours annually, but newly credit up to 2 hours in First Aid/CPR, to: ▪ 10 hours ▪ 12 hours ▪ 14 hours ▪ 16 hours Exceptions: short term program staff, 10 hours/year; parent-participants in cooperative pre-schools, 4 hours/year	 ▪ June 1, 2005 ▪ June 1, 2006 ▪ June 1, 2007 ▪ June 1, 2008	 ▪ No reported problems ▪ None; not in effect ▪ None; not in effect ▪ None; not in effect	▪ Once achieved, these changes in training for director and staff positions collectively will move Virginia to the top 10-12 rankings of where other states are now. Previous standards for staff training fell in bottom 15. ▪ DSS has significantly increased the amount and types of training available; delivery methods also more flexible
For **program directors** with no management experience, 10 hours management training or course; must include planning, budgeting, staffing, and monitoring	June 1, 2005	▪ No reported problems	Seen as a way to help preserve programs; failures and serious violations often result from lack of management knowledge
Program director qualifications: Eliminate lowest qualifying provision, i.e., high school/GED and 3 years' experience. Options for retention of directors hired prior to 6/1/2005 under the expiring provision are: • Annually earns 3 semester (6 quarter) hours until a qualification is met, or, • Is enrolled and regularly working toward a child development credential, which must be awarded by 6/1/2009 Options for retention of directors hired/promoted between 6/1/2005 and 6/1/2006 are: • Obtains 6 sh (9 qh) credits annually until qualified, or, • Is regularly working toward a child development credential awarded not later than 6/1/2007	June 1, 2008	None; not really in effect because compliance options are generous and flexible	NOTE: "Child development credential" does not refer to any particular entity's credential. Instead, the regulation defines the criteria for a competency-based credential (22 VAC 15-30-230,A, 4,b), which would include those listed at §63.2-1738, most of whom have representatives on Council as specified at §63.2-1735.

NATURE OF CHANGE	EFFECTIVE DATE	NET EFFECT TO DATE	COMMENTS
Non-credentialed Program Leaders (i.e., high school diploma only) in short term programs: reduced experience requirement from 250 to 200 hours and added in-service training requirement, 6 months prior to or within 1 month after appointment, increase to 12 hours: ▪ Hired/promoted after 6/1/2006 – 16 hours ▪ Hired/promoted after 6/1/2007 – 20 hours ▪ Hired/promoted after 6/1/2008 – 24 hours	▪ June 1, 2005 ▪ June 1, 2006 ▪ June 1, 2007 ▪ June 1, 2008	None specifically identified to date with this change; summer programs typically do have hiring issues related to being a short-term job with low pay. The net effect of these two changes reduces the prior experience requirement by 50 hours, replacing it with 12 training hours now, rising to 24 hours by 6/1/08	"Program leader" refers to a position used as a "lead teacher" who may supervise up to two aides, who are frequently inexperienced , untrained and young.

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I. Anthony Conyers, Jr., Commissioner, Virginia Department of Social Services

Background:

Prior to becoming Commissioner in March 2005, Mr. Conyers was Community Services Manager for James City County where he managed community development, housing, social services, recreation, transit and extension. As Community Services Manager, Mr. Conyers oversaw the initial licensing and continued operation of 9 licensed Child Day Centers with a combined capacity of 1700 children.

A. Where we are in the "phase-in" of the standards:

1. Only one organization has requested any Allowable Variances to any of the following areas of the standards since the revised standards went into effect June 1, 2005.
2. Space requirements do not become effective until June 2008. And the change only affects new buildings and additions after that date. That is, unless a current provider adds space to the facility after June 1, 2008, he/she will not have to provide 35 sq. ft. -- and only the addition itself would be subject to the 35 sq. ft. requirement.
3. The last time square footage requirements were assessed statewide (summer 2004), at least 19% of licensed CDC's purposely met a 35 sq ft. standard, and, in all, 78% of centers would not have been affected by a 35 sq. ft. standard, whether because of enrollment or other factors. Moreover, any building currently allowed to operate at 25 square feet may continue at that level even if it is subsequently acquired by a new licensee.
4. Staff Training and Qualifications

- Program Director qualifications: There were many changes to this area, which relaxed some standards while tightening others. Relaxations included counting more types of education programs (e.g., degrees in recreation) to count toward Program Director qualifications. The tightening eliminated non-educational programs from the list of acceptable backgrounds for Program Directors. Understanding that this could pose challenges for some providers and staffs, this elimination would not occur until June 2008 for Program Directors hired after June 1, 2006. Relaxing the standard for Program Director even more, those hired before June 1, 2006 have as long as they want to get certain degrees, provided they continue working toward a degree.
- Program Leader: The same incremental approach applies to one-time training for Program Leaders that are using one eligibility provision that consists solely of a high school or equivalent education and six months of programmatic experience. They now must have 12 hours of training within 30 days of being promoted or hired. That amount increases by 4 hours annually until reaching 24 after June, 2008. Program leaders are "lead teachers" that may oversee up to 2 aides; a program leader is required for each group of children.
- The annual training hours is another area where both relaxing and tightening occurred. More types of training can be counted, but more hours will be required. The hours will increase by 2 every year until it reaches 16. (By way of comparison, before a barber can get a license, he/she must work through a curriculum that entails 1500 clock hours (18VAC41-20-200)).
- DSS increased the amount of training it offers and could offer more if attendance warranted. In 2005 over 6200 providers were trained in classes and self-paced video methods. The department also established a website where any organization may advertise training beneficial for providers.

5. Ratios – The only ratio <u>not</u> being phased in applies to "balanced mixed age groups." For all practical purposes, this only affects Montessori programs. The ratio changed from a 15:1 child-to-adult ratio to 14:1. The remaining changes to ratios do not go into effect until June 1, 2006. DSS examined this issue during the revision process.
   - It was determined that approximately 265 centers – about 10% of the caseload -- would be affected by the changes in ratios.
   - Of the remaining centers,
     - 453 would NOT have been affected by the changes because they had already made formal business decisions to operate at or below the new ratios.
     - While some of the others may also have made a similar decision, they might instead have had sufficient staff to meet

the new ratios either because of low enrollment or room-sizes that did not accommodate the previous ratio.

B. Statistics

1. Growth

   a. Independent data analyses were performed by staffs of the Department of Social Services and the Joint Legislative Audit and Review Commission last year. They reached very similar conclusions about the estimated statewide enrollment rates in Child Day Centers – somewhere between 74% and 76%. JLARC reported a range of 19% vacancies in Southwest and Shenandoah to 34% in Virginia Beach, with relatively little difference related to facility size.

   b. Population growth: According to the U.S. Census Bureau's projection, the number of children between the ages of 0-12 years would increase by 6,421 from 2004 to 2005. Not all of those children would be in child care, and not all of those in care would be in licensed centers.

   c. CDC growth: Since the new standards became effective (June 1, 2005), the capacity of licensed CDCs has increased by over 2300 children.

2. Violations

   a. Program Director – (Not yet in effect.)

   b. Program Leader – (Not yet in effect.)

   c. Annual Training – In the six months since the new standards went into effect there has been 50% less violation of this standard than the same 6 month period in 2004 (Note: there were approximately 10% more inspections the 2004 time period)

   d. Ratios – In the six months since the new standards went into effect, 162 violations were cited related to child to staff ratios during 2567 inspections. This is approximately the same percentage of ratio violations to inspections for the same period in 2004. It seems that the first phasing in of new requirements has not shown an adverse effect on the industry.

C. Conclusions

Thus, there are no early warning signs that licensees are experiencing problems with the initial changes that have gone into effect -- nor any convincing evidence that changes made to the CDC regulations will have significant adverse effects on the industry.

The vast majority of CDCs are not at full capacity. The number of CDCs and their capacities are increasing while the population growth of children is slowing.

The department has significantly increased the amount of training it offers and is also offering more flexible, technology-supported types of training.

The department also recently increased the subsidy rates paid for children using licensed settings, raising it to 75% of the median community rate.

In fact, the timing to make some much-needed efforts to upgrade quality elements is good. As your first hand-out shows, these changes did improve Virginia's standing in some, not all, of the evidence-based key variables that are "quality-markers,"

Ms. Gail Johnson, who chairs the Child Day-Care Council, will focus her remarks on the benefits – to children and to society – that are well-documented in the research. The highlights of that research are captured in several handouts included in your packet. I would also add that both of us can speak with authority in saying that a good quality program conducted by better trained personnel is also good business for providers.

II. Gail Johnson – Chairperson, Child Day Care Council

Background:

Mrs. Gail Johnson has an M.S. in Maternal and Child Nursing. She has over 16 years of experience in the child care industry. She currently owns 3 preschool and 3 after-school programs in Virginia that service over 1300 children. She employs over 175 employees and has sold 15 franchises in 3 states.

The *Code of Virginia*, at § 63.2-1734, places responsibility for establishing regulations for licensed child day centers with the Child Day-Care Council. This section specifically charges Council *to ". . . adopt regulations for the activities, services and facilities to be employed by persons and agencies required to be licensed under this subtitle, which shall be designed to ensure that such activities, services and facilities are conducive to the welfare of the children . . . "*

The *Code* (§ 63.2-1735) also specifies the composition of the Council, which has 28 permanent members – and may have additional state agency advisory members – all appointed by the Governor. The statutorily designated membership is:

- 8 licensed operators or sponsors of licensed centers, including for-profit, non-profit, seasonal, and half-day nursery school settings, and a local governmental representative
- 5 state agency representatives
- 3 professional representatives, from the fields of child development, pediatric health, and law
- 1 parent representative
- 11 private accrediting or credentialing organizations

- The Council worked on the regulations that went into effect last June more than five years, carefully considering and balancing the interests of children, families, providers, and the social and economic needs of Virginia as a whole.
- Council developed a strategic plan and a mission statement to guide its efforts in making regulations.
- The Child Day-Care Council is designed to incorporate the span and diversity of expertise and experience needed to balance competing interests. Council did not come lightly to its conviction that upgrading was essential.
- Council considered:
  - An extensive body of relevant research on the effects of child care settings – in areas ranging from child development and later academic performance to morbidity and mortality rates associated with common risks in child care settings;
  - Comparative studies on regulatory standards in all states;
  - National health and safety standards and practice guidelines from a wide range of fields – ranging from pediatric health care to playground safety to product manufacturing standards;
  - Information from the state's participating agencies; and, the
  - Practical experiences and concerns of those who work daily in this field and those whose children are served in licensed centers.
  - Council weighed extensive public comments during the process. In addition to receiving public comment at most of its meetings, Council analyzed over 2600 public comments received before the current regulations were adopted.
- The revised regulation did not do all that we believe should be done to provide quality care as an indisputable investment in Virginia's future.
  - It did, however, raise the bar in an appropriate and sustainable compromise with cost considerations, and
  - It did give the industry time-allowances to come into compliance with selected upgrades which would be more challenging to achieve.

