

suspensions. As modified, the judgment of the Appellate Division is affirmed.

For modification and affirmance—Chief Justice PORITZ and Justices HANDLER, POLLOCK, O'HERN, GARIBALDI, STEIN and COLEMAN—7.

Opposed—none.



153 N.J. 480

¹⁴⁸⁰Raymond ABBOTT, a minor, by his Guardian Ad Litem, Frances ABBOTT; Arlene Figueroa, Frances Figueroa, Hector Figueroa, Orlando Figueroa, and Vivian Figueroa, minors, by their Guardian Ad Litem, Blanca Figueroa; Michael Hadley, a minor, by his Guardian Ad Litem, Lola Moore; Henry Stevens, Jr., a minor, by his Guardian Ad Litem, Henry Stevens, Sr.; Caroline James and Jermaine James, minors, by their Guardian Ad Litem, Mattie James; Dorian Waiters and Khudayja Waiters, minors, by their Guardian Ad Litem, Lynn Waiters; Christina Knowles, Daniel Knowles, and Guy Knowles, Jr., minors, by their Guardian Ad Litem, Guy Knowles, Sr.; Liana Diaz, a minor, by her Guardian Ad Litem, Lucila Diaz; Aisha Hargrove and Zakia Hargrove, minors, by their Guardian Ad Litem, Patricia Watson; and Lamar Stephens and Leslie Stephens, minors, by their Guardian Ad Litem, Eddie Stephens, Plaintiffs,

v.

Fred G. BURKE, Commissioner of Education; Edward G. Hofgesang, New Jersey Director of Budget and Accounting; Clifford A. Goldman, New Jersey State Treasurer; and New Jersey State Board of Education, Defendants.

Supreme Court of New Jersey.

Argued March 2, 1998.

Decided May 21, 1998.

In ongoing action by public school students alleging unconstitutionality of system

of funding public schools, students challenged constitutionality of funding plan developed by state in response to judicial mandate. The Supreme Court found plan facially constitutional but unconstitutional as applied to special needs districts (SNDs), ordered parity funding as interim remedy, and remanded for fact-finding hearings, 149 N.J. 145, 693 A.2d 417. Following conduct of fact-finding hearings by the Superior Court, Chancery Division, King, J., and submission of Report and Recommendation with respect thereto, the Supreme Court, Handler, J., held that: (1) elementary school reform plan proposed by state education and finance officials comported substantially with statutory and regulatory⁴⁸¹ policies defining constitutional guarantee of thorough and efficient education; (2) full-day kindergarten plan comported substantially with same statutory and regulatory policies and was essential to satisfaction of constitutional guarantee; (3) implementation by special needs districts of half-day pre-school programs for three- and four-year-olds satisfied requirements of funding statutes and was within statutory authority of state Commissioner of Education to order; (4) Supreme Court would authorize individual middle and high schools and school districts to request and obtain resources necessary to enable provision of on-site health and social services to students and adequate security, on basis of demonstrated need; (5) Court would direct Commissioner to approve such requests and provide or secure necessary funding therefor; (6) Court would authorize Commissioner to implement supplemental technology programs, alternative schools or comparable education programs aimed at reducing dropout rate, accountability programs, and school-to-work and college-transition programs at request of individual schools or districts or as he himself might otherwise direct; (7) Court would direct Commissioner to provide or secure funding for requested summer-school, after-school, and school nutrition programs for which there is demonstrated need; (8) Court would direct Commissioner to approve requested art, music and special education programs

beyond those required as part of reform plan, upon demonstration of need therefor; (9) school districts would be required, by January 1999, to complete enrollment projections and five-year facilities management plans for state's use in ascertaining its construction needs; (10) square footage requirements for educational areas in elementary schools contained in state's proposed educational adequacy standards (EAS) satisfied constitutional obligations; (11) specialized instructional rooms for art, music and science were not universally required at elementary school level; (12) state's proposal to empower Educational Finance Administration (EFA) to issue bonds and to serve as general construction manager effectively addressed need for adequate facilities and capital improvements inherent in reform plan; and (13) disputes arising with 1482 respect to reform plan would be considered disputes arising under School Laws and would be subject to administrative resolution procedures governing such disputes.

Remedial relief ordered.

1. Schools ⇌148(1)

Elementary school reform plan proposed by state education and finance officials comported substantially with statutory and regulatory policies defining constitutional guarantee of thorough and efficient education, and Supreme Court would require its adoption as presumptive elementary school model to remedy constitutional, statutory and regulatory violations inherent in existing system; plan was adaptable to statutorily mandated Core Curriculum Content Standards (CCCS), and its implementation was within statutory authority of Department of Education. N.J.S.A. Const. Art. 8, § 4, par. 1; N.J.S.A. 18A:7F-1 to 18A:7F-34, 18A:7F-6, subd. b.

2. Schools ⇌19(1)

Evidence of failure of public schools in special needs districts to satisfy statutorily mandated Core Curriculum Content Standards (CCCS) was sufficient to justify invocation of Department of Education's statutory authority to implement budgetary reforms, even in absence of express findings by state Commissioner of Education that schools were

failing to meet CCCS. N.J.S.A. 18A:7F-1 to 18A:7F-34, 18A:7F-6, subd. b.

3. Schools ⇌148(1)

Plan proposed by state officials, requiring schools in special needs districts to offer full-day kindergarten, comported substantially with statutory and regulatory policies defining constitutional guarantee of thorough and efficient education and was essential to satisfaction of state's constitutional obligation, and Supreme Court would therefore require its immediate implementation to remedy constitutional, statutory and regulatory violations inherent in existing⁴⁸³ system. N.J.S.A. Const. Art. 8, § 4, par. 1; N.J.S.A. 18A:7F-1 to 18A:7F-34, 18A:7F-6, subd. b.

4. Schools ⇌19(1)

Statute and regulations governing early childhood education mandate three tiers of funding for pre-school programs in special needs districts: undifferentiated funds to be spent on pre-school in districts having 20% poor students; monies to be spent on pre-school education for three-year olds in districts with 40% poor students; and extra funds to be used for services for elementary school students in districts with funds remaining after first two mandates are met. N.J.S.A. 18A:7F-16; N.J.Admin. Code title 6, chap. 19-3.2d.

5. Schools ⇌148(1)

Implementation by special needs districts of half-day pre-school programs for three- and four-year-olds satisfied requirements of funding statutes and was within statutory authority of state Commissioner of Education to order, and Supreme Court would require expeditious implementation of such programs to remedy constitutional, statutory, and regulatory violations inherent in existing system; continuing absence of early educational intervention would undermine children's later educational performance in public schools. N.J.S.A. Const. Art. 8, § 4, par. 1; N.J.S.A. 18A:7F-1 to 18A:7F-34, 18A:7F-6, subd. b.

6. Schools ⇌148(1)

Supreme Court would authorize individual middle and high schools and school districts to request and obtain resources neces-

sary to enable provision of on-site health and social services to students for which there was demonstrated need, in satisfaction of schools' constitutional obligation to provide thorough and efficient education; varying needs of individual schools rendered imposition of uniform system educationally unsound, and state shared with schools the burden of ensuring provision of social service component of thorough and efficient education. N.J.S.A. Const. Art. 8, § 4, par. 1.

1484 7. Schools ⇌148(1)

Supreme Court would require state Commissioner of Education to authorize requested school-based health and social service programs for which there was demonstrated need, and to provide or secure necessary funding therefor, to enable middle and high schools to satisfy schools' constitutional obligation to provide thorough and efficient education. N.J.S.A. Const. Art. 8, § 4, par. 1.

8. Schools ⇌148(1)

Supreme Court would authorize individual middle and high schools and school districts to request and obtain resources necessary to provide adequate security, based upon demonstrated need, in satisfaction of schools' constitutional obligation to provide thorough and efficient education; varying needs of individual schools rendered imposition of uniform system educationally unsound, and state's proposal for uniform system was not linked to actual needs and therefore lacked evidentiary basis. N.J.S.A. Const. Art. 8, § 4, par. 1.

9. Schools ⇌148(1)

Supreme Court would require state Commissioner of Education to authorize requested school security programs for which there was demonstrated need, and to provide or secure necessary funding therefor, to enable middle and high schools to satisfy schools' constitutional obligation to provide thorough and efficient education. N.J.S.A. Const. Art. 8, § 4, par. 1.

10. Schools ⇌148(1)

Supreme Court would authorize state Commissioner of Education to implement supplemental technology programs at re-

quest of individual schools or districts, or as he himself might otherwise direct, in satisfaction of schools' constitutional obligation to provide thorough and efficient education. N.J.S.A. Const. Art. 8, § 4, par. 1.

1485 11. Schools ⇌148(1)

Supreme Court would authorize state Commissioner of Education to implement alternative schools or comparable education programs aimed at reducing dropout rate, at request of individual schools or districts or as he himself might otherwise direct, in satisfaction of schools' constitutional obligation to provide thorough and efficient education. N.J.S.A. Const. Art. 8, § 4, par. 1.

12. Schools ⇌148(1)

Supreme Court would authorize state Commissioner of Education to implement accountability programs at request of individual schools or districts, or as he himself might otherwise direct, in satisfaction of schools' constitutional obligation to provide thorough and efficient education. N.J.S.A. Const. Art. 8, § 4, par. 1.

13. Schools ⇌148(1)

Supreme Court would direct state Commissioner of Education to implement school-to-work and college-transition programs in secondary schools in special needs districts at request of individual schools or districts or as Commissioner otherwise required, in satisfaction of schools' constitutional obligation to provide thorough and efficient education. N.J.S.A. Const. Art. 8, § 4, par. 1.

14. Schools ⇌148(1)

Supreme Court would direct state Commissioner of Education to provide or secure funding for requested summer-school, after-school, and school nutrition programs for which there was demonstrated need, to enable middle and high schools to satisfy schools' constitutional obligation to provide thorough and efficient education; needs for such programs would vary from school to school, rendering blanket requirement with respect thereto educationally unsound. N.J.S.A. Const. Art. 8, § 4, par. 1.

15. Schools ⇐19(1)

State Commissioner of Education is entitled, before seeking new appropriations to fund demonstrably needed supplemental program requested by school in special needs district, to first ¹⁴⁸⁶determine whether funds within existing school budget are sufficient to meet school's request.

16. Schools ⇐19(1)

Implicit in state Commissioner of Education's determination that funds within existing school budget are sufficient to meet school's request, pursuant to judicially-mandated school reform plan, for demonstrably needed supplemental program, is condition that funds may not be withdrawn from or reallocated within whole-school budget if that will undermine or weaken either school's foundational education program or already existing supplemental programs.

17. Schools ⇐148(1)

Supreme Court would direct state Commissioner of Education to approve requested art, music and special education programs beyond those required as part of judicially mandated school reform plan, upon demonstration of need therefor by requesting school or district, to enable schools to satisfy constitutional obligation to provide thorough and efficient education. N.J.S.A. Const. Art. 8, § 4, par. 1.

18. Schools ⇐148(1)

State's constitutional obligation to provide thorough and efficient education includes provision of adequate school facilities. N.J.S.A. Const. Art. 8, § 4, par. 1.

19. Schools ⇐148(1)

Deficiencies in public schools' architectural and structural integrity, heating, ventilation, and air conditioning systems, sanitary and water systems, fire protection and detection systems, plumbing fixtures, electrical power and distribution, emergency egress alarms and signs, and communications systems directly affected health and safety of children and were required to be first defects remediated in phased-in facilities improvement program included in judicially-mandated school reform plan.

¹⁴⁸⁷**20. Schools ⇐148(1)**

School districts would be required, by January 1999, to complete enrollment projections and five-year facilities management plans, for state's use in determining how to utilize existing space and in ordering all new construction necessary to enable compliance with program and class size requirements of judicially mandated school reform plan.

21. Schools ⇐148(1)

Square footage requirements for educational areas in elementary schools contained in state's proposed educational adequacy standards (EAS) complied with applicable regulations and were similar to those used in recently constructed elementary schools and elsewhere, and therefore comported substantially with statutory and regulatory policies defining constitutional guarantee of thorough and efficient education. N.J.S.A. Const. Art. 8, § 4, par. 1; N.J.Admin. Code title 6, chap. 22-5.5.

22. Schools ⇐148(1)

Specialized instructional rooms for art, music and science were not universally required at elementary school level to permit schools in special needs districts to offer exemplary programs in those areas, and individual schools and school districts would retain discretion under judicially mandated school reform plan to request such facilities as they considered necessary.

23. Schools ⇐97(1)

State's proposal to empower Educational Finance Administration (EFA) to issue bonds for construction and improvement of school facilities in property-poor districts and to serve as general construction manager for all projects undertaken effectively addressed need for adequate facilities and capital improvements inherent in judicially-mandated school reform plan, provided that state included in 100%-funded "approved costs" the complete cost of remediating infrastructure and life cycle deficiencies of schools in special needs districts and cost of construction of any new classrooms needed to correct capacity deficiencies.

24. Schools $\Leftarrow$ 115, 148(1)

Any default in state's continuing obligation to complete needs assessment with respect to public schools in special needs districts and to provide facilities educationally adequate to permit children in those districts to reach Core Curriculum Content Standards (CCCS), as required by judicially-mandated school reform plan, if challenged and not corrected or addressed, would constitute dispute under School Laws, entitling aggrieved parties to seek redress in accordance with procedures and standards governing resolution of disputes thereunder. N.J.S.A. 18A:7A-1 to 18A:7F-34.

25. Schools $\Leftarrow$ 148(1)

State Commissioner of Education was required to promulgate regulations and guidelines codifying education reforms incorporated in judicially-mandated school reform plan, including procedures and standards governing applications by individual schools and districts for needed programs and necessary funding.

26. Schools $\Leftarrow$ 19(1), 148(1)

Disputes involving implementation, extension, or modification of existing educational programs under judicially-mandated school reform plan, need for additional supplemental programs thereunder, allocation of budgeted funds and need for additional funding with respect thereto, and implementation of standards and plans for the provision of capital improvements and related educational facilities required thereby would constitute "controversies" arising under School Laws subject to administrative resolution procedure provided therein. N.J.S.A. 18A:7A-1 to 18A:7F-34.

Peter Verniero, Attorney General of New Jersey, for defendants (Mr. Verniero, attorney; Jaynee LaVecchia and Jeffrey J. Miller, Assistant Attorneys General, of counsel; Nancy Kaplen and Michelle Lyn Miller, Deputy Attorneys General, on the briefs).

¹⁴⁸⁸David G. Sciarra, Edison, and Paul L. Tractenberg, Newark, for plaintiffs (Mr. Sciarra, attorney; Mr. Tractenberg, David B.

Thronson, Newark, and Richard E. Shapiro, Jersey City, on the briefs).

Douglas S. Eakeley, Roseland, for amicus curiae The League of Women Voters of New Jersey (Lowenstein, Sandler, Kohl, Fisher & Boylan, attorneys; Stephen R. Buckingham and James C. Drury, on the brief).

Richard A. Friedman submitted a brief on behalf of amicus curiae New Jersey Education Association (Zazzali, Zazzali, Fagella & Nowak, Newark, attorneys; Mr. Friedman and Aileen M. O'Driscoll, on the brief).

Joseph Charles, Jr., Jersey City, submitted a brief on behalf of amicus curiae New Jersey Legislative Black and Latino Caucus (Mr. Charles, attorney; Raul Garcia, on the brief).

The opinion of the Court was delivered by

HANDLER, J.

Our Constitution mandates that the "Legislature shall provide for the maintenance and support of a thorough and efficient system of free public schools for the instruction of all the children in the State between the ages of five and eighteen years." *N.J. Const.* art. VIII, § 4, ¶ 1. This decision explains the remedial measures that must be implemented in order to ensure that public school children from the poorest urban communities receive the educational entitlements that the Constitution guarantees them.

[1] The required remedial measures incorporate many of the recommendations made by Judge Michael Patrick King pursuant to the remand ordered by this Court in *Abbott v. Burke*, 149 N.J. 145, 693 A.2d 417 (1997) (*Abbott IV*). These measures are based on a solid evidentiary record that was fully informed by the views and recommendations of the Commissioner of the Department of Education, expert and knowledgeable witnesses offered by both parties, and the Special Master. Most important, the educational programs to be implemented through these remedial measures ¹⁴⁹⁰comport substantially with the statutory and regulatory policies that define the constitutional thorough and efficient education.

Disputes inevitably will occur and judicial intervention undoubtedly will be sought in the administration of the public education that will evolve under these remedial standards. Nevertheless, because of the Commissioner's strong proposals for educational reform and the Legislature's clear recognition of the need for comprehensive substantive educational programs and standards, we anticipate that these reforms will be undertaken and pursued vigorously and in good faith. Given those commitments, this decision should be the last major judicial involvement in the long and tortuous history of the State's extraordinary effort to bring a thorough and efficient education to the children in its poorest school districts.

I

The first round of this generational struggle commenced in 1970 when students in poor urban school districts brought suit to enforce the New Jersey Constitution's educational guarantee. *Robinson v. Cahill*, 118 N.J.Super. 223, 287 A.2d 187 (Law Div.1972). In successive decisions, this Court found that the system of public school funding then in place was unconstitutional. See *Robinson v. Cahill*, 62 N.J. 473, 303 A.2d 273 (1973); *Robinson v. Cahill*, 63 N.J. 196, 306 A.2d 65, cert. denied, 414 U.S. 976, 94 S.Ct. 292, 38 L. Ed.2d 219 (1973); *Robinson v. Cahill*, 67 N.J. 35, 335 A.2d 6 (1975); *Robinson v. Cahill*, 69 N.J. 133, 351 A.2d 713, cert. denied 423 U.S. 913, 96 S.Ct. 217, 46 L. Ed.2d 141 (1975). The Legislature responded by enacting the Public School Education Act of 1975 (1975 Act), L. 1975, c. 212 (codified at N.J.S.A. 18A:7A-1 to -33 (repealed)), which this Court found to be facially constitutional. *Robinson v. Cahill*, 69 N.J. 449, 355 A.2d 129 (1976); *Robinson v. Cahill*, 70 N.J. 155, 358 A.2d 457 (1976); *Robinson v. Cahill*, 70 N.J. 464, 360 A.2d 400 (1976).

The second round of the struggle commenced in 1981, when public school students from Camden, East Orange, Irvington, and ¹⁴⁹¹Jersey City challenged the constitutionality of the 1975 Act as applied. The Court remanded the case for an Administrative Law Judge to develop an evidentiary record to demonstrate the existence, nature and ex-

tent of the educational deficiencies in the poor urban school districts. *Abbott v. Burke*, 100 N.J. 269, 301-02, 495 A.2d 376 (1985) (*Abbott I*). That hearing confirmed that the districts were not providing the constitutionally mandated thorough and efficient education and that the 1975 Act and its funding were unconstitutional as applied to those districts. *Abbott v. Burke*, No. EDU 5581-88 (OAL 1988). The Commissioner and the State Board of Education disagreed. The Court, on direct appeal, reversed the State Board's decision and declared the 1975 Act unconstitutional as applied to the State's twenty-eight poorest urban districts (special needs districts, SNDs, or Abbott districts). *Abbott v. Burke*, 119 N.J. 287, 575 A.2d 359 (1990) (*Abbott II*). As a remedial measure, the Court ordered that the 1975 Act be amended or new legislation be passed to ensure substantial equality in funding between the special needs districts and the property-rich districts. *Id.* at 385, 575 A.2d 359. The Court required that the level of funding "be adequate to provide for the special educational needs of these poorer urban districts" and "address their extreme disadvantages." *Ibid.* The Court also determined that special programs and services were required in the special needs districts. *Id.* at 386, 575 A.2d 359.