I want to share with you the highlights of what, in examining the issues, Council learned or, in many cases, simply found to confirm what early childhood professionals knew from experience. I have prepared a collection of handouts that reflect some of the findings and issues we considered.

- The previous regulation placed Virginia near the bottom of the nation on some of the most critical variables that research repeatedly demonstrates affect the safety and

development of children. That fact has serious implications for Virginia's future economic strength and its competitiveness in a global economy.

1. The first handout in your packet, after a copy of our remarks, is an overview of our combined report on the changes and effects to date for the regulation.
2. The next is a summary of salient research on quality variables related to good outcomes for children. It was prepared by a Canadian researcher, Dr. Judith Colbert, for the National Association for Regulatory Administration.
3. The next handout is a fact sheet on final changes sent to providers after the standards were adopted in final form. It shows that Council eventually dropped or significantly compromised on certain of these critical variables. For example,
   - Nothing was done to set a group size, although 38 states do so because it is consistently ranked among the top contributors to child well-being in the literature.
   - Ratios were improved but do not yet meet best practices; we will still fall below 27 states for two-year-olds. However, we remain in the "average range" for three-year-olds, and we have moved to the top third for four-year olds.
   - Staff training was improved, moving Virginia into the top 10-12 states for directors and staffs; however, generous time allowances were given for currently employed providers.
   - Space allowance of 25 SF per child, which puts Virginia below 42 states, was left untouched for existing structures, and three years were allowed before the new requirement would apply for additions or new construction.

- Mindful of the demographic shifts underway that will shrink the proportion of young and workforce age-bands, business leaders across the country have joined professional practitioners and elected officials in expressing growing concerns about the nation's performance in areas related to developing its human assets in ways that secure a competent, competitive future workforce.

4. The next article by Art Rolnick and Rob Grunewald, who are with a Federal Reserve bank in Minnesota, lays out the business case for quality child care from the viewpoint of economists. Child care is, of course, a significant actor in the economy in its own right as a major employer and consumer of goods and services from other businesses – and it is also important to the economy as a necessary support to working parents. But here, Rolnick and Grunewald are focusing on the cost-avoidance benefits of quality child care. They present evidence-based arguments that it is an extremely good investment when society can get such a high return on the dollar by preparing children to succeed in school and in life, and to become contributors rather than "problems" to their society.
5. The next handout, prepared by Voices for Virginia's Children, points out the disparity in investments made in foundational education during the first five years of life – even though the research has consistently shows that investment in early education pay huge dividends for children and for society.
6. The next handout shows why this is so. It reviews in lay terms the new frontier where child development and the neurosciences are meeting – and discovering just how miraculous the developing young brain is in those crucial first 60 months

of life. Knowing what we know even at the early stage of this field of research, we cannot help but take very seriously the responsibility to give every child the best possible learning environment in child care centers.

7. And the final handout is an interesting collection where I want to speculate that there are some dots to connect.
   - In May of this year, the National Governor's Conference held a summit on high schools at which Bill Gates spoke about the disturbing drop-out rates in high schools. The lifetime earning difference between high school and college completion is about $1 million. The lost productivity cost of the nation's high drop-out rate – about 32% -- is estimated at $16 billion annually. And many graduates who attempt college, fail. We do only a little better here in Virginia, with a drop-out rate of 23%. However, buried in the state's average are Virginia localities where less than 50% of 9th graders will graduate, including one large Virginia city where just under 40% graduated.
   - Then on Christmas morning, the Washington Post joined other newspapers around the country in giving us a lump of coal in our stocking – or perhaps it was a lump of cold fear. A new study showed a serious decline in the literacy of college graduates. Only 31% were proficient with complex material and only 41% with ordinary content in short prose – down about 10 points since 1992. Experts were groping for an explanation.
   - I'm sure the researchers will eventually come up with more information, and I'm sure the explanations are complex and multivariate. However, I'm going out on a logical, if speculative, limb. When I connect the dots, here's what I see:
     - We know that the current crop of high school and recent college graduates were extensively reared in child care settings of all types.
     - We know that, overall, the quality of child care is not good – and especially care focused on infants and toddlers -- those most formative years for acquiring language and conceptual tools. In fact, one study found that about 40% of infant and toddler care was of a harmful quality.
     - We know that those first three years are the most active time for brain development, which does, however, continue to respond to environmental conditions throughout childhood.
     - Is it possible – and logical – that our problems in K-12 and higher education are in some considerable measure reflecting that the foundations for effective learning are not sound – and cannot propel this nation successfully into the social and economic structures of the 21st Century until they rest on the foundation of a high caliber early education system that works for all children?

With that question in mind, I would say to you that the Child Day-Care Council did what it could at this point, working within all the forces that affected the decision-making environment. I would also say to you that I hope this Commission will lend its weight to helping to ensure that the modest steps taken in this revision will not be where Virginia

stops. I truly believe we would do so at real peril to the economic and social well-being of the people of the Commonwealth.

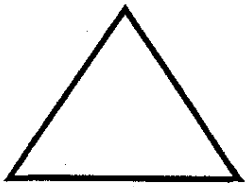
REGULATING DIMENSIONS OF QUALITY
SUMMARY

Judith A. Colbert, PhD
Consultant to the National Association for Regulatory Administration

The 1990s opened with considerations of quality in child care settings based on regulatable and unregulatable variables of quality (*Who Cares for America's Children: Child Care Policy for the 1990s,* Hayes, et al., 1990). Through the decade, emphasis shifted toward interactions among those variables; the picture became larger and more complex. Under ADA child care became more inclusive. Studies focused on both education and care, and reflected society's growing concerns about learning in the early years, as well as the increasingly apparent need for political and social structures, including licensing systems, to support high quality programs for children (*Eager to Learn: Educating Our Preschoolers,* Bowman, et al., 2000; *Not By Chance*, Kagan and Cohen, 1998).

THE QUALITY VARIABLES

Regulations largely focus on structural features. According to researchers, three key variables make up an "iron triangle" of features that predict child care quality:



- **group size**
- **staff/child ratio**
- **staff qualifications** (including education, ongoing training and experience).

All three are important, but **staff qualifications appear to be most important**. Recent research also indicates that positive teacher-child relationships, which are directly affected by **both ratio and group size**, are related to better outcomes for children.

Other variables that identify high quality care and foster child development, include

- **caregiver turnover and wages (not directly regulatable)**
- **the structure of daily routine (curriculum)**
- **the adequacy of physical facilities (indoor and outdoor space, and equipment)**
- **administrative and support services**
- **parent involvement.**

HEALTH AND SAFETY

Health and safety are essential supports to high quality care. According to *Caring for Our Children,* children in child care settings must be protected from:

- **hazards and potential injuries** (both intentional and unintentional injuries); and
- **potentially serious infectious diseases.**

RESEARCH SUMMARY — MORE HEALTH AND SAFETY

General Accounting Office (GAO) researchers

- have identified four **critical health and safety areas for regulation**:
  - **Play ground equipment** — specifically, pinch and crush points and surfaces
  - **Hand washing**
  - **Sanitation** — specifically, toys and indoor environmental surfaces
  - **Square footage** — indoors and outdoors (1998).
- consider **criminal background checks to be critical for compliance** with health and safety regulations (2000).

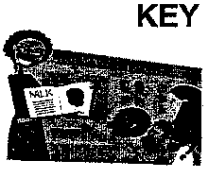
RECENT FINDINGS

- **Two thirds of licensed child care settings exhibited at least one targeted safety hazard and most of the hazards were not addressed in state licensing requirements** — hazards targeted: unsafe cribs, soft bedding, playgrounds with unsafe surfaces and/or poor maintenance, safety gates not in use, blind cord loops, drawstrings on children's outerwear, and recalled products in use (US Consumer Product Safety Commission study, 1998)
- **Most US playgrounds in schools, parks and child care centers were "unfit for children"** — a C grade for the US (National Program for Playground Safety's survey, 1998-2000)
- In 1996 **unintentional childhood injuries cost society** $66 billion in present and future productivity losses due to premature death or long-term disability, $14 billion in lifetime medical spending and $1 billion in other resource costs — most were preventable by education, environment and product changes, and legislation (Packard Foundation, 2000)

CONCLUSIONS

- **High quality** early childhood programs lead to **better school outcomes** for children.
- **Improvements to licensing standards raise child care quality.**
- Policies **keeping regulations at a minimum, and exempting categories** of providers from licensing "encourage" the use of lower quality informal and unregulated care and **are "harmful to children."**
- **Standards that are good predictors of high quality care focus on caregiver education and training, child/staff ratios, and group size — the iron triangle — and safety and health** (Other key issues are caregiver turnover and wages) (GAO).
- ***Legislation and regulation*** **are among the most powerful tools to reduce childhood injuries, and most enforcement and product design changes require legal action** (Packard Foundation).

KEY CHANGES FACT SHEET: Licensed Child Day Center Regulation 22 VAC 15-30
Department of Social Services (DSS), Division of Licensed Programs (DOLP)



Ratios, - 440

- Although new group sizes and teacher-to-child ratios were proposed, **only** ratio changes were approved.
- Currently, Virginia does not limit group size for children in child care centers and, according to the research on child care and development, this puts young children at risk for less-than-positive caregiving from their teachers
- The fewer children a caregiver has to care for at one time the more individualized care a child is likely to receive from a caregiver.

What does research show?

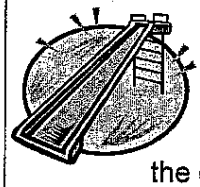
- Children in classrooms with fewer total children, have fewer children per adults (low ratios), experience more individualized attention from their teachers, and less distress in their classrooms than children in rooms with larger numbers of children and more children per teacher.
- Child group sizes have consistently been tied to child:adult ratios and how well or how poorly children adjust and develop
- Children who experience smaller group sizes and low child:adult ratios ...
  - have larger vocabularies
  - are better prepared to learn how to read
  - are more likely to experience affectionate, positive attention from their teachers
  - have a greater ability to learn and use new information to solve problems
  - are better able to form friendships, help resolve conflicts, and comfort or assist another child in difficulty

How will the change be implemented?