The Legislature then enacted the Quality Education Act of 1990. L. 1990, c. 52 (codified at N.J.S.A. 18A:7D-1 to -37 (repealed)). The Court, in 1994, found that statute unconstitutional as applied to the special needs districts because it failed to ensure parity of educational spending. *Abbott v. Burke*, 136 N.J. 444, 451, 643 A.2d 575 (1994) (*Abbott III*). The Court also found that contrary to the Court's determination in *Abbott II* and in disregard of a specific legislative directive, L. 1991, c. 259, § 2, the Commissioner did not address the supplemental programs that were needed to assist disadvantaged students. The Court reiterated its conclusion from *Abbott II* that achievement of educational success in the SNDs would not occur until such supplemental programs and ¹⁴⁹²services were identified and implemented.

Abbott III, *supra*, 136 N.J. at 454, 643 A.2d 575.

In response to *Abbott III*, the Legislature, in 1996, passed the Comprehensive Educational Improvement and Financing Act (CEIFA). L. 1996, c. 138 (codified at N.J.S.A. 18A:7F-1 to -34). Plaintiffs challenged the new legislation. The Court found CEIFA to be facially constitutional in its adoption of substantive standards, referred to as "Core Curriculum Content Standards" (CCCS), that served to define a thorough and efficient education. *Abbott IV*, *supra*, 149 N.J. at 168, 693 A.2d 417. However, the Court found CEIFA to be unconstitutional as applied to the SNDs because the statute failed to guarantee sufficient funds to enable students in those districts to achieve the requisite academic standards, *id.* at 174, 693 A.2d 417; because CEIFA's supplemental programs, Demonstrably Effective Program Aid (DEPA), N.J.S.A. 18A:7F-18, and Early Childhood Program Aid (ECPA), N.J.S.A. 18A:7F-16, were not based on a study of the students' actual needs or the costs of meeting those needs, *id.* at 180, 693 A.2d 417; and because the statute failed to address the facilities problems of the SNDs, *id.* at 186, 693 A.2d 417.

At that point, sixteen years after the start of the *Abbott* litigation, the Court found that the continuing constitutional deprivation had persisted too long and clearly necessitated a remedy. *Id.* at 201-02, 693 A.2d 417. While recognizing that increased funding for regular education in the SNDs was not sufficient to remedy the educational deficiencies in those districts, we mandated, as an interim remedy, that the State provide parity funding for each SND for the 1997-1998 school year. *Id.* at 189, 693 A.2d 417. The Court also directed that firm administrative controls accompany this increased funding to ensure the money was spent effectively and efficiently. *Ibid.*

The Court then remanded the case to the Superior Court, Chancery Division, to determine what judicial relief was necessary in order to address the need for supplemental programs and facilities improvements in *Abbott* districts. *Id.* at 224-26, 693 A.2d 417. Accordingly, the Court authorized the Superior Court to direct the Commissioner

to initiate a study and to prepare a report with specific findings and recommendations covering the special needs that must be addressed to assure a thorough and efficient education to the students in the SNDs. That report shall identify the additional needs of those students, specify the programs required to address those needs, determine the costs associated with each of the required programs, and set forth the Commissioner's plan for implementation of the needed programs. In addition, the Superior Court shall direct the Commissioner to consider the educational capital and facility needs of the SNDs and to determine what actions must be initiated and undertaken by the State to identify and meet those needs.

[*Id.* at 199-200, 693 A.2d 417 (footnote omitted).]

The Court also authorized the Superior Court to appoint a Special Master to assist in the proceedings and in that court's review of the recommendations of the parties. *Id.* at 200, 693 A.2d 417.

Judge King, a presiding judge of the Appellate Division, was temporarily assigned to the Chancery Division to conduct the remand proceedings. Consistent with the Court's authorization, Judge King designated Dr. Allan Odden, a professor at the University of Wisconsin-Madison, as Special Master.

At the direction of the Superior Court, both parties submitted reports on and recommendations concerning supplemental programs, facilities needs, and implementation. The Superior Court then conducted hearings on the proposals. Following those hearings, Dr. Odden submitted a report focusing on special needs programs. *See* Appendix II at 636-663, 710 A.2d at 527-541. Both parties responded to that report.

On January 22, 1998, Judge King issued his report and recommendation. *See* Appendix I at 529-636, 710 A.2d at 474-527. After reviewing the different proposals put forth by the parties, he recommended that the following programs be implemented: whole-school reform, full-day kindergarten for five-year-olds, full-day pre-kindergarten for four- and three-year olds, summer school, school-based health and social services, an accounta-

bility system, and added security. App. I at 607–613, 710 A.2d at 512–515. The Court now addresses those recommended reforms and other proposed remedial measures.

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The Commissioner proposed that elementary schools in the Abbott districts undergo “whole-school reform,” a comprehensive approach to education that fundamentally alters the way in which decisions about education are made. A school implements whole-school reform by integrating reform throughout the school as a total institution rather than by simply adding reforms piecemeal. If carried out successfully, whole-school reform affects the culture of the entire school, including instruction, curriculum, and assessment. The reform covers education from the earliest levels, including pre-school, and can be particularly effective in enabling the disadvantaged children in poor urban communities to reach higher educational standards.

A.

The Commissioner’s recommended version of whole-school reform for elementary schools is Success For All (SFA), a nationally proven program that addresses the reading deficits of low-income, at-risk public school children. SFA was one of five different research-based whole-school reform models considered by the Commissioner. According to the Commissioner’s proposal, a school could adopt one of the other four models approved by the Commissioner if it could show convincingly that the alternative model it chose would be equally effective and efficient as SFA or that the model was already in place and operating effectively.

SFA has two different components. The primary component is called “Success for All,” a program that focuses on reading, writing, and language arts. The second component, “Roots and Wings,” concentrates on mathematical skills and problem solving, sci-

ence, social studies, music, art, and programs for the gifted.¹

1495SFA strives to ensure that, as each student moves from pre-school through elementary school, he or she reads at the appropriate level. For ninety minutes each day, students are put in reading groups of fifteen that are organized according to reading level, regardless of age or grade. For first through third graders who are having trouble with reading, SFA includes an additional daily twenty-minute one-on-one tutoring session; for students in higher elementary grades, SFA includes a daily group tutoring session composed of slightly larger groups. Children are assessed every eight weeks to determine their progress and their need for the extra tutoring session.

According to Dr. Robert Slavin, SFA’s founder and the State’s expert, one of the benefits of SFA is “neverstreaming,” the process whereby the school “tr[ies] to prevent children from needing special education for reading disabilities.” The theory behind the process is that SFA’s high-quality, intensive reading program will allow children with poor reading skills but otherwise normal intelligence to succeed in reading, whereas in the past they might have been classified as learning disabled solely on the basis of their language skills. Neverstreaming does not apply to all categories of special education. There are categories of special education students, *i.e.*, the severely disabled, for which special education services would be provided in the usual way. According to the Assistant Commissioner for Finance in the DOE, some districts “may choose never to neverstream.”

Judge King, in accepting the basic proposal for whole-school reform, understood that the neverstreaming process would reduce the need for special education programs. *See* App. I at 605, 710 A.2d at 512. Nevertheless, he was emphatic in recommending that special education not be neglected and that adequate funding be provided for special education when needed. *See* App. I at 605–607, 710 A.2d at 512. We interpret the Commis-

1. Roots and Wings itself has two different components. “Math Wings” is the component that focuses on mathematic skills and problem solv-

ing. “WorldLab” is the portion that focuses on social studies, science, music, art, and programs for the gifted.

sioner's testimony, as did Judge King, "as assuring adequate money in individual school-based budgets for all extant worthy programs, including special education, and we take him at his ⁴⁹⁶word on this point." See App. I at 606, 710 A.2d at 512. Thus, in schools where neverstreaming demonstrably does not or will not work, additional funds may be required to implement traditional special educational services, including the hiring of teachers trained in special education and the provision of specially designed or equipped rooms.

The administration, supervision, and implementation of SFA is multifaceted. SFA includes a family support team that assists students with non-academic problems and is composed of various members of the school community, including social workers, counselors, parent liaisons, administrators, teachers, and parents. As Dr. Slavin testified, the goal of the family support team is to utilize school and community resources to ensure that children come to school every day prepared to learn. The support team would provide health, counseling, nutritional, tutorial or other needed services. Additionally, SFA requires a program facilitator, who ensures that all the elements of SFA are properly implemented and coordinated, and a school-based management or advisory team consisting of school administrators, teachers, and parents.

Recognizing that professional development is key to the implementation of whole-school reform, the Commissioner recommended that every Abbott school implement a professional development program that is continuous, focuses on student achievement of the CCCS, and is based on ongoing professional renewal. Prior to the school year, each member of the SFA instructional team would receive at least three full days of in-service training. The school principal and program facilitator would undergo a week long training session. Additional training time would be provided for teachers functioning as tutors and for the family support team. During the school year, there would be weekly in-school training sessions and three two-day evaluations by SFA staff.

The success of whole-school reform depends on obtaining the support and approval of teachers, staff, and parents. See Joel F. Handler, *Down From Bureaucracy: The Ambiguity of Privatization*⁴⁹⁷ and *Empowerment* 194 (1996). Thus, the model SFA program contemplates that eighty percent of the teachers and other school staff vote to approve or "buy into" whole-school reform. The Center for Social Organization of Schools, the SFA sponsor organization, estimates that it could implement SFA in fifty Abbott schools in the 1998-1999 school year, in 100 Abbott schools in the following year, and in the remaining Abbott elementary schools in the third year. It takes three years to implement SFA fully in any given school. Thus, under the Commissioner's recommendations, SFA could be fully operative in all Abbott elementary schools within five years.

The Commissioner voiced the State's strong commitment to implementing whole-school reform. The DOE will facilitate the implementation process by providing resources to help review budgets, coordinating necessary support, and assisting in the transition from centralized to site-based management. If a district or school is hesitant in its implementation of whole-school reform, the DOE will exercise its "essential and affirmative responsibility" to ensure the necessary changes.

The Commissioner recommended the implementation of SFA at a high level. As Dr. Odden noted, the Commissioner's proposal, responsive to the acute educational needs of the Abbott districts, exceeds the requirements of the prototypical program:

[The State] expanded every element of the [SFA] model. For example, the standard model assumes a class size of 25, while the State proposed a class size of 21. The standard model assumes four tutors for a school of five hundred with nearly all students eligible for free or reduced lunch; the State model proposes 5.5 tutors. The standard model assumes a full day kindergarten but does not require any preschool, while the State model proposes a half day four-year old preschool program. . . . The standard model assumes a part time family

liaison or a full time para-professional parent liaison, while the State model not only proposes a certified professional as the family liaison, but goes beyond that and proposes a full, five member family, health, and social services team. The standard model assumes no technology but the State model includes substantial technology. The standard model assumes a full-time, schoolwide instructional facilitator, and the State model not only proposes that position but a technology coordinator as well. The standard model assumes about \$65,000 for professional development and materials, while the State has proposed nearly twice that amount. So the State has taken the best and most solid, research-proven effective, urban district elementary school model in the 1998 country and enhanced nearly all its key features. The proposal is a strong, expensive, substantive proposal which could serve as a model for the rest of the country.

[App. II at 641-642, 710 A.2d at 529-530.]

Whole-school reform entails “zero-based budgeting.” Under this scheme, the school combines all of its sources of revenue or “funding streams” and uses the aggregated amount as the basis for the entire school budget. In other words, instead of allocating certain funds to specific programs, the school uses the entirety of its funds to implement whole-school reform. The Commissioner’s proposal for whole-school reform at a high level is premised on the assumption that the budgets of Abbott elementary schools contain and will continue to contain not only parity funds, but also DEPA and ECPA funds. Consistent with the Commissioner’s proposal, Judge King recommended that both the parity funding authorized in *Abbott IV*, *supra*, 149 N.J. at 189, 693 A.2d 417, and these other funding streams be continued. *See* App. I at 607, 710 A.2d at 512. We agree.

Plaintiffs claim that the Commissioner’s whole-school reform plan will not provide the constitutionally guaranteed thorough and efficient education because the plan is not tied to the CCCS. However, Dr. Slavin’s testimony about SFA’s impact in different states implied that SFA can be adapted to fit vari-

ous state standards of success. Moreover, the Assistant Commissioner for Finance in the DOE indicated that SFA could incorporate the CCCS. Janice Anderson, the Vice Principal of Asbury Park’s Thurgood Marshall Elementary School, a school using SFA, also testified that her school was able to conform the SFA program to New Jersey’s CCCS.

Under the Commissioner’s proposal for whole-school reform, class sizes would be reduced to twenty-one students per class for kindergarten through third grade and twenty-three students per teacher for fourth and fifth grades. Class sizes for reading would be fifteen for grades K-5. Plaintiffs claim that the implementation of whole-school reform should be accompanied by a class-size reduction to fifteen students per teacher for all subjects through 1999 third grade, not just for reading. However, Dr. Odden indicated in his report that whole-scale class size reduction as such has “only [a] modest impact[]” on student learning, *see* App. II at 652, 710 A.2d at 535, and Judge King found that “[c]onceptually, whole-school reform like SFA and class-size reduction to fifteen are alternative programs.” App. I at 609, 710 A.2d at 514. Noting that SFA requires students to spend 90 minutes or 30% of the instructional day in reading groups of 15, Judge King concluded: “If SFA is implemented effectively and works, this is sufficient.” App. I at 609, 710 A.2d at 514. We find sound support for that conclusion and concur in Judge King’s recommendation that it will not be essential to reduce class size in the elementary schools to an extent greater than that proposed by the Commissioner.

In addition, we do not find persuasive plaintiffs’ argument that SFA is beyond the DOE’s statutory authority or is inconsistent with this Court’s prior determination in *Abbott IV*. Even though there is no express statutory authorization for whole-school reform, the Commissioner’s recommendation is consistent with the expansive powers given him under CEIFA. For example, N.J.S.A. 18A:7F-6b provides that when the Commissioner determines that a school is failing to achieve the CCCS, he “may summarily take

such action as he deems necessary and appropriate, including but not limited to: (1) directing the restructuring of curriculum or programs; (2) directing staff retraining or reassignment; (3) conducting a comprehensive budget evaluation; (4) redirecting expenditures; (5) enforcing spending at the full per pupil T & E [*i.e.*, thorough and efficient] amount; and (6) . . . reviewing the terms of future collective bargaining agreements.” Additionally, under *N.J.S.A.* 18A:7F-6c, the Commissioner is given the power to review the proposed budgets of Abbott districts and reallocate the funds within the budget if the funds are not being “appropriately directed so that students in the districts are provided the educational opportunity” to meet the CCCS.

⁵⁰⁰[2] Although the Commissioner did not make the express determination required by *N.J.S.A.* 18A:7F-6b that schools in Abbott districts are failing to meet the Core Curriculum Content Standards, the evidence of chronic failure among those schools is indisputable. Thus, Judge King found:

Students in these *Abbott* schools often failed to attain statewide academic standards. Achievement levels in 148 of the schools in twenty districts fell below State standards in reading, writing, or math for three consecutive years as measured by the eighth grade Early Warning Test (EWT) and the eleventh grade High School Proficiency Test (HSPT). Additionally, eighty-three schools failed to meet the standards on one or more of these subjects for one year and twenty-nine failed for two consecutive years. The State now operates three *Abbott* districts by takeover (Newark, Paterson, and Jersey City), *see N.J.S.A.* 18A:7A-34 to -52; five more confront State intervention if they do not develop corrective action plans to improve student achievement.

Most recent available test data provided by the State showed marked variations in the passing rates for the EWT and HSPT between students in the *Abbott* and I and J [*i.e.*, the wealthier school] districts. State assessment data for the March 1996 EWT revealed that 92.3% of students in the I

and J districts passed at proficiency levels I or II versus 40.7% of the *Abbott* students. Further, 49.2% of the I and J students passed at the highest level of proficiency (level I) compared to 6.9% in the *Abbott* schools. For the October 1995 HSPT, data showed 91.7% of I and J students passed all sections with 94.9% passing reading, 96.5% passing math, and 97.4% passing writing. In contrast, only 41.8% of students in the *Abbott* districts passed all sections of the HSPT with 55.9% passing reading, 58.7% passing math, and 71.3% passing writing.

[App. I at 549-550, 710 A.2d at 484 (internal citations and footnote omitted).]

In these circumstances of pervasive academic failure, it can readily be inferred that the Legislature intended that the Commissioner’s broad remedial powers under CEI-FA were sufficient to deal with the problem. Whole-school reform is an action deemed “necessary and appropriate” by the Commissioner. *See N.J.S.A.* 18A:7F-6b. Further, the several elements of whole-school reform are consistent with the authority that *N.J.S.A.* 18A:7F-6b specifically grants the Commissioner. For example, mandating whole-school reform entails “directing the restructuring of the curriculum or programs.” *See N.J.S.A.* 18A:7F-6b(1). Professional management and the training of teachers in whole-school reform is implicit in the power to direct “staff retraining or reassignment.” *See N.J.S.A.* 18A:7F-6b(2). The zero-based budgeting as a ⁵⁰¹component of whole school reform is encompassed in the Commissioner’s power to “redirect[] expenditures.” *See N.J.S.A.* 18A:7F-6b(4).

It follows that whole-school reform is a remedial measure that can create the opportunity to achieve a thorough and efficient education. It is consistent with both legislative and executive educational policy and comports with the intended effect of this Court’s determination in *Abbott IV*. Because the evidence in support of the success of whole-school reform encompassing SFA is impressive,² we adopt Judge King’s recom-

2. About 750 schools in the United States, includ-

ing fourteen New Jersey schools, are using some

mendation “that the State require the Abbott districts to adopt some version of a proven, effective whole school design with SFA—Roots and Wings as the presumptive elementary school model.” See App. I at 607–608, 710 A.2d at 512–513. We direct that implementation proceed according to the schedule proposed by the Commissioner and that SFA contain the essential elements identified by the Commissioner. Finally, we direct the Commissioner to implement as soon as feasible a comprehensive formal evaluation program, modeled on §502SFA’s formal evaluation precedents, to verify that SFA is being implemented successfully and is resulting in the anticipated levels of improvement in the Abbott elementary schools.

B.

This Court has consistently recognized and emphasized that early childhood education is essential for children in the SNDs. See, e.g., *Abbott IV*, *supra*, 149 N.J. at 183, 693 A.2d 417. Accordingly, both parties submitted major proposals in respect of early childhood education. The parties clearly recognized that early childhood programs are critically important and address the fact that, if at-risk children are to have any chance of achieving educational success, they must be education-ready. As recommended by the Commissioner and contemplated by the State’s experts and the Special Master, early childhood education is consistent with whole-school reform’s focus on early educational initiatives and grade-by-grade continuity and improvement. Early childhood education in the spe-

form of SFA. Studies comparing SFA schools to control schools demonstrate that by the end of first grade, children in SFA schools were reading at a level three months beyond that achieved by their counterparts; by the end of fifth grade, the SFA children were reading an average of slightly more than a year above the control group. Significant improvements were shown in the progress of children who speak languages other than English, whether they were taught in that other language or in English.

None of the research used the New Jersey SFA schools. There was no indication, however, that the experience in New Jersey would be different. At the hearing before Judge King, the only testimonial evidence of SFA’s success in New Jersey came from Janice Anderson, the Vice Principal

cial needs districts is an integral component of whole-school reform.

1.