*One year after June 1, 2005, ***ratios*** between children and their teachers will be...

	Birth –16m	*16m-2yrs*	*2yrs*-4yrs*	*3-5yrs*	*4-5yrs*	*School-Aged*
Now	1:4	1:5	1:10	--	1:12	1:20
New	Same	Same	1:8*	1:10	1:10	1:18**

* the new standard applies only to two-year-olds; 3 – 5 year olds are in the next ratio category
**school age children between 5 – 8 yrs fall under 1:18 ratio; children between 9 -12 yrs fall under 1:20 ratio



Resilient Surfacing, -10, - 410

By increasing resilient surfacing from the current 6" standard to a depth that is proportionate to the critical height value of the playground equipment as tested by NPPS*, Virginia will no longer fall below recommended playground safety standards as we currently do, but will meet CPSC* guidelines.

What does research show?

- ✓ Most common injuries in child care:
  - Playground (51%)
- ✓ Falls from climbing equipment
  - Injuries (18%)
  - Fractures & concussions (53%)
- ✓ Most important risk factors for injuries =
  - Lack of adequate resilient surfacing
- ✓ Height of climbing equipment
- ✓ Impact-absorbing material:
  - Absorbs impact of falls and protects
- ✓ children from serious injuries (NHSS)*

** National Program for Playground Safety*

** Consumer Product and Safety Commission*

** National Health and Safety Standards*

How will the change be implemented?

Upon June 1, 2005, licensed child day centers will be required to have the appropriate amount of resilient surfacing underneath their playground equipment (indoors and out), as shown in the NPPS table. (The table is included in the regulation).

Activity Space or "Square Footage,"- 380

Why the change?

- The National Health and Safety Standards by the American Academy of Pediatrics, American Public Health Association and National Resource Center for Health and Safety in Child Care recommend "a minimum of 35 square feet of usable floor space per child . . . ."
- Children are better able to make good use of their learning time through their play and work when adequate space is organized to promote developmentally appropriate skills.
- Children who are crowded into small classrooms and spaces are at increased risk of developing upper respiratory infections.
- Children who have inadequate space are at higher risk of injury from simultaneous activities.
- Virginia currently ranks in the bottom 8 states on this quality measure; 43 states, including DC, require 35 square feet per child
- However, given the expense of space and child care centers' reliance on overall numbers of children served for tuition revenues, the Child Day Care Council and the Governor reached a compromise for a more modest change to square footage provided for children in child care. The compromise allows current child care providers and facilities to remain at the 25 square feet per child standard, and over time changes the requirement for all new child care providers, facilities, and new additions to existing facilities to 35 square feet per child on **June 1, 2008**.

What does research show?

Many researchers argue that more than 42 square feet per child are required for preschool children.

Providing adequate space for children in child care:

- Reduces children's physiological stress reaction, including impact on immune system, thereby improving resistance to illness. Research on children's stress (as measured by tracking their cortisol levels) shows there should be at least 54 square feet of space per child to reach full stress reduction.
- Benefits children's social and behavioral development; reduces confusion, disorder, and discipline problems in the classroom.
- Aids in controlling noise in the classroom, providing necessary privacy, and preventing irritation and discomfort for children and adults.
- Increases the percentage of participation, cooperation, and constructive behavior among young children when there are either fewer people in a small space, or a greater number of square feet for each person's space and an adequate provision of toys and learning materials.

Providing inadequate space in child care has negative effects on children

- Children react by becoming inactive, watching other children play, remaining isolated from the group, and by getting into conflicts with other children, at times even hitting, biting, or kicking.
- Children experience too much stimulation; stress and arousal; and have to deal with excess competition for toys, materials, and space.
- Children are constantly getting into one another's way and even in the way of the teachers.
- Children don't have enough space for privacy or quiet work; and they feel out of control in the classroom.

The final standard will phase in the required change and become effective on June 1, 2008:

- Currently licensed child care centers will be exempt from providing more than 25 sq ft of indoor useable activity space per child unless they undergo construction to expand available child care capacity, and the center's building remains exempt even if sold to another center owner;
- Child day centers initially licensed on or after June 1, **2008** must provide at least 35 sq ft per child; and,
- Currently licensed child care centers that build new additions must provide 35 sq ft per child in the added space effective June 1, **2008**

Training & Qualifications, - 230, - 260, - 310

Why the concern?

Parents in Virginia report that they consider love and attention as most important in terms of the quality of care their children receive in child care. Research shows that caregivers who have received more training and education in child development interact with children in more affectionate, attentive, and sensitive ways.

What does research show?

* Caregivers who have formal education or who have attended workshops in early childhood development...
  - are more sensitive in their interactions with infants and young children
  - have more positive relationships with children
  - are less detached with children than caregivers without child development training
  - create higher overall quality classroom environments
* Children in classrooms with caregivers trained in child development...
  - have larger vocabularies and are better prepared to begin reading and writing

How will the change be implemented? - 310

* Upon June 1, 2005...

Now	*Immediately New*	*2006*	*2007*	*2008*
8 hrs/yr	10	12	14	16

How much will it cost?

The actual training sessions are typically offered cost free by DSS to participants. However, sessions that offer take home materials (e.g., children's books) may have a nominal fee ($10). Child day centers that pay for their teachers' training time will incur respective salary costs for additional training hours.

Changes for Program Leaders? - 260

Training:

Now	*Immediately New*	*'06*	*'07*	*'08*
12 hrs/yr	---	16	20	24

Qualifications: All Program Leaders must now have either a G.E.D. or a high school diploma.

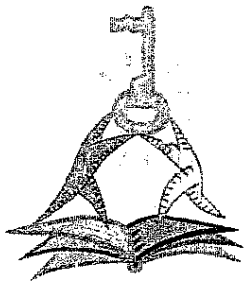
Short Term Programs Reduced program experience requirement from 250 hrs to 200 hrs for program leaders of short-term programs to reduce restrictions and increase flexibility of hiring, since most internships in recreation span about 200 hrs

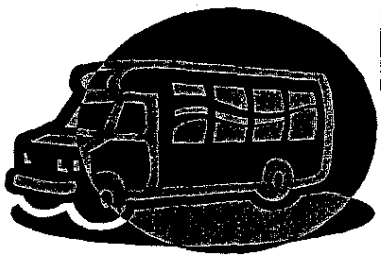
Changes for Program Director Training? - 230

Management training: One college course in a business-related field; or 10 clock hours of management training; or one child care management course that satisfactorily covers the management functions of:
(1) planning;
(2) budgeting;
(3) staffing; and
(4) monitoring
Management experience is defined as at least 6 months of on-the-job training in an administrative position that requires supervising, orienting, training, and scheduling staff.

Changes for Program Director Qualifications?-230

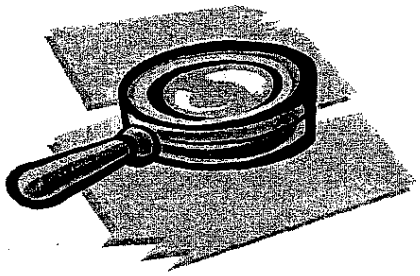
Qualifications: Changes from the current standards to the new standards include:
* Reduced hrs in child-related courses (from 48 hrs to 12 sem hrs & from 72 hrs to 18 qtr hrs)
* Recreation recognized as applicable degree
* Eligibility for trainers expanded to include clock hours vs. college credits for trainers
* Eliminated requirement for child care experience to be acquired in only regulated centers
* Minimum requirement = all Directors hired *before* June 1, 2005 will obtain (over the next 4 years) a child care credential or the equivalent (via college coursework). Directors hired *after* June 1, 2005 have two years to obtain a child care credential. No college degree is required.





Transportation, - 640

By adding an additional staff person on a vehicle while transporting 16 or more preschool or younger children, Virginia can provide greater protection for children. As a comparison, the Commonwealth's 188 licensed Head Start child care centers currently require an additional staff person while transporting 16 or more children, regardless of age.

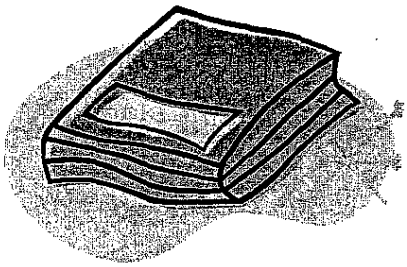


How to find the

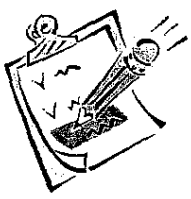
Final Child Day Center Regulation

on the Web

- Go to the DSS webpage at www.dss.state.va.us
- **Click on site map**
- **Click on/select** Child Day Care Council **(CDCC)**
- This takes you to the Council's webpage
- **Click on** the standard number in the 2nd paragraph, **22 VAC15-030** and it takes you right to the standards



* PLEASE remember what you are downloading is only a temporary document (the final draft from the Registrar). The final CDC regulation will include ALL standards (those that changed---which are the ONLY standards included in the final draft that you are able to download) AND the standards that did NOT change. It will be VERY important for you to operate from the FINAL PRINTED COMPLETE REGULATION (which you should receive during the first 10 days of April from the Home Office).



✔ **Be sure to look in the mail for your center's own copy of the final regulation during the first two weeks of April.**

✔ **Regional training will be provided between April 18 and May 14. Be sure to look for the flyer in the same envelope with the copy of the new regulation. Please register promptly.**

Components of A Professional Development System

↙ Competencies

What are the knowledge and skills that are necessary for an effective teacher of infants, toddlers, and preschoolers?

↙ Career Lattice

What are the connected levels of qualifications from entry at the lowest level to the highest standard of proficiency?

↙ Prior Learning Assessment and Recognition

With a workforce that has a varied array of experience and credentials, how can prior learning be assessed and melded into the career lattice?

↙ Supports and Incentives

How can the system encourage and support child care teachers so that they take advantage of educational opportunities?

↙ Quality Educational Options

How can the system ensure that the faculty and programs at the CDA, AAS, and BA level are high quality and in line with national best practice standards?

↙ Articulation Agreements

How can the system ensure that each institution recognizes and accepts credits from the previous one (e.g., four year colleges accept early childhood coursework from the AAS programs)?