[3] Both parties recommended full-day kindergarten for all Abbott five-year olds. According to the Commissioner’s report, “[s]tudies have shown that well-planned, developmentally appropriate full-day kindergarten programs for five-year-olds clearly provide one of the most cost-effective strategies for lowering the dropout rate and helping children at-risk become more effective learners in elementary school, particularly in first grade.” The Commissioner’s report also indicated that studies showed that students in full-day programs benefit more academically than students in half-day programs. Judge King “strongly endorse[d] the State’s commitment to full-day kindergarten.” App. I at 608, 710 A.2d at 513. We concur.

Full-day kindergarten comports with the requirements of SFA. Dr. Slavin testified that schools implementing SFA should increase their half-day kindergarten programs to full-day ones. §503Further, full-day kindergarten comports with statutory policy. CEI-FA requires that any district receiving ECPA must establish and maintain full-day kindergarten for all five-year olds by the 2001–2002 school year. N.J.S.A. 18A:7F–16.

Finally, research clearly supports the notion that full-day kindergarten is an essential part of a thorough and efficient education for the Abbott children. Not only will the children benefit in the long-run, as the empirical evidence demonstrates, but they will also be

of Asbury Park’s Thurgood Marshall Elementary School, who testified that SFA was successful in her school. Judge King also provided anecdotal evidence of a successful implementation of SFA in New Jersey. In his report and decision, he wrote that he “personally observed the SFA program in Principal Annetta Braxton’s Cramer School (pre-kindergarten to grade four) in East Camden, a most impressive operation. These children clearly were eager, ready and learning.” App. I at 605, 710 A.2d at 512. After three years with SFA, the school reported a 50% drop in the number of students who needed remedial instruction in second grade and a reduction from 13% to 5% in the number of grade one retentions.

better prepared to enter first grade and take advantage of the opportunities presented by SFA and whole-school reform.

Full-day kindergarten is not yet available in all Abbott districts. The demonstrated need for this program is acute. Because SFA will be implemented in the Abbott schools without further delay, and because the Commissioner himself has indicated a willingness to ensure the availability of adequate temporary facilities, we affirm Judge King's recommendation that full-day kindergarten be "implemented *immediately*." See App. I at 609, 710 A.2d at 513. In those schools unable promptly to locate or obtain adequate classroom space or instructional staff, full-day kindergarten shall be provided by the commencement of the September 1999 school year. The Commissioner's endorsement of full-day kindergarten signals and underscores the State's commitment to provide or secure the funds and resources essential for the effectuation of this early childhood initiative.

2.

There is no fundamental disagreement over the importance of pre-school education. The Commissioner proposed half-day pre-school for four-year olds, and the plaintiffs and Dr. Odden recommended full-day pre-school for both three- and four-year olds. As the Commissioner's research itself demonstrates: "Well-planned, high quality half-day preschool programs . . . help close the gap between the home and school environments and the educational expectations that lead to academic success."

Empirical evidence strongly supports the essentiality of pre-school education for children in impoverished urban school districts.⁵⁰⁴ That evidence demonstrates that the earlier education begins, the greater the likelihood that students will develop language skills and the discipline necessary to succeed in school. A review of two major studies on pre-school cited by the parties, the High/Scope Perry Preschool study and the Abecedarian study, also reveals that there is a strong correlation between the intensity and duration of pre-school and later educational progress and achievement. The Commis-

sioner's expert on childhood education, Dr. Slavin, noted that "the programs that have shown the greatest success are ones that provide more intensive services" and "start with three-year-olds rather than four-year-olds." Common experience confirms this empirical evidence that pre-school attendance is linked to success in school.

A 1996 report by the Carnegie Task Force on Learning in the Primary Grades lends further support to that conclusion. Carnegie Corp. of New York, *Years of Promise: A Comprehensive Learning Strategy for America's Children* (1996). The Report recommends that high-quality learning opportunities for children ages three to five be made universally available:

During the preschool years, children make the developmental leaps that form the basis of later achievement. To get all children ready for school and for an education that meets high standards of achievement, the task force recommends that the nation make a commitment to expanded high-quality public and private early care and education programs *for children ages three to five*, supported by national, state, and local mechanisms that are coordinated to assure adequate financing.

[*Id.* at xi (emphasis added).]

Part of the basis of that recommendation is that one-third of children entering elementary school lack basic school-readiness skills. *Id.* at 17. One reason for this deficit is that poor areas suffer from a scarcity of quality, publicly-funded early care and early education for three- to five-year olds. *Id.* at 57.

The evidence also shows that one of the most important functions of early childhood education is language development. At the hearing, evidence was produced showing that children in low income families suffer greatly in language development. Key elements of language development begin when a child is three and ⁵⁰⁵four; therefore, opportunities for those children to learn are lost if early childhood education does not begin at those ages.

[4] The Legislature itself has recognized the necessity of early childhood education for three- and four-year olds in the poorest school districts. *N.J.S.A.* 18A:7F-16 pro-

vides that for districts in which the concentration of low income pupils is greater than 20% but less than 40%, early childhood aid “shall be distributed” for “the purpose of providing full day kindergarten and pre-school classes and other early childhood programs and services.” The statute does not specify whether the pre-school aid should be used for three-year olds or four-year olds or both. For districts in which the concentration of low income pupils is equal to or greater than 40%, the statute directs that additional funds be used “for the purpose of expanding instructional services previously specified [*i.e.*, pre-school classes and other early childhood services] to 3 year olds.” *Ibid.* For districts, then, with a 40% concentration of poor students, it is mandatory that ECPA funds be expended for the pre-school education of three-year olds. The statute next provides that should extra funds remain, they may be used, “in addition to the instructional services previously specified” [*i.e.*, the just mentioned pre-school for three-year olds and the aforementioned “early childhood programs”], for “the purpose of” providing “transition and social services to primary grade students.” *Ibid.* The statute thus contemplates three tiers of funding: (1) undifferentiated funds to be expended on pre-school in Abbott districts with 20% poor (ECPA-1 districts); (2) additional monies that must be spent on pre-school education for three-year olds in districts with 40% poor (ECPA-2 districts); and (3) extra funds to be used for services for elementary school students in districts with funds remaining after the mandates of (1) and (2) have been met.

This construction of the statute is borne out by administrative regulation. See *N.J.A.C.* 6:19-3.2d (providing that beginning in the 2001-2002 school year, ECPA may be used only for “preschool, full-day kindergarten and other early childhood programs ¹⁵⁰⁶and services”). Finally, we note that GoodStarts, a full-day pre-school program for three- and four-year olds developed under the Kean administration under the name “Urban Early Childhood Initiative,” evidences the early recognition of the value of

such programs and is reflective of the same educational policy concerns underlying CEIFA.³

[5] In the vast majority of Abbott districts, more than 40% of the population is low income. For these ECPA-2 Abbott districts, then, pre-school for three-year olds is legislatively mandated. As for the remaining handful of Abbott districts where between 20 and 39% of their respective citizens are poor, we note the following. The record is undisputed and, indeed, uncontrovertible that the conditions that work to deprive children of their constitutional entitlement to a thorough and efficient education are pervasive not only in the ECPA-2 Abbott districts, but in the ECPA-1 Abbott districts as well. The Court concludes that the level of need in the ECPA-1 Abbott districts for pre-school programs for three-year olds is comparable to that exhibited by ECPA-2 Abbott districts. Given the documented and undisputed similarity of conditions that deleteriously impact the ability of children throughout the Abbott districts to receive a sound education, it would be inconsistent with the legislative mandate underlying CEIFA for the Commissioner not to use his power under *N.J.S.A.* 18A:7F-6b to direct ECPA-1 Abbott districts to restructure their curricula in order to provide pre-school education for three-year olds and to reallocate and apply ECPA funds to the cost of providing pre-school education for three-year olds. See App. I at 609, 710 A.2d at 513 (finding that State “recogniz[ed] the efficacy” of pre-school programs for three-year olds in Abbott districts).

This Court is convinced that pre-school for three- and four-year olds will have a significant and substantial positive impact on academic achievement in both early and later school years. As ¹⁵⁰⁷the experts described, the long-term benefits amply justify this investment. Also, the evidence strongly supports the conclusion that, in the poor urban school districts, the earlier children start pre-school, the better prepared they are to face the challenges of kindergarten and first grade. It is this year-to-year improvement

3. GoodStarts continues to appear as an unfunded line-item in the 1999 budget. See *State of*

New Jersey Budget, Fiscal Year 1998-1999 at E-9.

that is a critical condition for the attainment of a thorough and efficient education once a child enters regular public school.

Stated conversely, because the absence of such early educational intervention deleteriously undermines educational performance once the child enters public school, the provision of pre-school education also has strong constitutional underpinning. In light of our construction of *N.J.S.A.* 18A:7F-16, however, and the powers of the Commissioner delineated in *N.J.S.A.* 18A:7F-6b, we need not reach the constitutional issue. *Cf. In re Kimber Petroleum Corp.*, 110 *N.J.* 69, 83, 539 A.2d 1181 (1988) (holding that when faced with the choice between finding a statute unconstitutional or construing it in a way to "free it from constitutional doubt or defect" the Court should choose the latter). The provision in CEIFA for education of three-year-olds is a clear indication that the Legislature understood and endorsed the strong empirical link between early education and later educational achievement.

We note that *N.J.S.A.* 18A:7F-16 does not unequivocally require districts receiving ECPA funds to provide a full day of pre-school for either three- or four-year olds. Because whole-school reform must be implemented gradually and pre-school education must itself be integrated as part of that comprehensive reform, we concur in the Commissioner's determination that, as an initial reform, a half-day of pre-school should enable Abbott children to be education-ready when they enter primary school and thus allow them to take advantage of the opportunity to receive the thorough and efficient education that whole-school reform will provide.⁴ ¹⁵⁰⁸The Court directs the Commissioner to exercise his power under *N.J.S.A.* 18A:7F-6b and -16 to require all Abbott districts to provide half-day pre-school for three- and four-year olds. The Court autho-

rizes the Commissioner to require the Abbott schools to implement these programs as expeditiously as possible. In directing the implementation of pre-school programs in the Abbott schools, the Commissioner must ensure that such programs are adequately funded and assist the schools in meeting the need for transportation and other services, support, and resources related to such programs. The Commissioner may authorize cooperation with or the use of existing early childhood and day-care programs in the community. If any Abbott schools are able to obtain the space, supplies, teaching faculty, staff, and means of transportation that are necessary to implement these programs for the 1998-1999 school year, they should be supplied with the necessary funding to enable them to do so. The Commissioner shall ensure that all other Abbott schools shall have the resources and additional funds that are necessary to implement pre-school education by the commencement of the 1999-2000 school year.

III

Concluding that the available research on whole-school reform in middle and high schools was incomplete, the Commissioner did not recommend a specific program of whole-school reform for middle and high schools.⁵ He determined, however, that successful implementation of whole-school reform in the elementary ¹⁵⁰⁹grades will have a salutary impact on educational performance at the middle and secondary school levels. He also recommended several supplemental programs that, while generally applicable to all Abbott schools no matter what the level, could be of particular importance in overcoming the disadvantages that prevent middle and high school students in the Abbott dis-

4. *N.J.S.A.* 18A:7F-16 mandates that ECPA funds be used "for the purpose of providing full-day kindergarten and preschool classes" and that all Abbott districts "establish" such classes "by the 2001-02 school year." Given our decision to abide the results of the gradual implementation of whole-school reform and pre-school, we need not decide at this time whether "full-day" was meant to modify pre-school.

5. Dr. Slavin noted that whole-school reform programs were being developed, tried, and evaluated for middle and secondary schools and that by September 1999 such programs might be introduced in Abbott middle and secondary schools. We infer that the Commissioner will at that time determine whether the introduction of whole-school reform in Abbott middle and secondary schools is appropriate.

tricts from achieving a thorough and efficient education.

A.

Judge King properly acknowledged the pervasive and urgent need for the provision of social services in the Abbott districts. *See* App. I at 611, 710 A.2d at 514. The Commissioner himself recognized the “significant health and social service needs” of children in these districts and cited studies showing that low-income families face many problems particularly associated with poverty, such as substance abuse, teenage pregnancy and parenthood, inadequate housing, violence, and crime. The need for services to remedy those problems is often not met in communities with weakened infrastructures. Schools frequently have to step in where community structures fail. When schools do step in, research shows that there are positive, salutary effects on student performance, attendance, and dropout rates, as well as an increased opportunity for teachers to interact with students.

The research revealed two general approaches for providing these services: direct on-site service delivery and off-site service delivery through on-site coordination and referral. Although there are many models of on-site services,⁶ such services generally entail a school-based clinic providing preventive and health education services, social work and mental health services, drug and §10alcohol counseling, dental services, laboratory and prescription services, and primary health care, including reproductive health services. Specialized medical care beyond that provided would be referred off-site. According to plaintiffs, on-site social services provision is a concept that is growing rapidly across the country, with over 900 programs currently in existence. Plaintiffs recommended on-site service provision and claimed that it would free educators to concentrate on instruction, reduce student absenteeism, ensure that services are provided and are

provided quickly, and address the health needs of uninsured students.

Under the coordination and referral model favored by the Commissioner, the “school would not be responsible for providing the health and social services.” Rather, as the Assistant Commissioner for Student Services explained, the school would serve “as the facilitator in terms of identifying what types of social services, health services, a child and family might need, and then utiliz[ing] the expertise from those community resources who are in fact the experts in that area, to make sure that the right combination of services is provided to the family.” The State prefers this system for several reasons. First, there would be no “mission creep,” *i.e.*, the school would not be distracted from its primary mission of educating students. Second, the State felt that there are outside experts who are better suited to handle students’ problems. Finally, because different schools have different needs, it would be improper to order one on-site model for all schools.

[6] There is clear support for a finding that the provision of social services is within the school’s mission. In CEIFA, the Legislature mandated that schools “shall” use DEPA funds “for the purpose of providing . . . health and social service programs to students.” *N.J.S.A.* 18A:7F–18a. In addition, the current budget, under the heading “Educational Support Services,” directs the DOE to develop and implement programs in the following areas: “[V]iolence prevention, substance abuse prevention and education, comprehensive health education, suicide prevention, school health §11services, HIV/AIDS education, [and] family life education.” *State of New Jersey Budget, Fiscal Year 1998–1999* at D–91.

Judge King agreed with plaintiffs and recommended on-site provision of social services:

These services should optimally be provided at the school, confidentially and distinct

6. Plaintiffs presented three different models of school-based services: a model presented by Lawrence E. Gottlieb, senior program officer at the NBI Health Care Foundation in Roseland, New Jersey; the model of services provided at

the Snyder High School Adolescent Center (Snyder Center) in Jersey City; and School-Based Youth Services Program (SBYS). *See* App. I at 592–594, 710 A.2d at 505–506 (describing the three different models).

from the school's educational administration, because as Human Services' Assistant Commissioner Tetelman testified: "That is where the kids are." This court has observed these programs at Camden High School (including on-site maternity care) and at Woodrow Wilson High School, also in Camden. These programs, when adequately staffed and funded, are designed precisely to overcome the "extreme disadvantages facing children in the SNDs," which impede educational improvement. *Abbott IV*, 149 N.J. at 179 [693 A.2d 417]; see *Abbott II*, 119 N.J. at 369 [575 A.2d 359].

[App. I at 611, 710 A.2d at 514-515.]

Although in no way deprecating the "extreme disadvantages" generally facing children in the Abbott districts, we note that, beginning as early as *Abbott II*, we have stressed the importance of having the particularized needs of these children drive the determination of what programs should be developed. See *Abbott II*, *supra*, 119 N.J. at 295, 575 A.2d 359; *Abbott III*, 136 N.J. at 451-52, 643 A.2d 575; *Abbott IV*, *supra*, 149 N.J. at 198, 693 A.2d 417. However, the Commissioner did not conduct a particularized needs study nor did he base his recommendations on actual needs; rather, he relied almost exclusively on national research unrelated to New Jersey generally and Abbott schools specifically. The same deficiency undermines plaintiffs' proposals. The provision of supplemental programs involving necessary services should not be detached from the actual needs of individual Abbott schools and districts.

Ultimately, what matters for the education of the Abbott students is that their health and social problems are remedied. If the problems are remedied, the classroom teachers can better carry out their educational responsibilities. The particularized needs of an individual school will inform the decision of what type of program is necessary; different schools will have different health and social service needs depending on their student population⁵¹² and their location. As Dr. Lawrence Gottlieb testified at the remand hearing:

I think we should take a look at each school, the needs of each school, the problems in each school because every school will be somewhat different. High schools have different needs than elementary and middle schools. Some of the Abbott districts that are more suburban or more rural may have different access issues in terms of how those individuals in that community get to health services. Communities are different. There's more drug abuse in some communities, more crime in other communities, more AIDS in other communities. So I think each school should be looked at in terms of what the needs are of that particular school.

A school's needs may require any one of the models of social service provision described at the remand hearing or some other configuration yet to be developed. As the Commissioner recognized, adopting and ordering one uniform approach for every school to follow would not be educationally sound.

Furthermore, it must be acknowledged that the provision of such health and social services, although intimately affecting public education in the special needs districts, is not the exclusive responsibility of the DOE. Other State agencies have regulatory concerns and corresponding duties to address such problems. Indeed, a successful program noted by plaintiffs is SBYS, an on-site program developed and administered by the Department of Human Services. See App. I at 593-594, 710 A.2d at 506. Thus, it is the State, not just the DOE, that bears the responsibility for ensuring that the social service component of a thorough and efficient education is provided to Abbott students. This responsibility need not be placed exclusively on the shoulders of the DOE.

[7] We direct the Commissioner to implement his proposal to provide a community services coordinator in every middle and secondary school for the purposes of identifying student need and arranging for community-based providers to furnish essential health and social services. However, because the general need for social services for children in Abbott schools is acute and indisputable, there must be an effective and realistic op-

portunity for these schools to provide on-site services that go beyond mere referral and coordination. Thus, we hold that individual schools and 513districts have the right, based on demonstrated need, to request and obtain the resources necessary to enable them to provide on-site social services that either are not available within the surrounding community or that cannot effectively and efficiently be provided off-site. Conversely, we hold that the Commissioner has a corresponding duty to authorize requested school-based social service programs for which there is a demonstrated need and to provide or secure necessary funding.

B.

Both parties recognized the need for increased security measures in the Abbott schools.

The Commissioner recommended that each school establish a code of student conduct, employ full-time security personnel, and utilize protective devices such as metal detectors. The Commissioner acknowledged that increased security would ensure the children's safety and make the school environment conducive to learning. The Commissioner proposed that a prototypical elementary school of 535 students be allotted one security guard. For middle and high schools, he proposed one guard for every 225 students. The Commissioner based the secondary school security ratio on numbers contained in Perth Amboy's and Elizabeth's proposals for using parity money. Plaintiffs did not provide a specific plan for security.

The security needs of the students across the Abbott districts will vary based on a range of factors peculiar to the individual schools. With their immediate proximity to major metropolitan areas, schools in Jersey City or Camden will undoubtedly have much different security needs than the schools in Vineland and Asbury Park. Even within one particular district, different schools may have different security needs. Declaring that security should be deployed at the 1:225 ratio derived from Perth Amboy's and Elizabeth's proposals does not address individual school needs. We are certain there will be schools that need security beyond the Commission-

er's recommendation. For example, in *Abbott IV*, 514*supra*, we noted that approximately twenty security guards are required for Trenton High School's 3000 students, 149 *N.J.* at 173, 693 A.2d 417; this is a ratio of 1:150. Under the Commissioner's security plans, Trenton High School would receive only 13.3 security guards.

Security is a critically important factor in the provision of a thorough and efficient education. Inadequate security frustrates the education process and is a great barrier to learning. To approve of security at a ratio established by the funding requests of only two districts would be to divorce the provision of security from the real needs that exist within the remaining districts. Without a link to actual needs, the Commissioner's proposal lacks an evidentiary basis.

[8, 9] The Court holds that individual Abbott schools or districts have a right to request supplemental programs for security and that the Commissioner must authorize the requested programs that are based on demonstrated need and secure or provide necessary funding.

C.

Several other supplemental programs were addressed at the hearing below. The Commissioner presented recommendations on technology, school-to-work and college-transition programs, alternative school programs, and accountability. Plaintiffs also recommended such programs and, in addition, urged the adoption of summer school, after-school, and nutrition programs.

The Commissioner proposed and stressed the need for an extensive technology program wherein one computer would be provided for every five students in grades K-12. The technology, including peripherals and software, would be used as part of SFA, would help students master the basic and advanced skills necessary to reach the CCCS, and would improve student motivation and learning. The Commissioner's proposal also includes a full-time media/technology specialist to ensure that school and classroom₅₁₅ libraries have appropriate materials to supplement the curriculum, and a

full-time technology coordinator to facilitate the implementation and use of educational technology throughout the school.

The Commissioner also made recommendations for students who are disruptive or who have not been successful in traditional learning environments. The program helps prevent dropouts by providing more individualized instruction as well as necessary additional supports, such as job counseling, social workers, and guidance counselors. Research shows that placing students in alternative education programs decreases disruption in the regular school and, for the students in the programs, increases academic performance, fosters positive lifestyles, and reduces aggressive behavior. The Commissioner recommended that each Abbott district establish an alternative middle school program and an alternative high school program. The Commissioner also proposed that there be a dropout prevention specialist or counselor. Implicit in the Commissioner's recommendation that there be alternative school programs is the commitment to provide or secure the funding necessary to ensure that quality education extends to such alternative schools as well. Judge King endorsed the Commissioner's recommendation for the establishment of alternative schools and emphasized that the State's obligation to provide adequate funds extends to this program as well. *See* App. I at 608, 710 A.2d at 513.

The Commissioner recommended that a system of accountability be implemented. According to the Commissioner, the system would include the establishment of baseline data and the identification of progress benchmarks and standards that are linked to the Core Curriculum Content Standards. The results obtained from this accountability system would be used to make informed decisions about program improvement. The Commissioner also suggested a system of rewards and sanctions for students, teachers, and entire schools. Plaintiffs offered no proposals for accountability. Judge King concluded that accountability⁵¹⁶ mechanisms, both fiscal and academic, are "essential to high performance and effective restructuring." App. I at 612, 710 A.2d at 515.

The Commissioner identified several school-to-work and college-transition programs, including career majors, work-based learning, connecting activities, and career development, as being important to education and beneficial to students from low-income families who are in danger of failing. The Commissioner pointed to research indicating that such programs lead to increased school attendance, reduced dropout rates, higher motivation to learn, and greater likelihood of pursuing further education. The Commissioner recommended that each Abbott district implement these programs. Plaintiffs agree on the need for school-to-work and college-transition programs.

Plaintiffs proposed summer school as a supplemental program. Plaintiffs' report indicated that a summer program of instruction, recreation, and paid employment would prevent the learning loss that occurs when school is disrupted for an extended period and would also provide structure during these unsupervised months. The Commissioner made no recommendations in this area. Judge King agreed with plaintiffs and the Special Master that summer school was needed and that the State must fund an extended term or summer school program for all interested children. *See* App. I at 610-611, 710 A.2d at 514.

Plaintiffs also asserted that after-school programs for all grade levels were important because the programs address the students' needs for additional instruction time to improve academic performance. Plaintiffs' recommended program would include homework and tutorial assistance, computer training, and recreation opportunities. Again, the Commissioner made no recommendation in this area.

Plaintiffs made a recommendation concerning nutrition; the Commissioner did not mention this topic. Plaintiffs proposed that the DOE establish a nutrition program that provides a high quality breakfast and lunch for all students (including summer⁵¹⁷ school students) and a high quality snack for after-school students. The program would fill the gap left by current breakfast and lunch programs funded under 42 U.S.C.A. §§ 1751 to 1769(h).

D.

[10–14] As with social services and security, there will be varying needs in the Abbott schools for supplemental programs. Consistent with the Commissioner’s recommendations, we authorize him to implement technology programs at the request of individual schools or districts or as he otherwise shall direct. We further authorize the Commissioner to implement alternative schools or comparable education programs. Similarly, we direct the commissioner to authorize accountability programs, as may be deemed necessary or appropriate, and to coordinate them with whole-school reform. We also direct the Commissioner to implement school-to-work and college-transition programs in secondary schools in the Abbott districts at the request of individual schools or districts or as the Commissioner otherwise shall require. In respect of the other supplemental programs, we decline to order their immediate district-wide implementation, even though all such programs are sound in principle. Rather, because the needs for these programs will vary from school to school, we direct the Commissioner to provide or secure the funding necessary to implement those programs for which Abbott schools or districts make a request and are able to demonstrate a need. We reiterate that for middle and secondary schools, which will not have the benefit of whole-school reform, such supplemental programs may be necessary to ensure the educational success of their students.

IV

The comprehensive whole-school reform and supplemental programs that constitute the remedial measures adopted and approved by the Court markedly shift the emphasis in achieving a thorough and efficient education from financing as such to education itself. Nevertheless, even though it is not feasible at this ⁵¹⁸time to ascertain or mandate a specific funding level, adequate funding remains critical to the achievement of a thorough and efficient education.

[15, 16] Not only must sufficient funds be provided for whole-school reform and for the

additional or modified supplemental programs that are constituent parts of such reform, there must also be in place a clear and effective funding protocol. Consistent with zero-based budgeting, the Commissioner may, before seeking new appropriations, first determine whether funds within an existing school budget are sufficient to meet a school’s request for a demonstrably needed supplemental program. Implicit in any determination that existing appropriations are sufficient is the condition that funds may not be withdrawn from or reallocated within the whole-school budget if that will undermine or weaken either the school’s foundational education program or already existing supplemental programs.

[17] Underlying the Commissioner’s proposal for whole-school reform, early childhood programs, and supplemental programs, is the clear commitment that if there is a need for additional funds, the needed funds will be provided or secured. As Judge King emphasized when discussing the possible inadequacy of budgeted funds: “[I]f the State found no additional funds available, Commissioner Klagholz vowed to seek supplementary appropriations through the normal appropriation process.” App. I at 566, 710 A.2d at 492. Judge King also stressed that there must be sufficient funding to ensure “exemplary programs and facilities” for “special education, art, and music.” App. I at 608, 710 A.2d at 513. If a school demonstrates the need for programs beyond those recommended by the Commissioner, including programs in, or facilities for, art, music, and special education, then the Commissioner shall approve such requests and, when necessary, shall seek appropriations to ensure the funding and resources necessary for their implementation.

The provision of adequate funding, however, ultimately remains the responsibility of the Legislature. Requests by the Commissioner⁵¹⁹ that funds be appropriated to implement educational programs deemed essential on the basis of demonstrated need will be the measure of the State’s constitutional obligation to provide a thorough and efficient education, and we anticipate that the Legisla-

ture will be fully responsive to that constitutional call.

V

It is undisputed that the school buildings in Abbott districts are crumbling and obsolescent and that this grave state of disrepair not only prevents children from receiving a thorough and efficient education, but also threatens their health and safety. Windows, cracked and off their runners, do not open; broken lighting fixtures dangle precipitously from the ceilings; fire alarms and fire detection systems fail to meet even minimum safety code standards; rooms are heated by boilers that have exceeded their critical life expectancies and are fueled by leaking pumps; electrical connections are frayed; floors are buckled and dotted with falling plaster; sinks are inoperable; toilet partitions are broken and teetering; and water leaks through patchwork roofs into rooms with deteriorating electrical insulation.

Besides facing these decrepit and dangerous conditions, children in Abbott districts must also contend with gross overcrowding. Some class sizes hover around forty. Due to insufficient space, up to three different classes may be conducted simultaneously within the confines of one room. Libraries and hallways have been pressed into service as general classrooms. Some "classrooms" are no more than windowless closets converted by necessity into instructional areas. For children in these huddled spaces, "art" consists of coloring and "music" consists of singing a song.

[18] These deplorable conditions have a direct and deleterious impact on the education available to the at-risk children. The State's constitutional educational obligation includes the provision §520 of adequate school facilities. Consequently, in *Abbott IV*, *supra*, as part of the remedial relief to be determined and implemented, the Court ordered the DOE to undertake a detailed assessment of the facilities needs of the twenty-eight Abbott districts, to provide recommendations

concerning how the State should address these needs, and to consider appropriate funding mechanisms. 149 *N.J.* at 225, 693 A.2d 417. The DOE substantially complied with this mandate. Its study and proposals constitute the basis for appropriate and necessary remedial relief.

A.

[19] The DOE hired an engineering firm to conduct an examination of every Abbott school in order to determine compliance with the Uniform Construction Code (Code) and to identify components that are either non-functional or have exceeded their life expectancy. *See* App. I at 616, 710 A.2d at 517. Among the elements studied were architectural and structural integrity; heating, ventilation, and air conditioning systems; sanitary and water systems; fire protection and detection systems; plumbing fixtures; electrical power and distribution; emergency egress alarms and signs; and communications systems.⁷ Because deficiencies in these areas directly affect the health and safety of the children, these defects must be the first to be remediated in the necessary phased-in facilities improvement program. Because fixing the electrical power and distribution systems would serve the dual purpose of enhancing the safety of the building and allowing for the implementation of the State's technology plan, this area should be one of the first the State addresses.

§521B.

The firm also addressed the overcrowding problem. *See* App. I at 618-619, 710 A.2d at 518. After compiling current enrollment figures and conducting an inventory of instructional spaces that met minimum square footage parameters, the firm determined that 3137 additional classrooms are needed to accommodate the existing K-12 enrollment and a half-day of pre-school for four-year olds. *See* App. I at 618-620, 710 A.2d at 518-519.

7. *See* Vitetta Group, *New Jersey Abbott Districts Educational Facilities Assessment* (1977); *see also* Dunstan McNichol, *Disintegrating Schools Hold Kids Hostage*, *Sunday Star Ledger*, May 10,

1998 at 1 (reviewing the Vitetta study and discussing examples of the facilities problems found to exist in the Abbott districts).

[20] Before any new classrooms are built, however, each district is expected to complete an enrollment projection and a Five-Year Facilities Management Plan (Plan). This Plan will enable the State and the district to work together to determine how to make the “best use” of existing space. After reviewing grade configurations, school sending areas, school sizes, and each district’s individualized need for instructional space, the State and the district will make the site-sensitive decision of whether it is more feasible to renovate existing buildings or to construct new ones. According to the timeframe the State has submitted, the Plans and the enrollment projections will be completed by January 1999, and architectural blueprints will be completed by the fall of that year. Construction will begin by the spring of 2000.

The Court directs that the formulation of these Plans be undertaken immediately. The proposed timeframe seems reasonably feasible, and the Court declines now to impose additional or unrealistic time constraints.⁸ The Commissioner is directed to ensure that the Plans are completed and that the deadlines are met.

1522C.

[21] The DOE promulgated educational adequacy standards (EAS) to ensure that every school has instructional areas sufficient to enable the children to meet the CCCS. *See* App. I at 624–627, 710 A.2d at 521–522. Elementary classrooms would be general instructional rooms wherein all subjects are taught. An elementary school would also contain a cafetorium (a combination cafeteria and auditorium), a gymnasium, and four small group instructional rooms. The small group rooms would provide the space needed to implement the lower student-teacher ratios mandated by the SFA program.

Plaintiffs disagree with the State’s recommended square footage parameters. However, the square footage parameters that the DOE proposed for existing classrooms comply with the minimum space requirements as outlined in *N.J.A.C.* 6:22–5.5. Also, the

square footage parameters that the DOE proposed for new construction are similar to those used in recently constructed elementary schools in this State and elsewhere. Thus, we decline to order the State to change its proposal in this area.

[22] Plaintiffs also request that every elementary and middle school have specialized instructional areas for art, music, and science. Although we agree with Judge King’s conclusion that it is essential to have an exemplary art and music program for Abbott children because they may face cultural deficits unknown to their more affluent counterparts, *see* App. I at 608, 710 A.2d at 513, the record does not support the conclusion that specialized instructional rooms are indispensable to achieve that end. The individual Abbott schools and districts should have the discretion to decide initially whether specialized rooms for art, music, and science instruction are required at the elementary level. Should a school or district determine that such rooms are educationally necessary based on particularized need, its determination should be included in its Five-Year Facilities Management Plan. The DOE should review that request and determination. The determination of the local education authorities should be reviewed with 1523deference and with the understanding that the local educators are in the best position to know the particularized needs of their own students.

Accordingly, we accept the Commissioner’s conclusions relating to the minimum standards for instructional areas in Abbott schools. We further direct that each Abbott school or district shall be authorized to demonstrate the need for additional, specialized spaces and that the Commissioner secure or provide the necessary funds whenever such need is demonstrated.

D.

In the past, property-poor districts that had a poor bond rating were unable to finance needed construction. Recognizing this, the DOE has recommended that the

8. Similarly, given that projected cost estimates are speculative at best at this time, *see* App. I at 620–624, 710 A.2d at 519–521 (outlining how

construction costs were both under- and over-estimated by the parties), we decline to impose dollar restrictions.

Legislature amend *N.J.S.A.* 18A:72A-1 to -58 to empower the Educational Facility Authority (EFA or Authority) to finance the construction and renovation of elementary and secondary schools in the Abbott districts. Under the proposed plan, a district would issue bonds in an amount consistent with its facilities needs as expressed in its Plan. The district would then sell these bonds privately to the Authority, which would, in turn, sell them to the public. The Authority's bonds would receive a triple A rating, and the debt would be serviced using annual appropriations from the State. Because EFA-issued bonds are viewed in the market as one notch less than a general obligation of the State, there would be significant repercussions to the State and its credit rating were the Legislature not to make an annual appropriation.

[23] Besides allowing districts with poor credit to finance their construction through indirect market participation, this arrangement has other benefits. *See* App. I at 630-633, 710 A.2d at 524-525. The EFA would serve as construction manager for all projects. The Authority would prepare specifications for construction,⁵²⁴ solicit bids for all work and materials required, enter into project contracts, invest any monies not required for immediate disbursement, and review all completed work before dispensing requisitioned funds. In short, the EFA would ensure efficient and satisfactory construction. We determine that the State's proposal to provide and administer the funding for capital improvements would effectively address the need for adequate facilities and capital improvements.

The State's proposal is based on the premise that the State will fund 100% of "approved costs." After oral argument the State submitted to the Court its "master funding formula" for determining which costs will be approved. We conclude that any funding formula that does not fund the complete cost of remediating the infrastructure and life cycle deficiencies that have been identified in the Abbott districts or that does not fully fund the construction of any new classrooms needed to correct capacity deficiencies will not comport with the State's constitutional mandate to provide facilities

adequate to ensure a thorough and efficient education.

E.

The State is committed to prioritize construction projects that will facilitate the full implementation of early childhood programs. While awaiting the construction or renovation of the necessary facilities, the Commissioner should, in order to meet his obligation to begin providing a half day of pre-school for three- and four-year olds in the fall of 1998, make use of trailers, rental space, or cooperative enterprises with the private sector. Consistent with the minimum requirements that the DOE cited, these temporary spaces should be in buildings free of Code violations, should be at least 600 square feet, and should contain toilet rooms visible to the teacher. The State has indicated that it is prepared to move immediately to ensure the availability of adequate temporary facilities to implement pre-school in some Abbott schools by the 1998-1999 school year and in all Abbott schools by the 1999-2000 beginning of the 1999-2000 school year.

F.

[24] Given the extreme time constraints it faced, the State has adequately complied with the facilities mandate in *Abbott IV* and has submitted a reasonably feasible plan for undertaking the completion of a needs assessment and for correcting identified deficiencies in Abbott schools. We expect that the State will follow through in good faith with its multi-phase implementation plan for facilities improvement. Abbott schools or districts shall have the authority to challenge the DOE should it default in its continuing obligation to complete a needs assessment or waiver in its commitment to provide facilities that are educationally adequate to permit Abbott children to reach the CCCS. Such a default, if challenged and not corrected or addressed, shall constitute a dispute under the School Laws, *N.J.S.A.* 18A:7A-1 to 7F-34, and aggrieved parties, including both districts and individual schools, may seek redress in accordance with the procedures and standards that shall govern the resolution of

such disputes. *See infra* at 525–527, 710 A.2d at 473.

VI

[25] With our holding today, funding remains a critical element in the provision of public school education that will comport with the basic education goals of CEIFA and satisfy the constitutional mandate for a thorough and efficient education. However, as noted, necessary funding levels cannot now be determined. The level of funding beyond parity needed to ensure effectuation of whole-school reform, to implement supplemental programs, and to construct and renovate essential facilities will depend to a great extent on many variables. These factors include difficulties in implementing whole-school reform, the ability of individual schools^[526] to demonstrate particularized need for supplemental programs, the site-sensitive decision of whether to renovate an existing school or to construct a new one, and an assessment of the size of the pre-school population and the identification of adequate resources for pre-school programs. Standards and procedures are essential to effectuate this process. We, therefore, direct the Commissioner to promulgate regulations and guidelines that will codify the education reforms incorporated in the Court's remedial measures. These regulations shall include the procedures and standards that will govern applications by individual schools and districts for needed programs and necessary funding.

[26] We recognize that disputes will occur in the administration of public education in the era ushered in by these reforms. Those disputes will involve issues arising from the implementation, extension, or modification of existing programs, the need for additional supplemental programs, the allocation of budgeted funds, the need for additional funding, and the implementation of the standards and plans for the provision of capital improvements and related educational facilities. Such disputes shall be considered "controversies" arising under the School Laws. *N.J.S.A.* 18A:7A–1 to 7F–34. Based on a showing of demonstrated need, schools or school districts may apply to the DOE for

authorization to improve or amend existing programs, to adopt additional supplemental programs, to build or to renovate facilities, and to seek the necessary funding. An aggrieved applicant may appeal to the Commissioner from an adverse decision on any such application made to the DOE. If the dispute is not resolved or if the applicant is not satisfied with the disposition, the case may be transferred under the Administrative Procedure Act to the Office of Administrative Law as a contested case. *See N.J.S.A.* 52:14B–1 to –15; *N.J.A.C.* 1:1–1.1 to –19.2. After conducting a hearing, the Administrative Law Judge will make a recommendation, which the Commissioner may, in his discretion, accept or reject. Either party may then appeal to the State Board of Education. The ^[527]Board's determination will constitute a final agency determination that may then be appealed to the Appellate Division and, ultimately, to this Court. In this way, districts and individual schools will be accorded full administrative and judicial protection in seeking the demonstrably-needed programs, facilities, and funding necessary to provide the level of education required by CEIFA and the Constitution.

VII

In summary, and consistent with this opinion, we determine and direct that the Commissioner implement whole-school reform; implement full-day kindergarten and a half-day pre-school program for three- and four-year olds as expeditiously as possible; implement the technology, alternative school, accountability, and school-to-work and college-transition programs; prescribe procedures and standards to enable individual schools to adopt additional or extended supplemental programs and to seek and obtain the funds necessary to implement those programs for which they have demonstrated a particularized need; implement the facilities plan and timetable he proposed; secure funds to cover the complete cost of remediating identified life-cycle and infrastructure deficiencies in Abbott school buildings as well as the cost of providing the space necessary to house Abbott students adequately; and promptly initiate effective managerial responsibility over

school construction, including necessary funding measures and fiscal reforms, such as may be achieved through amendment of the Educational Facilities Act.