↙ Model Training Sites

How can the system ensure that training sites are available to make real world application in high quality settings?

↙ Credentialing Registry

How can the system manage and record the educational credentials of infant, toddler, and preschool child care teachers?

Voices for Virginia's Children
Issue Brief in Early Childhood
July 2005

Improving Quality in Early Childhood Education: Professional Development

Nobody disputes the fact that public school teachers need to be well educated and knowledgeable in the subjects that they teach. The "No Child Left Behind" Act requires "highly qualified teachers" and extends those requirements down to pre-kindergarten. As a result, teachers employed in public schools meet licensing requirements and have at least a bachelor's degree. Head Start recognizes that their teachers need to be better educated too, and implemented new regulations that require that half of their teachers have at least an Associates' degree. Unfortunately, however, teacher education requirements are not being applied to those teaching our youngest children – infants, toddlers, and preschoolers – many of whom spend 30 – 50 hours a week in the care of teachers who may be poorly educated and sometimes are also poorly qualified for the work that they do. Early care and education teachers tend to be poorly compensated as well.

The results of the lack of "highly qualified teachers" at the infant, toddler, and preschool level are evident when large numbers of children arrive at kindergarten or first grade without the skills they need to be successful in school. Professional development for early care and education teachers is a critical issue in improving school readiness. Without a doubt, "a knowledgeable well-compensated child care workforce is the key element to program quality and positive child outcomes."[i]

Research suggests that education matters: teachers with bachelor's degrees (with or without college-level specialized training) were more sensitive, less harsh and less detached than teachers without bachelor's degrees and children in programs with sensitive and responsive teachers received higher language scores and exhibited a higher level of peer play than other children.[ii] Children who had teachers with a B.A. or an A.A. in early childhood education demonstrated stronger receptive vocabularies than did children in classrooms with teachers having only high school backgrounds and teachers with the most advanced education were the most effective overall.[iii]

Raising the level of education and professionalism in a field like early care and education where work is underestimated and undervalued by the general public and where the workforce is underpaid and subject to high turnover rates requires strategic and purposeful effort and strong state leadership. But – change is possible. A good example is the turn-around that occurred in the military child care system.[iv] If change can occur in a system as rigid and as regimented as the military, it certainly can occur elsewhere.

The development of a state plan for professional development is one of the components of the "Good Start, Grow Smart" early childhood initiative launched by the Bush Administration in April 2002. Although Virginia has been working on pieces of a state plan for professional development, such a plan is still a work-in-progress, with a lot still to be accomplished.

What about the development of an early childhood professional development system for Virginia?

While there is a lot yet to be done, there are a number of things already in place in Virginia:

- T.E.A.C.H.-VA provides scholarships and supports to over 300 early care and education teachers in Virginia
- 8 Community Colleges in Virginia offer AAS Degrees in Early Childhood Education
- 17 Community Colleges in Virginia offer Career Studies Certificates in Early Childhood Education
- 14 Community Colleges in Virginia offer some other type of certificate related to Early Childhood Education
- Several four year colleges in Virginia offer bachelor degrees with coursework in Early Childhood Education
- Virginia has a cadre of people who are on the Council for Professional Recognition's CDA Advisor Registry
- The Coalition for Early Childhood Education (CECE) Leadership Council, sponsored by *Voices for Virginia's Children*, held quarterly meetings over the past year to examine best practice models for professional development system components
- The Virginia Department of Social Services initiated "Training Routes and Avenues for Virginia's Early Learning Success" or T.R.A.V.E.L.S. and is working on
  - defining quality child care
  - designing a career lattice
  - developing a list of competencies and
  - working on articulation agreements
- The Virginia Department of Health through a Maternal/Child Health grant-funded initiative (Virginia Early Childhood Comprehensive Systems or VECCS) has been working on a strategic plan for early childhood. The VECCS Early Care and Education Workgroup drafted a framework for a professional development system infrastructure
- *Voices for Virginia's Children*, Virginia Commonwealth University, the Virginia Child Care and Resource and Referral Network, the Virginia Department of Social Services, Success By 6®, and ZERO TO THREE partnered to submit a grant proposal to the U.S. Department of Education under the "Early Childhood Professional Development Grant" – if funded, this project will expand T.E.A.C.H.-VA to the CDA and BA levels, and pilot a credentialing registry, a wage incentive program, a mentoring program, and a quality rating system
- Several local coalitions have been working on components of a comprehensive professional development system

Policy Recommendations

- Develop an infrastructure for early childhood education, preferably with leadership at the Governor's Cabinet level
- Develop and implement all of the components of a comprehensive professional development system
- Move resources away from the offering of a wide array of workshops and toward credit-bearing training that will be connected in the career lattice
- Encourage the development of bachelor's and graduate level coursework and degree programs at state institutions of higher ed
- Engage the corporate and business community and develop public/private partnerships that can pay for incentives to support the education and boost the salaries of early care and education teachers

End Notes:

[i]National Infant & Toddler Child Care Initiative @ ZERO TO THREE (June 2005), "At A Glance: A Place at the Policy Table for Infants and Toddlers. Washington, D.C.: ZERO TO THREE.

[ii]M. Whitebrook (2002). "Bachelor's Degrees Are Best: Higher Qualifications for Pre-Kindergarten Teachers Lead to Better Learning Environments for Children." Washington, D.C.: The Trust for Early Education.

[iii]C. Howes (1997). "Children's Experiences in Center-Based Child Care as a Function of Teacher Background and Adult-Child Ratio." *Merrill-Palmer Quarterly, 43(3)*, 404-425.

[iv] N. Campbell, J. Appelbaum, K. Martinson, & E. Martin (2000). "Be All That We Can Be: Lessons from the Military for Improving Our Nation's Child Care System." Wasington, D.C.: National Women's Law Center.
www.nwlc.org/pdf/military.pdf

Additional Resource:
www.nccic.org/poptopics/pdsystem.pdf

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Early Childhood Development: Economic Development with a High Public Return

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Note: The following paper was developed in March 2003 with Minnesota audiences in mind. However, the authors subsequently discovered a high degree of interest throughout the country in their research on the economics of early childhood development and the universality of the issues discussed. This paper also motivated the October conference at the Minneapolis Fed.

Early childhood development programs are rarely portrayed as economic development initiatives, and we think that is a mistake. Such programs, if they appear at all, are at the bottom of the economic development lists for state and local governments. They should be at the top. Most of the numerous projects and initiatives that state and local governments fund in the name of creating new private businesses and new jobs result in few public benefits. In contrast, studies find that well-focused investments in early childhood development yield high public as well as private returns.

Why the case for publicly subsidizing private businesses is flawed and misguided

Over the last few years, the future of Minnesota's economy has been called into question. The resulting debate illustrates how little is understood about the fundamentals that underlie economic development. While many recognize the success of the Minnesota economy in the past, they see a weakening in the foundations of that success. Some point to the decline in corporate headquarters located in Minnesota. Some point to the lack of funding for new startup companies, particularly in the areas of high-tech and biotech. Some point to the possible loss of professional sports teams. Some think the University of Minnesota is not visible enough in the business community. And still others raise the broader concern that Minnesota's citizens and policymakers have become too complacent and unwilling to make the public commitment to be competitive in a global economy. Those who raise these concerns conclude that Minnesota and local governments need to take a more active role in promoting our economy. Often that implies that the state or local governments subsidize private activities that the market is not funding. Proponents of this view argue that without such subsidies, either well-deserving businesses will not get funded or other states will lure our businesses to greener pastures. State and local subsidies to private businesses are not new. In the name of economic development and creating new jobs, Minnesota, and virtually every other state in the union, has a long history of subsidizing private businesses. We have argued in previous studies that the case for these subsidies is short-sighted and fundamentally flawed.[1] From a national perspective, jobs are not created—they are only relocated. From a state and local perspective, the economic gains are suspect because many would have been realized without the subsidies. In summary, what often passes for economic development and sound public investment is neither.

If subsidizing private businesses is the wrong way to promote Minnesota's economy, then what is the right way?

To answer this question,we need to understand that unfettered markets generally allocate scarce resources to their most productive use. Consequently, governments should only intervene in markets when they fail. Market failures can occur for a variety of reasons; two well-documented failures are goods that have external effects and those with public attributes. Unfettered markets will generally produce the wrong amount of such goods. Education has long

been recognized as a good that has external effects and public attributes. Without public support, the market will yield too few educated workers and too little basic research. This problem has long been understood in the United States and it is why our government, at all levels, has supported public funding for education. (According to the Organization for Economic Cooperation and Development, for example, the United States in 1999 ranked high on public funding of higher education.[2]) Nevertheless, recent studies suggest that one critical form of education, early childhood development, or ECD, is grossly underfunded. However, if properly funded and managed, investment in ECD yields an extraordinary return, far exceeding the return on most investments, private or public.

A convincing economic case for publicly subsidizing education has been around for years and is well supported. The economic case for investing in ECD is more recent and deserves more attention.

Public funding of education has deep roots in U.S. history. John Adams, the author of the oldest functioning written constitution in the world, the constitution of the Commonwealth of Massachusetts, 1779, declared in that document that a fundamental duty of government is to provide for education.[3] Publicly funded schools have been educating children in the United States ever since. Today over 85 percent of U.S children are educated in publicly funded schools. John Adams argued for public funding of education because he realized the importance of educated voters to the well-being of a democracy. We suspect that he also understood the economic benefits that flow to the general public.

Investment in human capital breeds economic success not only for those being educated, but also for the overall economy. Clearly today, the market return to education is sending a strong signal. Prior to 1983, the wages of a worker with an undergraduate degree exceeded a worker with a high school degree by roughly 40 percent. Currently, that difference is close to 60 percent. The wage premium for an advanced degree has grown even more. Prior to 1985, the wages of a worker with a graduate degree exceeded those of a worker with a high school degree by roughly 60 percent. Today, that difference is over 100 percent.

Minnesota represents a good example of the economic benefits that flow from education. Evidence is clear that our state has one of the most successful economies in the country because it has one of the most educated workforces. In 2000, almost a third of persons 25 and older in Minnesota held at least a bachelor's degree, the sixth highest state in the nation. To ensure the future success of Minnesota's economy, we must continue to provide a highly educated workforce.

The economic case for public funding of early childhood development

Knowing that we need a highly educated workforce, however, does not tell us where to invest limited public resources. Policymakers must identify the educational investments that yield the highest public returns. Here the literature is clear: Dollars invested in ECD yield extraordinary public returns.