In directing remedial relief in the areas of whole school reform, supplemental programs, and facilities improvements, the Court remains cognizant of the interests of the parties, particularly those of plaintiffs who speak for and represent the at-risk children of the special needs districts. The lessons of the history of the struggle to bring these children a thorough and efficient education ¹⁵²⁸render it essential that their interests remain prominent, paramount, and fully protected.

Whether the measures for education reform that are to be implemented will result in a thorough and efficient education for the children in the Abbott districts depends, in the final analysis, on the extent to which there is a top-to-bottom commitment to ensuring that the reforms are conscientiously undertaken and vigorously carried forward. That commitment on the part of the Executive Branch has been demonstrated by the Commissioner's strong proposals and positive avowals to see these reforms through. The Legislature's commitment is evidenced by the sound and comprehensive public education that is contemplated by the statute within which these reforms will be effected. It is not enough, however, that the three branches of government, sometimes working together and sometimes at apparent odds, have each responded to the challenge to carry out the Constitution's command of a thorough and efficient education. We must reach the point where it is possible to say with confidence that the most disadvantaged school children in the State will not be left out or left behind in the fulfillment of that constitutional promise. Success for all will come only when the roots of the educational system—the local schools and districts, the teachers, the administrators, the parents, and the children themselves—embrace the educational opportunity encompassed by these reforms.

VIII

The Court directs that remedial relief consistent with this opinion be promptly undertaken.

For remedial relief—Chief Justice PORITZ and Justices HANDLER, POLLOCK, O'HERN, GARIBALDI, STEIN and COLEMAN—7.

Opposed—None.

¹⁵²⁹APPENDIX I

SUPERIOR COURT OF NEW JERSEY CHANCERY DIVISION—MERCER COUNTY

S. Ct. DOCKET NO. A-155-97

RAYMOND ARTHUR ABBOTT, a minor, by his Guardian Ad Litem, FRANCES ABBOTT; ARLENE FIGUEROA, FRANCES FIGUEROA, HECTOR FIGUEROA, ORLANDO FIGUEROA, and VIVIAN FIGUEROA, minors, by their Guardian Ad Litem, BLANCA FIGUEROA; MICHAEL HADLEY, a minor, by his Guardian Ad Litem, LOLA MOORE; HENRY STEVENS, JR., a minor, by his Guardian Ad Litem, HENRY STEVENS, SR.; CAROLINE JAMES and JERMAINE JAMES, minors, by their Guardian Ad Litem, MATTIE JAMES; DORIAN WAITERS and KHUDAYJA WAITERS, minors, by their Guardian Ad Litem, LYNN WAITERS; CHRISTINA KNOWLES, DANIEL KNOWLES, and GUY KNOWLES, JR., minors, by their Guardian Ad Litem, GUY KNOWLES, SR.; LIANA DIAZ, a minor, by her Guardian Ad Litem, LUCILA DIAZ; AISHA HARGROVE and ZAKIA HARGROVE, minors, by their Guardian Ad Litem, PATRICIA WATSON; and LAMAR STEPHENS and LESLIE STEPHENS, minors, by their Guardian Ad Litem, EDDIE STEPHENS, Plaintiffs,

v.

FRED G. BURKE, COMMISSIONER OF EDUCATION; EDWARD G. HOFGESANG, NEW JERSEY DIRECTOR OF BUDGET AND ACCOUNTING; CLIFFORD A. GOLDMAN, NEW JERSEY STATE TREASURER; and NEW JERSEY STATE BOARD OF EDUCATION, Defendants.

REPORT AND DECISION OF REMAND COURT

Decided: January 22, 1998

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On remand from the Supreme Court of New Jersey.

David G. Sciarra, Executive Director, Education Law Center, for plaintiffs.

Jeffrey J. Miller, Assistant Attorney General, for defendants (Peter Verniero, Attorney General of New Jersey, attorney).

Cynthia J. Jahn, Director, Legal Department, submitted a brief on behalf of *amicus curiae* New Jersey School Boards Association.

Richard A. Friedman submitted a brief on behalf of *amicus curiae* New Jersey Education Association (Zazzali, Zazzali, Fagella & Nowak, attorneys).

Dorothy Dunfee, President, submitted a statement on behalf of *amicus curiae* The League of Women Voters of New Jersey.

KING, P.J.A.D. (temporarily assigned)

I

INTRODUCTION

The New Jersey Constitution mandates the State provide to all students in its public schools an opportunity to achieve a thorough and efficient education. To meet this constitutional obligation, the State currently must assure: 1) parity between the most wealthy and poorest school districts in per pupil expenditures for regular education; 2) supplemental programs addressing special needs of 1531 students in poorer urban districts; and 3) safe learning facilities. *Abbott v. Burke*, 149 N.J. 145, 693 A.2d 417 (1997) (*Abbott IV*).

After a series of legislative acts failed to satisfy these obligations, the New Jersey Su-

preme Court issued an interim order in *Abbott IV* to remedy constitutional violations. The Court directed the State to immediately increase funding for regular education in the Special Needs Districts (SNDs) to achieve equality. The Court then ordered the Superior Court, Chancery Division, on remand to examine potential remedial relief involving supplemental programs and facilities needs.

Consistent with the *Abbott IV* decision, this court appointed a consultant, Dr. Allan Odden of the University of Wisconsin at Madison, to help determine appropriate remedies. The consultant assisted the court in the proceedings and reviewed the record, including the report prepared by the Commissioner of the Department of Education addressing special needs of children and facilities in the SNDs. This opinion presents the remand court's findings, conclusions, and recommendations for supplemental programs and facilities improvements necessary for educating students in the State's poorer urban districts, based on the testimony of the witnesses and the consultant's recommendations.

II

PROCEDURAL HISTORY

The New Jersey Constitution guarantees a thorough and efficient educational opportunity to all children in the State who attend public schools. The Education Clause states: "[t]he Legislature shall provide for the maintenance and support of a thorough and efficient system of free public schools for the instruction of all the children in the State between the ages of five and eighteen years." *N.J. Const.* art. VIII, § 4, ¶ 1. This provision

APPENDIX I —Continued

became the basis for a sustained legal challenge which began over two decades ago.

⁵³²In 1973 the New Jersey Supreme Court interpreted the constitutional mandate to require the State to provide its children with "that educational opportunity which is needed . . . to equip a child for his role as a citizen and as a competitor in the labor market." *Robinson v. Cahill*, 62 N.J. 473, 515, 303 A.2d 273 (1973) (*Robinson I*). In *Robinson I* plaintiffs challenged the State's statutory scheme for financing public schools on the ground that it violated the constitutional requirement. To measure the State's compliance, the Court focused on per-pupil expenditures and found the system unconstitutional because heavy reliance on the property tax fostered excessive financial disparities between school districts. *Id.* at 520, 303 A.2d 273; State School Incentive Equalization Aid Law, L.1970, c. 234.

In response to *Robinson I*, the Legislature passed the Public School Education Act of 1975 (1975 Act). N.J.S.A. 18A:7A-1 to -52. In 1976, the Supreme Court found the 1975 Act facially constitutional, if fully funded. *Robinson v. Cahill*, 69 N.J. 449, 467, 355 A.2d 129 (1976) (*Robinson V*). While the Court acknowledged the importance of appropriating minimum aid on a per-pupil basis, the Court in 1976 considered the funding provision within the context of the entire Act. *Id.* Thus, the Court switched its focus from equal dollars per pupil to the substantive content of the educational plan.

The procedural history of the case now before this court began in 1981 when plaintiffs filed a complaint in Superior Court, Chancery Division, claiming the 1975 Act violated the Education Clause of New Jersey's Constitution, and the Equal Protection Clauses of the New Jersey and United States Constitutions. The plaintiffs, children from the Camden, East Orange, Irvington and Jersey City school districts, sought a judgment declaring the 1975 Act's funding provisions unconstitutional because they created financial disparities which denied them a thorough and efficient education. Defendants were State officials responsible for administering public education

APPENDIX I —Continued

laws and assuring that all school children received a constitutionally-mandated education. On September 30, 1983 defendants⁵³³ filed a motion to dismiss the complaint, contending that plaintiffs had failed to exhaust administrative remedies. The Chancery Division judge granted the motion on November 28, 1983.

After the Supreme Court issued an order denying direct certification, the Appellate Division reversed the Chancery Division's decision and remanded for a plenary hearing on plaintiffs' constitutional claims. *Abbott v. Burke*, 195 N.J. Super. 59, 477 A.2d 1278 (App.Div.1984). The Appellate Division found the exhaustion of administrative remedies doctrine did not apply because the constitutional question was "beyond the power of the Commissioner to decide." *Id.* at 74, 477 A.2d 1278. More specifically, plaintiffs had asked the court to find the Act's funding provisions unconstitutional, not to correct educational deficiencies through increased funding.

The Supreme Court granted defendants' petition for certification. *Abbott v. Burke*, 97 N.J. 669, 483 A.2d 187 (1984). In *Abbott v. Burke*, 100 N.J. 269, 495 A.2d 376 (1985) (*Abbott I*), the Court recognized the presence of constitutional claims but determined that the appeal presented only the narrow issue of which tribunal should consider the claim initially. However, the Court recognized that the merits of the constitutional challenge influenced the litigation's procedural course. After declaring the 1975 Act constitutional on its face, the Court found the evidence insufficient to resolve the issue of whether the funding provisions rendered it unconstitutional as applied. In particular, the record failed to permit resolution of contested factual matters such as whether: 1) plaintiffs suffered substantial educational deficiencies; 2) the Act's funding scheme resulted in gross disparities among school districts and engendered inequalities in educational resources; and 3) the State's obligation to provide a constitutionally-mandated education to special-needs children could be met only by increasing financial aid to their schools. *Id.* at 284-86, 495 A.2d 376.

APPENDIX I —Continued

APPENDIX I —Continued

¹⁵³⁴In order to create an adequate factual record, the Supreme Court ruled the case should be considered initially by an administrative tribunal with the necessary training, expertise, and regulatory responsibility which could better address the issues of educational quality and municipal finance. *Id.* at 300-01, 495 A.2d 376. Moreover, the ultimate constitutional issues were quite fact-sensitive and could not be resolved absent a comprehensive factual record. Towards this end, the Court modified the Appellate Division's decision remanding to the Chancery Division and transferred the case to the Commissioner of the Department of Education (Commissioner) with the directive to create "an administrative record sufficient to guide the adjudication of the constitutional issues on any future appeal." *Id.* at 279, 495 A.2d 376. The Court ordered the Commissioner, a defendant in *Abbott I*, to transfer the case to the Office of Administrative Law (OAL) to conduct the initial hearing and fact-finding.

After eight months of proceedings, Administrative Law Judge Lefelt (ALJ) issued recommendations on August 24, 1988. *Abbott v. Burke*, No. EDU 5581-88 (OAL 1988). The factual findings documented extreme disadvantages and unmet educational needs faced by students in the SNDs. The ALJ concluded the 1975 Act was unconstitutional as applied because its funding mechanism contributed to program and expenditure disparities between property-rich and property-poor school districts. As a result, students did not receive an equal educational opportunity but rather, an opportunity "determined by socioeconomic status and geographic location." *Id.* at 14.

The then-Commissioner declined to accept the ALJ's recommendations including the factual finding of a strong relationship be-

tween property wealth and per-pupil expenditures. The Commissioner faulted the plaintiffs' analysis because it compared the poorest and richest districts, ignoring those districts in the financial "middle." Rather than mandating equal programs and expenditures, the Commissioner interpreted the State Constitution to require only that children receive an education sufficient for them ¹⁵³⁵to participate fully in the labor market. The Commissioner concluded the 1975 Act's reporting, monitoring and corrective provisions assured that all students received a thorough and efficient education. *Id.* at 613-14. If any district failed to achieve the constitutional standard, the Act provided a remedy by giving the Commissioner power to require the district to raise additional funds or to take over operation of the district.

The State Board of Education (Board) adopted the Commissioner's decision, although the Board did recommend corrective legislation to address capital construction needs and ordered strengthening of the reporting, monitoring, and corrective functions. Plaintiffs appealed and the Supreme Court certified the appeal directly. *Abbott v. Burke*, 117 N.J. 51, 563 A.2d 818 (1989).

In 1990 the matter came before the Supreme Court for substantive review. *Abbott v. Burke*, 119 N.J. 287, 575 A.2d 359 (1990) (*Abbott II*). Plaintiffs again contended the 1975 Act was unconstitutional as applied because its funding provisions created substantial disparities in expenditures and educational input among school districts. The Court agreed but only with respect to a limited number of districts. Specifically, the *Abbott II* holding applied to twenty-eight poorer urban districts classified within District Factor Groups (DFGs) A and B, referred to as the SNDs.¹ Both financial disparities and special needs created inferior educational ¹⁵³⁶opportunities that prevented these stu-

1. In 1974 the Department of Education (DOE) ranked school districts by socioeconomic status into ten District Factor Groups (DFGs). The DOE used seven factors to quantify school districts in terms of their social and economic backgrounds. These factors included: 1) per capita income level; 2) occupation level; 3) education level; 4) percent of residents below the poverty line; 5) density (average number of persons per household); 6) urbanization (percent of district consid-

ered urban); and 7) unemployment (percent of people receiving some unemployment compensation). The DOE updated the measurement in 1984 based on the 1980 census. DFG A includes the districts with the lowest socioeconomic status, DFG J the highest. While the Commissioner identified twenty-nine districts within the DFGs A and B, the Court excluded Atlantic City because of its high property wealth. *Abbott II*, 119 N.J. at 338-39, 342 n. 18, 575 A.2d 359.

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dents from participating fully as “citizens and workers in our society.” *Id.* at 384, 575 A.2d 359.

To redress the constitutional deficiency, the Court in *Abbott II* outlined a two-step approach. First, funding for regular education in the SNDs must be substantially equal to that of property-rich districts without relying upon local budget and taxing decisions. Second, the new legislative plan must provide aid for the special needs of these students, that is, the offering of educational programs in the poorer urban districts with additional elements not needed in the affluent districts. *Id.* at 374, 575 A.2d 359. The Court also recognized that new aid and educational programs could not assure a constitutional education if school facilities provided an inadequate learning environment. The remedy required identification of problems associated with aging, deteriorating buildings and proposal of a plan for their correction.

Plaintiffs contended the 1975 Act as applied was unconstitutional “in toto.” *Id.* at 301, 575 A.2d 359. They claimed the entire state educational system failed to provide a thorough and efficient education because of gross spending inequities between the poorer and more affluent districts. The Court, however, declined to interpret the Education Clause to mandate equal expenditures per student. Instead, the State must provide a certain substantive level of education, albeit one that continually changes. Once that level is attained, equality of educational opportunity is achieved regardless of how many districts spend beyond that amount. Further, the Court found no direct substantive evidence to show that a thorough and efficient education did not exist in the middle level DFG districts, including rural poor and older suburban districts.

Children in SNDs, however, clearly received a far inferior education than those in the richer I and J districts. For these students, the Act failed to achieve the constitutional goal. Despite a variety of programs designed to provide aid to these poorer ¹⁵³⁷schools, a vast gulf in educational spending remained. *Id.* at 324–30, 575 A.2d 359;

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see *Robinson V*, 69 N.J. at 478–90, 355 A.2d 129 (describing the Act’s funding scheme in detail). Although the 1975 Act empowered these districts to increase their budgets by raising unlimited funds, the scheme relied too heavily on taxing a local property base which invariably had nothing left to give. *Abbott II*, 119 N.J. at 356–57, 575 A.2d 359. Municipal overburden from excessive taxation for other governmental needs prevented these districts from raising substantially more money. *Id.* at 321, 575 A.2d 359 (noting that “these districts are just too poor to raise the money they theoretically are empowered to.”).

The 1975 Act also actually exacerbated the funding disparities first addressed in *Robinson I*. *Abbott II*, 119 N.J. at 334, 575 A.2d 359 (documenting the increasing disparity in expenditures prior to and several years after the Act, even when adjusted for inflation). To assure equality of educational opportunity, the Supreme Court ordered legislative reform to provide poorer urban schools with a guaranteed level of funding which did not depend upon budget or taxing decisions of local school boards. The Court rejected the State’s contentions that: 1) educational deficiencies were caused by mismanagement; and 2) increased monitoring under the Act’s existing funding mechanism would achieve the constitutional mandate. Instead, the Court recognized a causal relationship between dollars per pupil and educational opportunity. Any remedy implemented by the State must assure that per-pupil expenditures in the SNDs were approximately equal to the average of property-rich districts. *Id.* at 385, 575 A.2d 359.

Nonetheless, the Court recognized that money alone did not guarantee a thorough and efficient education. Any legislative response also must identify programs tailored to meet the special needs of students in the poorer urban districts and provide for their funding. These needs run the gamut from education to basic requirements of food, clothing and shelter. While they are capable of performing as well as other children, special-needs students must surmount serious obstacles stemming from their socioeconomic⁵³⁸ status and environment. *Id.* at 340, 575

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A.2d 359. The 1975 Act recognized the inadequacies of conventional education and made categorical aid available to address special needs such as compensatory education, bilingual education, and education for disabled students. However, the Supreme Court found that such aid failed to address adequately these students' disadvantages. *Id.* at 374, 575 A.2d 359. While recognizing that no amount of money may achieve the constitutional standard, the Court concluded these students were "entitled to pass or fail with at least the same amount of money as their competitors." *Id.* at 375, 575 A.2d 359.

The Supreme Court also addressed the serious problems created by inadequate physical facilities. Many schools in the SNDs were so deteriorated they did not provide a successful, safe learning environment. As observed in *Robinson I*, 62 N.J. at 520, 303 A.2d 273, the State is obligated to make capital expenditures to keep public school buildings in good repair. In 1990, an estimated \$3 billion was needed to completely upgrade all State public school facilities. *Abbott II*, 119 N.J. at 362, 575 A.2d 359. The Court recognized that the Legislature was best suited to devise a program to identify facilities problems and bring about their correction. However, if the Legislature failed to do so, the Court would be "obliged under the Constitution to consider the matter." *Id.* at 391, 575 A.2d 359.

Finally, the *Abbott II* Court declined to rule on plaintiffs' equal protection claim. Plaintiffs argued that property wealth affected what they considered their fundamental right to education. Plaintiffs contended the State could offer no compelling interest to justify determining the level of education based on whether a district was property-rich or property-poor. Previously, the Court had expressed concern that application of the equal protection doctrine to the financing of education would lead to a similar analysis for a vast range of other essential government services that are not provided on a uniform dollar basis. *Robinson*, 62 N.J. at 492-501, 303 A.2d 273. But, the Court declined to address ¹⁵³⁹these concerns in *Abbott II* because it found the remedy "substantially mit-

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igates" the equal protection claim. 119 N.J. at 390, 575 A.2d 359. The plaintiffs had no federal Equal Protection Clause claim. *See San Antonio Indep. School Dist. v. Rodriguez*, 411 U.S. 1, 93 S.Ct. 1278, 36 L.Ed.2d 16 (1973). Nor did the Court consider the issue of whether the existence of school districts coextensive with municipal boundaries constituted *de facto* segregation which created extreme racial and ethnic isolation in the public school system and deprived children of equal opportunity, in violation of the state constitution. *See Sheff v. O'Neill*, 238 Conn. 1, 678 A.2d 1267 (1996) (so holding in a 4-3 decision).

In response to *Abbott II*, the Legislature passed the Quality Education Act of 1990 (QEA) which established a new system for distributing State aid to school districts. N.J.S.A. 18A:7D-1 to -37. The QEA attempted to achieve parity in per-pupil expenditures within five years. Unlike the 1975 Act, the QEA's funding mechanism did not rely upon local budgets or taxes but created a complex foundation budget for each district. State aid for regular education was distributed based on a statutorily-set maximum foundation amount, representing the typical per-pupil cost of providing a quality education. The QEA then increased the weighted foundation amount for the SNDs, ensuring they received more aid than the I and J districts until they achieved parity in per-pupil expenditures. Additionally, the QEA created a new aid program for "at-risk" students designed to provide for their special educational needs. Funding for these new aid categories first became effective in 1991-92 and would be fully phased in by the 1995-96 school year.

On June 12, 1991 plaintiffs reacted to the QEA by moving for post-judgment relief in an application to the Supreme Court. Plaintiffs asked the Court to assume jurisdiction and declare the QEA facially unconstitutional. The Court denied the motion in all respects, did not retain jurisdiction, and remanded the matter to the Superior Court, Chancery Division.

¹⁵⁴⁰In 1993 the Superior Court, Chancery Division, declared the QEA unconstitutional as applied because it did not comply with the

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Abbott II mandates. *Abbott v. Burke*, No. 91-C-00150, 1993 WL 379818 at *14 (Ch. Div. August 31, 1993). Chancery Division Judge Levy held the QEA failed to assure that funding for regular education in the SNDs would approximate the more affluent districts within the projected five years. To reach parity, the special-needs weight must be increased by more than 400% by the 1995-96 school year. *Id.* at *11. However, the QEA left any increases to the discretion of the Governor. The court concluded that it was “almost impossible” to expect the Governor to make a recommendation for such a dramatic increase to the Legislature. *Id.*

Further, the at-risk aid program failed to meet the goals of *Abbott II*. First, as with special-needs weights, the QEA arbitrarily determined the sums available; the Legislature did not conduct a study of additional costs associated with these special services. The QEA also used an outdated, prior-year pupil population to calculate the at-risk program funding. Consequently, the total amount of aid available represented only a small portion the court found actually was needed. Additionally, the Chancery Division judge found the pace of progress in identifying and implementing at-risk programs unacceptably slow. *Id.* at *14.

On appeal, the Supreme Court affirmed the judgment of the Superior Court, Chancery Division, and held the QEA unconstitutional as applied to the SNDs. *Abbott v. Burke*, 136 N.J. 444, 643 A.2d 575 (1994) (*Abbott III*). The Court based its decision on the QEA’s failure to assure substantially equivalent expenditures for regular education by the richer and poorer districts. In fact, the QEA did not guarantee sufficient funding to the SNDs so they could spend the amounts necessary to achieve parity. *Id.* at 451, 643 A.2d 575. The Court also expressed concern that the QEA failed to include a mechanism to monitor the use of any additional funds and suggested the State consider whether such supervision should be undertaken. Finally, the QEA did not address adequately⁵⁴¹ the special needs of these students. Although required to do so, the Commissioner never conducted a study to identify

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appropriate remedial programs and their costs.

Recognizing that the Department of Education (DOE) and Legislature could best determine issues related to parity funding and special needs, the Supreme Court affirmed the Chancery Division’s decision but did not order any specific remedies. Rather, the Court offered to entertain applications for relief only if there appeared little chance of achieving substantial equivalence in expenditures for regular education or if the educational needs of students in the SNDs could not be met by the 1997-98 school year. *Id.* at 447-48, 643 A.2d 575.

In April 1996 plaintiffs filed a motion with the Supreme Court in aid of litigants’ rights. *R.* 1:10-3. Plaintiffs claimed the State failed to discharge its duties to achieve parity in funding for regular education and to provide supplemental programs necessary for the SNDs. On September 10, 1996 the Supreme Court denied the motion without prejudice because new legislation to address these concerns was under consideration by the Legislature. However, the Court said that if no remedial legislation was enacted by December 31, 1996 plaintiffs could renew their motion. See *Abbott IV*, 149 N.J. at 160, 693 A.2d 417.

Subsequently, on December 20, 1996, the Legislature enacted the Comprehensive Educational Improvement and Financing Act of 1996 (CEIFA). N.J.S.A. 18A:7F-1 to -34. Unlike the previous statutes, CEIFA set academic standards that must be achieved by all students, identified programs to accomplish these goals, provided a funding mechanism to ensure their support, and included mechanisms for enforcement.

CEIFA defined the constitutional requirement of a thorough and efficient education using a “standard-based” approach. These standards provided achievement goals in seven core curriculum areas including visual and performing arts, comprehensive health and physical education, language-arts literacy, math, science, social⁵⁴² studies, and world languages. Local school districts were required to develop curricula to achieve these goals. CEIFA scheduled a statewide assess-

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ment program over the next six years to measure student progress.

The Legislature based CEIFA's funding provisions on fixed per-pupil costs of delivering the core curriculum content standards and other activities considered necessary for a fundamental education. Unlike the QEA, these "T & E amounts" (thorough and efficient) allegedly were not assigned arbitrarily but correlated with educational achievement. *N.J.S.A.* 18A:7F-3. The fiscal standards were derived from a hypothetical school district model and actual costs were determined using statewide averages. CEIFA required each school district to raise part of the per-pupil expenditure based on its ability to pay, with the State assuming responsibility for the difference.

To redress the disadvantages of special-needs students, CEIFA provided aid for two programs targeted to school districts with high concentrations of low-income pupils: Demonstrably Effective Program Aid (DEPA) and Early Childhood Program Aid (ECPA), funded at about \$100 million and \$200 million, respectively.² DEPA provided aid to school districts for "instructional, school governance, and health and social service programs." *N.J.S.A.* 18A:7F-18(a). ECPA distributed funds "for the purpose of providing full-day kindergarten and pre-school classes and other early childhood programs and services." *N.J.S.A.* 18A:7F-16.

After passage of CEIFA, plaintiffs renewed their motion for judicial relief. Plaintiffs claimed that CEIFA's funding provisions failed to guarantee them a thorough and efficient education.

¹⁵⁴³Again, the Supreme Court found the legislative response unconstitutional as applied to the SNDs. *Abbott v. Burke*, 149 N.J. 145, 693 A.2d 417 (1997) (*Abbott IV*). CEIFA failed to guarantee sufficient funds to enable students in the poorer urban districts to achieve the requisite academic standards. Also, the supplemental programs did not address adequately their special needs.

2. In his affidavit to the Supreme Court on January 30, 1997, filed in the plaintiffs' proceeding in aid of litigants' rights, Michael Azzara, Assistant Commissioner for Finance, DOE, stated that

The Court did find CEIFA otherwise facially constitutional. The use of content and performance standards embodied the accepted definition of a thorough and efficient education, *i.e.*, to prepare all students with a meaningful opportunity to participate in their community. *See Abbott I*, 100 N.J. at 280-81, 495 A.2d 376. Instead *Abbott IV* focused sharply upon these issues: 1) whether CEIFA's funding provisions for regular education were unconstitutional as applied to the SNDs; 2) whether CEIFA's provisions for supplemental aid were unconstitutional as applied to the SNDs; and 3) whether CEIFA's failure to address the need for facilities improvements rendered it inadequate as a remedial measure and thus unconstitutional.

The Supreme Court concluded that CEIFA's funding provisions failed to provide the constitutionally-mandated education to students in the SNDs. The model district approach was inadequate to determine the amount of money needed for regular or fundamental education. The hypothetical model neither resembled any of the State's successful districts nor incorporated characteristics of the SNDs. Rather, the model treated all districts the same without considering their diverse environments. *Abbott IV*, 149 N.J. at 169-72, 693 A.2d 417. The Court also rejected the model's basic assumption that all students, if given the same advantages, were equally capable of exploiting them. This premise ignored the factual record showing that students in poorer urban districts required special programs to overcome their severe disadvantages.

CEIFA was unconstitutional as applied because it did not achieve substantial equality in per-pupil expenditures for regular education throughout all districts. Instead, it created a two-tiered¹⁵⁴⁴ system by permitting property-rich districts to raise additional funds through local taxation; property-poor districts which could not increase taxes realistically or effectively were capped at an amount the Court found insufficient. Therefore, richer districts inevitably would spend more per student than the SNDs. Further,

CEIFA provided the *Abbott* districts with \$200.1 million in ECPA and \$108 million in DEPA for 1997-98.

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CEIFA established fixed per-pupil costs that fell below the amounts assigned arbitrarily by the QEA. The “T & E amount” was set at \$6720 per elementary school pupil, only \$80 more than the QEA foundation amount; the “T & E amount” for a high school student was even less than the amount the QEA considered necessary for a quality education. *Id.* at 174, 693 A.2d 417.

CEIFA’s provisions for supplemental aid also did not address adequately the special needs of students in the poorer urban districts. In *Abbott II*, the Court required additional aid to the SNDs so their students could achieve the Constitution’s command. 119 N.J. at 374, 575 A.2d 359. Again, in *Abbott III*, the Court directed the State to identify and implement special-needs programs. 136 N.J. at 454, 643 A.2d 575. Despite judicial emphasis on this remedial component, the Legislature did not undertake a comprehensive study to identify special needs, supplemental programs or their costs.

Rather, CEIFA identified only two initiatives to address special needs. For both DEPA and ECPA, the statute set predetermined amounts for funding. However, the Legislature provided no explanation or analysis of how it arrived at these figures. The Court also expressed concern over implementation. Although CEIFA provided a list of programs which qualified for DEPA, the Act did not require the poorer urban districts to implement them; neither did it provide evidence of sufficient aid to cover their costs. *Abbott IV*, 149 N.J. at 181, 693 A.2d 417. Likewise, districts could apply for ECPA to establish full-day kindergarten and preschool classes but operational plans were not due until the 2001–02 school year. The Court found the delay a “glaring weakness.” *Id.* at 183, 693 A.2d 417.

⁵⁴⁵Alternatively, CEIFA allowed the use of ECPA for facilities construction related to early-childhood instruction. Facilities improvements had to be addressed if the State was to meet its constitutional obligation to provide a thorough and efficient education. The 1988 findings of the ALJ documented that many school buildings in the poorer urban districts were deteriorating, unsafe,

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and overcrowded. Yet, despite repeated admonitions by the Court that adequate facilities were essential, the DOE never studied this problem. See *Abbott II*, 119 N.J. at 362, 575 A.2d 359 (“A thorough and efficient education also requires adequate physical facilities.”); *Robinson I*, 62 N.J. at 520, 303 A.2d 273 (“The State’s obligation includes as well the capital expenditures without which the required educational opportunity could not be provided.”). Absent a detailed study of facilities needs, the Court could not determine the sufficiency of funds available through ECPA to repair or expand existing school buildings to accommodate early childhood programs. *Abbott IV*, 149 N.J. at 184, 693 A.2d 417.

The *Abbott IV* decision stressed that a comprehensive remedy to assure an equal educational opportunity to students in the SNDs required meaningful legislative and executive efforts. In their absence, the Supreme Court mandated interim judicial measures. See Jean Anyon, *Ghetto Schooling* 146–48 (Teachers College Press 1997), for general discussion.

First, the Supreme Court required increased funding of regular education to ensure parity in per-pupil expenditures (\$8664 per pupil) between the SNDs and the I and J districts. Further, the State must guarantee that each SND receives these funds by the beginning of the 1997–98 school term. *Abbott IV*, 149 N.J. at 197, 693 A.2d 417. The Court refused to delay implementation of the remedy any longer because the State already had seven years to comply with the 1990 order for judicial relief in *Abbott II*. Additionally, the Court directed that firm administrative controls accompany this parity funding. *Abbott IV*, 149 N.J. at 193, 693 A.2d 417. Towards this end, the Commissioner must develop administrative⁵⁴⁶ procedures to assure the money is spent effectively and efficiently.

Second, the Court ordered the State to implement supplemental programs providing for special needs of students in the twenty-eight SNDs. The Court found that the State gave no heed to *Abbott II* and *Abbott III*; it never undertook a comprehensive study to determine these needs, identify appropriate

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remedial programs or evaluate costs of implementation. Likewise, the State failed to conduct a facilities review even though prior court decisions stressed its importance. Thus, *Abbott IV* also required the State to assess current facilities needs.

to participate in any proceedings; and 6) prepare and submit a final report including findings, conclusions, and recommendations along with responses and exceptions of the parties.

III

THE REMAND ORDER

After holding that CEIFA was unconstitutional as applied to the SNDs, the Supreme Court ordered judicial relief in three areas: parity funding, supplemental programs, and facilities needs. The Court remanded the latter two issues to the Superior Court, Chancery Division to implement the remedial order.

The *Abbott IV* decision also gave authority to the Superior Court to conduct proceedings with the Commissioner and all parties. The Order permitted appointment of a Special Master, with the Supreme Court's approval, to assist with the proceedings and the Superior Court's review of the Commissioner's report. The Special Master could be asked to submit to the Superior Court a report including findings, conclusions, and recommendations for special programs and facilities needs in the SNDs.

To effectuate the remedy for parity funding, the Court ordered the following: 1) the State must provide increased funding to the twenty-eight SNDs to assure they spend a substantially equivalent amount per pupil in the 1997-98 school year as the average, actual, budgeted per-pupil expenditures in the I and J districts; and 2) the State, through the Commissioner, must manage, control, and supervise the implementation of this additional funding.

The Remand Order required the Superior Court to render a decision by December 31, 1997 based upon its review of the Commissioner's report, the Special Master's report, and any additional evidence. This decision must include the remand court's findings, conclusions, and recommendations, including whether or not the Commissioner's proposals complied with the judicial remedies ordered in *Abbott IV*. The Court later extended the time for decision to January 20, 1998.

IV

THE STATE'S PRESENTATION ON
SUPPLEMENTAL PROGRAMS

The Court remanded the case to the Superior Court, Chancery Division, to implement the judicial relief involving supplemental programs and facilities needs. While recognizing that educators are most qualified to address these concerns, the Court concluded the judiciary can "provide necessary procedures and identify the parties who best may devise the educational, programmatic, and fiscal measures to be incorporated in such remedial relief." *Abbott IV*, 149 N.J. at 199, 693 A.2d 417.

The Supreme Court in *Abbott IV* recognized that equality of expenditures alone does not translate into a comparable educational opportunity for students in the SNDs and property-rich I and J districts. *Abbott IV*, 149 N.J. at 202, 693 A.2d 417. Rather, ¹⁵⁴⁸students who live in poorer urban communities must cope with a wide range of social and economic disadvantages which adversely affect their ability to learn in school. Acknowledging the expertise of educators to determine an appropriate remedy, the Court directed the State "to study, identify, fund, and implement the supplemental programs required to redress the disadvantages of public school children in the special needs districts." *Id.* at 153, 693 A.2d 417.

¹⁵⁴⁷The Court ordered the Superior Court to direct the Commissioner to: 1) conduct a study of special educational needs of students attending school in the SNDs and identify appropriate supplemental programs; 2) determine the costs of these programs; 3) devise a plan for their implementation; 4) review facilities needs and provide recommendations to correct them; 5) allow all parties

The State responded by proposing to improve substantially the academic achieve-

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ment of disadvantaged students through whole-school reform. This approach integrates supplemental programs with the regular education format. Instead of simply adding new programs, whole-school reform fundamentally restructures the core curriculum and methods of instruction to ensure that students achieve a constitutionally-mandated education. Indeed, Commissioner Klagholz testified: “nothing short of dramatic changes in practice will allow us to achieve that goal.”

Specifically, the State’s primary objective was to provide a system of “thorough and efficient” public schools which will enable students in the SNDs to achieve educational success. To define the constitutional guarantee of “thorough,” the State Board of Education adopted core curriculum content standards in May 1996. (D-12). These standards set forth the “substantive meaning of education” by defining the skills and knowledge all students must acquire in specific academic subjects and across disciplines to be successful as citizens and workers in the marketplace. The seven content areas include language arts and literacy, mathematics, science, social studies, visual and performing arts, world languages, and comprehensive health and physical education. Students also must be competent in five cross-subject workplace readiness standards. Further, these standards serve as “measures of educational performance and achievement” by directly influencing the State assessment program which tests students at grades four (Elementary School Proficiency Assessment), eight ¹⁵⁴⁹(Early Warning Test), and eleven (High School Proficiency Test). *Abbott IV*, 149 N.J. at 162, 693 A.2d 417.

The Commissioner’s report to this court established that during the 1996-97 school year, children in the *Abbott* districts represented 21.6% of the total student enrollment in New Jersey. These 264,070 students attended 420 schools in the SNDs including 319 elementary, 49 middle, and 52 high schools. This enrollment included 119,066 African-

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Americans (45%), 98,098 Latinos (37%), 39,355 Whites (15%), and 7,551 Native Americans and Asian or Pacific Islanders (3%). Of these students, 176,362 (about 67%) were eligible for free lunch, 42 U.S.C.A. § 1751 to § 1769(h), and 68,546 participated under federal Title I, 20 U.S.C.A. § 2701 to § 3386. A total of 26,245 students participated in bilingual or English as Second Language (ESL) programs. (D-2).

Students in these *Abbott* schools often failed to attain statewide academic standards. Achievement levels in 148 of the schools in twenty districts fell below State standards in reading, writing, or math for three consecutive years as measured by the eighth grade Early Warning Test (EWT) and the eleventh grade High School Proficiency Test (HSPT). Additionally, eighty-three schools failed to meet the standards on one or more of these subjects for one year and twenty-nine failed for two consecutive years. The State now operates three *Abbott* districts by takeover (Newark, Paterson, and Jersey City), *see* N.J.S.A. 18A:7A-34 to -52; five more confront State intervention if they do not develop corrective action plans to improve student achievement. (D-2).

Most recent available test data provided by the State showed marked variations in the passing rates for the EWT and HSPT between students in the *Abbott* and I and J districts. State assessment data for the March 1996 EWT revealed that 92.3% of students in the I and J districts passed at proficiency levels I or II versus 40.7% of the *Abbott* students. Further, 49.2% of the I and J students passed at the highest level of proficiency (level I) compared to 6.9% in the *Abbott* schools. For the October 1995 ¹⁵⁵⁰HSPT, data showed 91.7% of I and J students passed all sections with 94.9% passing reading, 96.5% passing math, and 97.4% passing writing. In contrast, only 41.8% of students in the *Abbott* districts passed all sections of the HSPT with 55.9% passing reading, 58.7% passing math, and 71.3% passing writing. (D-14).³

3. *Education Week* very recently commented:

New Jersey’s dichotomy of suburban-urban, rich-poor is reflected in student achievement as well. The state’s suburbs boast some of the

nation’s best schools, while its cities struggle just to keep their pupils in class. For all the drama of the finance rulings and state takeovers, urban schools remain the state’s sore

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In *Abbott IV*, the Supreme Court ordered the State to assume an affirmative role in addressing educational deficiencies in the SNDs. This directive departed from the State's traditional deference to school districts. The State now recognizes the primary importance of its affirmative responsibility to act over the interests of the districts' local autonomy. The State's new approach will focus upon individual schools, not districts. Indeed, Commissioner Klagholz testified that reform in the *Abbott* districts must be accomplished school-by-school because "that's where students are educated, in the school. That's where the money has to go. That's where the programs have to be provided."

¹⁵⁵¹To determine the best strategy to implement these changes, the State conducted a study composed of the following elements: 1) a survey of existing supplemental programs in the SNDs and an analysis of their effectiveness; 2) community meetings in each district to solicit input about the specific needs of its students; 3) a review of research-based instructional programs currently used in school districts across the country and discussions with nationally-recognized education experts; 4) comparisons of actual programs and consultations with urban district administrators; and 5) development of cost estimates. The State reported its findings in *A Study of Supplemental Programs and Recommendations for the Abbott Districts*, November 1997. (D-2).