The quality of life for a child and the contributions the child makes to society as an adult can be traced back to the first few years of life. From birth until about 5 years old a child undergoes tremendous growth and change. If this period of life includes support for growth in cognition, language, motor skills, adaptive skills and social-emotional functioning, the child is more likely to succeed in school and later contribute to society.[4] However, without support during these early years, a child is more likely to drop out of school, receive welfare benefits and commit crime.

A well-managed and well-funded early childhood development program, or ECDP, provides such support. Current ECDPs include home visits as well as center-based programs to supplement and enhance the ability of parents to provide a solid foundation for their children. Some have been initiated on a large scale, such as federally funded Head Start, while other small-scale model programs have been implemented locally, sometimes with relatively high levels of funding per participant.

The question we address is whether the current funding of ECDPs is high enough. We make the case that it is not, and that the benefits achieved from ECDPs far exceed their costs. Indeed, we find that the return to ECDPs far exceeds the return on most projects that are currently funded as economic development.

Many of the initial studies of ECDPs found little improvement; in particular, they found only short-term improvements in cognitive test scores. Often children in early childhood programs would post improvements in IQ relative to nonparticipants, only to see the IQs of nonparticipants catch up within a few years.[5]

However, later studies found more long-term effects of ECDPs. One often-cited research project is the High/Scope study of the Perry Preschool in Ypsilanti, Mich., which demonstrates that the returns available to an investment in a high-quality ECDP are significant. During the 1960s the Perry School program provided a daily 2 1/2-hour classroom session for 3- to 4-year-old children on weekday mornings and a 1 1/2-hour home visit to each mother and child on weekday afternoons. Teachers were certified to teach in elementary, early childhood and special education, and were paid 10 percent above the local public school district's standard pay scale. During the annual 30-week program, about one teacher was on staff for every six children.[6]

Beginning in 1962, researchers tracked the performance of children from low-income black families who completed the Perry School program and compared the results to a control group of children who did not participate. The research project provided reliable longitudinal data on participants and members of the control group. At age 27, 117 of the original 123 subjects were located and interviewed.[7]

The results of the research were significant despite the fact that, as in several other studies, program participants lost their advantage in IQ scores over nonparticipants within a few years after completing the program. Therefore a significant contribution to the program's success likely derived from growth in noncognitive areas involving social-emotional functioning. During elementary and secondary school, Perry School participants were less likely to be placed in a special education program and had a significantly higher average achievement score at age 14 than nonparticipants. Over 65 percent of program participants graduated from regular high school compared with 45 percent of nonparticipants. At age 27, four times as many program participants as nonparticipants earned $2,000 or more per month. And only one-fifth as many program participants as nonparticipants were arrested five or more times by age 27.[8]

Perry School Preschool's Estimated Impact per Program Participant

Table 1A **Benefit/Cost Analysis**

Present Value in 1992 Dollars Discounted at 3%

Benefits*	For Participant	For Public	Total
Child care provided	738	0	738
More efficent K-12 education, such as less grade retention and higher achievement	0	6,872	6,872
Decrease in public adult education costs	0	283	283
Increase in participants' earnings and employee benefits	21,485	8,846	30,331
Decrease in crime	0	70,381	70,381
Increase in publicly funded higher education costs	0	-868	-868
Decrease in welfare payments	-2,653	2,918	265
Total Benefits	19,570	88,433	108,002
Cost of Program	0	-12,356	-12,356
Estimated return on $1 invested in program:			
For Participant and Public: $8.74 ($108,002 in Benefits/$12,356 for Cost of Program)			
For Public: $7.16 ($88,433 in Benefits/$12,356 for Cost of Program)			

* Benefits and costs were measured from ages 3 through 27 and projected for ages 28 through 65.

Data source: *The High/Scope Perry Preschool Study Through Age 27*

Other studies of ECDPs, while not solely focused on 3- to 4-year-old children, also show improvements in scholastic achievement and less crime. For example, the Syracuse Preschool Program provided support for disadvantaged children from prenatal care through age 5. Ten years later, problems with probation and criminal offenses were 70 percent less among participants compared with a control group.[9]

As the result of the Abecedarian Project in North Carolina, which provided children from low-income families a full-time, high-quality educational experience from infancy through age 5, academic achievement in both reading and math was higher for program participants relative to nonpar-

Perry School Preschool's Estimated Impact per Program Participant

Table 1B Real Internal Rate of Return*

Benefits**		Average Annual Effect in 1992 Dollars		
		For Participant	For Public	Total
Child care provided	(Ages 3-4)	385	0	385
More efficent K-12 education	(Ages 5-17)	0	747	747
Decrease in public adult education services	(Ages 20-25)	0	89	89
Increase in participants' earnings and employee benefits	(Ages 18-27)	2,142	714	2,856
	(Ages 28-65)	1,070	357	1,427
Decrease in crime	(Ages 18-27)	0	8,923	8,923
	(Ages 28-65)	0	1,565	1,565
Increase in publicly funded higher education costs	(Ages 20-25)	0	-225	-225
Decrease in welfare payments	(Ages 18-27)	-392	431	39
	(Ages 28-65)	-31	34	3
Cost of program	(Ages 3-4)	0	-6,444	-6,444
Estimated Real Internal Rate of Return		4%	12%	16%

* The internal rate of return is the interest rate received for an investment that consists of payments and revenue occurring at regular periods. The above amounts were allocated annually across the age groups listed.

** Benefits and costs were measured from ages 3 through 27 and projected for ages 28 through 65.

Data source: *The High/Scope Perry Preschool Study Through Age 27*

ticipants into young adulthood. Furthermore, participants had fewer incidences of grade retention and special education placements by age 15.[10]

The High/Scope study conducted a benefit-cost analysis by converting the benefits and costs found in the study into monetary values in constant 1992 dollars discounted annually at 3 percent. The researchers found that for every dollar invested in the program during the early 1960s, over $8 in benefits was returned to the program participants and society as a whole (see Table 1A).

While 8-to-1 is an impressive benefit-to-cost ratio, policymakers should place this result in context with returns from other economic development projects. Perhaps another project can boast a higher benefit-to-cost ratio. Unfortunately, well-grounded benefit-to-cost ratios are seldom computed for public projects. However, an alternative measure—the internal rate of return—can be used to more easily compare the public, as well as private, return to investments. (The internal rate of return is the interest rate received for an investment consisting of payments and revenue that occur at regular periods.)

To calculate the internal rate of return for the Perry School program, we estimated the time periods in which costs and benefits in constant dollars were paid or received by program participants and society (see Table 1B). We estimate the real internal rate of return for the Perry School program at 16 percent. "Real" indicates that the rate of return is adjusted for inflation.

While program participants directly benefited from their increase in after-tax earnings and fringe benefits, these benefits were smaller than those gained by the general public. Based on present value estimates, about 80 percent of the benefits went to the general public (students were less disruptive in class and went on to commit fewer crimes), yielding over a 12 percent internal rate of return for society in general. Compared with other public investments, and even those in the private sector, an ECDP seems like a good buy. This analysis suggests that early childhood development is underfunded; otherwise, the internal rate of return on an ECDP would be comparable to other public investments.

As with virtually all studies, there are caveats to the High/Scope findings. On the one hand, the High/Scope study may overstate the results we could achieve today. Problems facing children 30 years ago were different from the problems facing children today. Single parenthood, parental drug use, neighborhood crime are higher in many areas of the country than they were 30 years ago. Therefore, the rate of return of an ECDP today may be lower than the Perry School program.

Furthermore, in reviewing our method of calculating the internal rate of return, one could argue that some of the payments and revenue streams assigned should have started or ended in different years, or that assigning an even distribution distorts the actual payments and revenue made. Nevertheless, we find that the final result holds,

even when payments and revenue are adjusted to a more conservative distribution.

On the other hand, the High/Scope study may understate the results we could achieve today. First, the High/Scope study doesn't measure positive effects on children born to participant families after the study period. The knowledge gained by parents participating in the program likely transferred to their younger children. Second, the study may further understate the effects because it doesn't take into account effects on future generations. With increased education and earnings, participants' children would be less likely to commit crime and more likely to achieve higher levels of education and income than if their parents hadn't attended the Perry School program. A chain of poverty may have been broken.

The returns to ECDPs are especially high when placed next to other spending by governments made in the name of economic development. Yet ECD is rarely considered as an economic development measure.

For example, tax increment financing and other subsidies have recently been used to locate a discount retail store and an entertainment center in downtown Minneapolis, and to relocate a major corporate headquarters to suburban Richfield and a computer software firm to downtown St. Paul. Can any of these projects, which combined represent an estimated quarter of a billion dollars in public subsidies, stand up to a 12 percent public return on investment? From the state's point of view, if the subsidy is simply moving businesses within the state, the public return is zero. If the subsidy is required for the business to survive, the risk-adjusted public return is not merely small but could be negative.

As our lawmakers review proposals to build or improve the state's major professional sports stadiums, let's not make the same mistake. The various proposals to build new baseball and football stadiums and improve the current basketball stadium total over $1 billion. Can new stadiums offer a comparable public return on investment as an ECDP? How does a new stadium reduce crime, increase earnings and potentially break a chain of poverty? We propose that this $1 billion plus be invested in a project with a much higher public return.

Proposal: Minnesota Foundation for Early Childhood Development

Our proposal—to create a foundation for early childhood development in Minnesota—isn't born in a vacuum. For several years the state of Minnesota has sponsored initiatives to help prepare children for kindergarten, specifically, Early Childhood Family Education, or ECFE, School Readiness and state-funded Head Start programs. These programs often work together in supporting early childhood development.