The Supreme Court's rulings consistently have recognized that students in the *Abbott* districts have much greater needs than those of students in the I and J districts. *Abbott IV*, 149 N.J. at 179, 693 A.2d 417. Repeatedly, the Court has observed that extreme so-

cial and economic disadvantages faced by children in the SNDs created serious obstacles to their achievement of a thorough and efficient education. The Court ordered the State to study the special needs of the twenty-eight *Abbott* districts and research supplemental programs designed to address those needs.

To comply, the State contacted urban education specialists at the Temple University Center for Research in Human Development and Education (CRHDE). CRHDE conducted a needs assessment survey of the *Abbott* districts consisting of narrative questions and data matrices. (P-5). The survey used program categories described in *Wiping Out Disadvantages* (1996), a report actually prepared for this litigation by the Education Law Center, the advocacy group representing the plaintiffs here. (P-4). CRHDE then analyzed the survey results. The findings showed that most *Abbott* districts already provided a variety of supplemental educational programs and school-based social services. Many districts also incorporated some form of research-based instructional intervention in the elementary schools. Few SNDs, however, implemented these models within the context of ¹⁵⁵²whole-school reform. Consequently, there was little or no connection between the supplemental and regular education programs. Further, most of these districts did not evaluate the impact of these supplemental programs on student achievement.

The State did not compile statistics on individual schools in the SNDs. Because the unique needs of disadvantaged students in the *Abbott* districts were "not unknown" to DOE, the State relied on the large body of national research documenting these special needs. Instead, the State focused its efforts on developing solutions to the complex learn-

thumb. On the 11th grade proficiency test in 1995, about 43 percent of the state's 9,600 poorest students taking the test for the first time passed all three sections; in the rest of the state, the passing rate averaged 40 percentage points higher.

And on the state's 1995 8th grade readiness tests, half the students in the poorest districts failed to demonstrate at least minimal competency in math, while their peers in the most well-to-do systems showed such skills at rates of 96 percent or better.

Such poor performance has bedeviled educators, state leaders, and taxpayers for years. "New Jersey spends \$12 billion a year on education," says Bill Watson, the executive director of the John S. Watson Institute for Public Policy in Trenton and a policy adviser to the New Jersey Urban Mayors Association. "For that kind of money, we should be providing a better product."

[Drew Lindsay, *New Jersey: Quarter-Century Quagmire*, Education Week, January 8, 1998, at 204-05.]

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ing problems of these students. As Commissioner Klagholz testified, DOE did not want to expend its energy on compiling existing statistics but wanted to develop programs to “improve the students and meet their needs based on the body of literature that talks about what those needs are and what kinds of solutions will meet the needs.”

Research at the national level sufficiently documented the success of a variety of whole-school reform models designed specifically for elementary schools. These schools typically include kindergarten through fifth grade but also can extend from preschool through eighth grade, known as “family schools.” Particularly, the State identified these research-based programs: Success for All (SFA) developed by Dr. Robert E. Slavin at Johns Hopkins University; Comer School Development Program developed by Dr. James Comer at Yale University; Adaptive Learning Environments Model (ALEM) developed by Dr. Margaret Wang at Temple University; Accelerated Schools developed by Dr. Henry Levin at Stanford University; and Modern Red Schoolhouse developed by a collaboration of several researchers. The State also examined Reading Recovery which is not whole-school reform but a widely-used instructional program for kindergarten and first grade.

Although research on whole-school reform at the secondary school level is less compelling, the State identified four promising models: the Project on High Performance Learning Centers⁵⁵³ developed by the Carnegie Council on Adolescent Development; Communities of Authentic Teaching, Learning, and Assessment for all Students (ATLAS); Coalition of Essential Schools (CES); and Paideia. These programs appear to succeed in raising achievement levels of at-risk students through a combination of such strategies as: 1) personalized learning; 2) use of teachers specially-trained for these grade levels; 3) staff training and technical assistance; 4) parental and community involvement; 5) introduction of community social service providers; and 6) site-based management. However, the State did not require implementation of these models because of

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the absence of sufficient research documenting their impact on secondary education. Instead, the State encouraged middle and high schools in the SNDs to experiment with research-based instructional programs.

For elementary education, however, the State recommended whole-school reform in every school based upon strong empirical support for its likely effectiveness in improving student achievement. The State placed primary emphasis on the elementary level where it claimed the biggest impact could be made. Commissioner Klagholz insisted in his testimony that any programs placed in elementary schools must be research-based, *i.e.*, “those things for which there was the greatest empirical support in terms of their likely effectiveness . . . as opposed to just allowing it to be the result of local consensus of things people might feel good about or want.”

Therefore, several guiding principles underlie the State’s implementation plan. These are: 1) to help all students in the SNDs achieve the new standards; 2) to balance State authority with local school initiative; 3) to focus beyond the district level to the individual school; 4) to promote research-based programs; 5) to take a comprehensive approach which integrates supplemental programs with the regular educational curriculum; 6) to support school-based decision-making; and 7) to develop a system of rewards for administrators, teachers, and parents who help children⁵⁵⁴ attain the standards and a system of sanctions when a school fails to make progress in any of the core content areas.

A. *Elementary and Family School Reform*

The State’s testimony identified SFA and its complement, Roots and Wings, as the most promising of the whole-school reform models. This comprehensive approach to school improvement is based on years of research and effective practices to ensure that disadvantaged students in high poverty-level schools have the best opportunity to be successful. Consequently, the State recommended its implementation in all elementary schools within the *Abbott* districts. Fourteen of these schools already use this pro-

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gram. However, a school may select another research-based model, especially if one is already in place, provided the school demonstrates the effectiveness of its extant or proposed whole-school program. As noted, other possible models include the Comer School Development Program, Accelerated Schools, ALEM, and the Modern Red Schoolhouse.

Researchers at Johns Hopkins University developed SFA in 1987 to serve students in high poverty schools who are at risk of academic failure. The goals of this program are twofold: 1) to prevent children from falling behind and needing remediation; and 2) to intervene early and intensively if a student is experiencing difficulty in achievement. SFA adheres to these principles by emphasizing reading, writing, language arts, early childhood programs, family support, and tutoring. While SFA's primary focus is on kindergarten through grade five, this program can be adapted for use in preschool, family schools (kindergarten through grade eight), or in traditional middle schools. Pilot programs currently are in operation in seventh and eighth grades in Miami, Albuquerque, and Memphis. Dr. Slavin, Co-Director of Johns Hopkins University's Center for Research on the Education of Students Placed At Risk, testified that by September 1999, SFA will be ready for full implementation in middle schools.

¹⁵⁵⁶The implementation of SFA substantially changes a school's organization and practices. It affects instruction, curriculum, assessment, early childhood programs, special education, bilingual education, health and social services systems, Title I, parental involvement, promotion or retention policies, and internal school governance. (P-6). This program requires the active participation of all staff members. For these reasons, SFA and Roots and Wings require schools to follow an established set of procedures and guidelines.

Initially, participation in the program must be voluntary and based on informed choice.

4. For example, Cramer Elementary School in Camden reported that three years after implementation of SFA, the number of students who needed remedial instruction after entering second grade was cut by 50% and grade one reten-

SFA project staff make presentations at interested schools which may send delegations to visit SFA model sites. Teachers then are given an opportunity to vote by secret ballot on whether or not to participate. This process requires at least 80% of the faculty to "buy in" to the program. The "buy-in" process is essential. It ensures SFA is not imposed on teachers and helps bind them to the program.

The underlying assumption of SFA is that all children can learn to read successfully in the early grades. The program aims to make sure every child becomes an enthusiastic and skilled reader by the end of third grade.⁴ In fact, results of SFA show that children at the end of first grade read about three months better than children in the control or non-SFA schools. By the end of fifth grade, they read an average of slightly more than one year ahead of their peers in the non-SFA schools. Further, research demonstrates that the positive effects of this program last at least into middle school. (P-6).

¹⁵⁵⁶SFA accomplishes these results by first emphasizing prevention. Standard program components include: 1) full-day kindergarten (preschool is not assumed); 2) a school-wide ninety-minute daily reading period taught by all reading-certified teachers; 3) eight-week reading assessment periods; 4) a full-time facilitator to work with teachers and coordinate the data from the eight-week assessments; and 5) increased parental education to support students' learning at home.

SFA also requires intensive early intervention. This means: 1) 1:1 tutoring by certified teachers in twenty-minute daily sessions for first through third grade students with serious reading problems; 2) some group tutoring for older children who need reading assistance; 3) a family support team typically composed of a social worker or counselor, parent liaison, principal, and teachers to focus on attendance, coordination of outside social services, parent involvement, and stu-

tions were reduced from 13% to 5%. Memorandum from Annetta M. Braxton and Rhoda L. Chasten, Cramer Elementary School, to Orlando Castro, DOE 1 (September 30, 1994). (P-24A).

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dent behavior; 4) continuing professional development including an initial three full days of in-service staff training, a week-long program for the principal or facilitator, and additional time to train tutors and the family support team, plus two-day follow-up sessions; and 5) site-based management.

To fully restructure an elementary school, however, ensuring that every child can read is not enough. Students also must develop skills in higher-order thinking, problem solving, and discovery. Consequently, in 1992, SFA expanded in scope to include Roots and Wings for first through fifth grades. Roots and Wings uses the program components of SFA but adds two major elements.

First, Math Wings is a cooperative learning approach to mathematics instruction which balances basic skills, concept building, and experimentation. Math Wings emphasizes problem solving and reasoning, not rote calculations. This approach is consistent with recommendations made by the National Council of Teachers of Mathematics which has provided the prevailing standard of mathematics education in recent years.

¹⁵⁵⁷Second, Worldlab is a science and social studies program which strives to make the entire elementary curriculum relevant and useful. In Worldlab, students engage in group investigations and simulations to fully involve them in the subjects they are studying. The science and social studies curriculum in Worldlab can be aligned with the New Jersey standards. Music, art, computers, videos and other technology can be used to solve problems related to the assigned topics. While music, art, and programs for the gifted may be integrated into Worldlab, schools still may want art and music teachers to provide fuller programs.

Together, SFA and Roots and Wings encompass the entire elementary curriculum including special education, bilingual education, and ESL. By using all available resources, SFA focuses upon improving the quality of the whole school rather than creating another program, separate and apart from what the balance of the school is doing. For example, SFA reduces the need for spe-

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cial education services and referrals by raising the reading achievement of at-risk students through 1:1 tutoring, extended reading periods, and family support assistance. SFA's philosophy of intervening early and intensively to keep low-achieving students out of the special education system is called "neverstreaming." Likewise, for bilingual students, SFA materials are available in Spanish or can be adapted to effective ESL strategies.

Consequently, the State adopted SFA's zero-based budgeting approach in which all funding streams currently supporting unrelated programs are combined to create an effective elementary school from the funding mix. These streams include funds earmarked for foundation aid, parity, CEIFA programs, Title I, special education, and bilingual education. By covering all students under its substantive and fiscal umbrella, SFA reduces the need for separate programs or classes.

For the *Abbott* districts, the State recommended an expanded version of the SFA model in all elementary schools. The State's program included staff positions for a nurse, guidance counselor, ¹⁵⁵⁸technology coordinator, media services librarian, and security guards. Further, the State's model included a half-day four-year old preschool program, smaller class sizes, more tutors, and additional funds for professional development. This comprehensive approach to whole-school reform is consistent with the Supreme Court's order to provide students in the SNDs with more intensity of instruction and a higher quality of educational experience.

The first element in the State's whole-school reform program required a well-planned, high quality half-day preschool for all four-year olds in small classes with a 1:15 teacher-to-student ratio. This recommendation relied on research showing that an enriching pre-kindergarten experience reduces the chances that disadvantaged children will be retained or assigned to special education in the early grades. The State did not recommend full-day preschool classes because research on the long-term effects of half-verses full-day pre-kindergarten programs allegedly was inconclusive.

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The State also limited its preschool recommendation to four-year olds. Again, the State claimed that research on the benefits of school for three-year olds was unpersuasive. Further, the State felt its duty to educate children was guided by the constitutional demand which the Legislature had implemented. In New Jersey, the State constitutionally must provide a public school education for children between the ages of five and eighteen years. *N.J. Const.* art. VIII, § 4, ¶ 1. New Jersey statutory law only mandates attendance of children between the ages of six and sixteen. *N.J.S.A.* 18A:38–25. Thus, participation in any early childhood program must be optional, not mandatory. In recommending preschool for four-year olds only, the State also considered the finiteness of budgets and facilities. Nonetheless, under CEIFA, districts with concentrations of low-income pupils greater than 40% can use Early Childhood Program Aid (ECPA) to reach three-year olds provided they first serve all four-year olds seeking enrollment. *N.J.S.A.* 18A:7F–16.

¹⁵⁵⁹The State's recommendation for at least one year of half-day preschool for disadvantaged children is consistent with the 1990 National Education Goals adopted by the members of the National Governors' Association. (D–7). The Child Parent Center II study of long-term effects of age variations at entry to preschool "found no advantage for children who entered at age three compared with children who entered at age four." (D–8). Both Dr. W.S. Barnett who testified for the plaintiffs and *Wiping Out Disadvantages* prepared by the Education Law Center recommended that children in poverty should be provided with at least one year of preschool before kindergarten. (P–4; P–28).

The State would require one teacher and one aide for each half-day preschool class. The estimated budget was \$2983 per pupil based on average 1996–97 I and J district salaries of \$51,000 per teacher and \$15,200 per aide, plus benefits. This amount also covered expenses for employee benefits, materials, supplies, purchased services, and instructional equipment. The cost did not include administration, support or facilities.

Additionally, the State wanted all *Abbott* schools to implement full-day kindergarten programs as part of whole-school reform, in lieu of the half-day program now provided. There is a significant body of research supporting the benefits of this full-day program in terms of improved student achievement. Specifically, research demonstrates that full-day kindergarten programs generate an immediate boost in intelligence, improve basic skills, decrease student failure rates and below grade-level performance, decrease discipline problems, reduce dropouts, and improve rates of high school graduation. (D–2). To be effective, however, the kindergarten program as well as preschool must use the SFA thematically-based curriculum which balances child-initiated and teacher-directed instruction. The State's annual estimated cost of full-day kindergarten was \$4108 per pupil which included annual salaries and benefits for a teacher and aide based on I and J district expenses without including administration, support or facilities.

¹⁵⁶⁰The State's recommendations and budgets for preschool and kindergarten were consistent with the legislative requirements for ECPA. *N.J.S.A.* 18A:7F–16. ECPA aid under CEIFA totals approximately \$200 million. This aid is distributed to school districts with a high percentage of low-income pupils for the purpose of establishing preschool and full-day kindergarten. These programs must be in place by the 2001–02 school year. Districts first must serve all four-year olds before they can establish classes for three-year olds. However, if three-year old children currently are in such programs, they can remain.

The State's plan also reduced overall class sizes in the primary grades. Studies show that students from low-income backgrounds benefit from reduced class sizes which increase the frequency of teacher-student interactions, reduce distractions, and provide more opportunity for assessment, feedback, and reinforcement. Thus, the State proposed the following reductions: 1) a 1:15 teacher to student ratio for preschool; 2) a 1:21 teacher to student ratio for kindergarten through third grade; and 3) a 1:23 teacher to student ratio for fourth and fifth grades.

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Moreover, the State recommended even smaller classes in reading for students in first through third grades. Particularly, research shows students with learning deficits or socioeconomic disadvantages find it difficult to master reading skills in large group settings. Absent significant research to support further reducing class sizes in all subjects, the State determined that reduced class size in reading for the early elementary grades would be most effective in helping students learn to read and attain academic achievement in all subject areas. Indeed, while SFA assumes a class size of twenty-five, Dr. Slavin testified the model operates on the expectation that classes will be reduced significantly during reading periods by using tutors and certified staff.

Therefore, the State adopted SFA's approach of extending instructional time for reading to ninety minutes daily or 30% of ¹⁵⁶¹the instructional day, instead of the national average of fifty-one minutes as reported in 1994 by the National Commission on Time and Learning. During this common reading period, all students in first through third grades including special education and bilingual or ESL students are regrouped homogeneously by reading performance level into smaller classes with a 1:15 teacher-to-student ratio. These classes are smaller because tutors and other certified staff, such as librarians or art teachers, teach reading during this common period. This cross-grade grouping for reading increases direct instructional time by allowing teachers to teach the whole class without the necessity of dividing students into multiple reading groups with different assignments. The cost of reducing class sizes in first through third grades from twenty-one to fifteen students for ninety minutes daily was \$361 per pupil. This figure was based on the I and J district averages for salaries and benefits of 1.5 additional certified tutors for every 250 pupils.

To increase and maintain academic achievement, smaller reading classes must be accompanied by individual tutoring. The State followed the SFA model and proposed twenty minutes of 1:1 tutoring by certified teachers for all students in first through

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third grades who fall behind their peers in reading. These tutoring sessions are designed to prevent reading failure and are tailored to meet each student's special needs. Additionally, the State's program allowed for small group tutoring of students in the upper primary grades who still read below grade level.

Initially, students are identified for the SFA tutorial program based on informal reading inventories given by the tutors to each child. Subsequently, tutoring assignments are made at eight-week intervals based on teacher recommendations and more formal assessments. The results of these eight-week assessments also are used to change reading groups, to make adaptations in the tutorial programs, and to identify students who need other forms of assistance such as family interventions or screening for vision and hearing problems.

¹⁵⁶²The State assumed an average of 20% of students would require tutoring which allowed for a top rate of 30% for first graders, 20% for second graders, and 10% for third graders. The State estimated the cost of 1:1 tutoring was \$4208 per pupil using I and J district averages for salaries and benefits of 3.5 certified tutors per 50 pupils.

The State's plan also required one program facilitator at each elementary school to oversee the operation of SFA. The facilitator would work with the principal to coordinate scheduling, visit classrooms and tutoring sessions, and help teachers and tutors with individual problems both academic and behavioral. The estimated budget for this position was \$51,000 plus benefits using I and J averages.

While the mission of DOE is to educate students, the State recognized that whole-school reform must include an appropriate social services delivery system. Students in the SNDs are at a higher risk of school failure because of problems related to poverty including inadequate housing, violence, crime, substance abuse, teenage pregnancy, and parenthood. Often, these children require additional intervention above and beyond the classroom teacher or tutor.

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The State appears to recognize that schools must offer health and social support services for this student population to increase the likelihood of academic success. Indeed, CEIFA itself also recognizes this need. *N.J.S.A.* 18A:7F-18 (Demonstrably Effective Program Aid (DEPA) includes “health and social service programs”). These services can be provided through a variety of models such as New Jersey’s School-Based Youth Services Program, family resource centers or community schools. Generally, these programs offer a range of assistance from screening and assessing needs of students to providing either direct services on-site or referrals for physical and mental health, family support and counseling, drug and alcohol counseling, parenting education, and ¹⁵⁶³child care. Studies indicate these programs reduce retentions, special education placements, absenteeism, and drop-out rates.

In the *Abbott* elementary and family schools, the Commissioner embraced a social services model based on coordination and referral. In this model, school staff identify health and social services needs of their students, then community resources are utilized to provide those services. In rejecting the model of direct on-site service delivery, Dr. Barbara Anderson, Assistant Commissioner for Student Services, DOE, testified the primary mission of schools is to improve student achievement and not to become experts in social services. While schools should provide coordination of programs, they should defer direct care to those individuals who work in human, health, or community services. Indeed, the basic mission of the State Department of Human Services (DHS) is to address social services needs. This was not the basic mission of DOE. To provide school-linked services, the State determined each elementary school should include a social worker and parent liaison for every 535 students. The estimated cost was \$158 per pupil.