ECFE provides support to parents and their children from birth until kindergarten enrollment to promote the healthy growth and development of children. The program offers classes for parents and

Table 2 Cost Estimate to Educate all 3- and 4-Year-Old Children from Low-Income Families in Minnesota at a Two-Year, High-Quality ECDP

Annual cost of program	
Number of 3- and 4-year-old children living in poverty*	20,000
Cost per child**	$ 9,500
Total	$ 190,000,000
Current funds available	
Federal and state annual funds for Head Start (Serves about 13,300 children at an annual cost of $5,750 per child)	$ 80,000,000
School Readiness (Estimate that 30 percent of children participating in the program live in poverty)	$ 3,000,000
Early Childhood Family Education (Estimate of amount currently spent on 3- and 4-year-old children who live in poverty)	$ 2,000,000
Total	$ 85,000,000
Total annual need (Cost—Current funds available)	$ 105,000,000
$1.5 billion endowment invested in AAA corporate bonds yielding an average 7 percent annual return	$ 105,000,000

* Based on statistics from the Minnesota Department of Children, Families & Learning

** Estimate based on Perry School program

children, and provides optional home visits. About $20 million in state aid was allocated to ECFE in 2001, which supported programs for more than 300,000 parents and children.[11]

Between the ages of 3 1/2 to 5 years, children can participate in School Readiness programs that provide a wide array of prekindergarten activities in collaboration with other early childhood and community programs. Funding for School Readiness was about $10 million in 2001 and reached 43,030 children.[12]

The state of Minnesota also allocated almost $19 million to supplement federal funding ($59 million) for Head Start programs in 2000, with about 13,300 children and their families participating in comprehensive education, health and social services. However, according to a state report, only 45 percent of eligible children and their families received Head Start services. Some of these eligible children between the ages of 3 1/2 to 5 years who didn't receive help from Head Start participated in School Readiness programs.[13] However, it is unlikely that participation of high-needs children in a lower-cost, less comprehensive program demonstrated the returns available in a part- to full-day, long-term program.

We propose that the Minnesota state government create the Minnesota Foundation for Early Childhood Development to fill the gap between the funds currently available for ECFE, School Readiness and Head Start and the amount necessary to fully fund a high-quality program for all 3- and 4-year-old children living in poverty in Minnesota. A one-time $1.5 billion outlay would create an endowment that could support ECDPs on an annual basis. The foundation would receive donations from government, private foundations, individuals and businesses. With the foundation's funds invested in corporate AAA bonds, earning about 7 percent per year, we estimate that the $105 million in annual earnings would cover the yearly costs required to fully fund comprehensive, high-quality ECDPs for all children from low-income families in Minnesota (see Table 2).

The Minnesota Foundation for Early Childhood Development would provide funding for well-supported and highly effective ECDPs, whether supplementing funds for an existing Head Start center or helping start a new program. The Foundation would provide additional resources to enhance existing programs, such as boost teacher qualification and compensation, reduce teacher-student ratios and expand curriculum resources. Furthermore, the Foundation would provide start-up funds for new ECDPs to help reach all eligible children.

We contend that funding for ECDPs should reach the level of model program status, such as the Perry School program, since this is the level at which high returns have been demonstrated. Well-funded ECDPs would ensure that all teachers have a degree in early childhood education and are paid at a level that keeps turnover to a minimum. Furthermore, ECDPs would maintain low student-to-teacher ratios and use high-quality curriculum materials. Funds should also be allocated for research to track the improvement of participating children and identify where additional support may be needed. Participation in these programs should be voluntary, but incentives may be provided for families to participate. ECDPs should work effectively with parents and include them in the education process with their children.

Conclusion

The conventional view of economic development typically includes company headquarters, office towers, entertainment centers, and professional sports stadiums and arenas. In this paper, we have argued that in the future any proposed economic development list should have early childhood development at the top. The return on investment from early childhood development is extraordinary, resulting in better working public schools, more educated workers and less crime. A $1.5 billion investment to create the Minnesota Foundation for Early Childhood Development would go a long way toward ensuring that children from low-income families are ready to learn by the time they reach kindergarten.

Granted that in today's tight fiscal environment, $1.5 billion is a particularly large sum, which may mean we can't fully fund the program immediately. But we should be able to fully fund the endowment over the next five years. After measuring the public impact on the quality of life that such a foundation can provide, the costs of not making such an investment are just too great to ignore. ■

ENDNOTES

[1] Melvin Burstein & Arthur Rolnick, "Congress Should End the Economic War Among the States: Federal Reserve Bank of Minneapolis Annual Report Essay," *The Region* 9, no. 1 (March 1995), 3-4.

[2] "The Ruin of Britain's Universities," *The Economist* 365, No. 8299 (16 Nov. 2002), 51.

[3] David McCullough, *John Adams* (New York: Simon & Schuster, 2001), 222-225.

[4] Martha Farrell Erickson & Karen Kurz-Riemer, *Infants, Toddlers and Families: A Framework for Support and Intervention* (New York: The Guilford Press, 1999), 19.

[5] Dale C. Farran, "Another Decade of Intervention for Children Who Are Low Income or Disabled: What Do We Know Now?" in *Handbook of Early Childhood Intervention*, ed. Jack P. Shonkoff and Samuel J. Meisels (Cambridge University Press, 2000), 511-512.

[6] Lawrence J. Schweinhart, Significant Benefits: *The High/Scope Perry Preschool Study Through Age 27* (Ypsilanti, Michigan: High/Scope Press, 1993), 32.

[7] Dale C. Farran, "Another Decade of Intervention for Children Who Are Low Income or Disabled: What Do We Know Now?" in *Handbook of Early Childhood Intervention*, ed. Jack P. Shonkoff and Samuel J. Meisels (Cambridge University Press, 2000), 516.

[8] Lawrence J. Schweinhart, Significant Benefits: *The High/Scope Perry Preschool Study Through Age 27* (Ypsilanti, Michigan: High/Scope Press, 1993), xv, 55.

[9] James J. Heckman and Pedro Carneiro, "Human Capital Policy," working paper, University of Chicago, August 2002.

[10] Dale C. Farran, "Another Decade of Intervention for Children Who Are Low Income or Disabled: What Do We Know Now?" in *Handbook of Early Childhood Intervention*, ed. Jack P. Shonkoff and Samuel J. Meisels (Cambridge University Press, 2000), 513-515.

[11] *Early Childhood and Family Support* [online], Minnesota Department of Children, Families & Learning Web Site [cited December 2002], available from World Wide Web: (http://cfl.state.mn.us/ecfi/).

[12] Ibid.

[13] Ibid.

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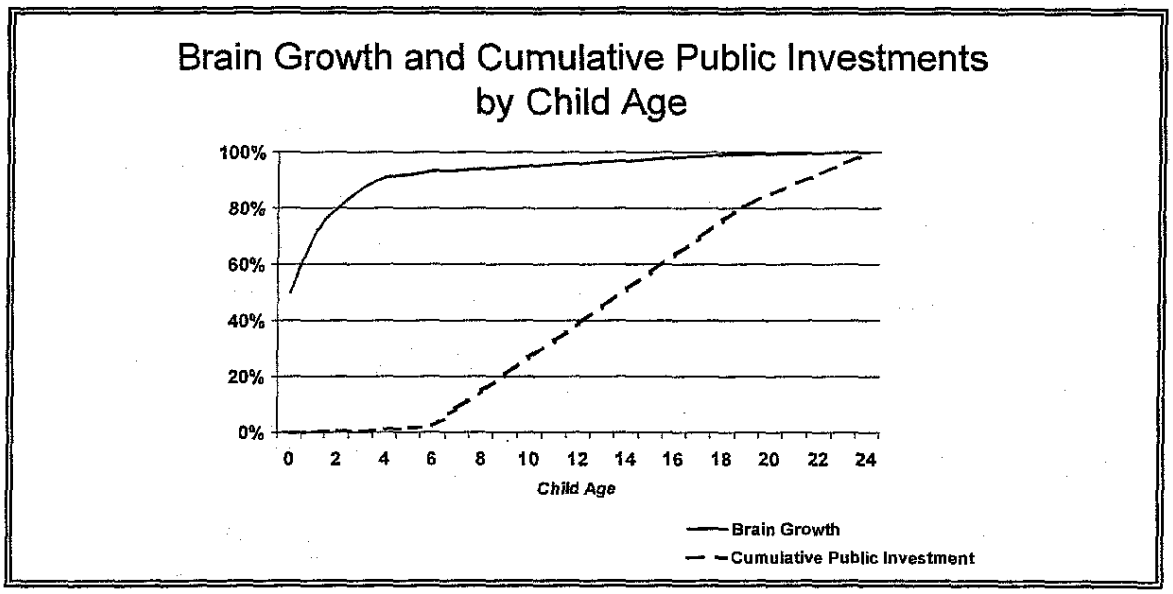
VIRGINIA

EARLY LEARNING LEFT OUT
INVESTMENTS BY CHILD AGE ON EDUCATION AND DEVELOPMENT

April 2005



Total and Per Child Spending by Child Age

Child Age	total in millions of dollars: State and Local	Federal	Total	2003 Number of Children	per child spending in dollars: Per Child State and Local	Per Child Federal	Per Child Total
Infants and Toddlers (0-2)	$19.6	$77.3	$96.9	292,144	$67	$264	$332
Preschoolers (3-5)	$41.3	$173.4	$214.7	291,720	$142	$594	$736
School-aged Children (6-18)	$9,327.5	$696.0	$10,023.5	1,309,492	$7,123	$531	$7,654
College-aged Youth (19-23)	$2,147.2	$182.9	$2,330.1	519,742	$4,131	$352	$4,483

Characteristics of Young Children and Families with Young Children (2000 Census)

	Total	Both/Only Parent Working	% Parents Working		% in Poverty	%<185 % of Poverty
Children 0-5 with Two Parents	394,729	225,049	57.0%	Families with Child 0-4	12.3%	29.4%
Children 0-5 with One Parent	136,401	104,919	76.9%	Families with Child 5-17 Only	8.9%	22.2%
All Children 0-5	531,130	329,968	62.1%			

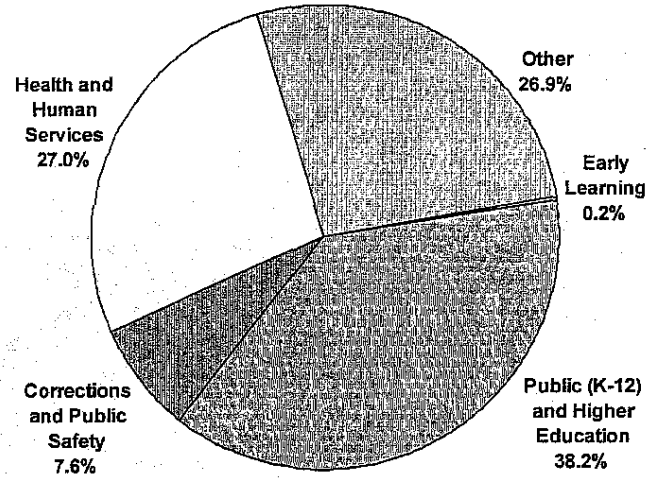
Early Childhood Services Information

2003 Mean Wage Rates	Hourly	Annual
All Jobs	$17.96	$37,360
Child Care Workers	$8.22	$17,100
Pre-school Teachers	$11.51	$23,950
Child Care Subsidy Eligibility Cut-Off for family of three	(43% of median income)	$23,400
Weekly Subsidy Payment for Pre-Schooler		$161.00

	# of Children	% of Age Population
Infants and Toddlers Enrolled in Part C Early Intervention as % of 0-2 year-olds	5,228	1.75%
Children Enrolled in Early Head Start as % of 0-2 year-olds	1,269	0.5%
Children Enrolled in Head Start, State Pre-Kindergarten, or Special Education Pre-School as % of 3-4 year-olds	26,278	14%

*For every **$1.00** invested in a school-aged child...*
***58.6¢** is invested in a college-aged youth (19-23), but only*
***9.6¢** is invested in a pre-school aged child (3-5), and only*
***4.3¢** is invested in an infant or toddler (birth to 2)*

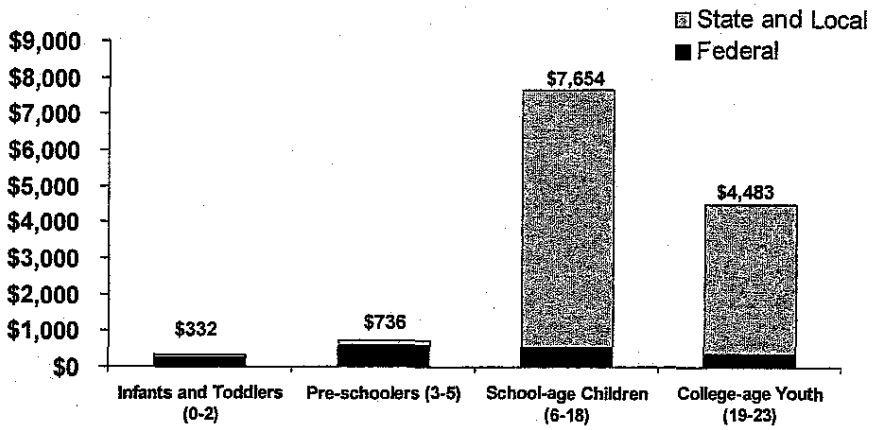
Virginia 2003 General Fund Expenditures



State spending on early learning is 0.2% of total general fund expenditures.

0-5 year-olds make up 9.3% of the total state population.

Virginia per Child Investment by Age



Virginia was one of 17 states selected to participate in the School Readiness Indicators Initiative sponsored by the Ford, Kauffman, and Packard Foundations. During the period from 2001-2004, public and private lenders worked together to develop a set of indicators to track the well-being of Virginia's children, publishing the data in *No Time to Waste*, available online at www.vakids.org. In addition, Virginia took steps to expand early learning services in 2004 and 2005, with an increase of funding for this pre-school initiative for low-income four-year-olds from $18.9 million in 2003 to $47.4 million in 2004, and designation of child care block grant funds (CCDF) for the establishment of a comprehensive school readiness early care and education public-private partnership grant program in 2005, with $500,000 grants to three sites. The addition of $30 million in pre-school funding in 2004 raises the per child investment in pre-school children from the $736.09 shown in the chart shown above to $838.95 for 2004. Voices for Virginia's Children (www.vakids.org) served as the state data partner in completing the state information.

Virginia data were compiled for *Early Learning Left Out* by Voices for Virginia's Children, and are estimates.

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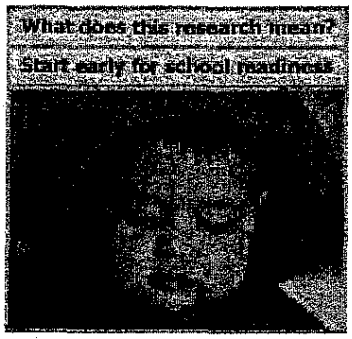
Voices FOR VIRGINIA'S CHILDREN

BRAIN DEVELOPMENT

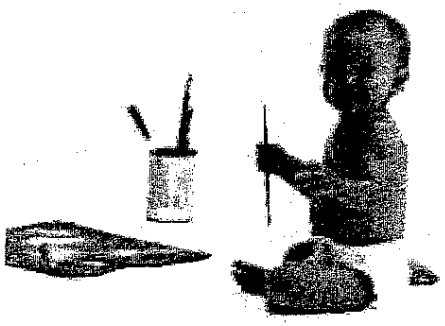
The experiences young children receive in the first three years of life are crucial to brain development. As your child receives loving care and stimulation, neural connections are formed between his brain cells. These connections form the wiring system of the brain. Your child's early experiences largely determine the strength and function of her brain's wiring system. Warm responsive parents, who cuddle and talk to their children and provide challenging learning experiences, promote healthy brain development for their children.



Brain Facts: Understanding the latest research

New technology allows the thorough study of the brain, like we've never seen before. These studies prove that a child's early development is determined by his daily environment and experiences, rather than genetics alone. Researchers now believe it is the plasticity of the brain, its ability to develop and change in response to the demands of the environment, that enables a child to learn to use computers, solve mathematical problems and learn foreign languages. In order to fully understand this information, we must first understand how a child's brain works and develops.

Brain Facts



- **MAKING CONNECTIONS** A child is born with over 100 billion neurons or brain cells. That's enough neurons to last a lifetime, since no more neurons will develop after birth. These neurons form connections, called synapses, which make up the wiring of the brain. (Don't worry, these terms are defined later)
- **EARLY EXPERIENCES** At age eight months an infant may have 1,000 trillion synapses. However, by age 10 the number of synapses decrease to about 500 trillion. The final number of synapses is largely determined by a child's early experiences, which can increase or decrease the number of synapses by as much as 25 percent.
- **"USE IT OR LOSE IT!"** The brain operates on a "use it or lose it" principle: only those connections and pathways that are frequently activated are retained. Other connections that are not consistently used will be pruned or discarded so the active connections can become stronger.
- **DEFINING LANGUAGE SKILLS** When an infant is three months old, his brain can distinguish several hundred different spoken sounds. Over the next several months, his brain will organize itself more efficiently so that it only recognizes those sounds that are part of the language he regularly hears. During early

childhood, the brain retains the ability to relearn sounds it has discarded, so young children typically learn new languages easily and without an accent.

- **THE POWER OF THE SPOKEN WORD** The power of early adult-child interactions is remarkable. Researchers found that when mothers frequently spoke to their infants, their children learned almost 300 more words by age two than did their peers whose mothers rarely spoke to them. However, mere exposure to language through television or adult conversation provided little benefit. Infants need to interact directly with others. Children need to hear people talk to them about what they are seeing and experiencing, in order for their brains to fully develop language skills.
- **THE LOVING TOUCH** Warm, responsive caregiving not only meets an infant's basic, day-to-day needs for nourishment and warmth, but also responds to their preferences, moods and rhythms. Recent research suggests that this kind of consistent caregiving is not only comforting for an infant, it plays a vital role in healthy development. The way that parents, families and other caregivers relate and respond to their young children, and the way they respond to their children's contact with the environment, directly affect the formation of the brain's neural pathways.
- **CREATING ONE STABLE BOND** Researchers who examine the life histories of children who have succeeded despite many challenges, have consistently found that these children have had at least one stable, supportive relationship with an adult early in life.

Tips for Promoting Healthy Development

- Be warm, loving and responsive
- Respond to the child's cues and clues
- Talk, read, and sing to your child
- Establish routines and rituals
- Encourage safe exploration and play
- Make TV watching selective
- Use discipline as an opportunity to teach
- Recognize that each child is unique
- Choose quality child care and stay involved
- Take care of yourself

- from I Am Your Child

What does this brain research mean?

The implications of this research are far reaching. It should be used to educate parents and caregivers about the critical window of opportunity in a child's life that can ensure a child's healthy development.

Parents play the most important role in providing the nurturing and stimulation that children require, but many parents need information and support to develop good parenting skills. There is much that communities can also do to help families promote their child's healthy brain development, through programs like Parents As Teachers.

PARENT EDUCATION Parents must be educated about the importance of proper early experiences. The little things that parents do, like talking to an infant, reading to

him at an early age and helping him play simple games, have many lasting effects.

CHILD ABUSE AND NEGLECT PREVENTION It is important, as always, to stress the prevention of child abuse and neglect during the developmental years. Greater attention must be given to preventing maltreatment before it starts. High-quality home visitation programs which start working with families as soon as the child is born have proven to be effective in preventing abuse and neglect. These programs help parents manage the stresses of raising children and prevent unhealthy patterns from developing.

PROPER PRENATAL CARE Many studies have shown the devastating effects on intelligence and brain development from a lack of basic nutrients at the prenatal stage, in infancy and early childhood. Educational and outreach campaigns to alert women to the importance of nutrition during pregnancy would also be helpful in preventing problems that can arise in this critical period when brain cells begin to form.

CHILD CARE PROVIDER EDUCATION Consistent, healthy care from child care providers is another factor affecting proper brain development. An increasing number of infants and toddlers are spending most of their day in child care arrangements so parents can work. This relationship is one of the most important a child will ever form. However, too often child care providers are poorly trained, underpaid, and do not provide children with appropriate stimulation. Research has shown that in the majority of infant care arrangements in the U.S., children are not talked to and played with enough, and they do not have the opportunity to form the kind of comfortable, secure relationships with a caregiver that will promote their healthy emotional development. Programs like T.E.A.C.H. can assist in educating child care providers.

CHOOSING QUALITY CHILD CARE Parents should be given information about how to choose high quality child care for their children, as is available from many child care resource and referral offices around North Carolina. In addition, special attention must be given to the development and enforcement of child care licensing standards that promote high-quality care.

Our increasingly technically and socially complex society cannot afford to continue to allow large numbers of children to miss out on the positive experiences they need in infancy and early childhood; the costs in terms of lost intellectual potential and increased rates of emotional and behavioral problems, are too high. The new developments in brain research show us what children need; our challenge is to ensure that every child receives it!

The Effect of Abuse and Neglect on Brain Development

At the CIVITAS Child Trauma Programs at Baylor College of Medicine, Bruce Perry and co-workers have studied the impact of neglect and trauma on the neurobiology of over 1,000 abused and neglected children. In one study, 20 children who had been raised in globally under-stimulating environments- children who were rarely touched or spoken to and who had little opportunity to explore and experiment with toys- were examined with sophisticated new brain-imaging techniques and other measures of brain growth. The children were found to have brains that were physically 20 to 30 percent smaller than most children their age and, in over half the cases, parts of the children's brains appeared to have literally wasted away. — Starting Smart: How early experiences affect brain development, An Ounce of Prevention Fund, 1996.

Brain development makes economic sense

To invest early in a child's life to build a good foundation for learning and emotional

development can save taxpayers a tremendous amount of money. Here are a few examples:

- **Risk vs. Opportunity**- Specific cost benefit ratios:

  Family Planning- Save $4.40 for every $1
  Quality Preschool- Save $7.16 for every $1
  Home Visits- Save $5.63 for every $1
  School-Based Clinics- Save $7 for every $1

- **Get businesses involved** - To increase the productivity of any business, employees need to be assured the care their child is receiving is adequate, reliable and of high quality. To have a well-qualified workforce tomorrow, we must start with nurturing today's growing brains.

Glossary of Brain Terms

Dendrite - finger-like extensions of a neuron that receives signals or chemical messages and stimulates activity in the receiving neuron

Neurons - brain cells which are rapidly developed before birth, but are no longer formed after birth

Neurotransmitters - an on/off switch that acts as a chemical switchboard which regulates the brain's senses and behavior. Types of neurotransmitters include melatonin, seratonin, endorphins, cortisol, noradrenaline, melatonin, seratonin, endorphins, cortisol, noradrenaline

Melatonin - chemical which promotes sleep and is activated by calcium and darkness
Seratonin - low levels of this chemical are associated with aggression and anger; moderate levels- relaxation and sleep
Endorphin - chemical released in presence of pain, vigorous exercise and relaxation
Cortisol - found in saliva, this chemical regulates stress to protect our body from physical danger
Noradrenaline - leads to heightened awareness, rapid heart beat; puts body in fight or flight mode

PET Scan - (positron-emission tomography) new technology that allows scientists to see and measure the brain's activity

Plasticity - the brain's ability to develop and change in response to the demands of the environment

Pruning - the elimination of excess synapses or connections that creates a more powerful and efficient system of connections or pathways; pruning also allows the remaining synapses to function at a higher level

Synapse - a neuron connection made depending on the stimuli or signals from the brain

Wiring - the architectural design of the brain; the network of connections which allows thinking and learning

Information for this report was obtained from the Families & Work Institute, An Ounce of Prevention Fund, Dr. Dorothy Routh of Florida State University, and the national I Am Your Child campaign.

Last Modified 10/10/2003 09:01:59

Notable Facts and Quotes

From *No Time to Waste*: Indicators of School Readiness; 2004 Data Book, p. 12;
http://www.vakids.org/Early%20Care%20and%20Edu/SRI2004.pdf

> Virginia administers a screening tool to identify students who are at risk for reading difficulties. The Phonological Awareness Literacy Screening for Kindergarten (PALS-K) is a screening tool used by school divisions in Virginia to identify students who are below grade level expectations in important literacy fundamentals. Developed by reading researchers at the University of Virginia, PALS-K focuses on phonological awareness, alphabet knowledge, knowledge of letter sounds, spelling, and concept of word. Students who are below expectations are identified for additional instruction, which is funded through Virginia's Early Intervention Reading Initiative (EIRI). Although participation in EIRI is not mandatory, nearly all school divisions in Virginia choose to participate (98% or 130 of 132 divisions in 2002-2003 participated). Those who do participate screen all of their kindergarten students in the fall of the school year. In fall of 2002, 74,666 kindergartners in Virginia were screened using PALS-K and 15,194 (20.3%) were identified as needing additional instruction. . . . Note that two school divisions do not participate, and that the number of children screened in some localities is very small.

Additional comment from Council's examination of a related impact: 11,692 Virginia children in grades K-3 were not promoted in the 2002-03 school year. Virginia school systems spent $8,186 on average for each of these children to repeat that grade, resulting in a total cost of $95.7 million.

Excerpt from Bill Gates' opening remarks to the 2005 Education Summit on High Schools. Declaring high schools obsolete, he said:

> Let's be clear. Thanks to dedicated teachers and principals around the country, the best-educated kids in the United States are the best-educated kids in the world. We should be proud of that. But only a fraction of our kids are getting the best education.
>
> Once we realize that we are keeping low-income and minority kids out of rigorous courses, there can be only two arguments for keeping it that way – either we think they can't learn, or we think they're not worth teaching. The first argument is factually wrong; the second is morally wrong.
>
> Everyone who understands the importance of education; everyone who believes in equal opportunity; everyone who has

been elected to uphold the obligations of public office should be ashamed that we are breaking our promise of a free education for millions of students.

Full text at:
http://www.gatesfoundation.org/MediaCenter/Speeches/BillgSpeeches/BGSpeechNGA-050226.htm

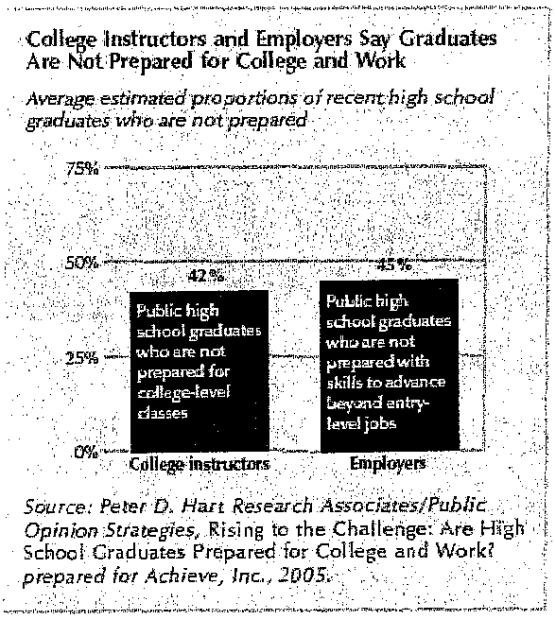
[redacted]

From 2005 Education Summit on High Schools, sponsored by Achieve, Inc., and National Governors Association, in partnership with The Business Roundtable, the Education Commission of the States and the Hunt Foundation

Few Students Make It through the Education Pipeline

Nationally	/	*Virginia*
• *68%*		*74% graduate from high school on time*
• *40%*		*41% immediately enroll in college*
• *27%*		*31% are still enrolled sophomore year*
• *18%*		*22% graduate on time*

Source: National Center for Public Policy and Higher Education, Policy Alert, *April 2004. Data are estimates of pipeline progress rather than actual cohort.*



(At page 3)
"Unfortunately, American high school graduates are less prepared for college and work than their peers elsewhere. The United States has one of the lowest high school graduation rates among industrialized nations.(6) In international math and science comparisons, American high school seniors outperform only students from Cyprus, Lithuania and South Africa. Even though the United States has one of the highest college enrollment rates in the world, our college completion rate is below average among developed countries."

Literacy of College Graduates Is on Decline

Survey's Finding of a Drop in Reading Proficiency Is Inexplicable, Experts Say

By Lois Romano
Washington Post Staff Writer
Sunday, December 25, 2005; A12

Literacy experts and educators say they are stunned by the results of a recent adult literacy assessment, which shows that the reading proficiency of college graduates has declined in the past decade, with no obvious explanation.

"It's appalling -- it's really astounding," said Michael Gorman, president of the American Library Association and a librarian at California State University at Fresno. "Only 31 percent of college graduates can read a complex book and extrapolate from it. That's not saying much for the remainder."

While more Americans are graduating from college, and more than ever are applying for admission, far fewer are leaving higher education with the skills needed to comprehend routine data, such as reading a table about the relationship between blood pressure and physical activity, according to the federal study conducted by the National Center for Education Statistics.

Experts could not definitively explain the drop.

"The declining impact of education on our adult population was the biggest surprise for us, and we just don't have a good explanation," said Mark S. Schneider, commissioner of education statistics. "It may be that institutions have not yet figured out how to teach a whole generation of students who learned to read on the computer and who watch more TV. It's a different kind of literacy."

"What's disturbing is that the assessment is not designed to test your understanding of Proust, but to test your ability to read labels," he added.

The test measures how well adults comprehend basic instructions and tasks through reading -- such as computing costs per ounce of food items, comparing viewpoints on two editorials and reading prescription labels. Only 41 percent of graduate students tested in 2003 could be classified as "proficient" in prose -- reading and understanding information in short texts -- down 10 percentage points since 1992. Of college graduates, only 31 percent were classified as proficient -- compared with 40 percent in 1992. Schneider said the results do not separate recent graduates from those who have been out of school several years or more.

The results were based on a sample of more than 19,000 people 16 or older, who were interviewed in their homes. They were asked to read prose, do math and find facts in documents. The scores for "intermediate" reading abilities went up for college students, causing educators to question whether most college instruction is offered at the intermediate level because students face reading challenges.

Gorman said that he has been shocked by how few entering freshmen understand how to use a basic library system, or enjoy reading for pleasure. "There is a failure in the core values of education," he said. "They're told to go to college in order to get a better job -- and that's okay. But the real task is to produce educated people."

Other experts noted that the slip in scores could be attributed to most state schools not being particularly selective, accepting most high school graduates to bolster enrollment. In addition, Schneider said schools may not be taking into account a more diverse population, and the language and cultural barriers that come with shifting demographics.

That would account for the dramatic drop in average prose literacy for Hispanics, which slipped by 18 percentage points, he said. "The Hispanic scores were somewhat understandable based on the changing demographics," Schneider said. "Diversity may lead to more difficulties in education."

Dolores Perin, a reading expert at Columbia University Teachers College, said that her work has indicated that the issue may start at the high school level. "There is a tremendous literacy problem among high school graduates that is not talked about," said Perin, who has been sitting in on high school classes as part of a teaching project. "It's a little bit depressing. The colleges are left holding the bag, trying to teach students who have challenges."

On average, adult literacy is virtually unchanged since 1992, with 30 million people struggling with basic reading tasks. While adults made some progress in quantitative literacy, such as the ability to calculate taxes, the study showed that from 1992 to 2003 adults made no improvement in their ability read newspapers or books, or comprehend basic forms.

One bright spot is that blacks are making significant gains in reading and math and are reaching higher levels of education. For instance, the report showed that the average rate of prose literacy, or reading, among blacks rose six percentage points since 1992. Prose and document reading scores for whites remained the same.