The State also recognized the importance of providing teachers and administrators with continuing professional development to improve student performance. Dr. Anderson testified this program was the “critical linch-

pin” in whole-school reform. To be effective, however, such a program must offer a variety of effective instructional strategies for teaching, classroom management, and assessment designed to help students achieve the higher expectations embodied in the new core curriculum content standards. The State’s estimated cost for a comprehensive professional development program as part of whole-school reform was 2% of the district budget for salaries plus substitute costs for six release days for teachers and aides. For elementary schools, this amount is adjusted to include a full-time facilitator and training costs for SFA. The projected per-pupil amount was \$398.

¹⁵⁶⁴Another State goal was to increase the effective use of technology in *Abbott* classrooms. By integrating computers into instructional programs, students are ensured the necessary resources to meet the newer, more rigorous standards. The proposed cost was \$267 per pupil based on a computer-to-student ratio of 1:5 with a five-year replacement schedule, peripherals, software, wiring, and a full-time technology coordinator. At no cost, all *Abbott* schools will be connected to a high-speed fiber optic network and equipped with an interactive television classroom. Schools also will be charged reduced access fees.

Additionally, these districts will receive \$40 per pupil for purchases of hardware and software as part of Distance Learning Network Aid. This aid will enable districts to “link up” to a statewide infrastructure which will facilitate the expansion and enrichment of curriculum offerings for every school. Further, the Educational Technology Training Centers established by DOE in each county of the State will provide professional development opportunities.

To address problems of student disruption and violence, the State’s plan required every elementary school in the SNDs to establish a code of conduct defining acceptable and non-acceptable student behavior along with the consequences resulting from failure to comply. The State also recommended that each school employ full-time security personnel and use other protective devices such as metal detectors to ensure safety. The estimated

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cost of one security guard for every 535 students at an elementary school was \$61 per pupil. (This court doubts very much that one security guard per elementary school is sufficient.)

Another supplemental program identified by the State was school-based decision-making. This program builds a sense of local ownership because it empowers principals, teachers, parents, and students to play active roles in educational planning, governing, and budgeting. By transferring significant decision-making authority from local district offices to the individual schools, ¹⁵⁶⁵research shows that school reform efforts are more effective and students' academic performances improve. Likewise, this program increases the involvement of parents in decisions that affect their children. The proposed costs for school-based decision-making, budgeting, and parental involvement were funded in the "base budget." Further, the State indicated it would train people to assemble school-based budgets at no additional cost.

To implement reform at the elementary level, the State presented an illustrative school-based budget based on the individual program component costs mentioned above. Commissioner Klagholz testified, however, that the State does not plan to impose this budget on every school or any particular school. Rather, the State's plan was to evaluate each school to determine existing and needed resources; "nothing short of that is going to allow us to meet the Court's expectations, that we assume an essential, an affirmative responsibility for making these results materialize." Therefore, the State did not ask the Supreme Court to impose the model budget on particular schools but to approve the approach of creating whole-school reform through these illustrative school-based budgets.

The State then assumed that sufficient funds existed in the system to finance whole-school reform. To determine the funding issue, the Commissioner outlined a school-based budgeting process similar to the one DOE implemented in the Newark takeover district. First, the State would examine the practices of a particular school and its fi-

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nances using DOE program and fiscal review staff. Second, if there were insufficient funds to implement whole-school reform, the State would see if the money was being used in non-productive or counter-productive ways. Third, district budgets would be examined for inefficiencies in administration. Fourth, the State would determine if funds could be reallocated under the authority given by CEIFA and this court's mandate to assume absolute responsibility for implementation of necessary programs. Finally, if the State found no additional funds available, Commissioner Klagholz vowed to seek supplementary appropriations⁵⁶⁶ through the normal appropriation process. Therefore, the State did not create a precise formula for funding *Abbott* school districts. Again, the State's goal was to improve student achievement by empowering the administrative and teaching staffs in local schools with some degree of control over their resources. By adopting school-based budgets, the idea was to ensure that necessary funds would flow through the districts to the individual schools.

Substantively, the illustrative elementary school budget for a school of 584 students in pre-kindergarten through grade five contained cost estimates for the following program components: half-day preschool for four-year olds; full-day kindergarten; average class size of twenty-one students in kindergarten through grade three with fifteen students in preschool classes; ninety-minute daily reading periods for all students in first through third grades in homogeneous classes of fifteen; twenty minute daily 1:1 tutoring by certified teachers for students in grades one through three who are reading below grade level; 298 minutes of daily overall instruction; a full-time facilitator to administer SFA; one family support specialist or social worker and one parent liaison to comprise the Family Support Team and make social services referrals; and substitute coverage for six staff development days for teachers and aides. (D-2, Appendix B).

The total budget for the illustrative elementary school included: 30.5 teachers (\$1,555,500); five teacher tutors (\$255,000); one principal (\$89,400); seven aides for pre-

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kindergarten and kindergarten (\$106,400); three support aides (\$45,600); one facilitator (\$51,000); one social worker (\$51,000); one counselor (\$51,000); one nurse (\$51,000); one parent liaison (\$20,500); one technology coordinator (\$51,000); one media services librarian (\$51,000); one security guard (\$27,900); two clerical employees (\$55,800); substitutes (\$37,500); and benefits (\$454,200). The subtotal for salaries and benefits was \$2,953,800. (D-2, Appendix B). These costs were based on 1996-97 averages of I and J districts but then inflated forward to 1997-98 using the consumer price index. To ¹⁵⁶⁷determine salaries for aides, the Commissioner relied on the number used in the CEIFA model. The Commissioner then applied an 18% benefits rate; pensions and social security were not included in the calculations because the State already pays for them directly. The budget assumed all instruction in the seven core curriculum content areas would occur in the regular classroom with only instruction in physical education occurring in a specialized setting.

The budget also included instructional costs for textbooks, materials, and supplies (\$105,600). These costs were based on amounts spent in I and J districts. Other budget items were: technology and distance learning (\$83,100); equipment (\$30,700); curriculum consultants (\$11,600); extracurricular activities (\$11,200); professional development (\$135,600); and summer curriculum development (\$4300). Additionally, allocations for administration included: facilities operation and maintenance (\$640,100); small facilities projects (\$58,800); supplies (\$42,300); equipment (\$19,200); purchased services (\$68,200); excess cost of food services (\$47,300); and miscellaneous (\$9000). The costs of operations, maintenance, and food services were based on higher *Abbott* district numbers because they reflected actual conditions in the SNDs. (D-2, Appendix B).

The total school-based budget for the State's illustrative elementary school was \$4,220,800. (D-2, Appendix B). By breaking this number down into per-pupil

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amounts, Michael L. Azzara, Assistant Commissioner for Finance, DOE, testified the State could extrapolate the cost for a higher or lower student population without qualitatively changing the programs. Revenues to fund this budget are provided under CEIFA, federal aid entitlements, and parity aid, then reduced by the school's proportional share of district office costs and out-of-district tuition for severely disabled students. Where 40% of students were low-income, available revenues were projected at \$4,625,416. Where at least 20% of the students were low-income, the amount was \$4,272,084. (D-2).

¹⁵⁶⁸To implement this modified SFA model in all *Abbott* elementary schools, the Commissioner proposed a "careful and conscientious approach" that assured high quality. Under this process, Commissioner Klagholz testified SFA could be placed in fifty elementary schools during the first year, 100 the second year, and then 150. Dr. Slavin also testified in favor of phased-in implementation. The State would select the first fifty schools based on three criteria: 1) where academic achievement was the lowest; 2) where there was the greatest commitment to change; and 3) where there was an apparent readiness to take on the SFA model.

During the first year, the following SFA components would be implemented in each of the chosen elementary schools: reading; writing; language arts; preschool; full-day kindergarten; tutoring; the extended reading periods; and family support. The State would implement the math component of Roots and Wings during the second year and Worldlab during the third year.

B. Middle and High School Reform

The State's ultimate goal is to implement supplemental programs within the context of whole-school reform in the *Abbott* middle and high schools. The State, however, did not recommend this approach for immediate implementation because the research on, and level of confidence in, existing secondary school models was not compelling. No particular whole-school reform model was validated empirically as effective in improving student achievement. Instead, the State's report urged secondary schools immediately

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to adopt supplemental programs and to experiment, pilot, and evaluate secondary school models of whole-school reform such as the Project on High Performance Learning Centers, ATLAS, CES, and Paideia. (D-2).

The disadvantages of students in the *Abbott* secondary schools are complex and pervasive. These students are at much greater risk of school failure and dropout than their peers in the wealthier districts. They often must deal with serious problems including substance abuse, disruptive behavior, disaffection, adolescent ¹⁵⁶⁹pregnancy, and parenthood, without adequate support at home. (D-2). For these students, the Commissioner recommended a range of special programs including remedial instruction at a reduced class size of fifteen for students requiring additional assistance, alternative schools, dropout prevention, school-to-work and college transition programs, community services coordinators, and social services.

At the middle schools, the State's plan required 20% of the student population to receive ninety minutes daily of basic skills remedial instruction at a reduced class size of fifteen; at high schools, 20% of the population would receive two periods of remedial instruction each day in classes of fifteen. Otherwise, class sizes were twenty-three at all middle school grade levels and twenty-four at all high school grade levels. While the State did not specify how many additional teachers would be necessary for the supplemental remediation program, Dr. Margaret E. Goertz, a plaintiffs' expert, testified this would require an extra 1.5 teachers per model middle school of 675 students and 2.5 teachers per model high school of 900 students. Dr. Goertz estimated the cost at an additional \$143 per pupil, and \$193 per pupil,² respectively.

To combat the dropout rate and improve student achievement, Commissioner Klagholz proposed to provide secondary students in each *Abbott* district with an alternative school program. Research indicates that such programs increase academic success with their smaller class sizes and individualized focus allowing for greater levels of counseling, parental or family involvement, and

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instructional support. Further, alternative school programs increase attendance rates, improve basic skills and scores on standardized tests, decrease dropout rates, reduce disruptive behavior, and increase college aspirations. Such programs include work-study opportunities, community service involvement, life-skills training, job search training, vocational education, and personal growth counseling such as anger management, assertiveness training, and social skills. (D-2).

¹⁵⁷⁰The State's plan required each *Abbott* district to establish an alternative education program in one of its middle and high schools. The cost for this supplemental program was estimated at \$275,000 for each alternative school. (D-2).

The State also proposed that each middle and high school in the SNDs would have a dropout prevention counselor to serve a dual role: 1) to work with students in the alternative education program; and 2) to ensure that adequate dropout prevention programs exist in middle and high schools. The State's illustrative school-based budgets estimated the cost to be \$64,500 at the middle school level and \$69,400 at the high school level. These salaries were based on I and J averages plus 18% benefits. (D-5A).

School-to-work or college transition programs also were considered supplemental because they responded to unique needs of students in the SNDs. Students with socioeconomic and academic disadvantages often lack the basic skills to support themselves responsibly. Additionally, many of these children do not have access to information on college opportunities or meaningful employment which typically is found in the wealthier districts. For these reasons, the Commissioner proposed to integrate workplace readiness skills and college transitional programs into the secondary school curriculum. Research indicates that such programs lead to increased school attendance, reduced dropout rates, higher motivation to learn, and greater likelihood of pursuing further education. (D-2).

Specifically, these school-to-work and college transition programs would contain the following elements: career majors that com-

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bine academic and vocational instruction; work-based learning experiences; connecting activities to match students with employers; and career development to help students become aware of their interests and strengths. These opportunities would be provided through a combination of cooperative education programs, vocational technical programs, school based enterprises, career ¹⁵⁷¹academies, and youth apprenticeship programs. The Commissioner recommended that each *Abbott* district implement all of these programs in the high schools using resources presumably present in the regular budget. Dr. Anderson testified, however, that schools must start preparing these students with the skills necessary for work or college transitions as early as kindergarten.

Other supplemental programs designed to improve student achievement were recommended for both elementary and secondary schools. These programs included health and social services, additional security, instructional technology, professional development, school-based decision-making, and parental involvement. The Commissioner proposed to implement them in the middle and high schools with some modifications for the special needs of older students.

Consistent with his recommendation for elementary schools, Commissioner Klagholz wanted secondary schools to implement an appropriate health and social services delivery system. At middle and high schools, the problems of disadvantaged children often are very complicated. Treatment requires a mix of services ranging from primary health care, mental health and family counseling, health education, drug and alcohol abuse counseling, recreation, parent education, employment assistance or even child care for student-parents. To avoid what Dr. Anderson characterized as "mission creep," the State adopted a school-linked services model based upon coordination and referral. Under this approach, the State recommended inclusion of a full-time community services coordinator at a cost of \$64,500 for each middle school and \$69,400 for each high school. These coordinators would work closely with school resources including the nurse or guidance

counselor to identify the kinds of assistance a child or family may need. These coordinators would then either bring into the school, or provide access to, local community agencies better-suited to address those needs.

¹⁵⁷²The Commissioner also recognized that disruptive behavior or violence directly impacted the ability of students to learn. Consequently, the State proposed that all *Abbott* schools employ full-time security personnel, use protective devices such as metal detectors, and establish codes of conduct. The cost of one security guard for every 225 students in the middle and high schools was estimated at \$146 per pupil.

Further, the Commissioner advocated increased use of instructional technology. This supplemental program acknowledged that students in the SNDs have limited or no access to computers in the home. To function in an increasingly technological society, however, these children must develop computer skills. Towards this end, the Commissioner required the *Abbott* schools to integrate technology into the instructional program at the classroom level. As discussed previously in the elementary education section of this opinion, this technology includes computers, hardware, software, interactive classrooms, educational programming, and a "link up" to the statewide Distance Learning Network.

For secondary schools, the Commissioner recommended a ratio of one computer for every five students with a five-year replacement schedule, peripherals, software, and wiring. However, unlike elementary schools, the State's budget called for two media-technology coordinators in both the middle and high schools, each at a cost of \$54,700 and \$58,800 respectively. (D-5A). At no cost to the school, the State will connect each school to a high-speed fiber optic network, provide an interactive television classroom, and reduce access fees. Additionally, schools will receive \$40 per pupil in Distance Learning Network Aid for purchases of hardware and software. They also will be given professional development opportunities through Educational Technology Training Centers established by DOE in each of the State's counties. The overall cost estimated for this

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supplemental program was \$252 per middle school pupil and \$234 per high school pupil. (D-2, Appendix A).

¹⁵⁷³The State's plan also provided all staff in *Abbott* schools with continuous professional development. The purpose was to improve the performance of teachers, administrators, and support staff with continuous training focusing on subject matter knowledge and effective teaching practices. For secondary schools, the cost of professional development was 2% of budgeted average salaries in the I and J Districts plus substitute costs for six release-days for teachers and aides.

Finally, the Commissioner recommended school-based decision-making including school-based budgeting and parental involvement in the secondary schools. This supplemental program was considered an essential component of the State's plan because it provided meaningful school-level involvement and assured funds would reach the classroom. For secondary schools, the costs were proposed to be funded in the base budget for regular education.

To summarize, the State's 1997 study of supplemental programs described a "typical" middle school of grades six through eight as follows: an enrollment of 675 students with 1.5% assumed to have severe learning disabilities and served in out-of-district placement; class size of twenty-three in all grades; ninety minutes daily of basic skills remedial instruction for 20% of the population at a reduced class size of fifteen; and ninety minutes daily of bilingual instruction for 12% of the population. (D-2). The staff would consist of: one principal and one vice-principal (\$177,800); 46.5 teachers (\$2,543,600); two guidance counselors (\$109,400); one nurse (\$54,700); one media specialist or librarian (\$54,700); one technology coordinator (\$54,700); one community services coordinator (\$54,700); one dropout prevention counselor (\$54,700); four clerical employees (\$111,600); one aide (\$15,200); substitutes (\$22,400); three security guards (\$83,700); plus benefits (\$503,800). (D-5A).

In addition to salaries and benefits, the budget consisted of curriculum materials and

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supplies (\$130,800); technology and distance learning (\$103,400); other equipment (\$42,800); curriculum ¹⁵⁷⁴consultants (\$14,400); professional development (\$63,200); extra-curricular activities (\$90,800); and summer curriculum development (\$4300). Other non-instructional costs were facilities operation and maintenance (\$891,800); small facilities projects (\$82,000); supplies (\$52,600); equipment (\$23,900); purchased services (\$84,900); food services (\$63,800); and miscellaneous (\$11,200). The total school-based budget for this model *Abbott* middle school was \$5,500,900. (D-5A).

Likewise, the State's illustrative school-based budget for the "typical" high school included grades nine through twelve with: student enrollment of 900 with 1.5% served out-of-district for severe learning disabilities; class size of twenty-four at all grade levels, two periods daily of basic skills remedial instruction for 20% of the population at reduced class size of fifteen; and two periods of bilingual instruction daily for 12% of the population. (D-2). Staff was composed of: 53.5 teachers (\$3,145,800); one principal and two vice-principals (\$279,900); four supervisors of instruction (\$325,600); four guidance counselors (\$235,200); one dropout prevention counselor (\$58,800); one community services coordinator (\$58,800); two nurses (\$117,600); a part-time attendance officer (\$14,000); one media specialist or librarian (\$58,800); one technology coordinator (\$58,800); nine clerical employees (\$251,100); one aide (\$15,200); four security guards (\$111,600); substitutes (\$25,700); plus benefits (\$690,900). (D-5A).

The high school budget also contained allocations for instructional costs. These included: curriculum materials and supplies (\$174,200); technology and distance learning (\$137,900); other equipment (\$60,100); curriculum consultants (\$19,200); extra curricular activities (\$384,300); professional development (\$88,700); and summer curriculum development (\$4300). Other nonsalary costs were: facilities operation and maintenance (\$1,252,800); small facilities projects (\$115,100); supplies (\$70,200); equipment (\$31,800); purchased services (\$113,200); food services (\$85,100) and miscellaneous (\$15,-

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000). The total illustrative school-based high school budget was \$7,999,700. (D-5A).

¹⁵⁷⁵The State then calculated existing revenue sources at the secondary school level. These sources included all aid programs under CEIFA, federal aid entitlements, and parity funds. Reductions were made for each school's proportional share of district office costs, out-of-district tuition for students with severe learning disabilities, and costs for alternative schools. For middle schools, the total available revenue for the school-based budget was \$6,161,267 where 40% of the students were low-income and \$6,076,892 where at least 20% of the students were low-income. Likewise, the State estimated the total available revenue at a high school with 40% low-income students was \$9,063,519; for high schools with at least 20% low-income students, the amount was \$8,951,019. (D-5A.)

The State presented the above figures for illustrative purposes only. As reiterated throughout the State's testimony, actual budgets will be calculated school-by-school to account for individual variations and needs. Throughout its presentation, the State endorsed the continuation of so-called "parity" funding to the *Abbott* districts to eliminate fiscal inequities and continuing deficits and to adequately fund the anticipated school-based budgets. Any excess in the budget would remain in the school.

In *Abbott IV*, the Supreme Court not only ordered the State to provide costs of educational programs but to ensure, through the Commissioner, that such funding was spent effectively and efficiently. 149 *N.J.* at 224, 693 A.2d 417. To comply, the State reorganized DOE and established two new offices to monitor the activities of the *Abbott* districts: the Office of Program Review and Improvement (approximate staff of fifty) and the Office of Fiscal Review and Improvement (approximate staff of thirty). DOE also created the position of Special Assistant to the Commissioner for School Improvement to coordinate department-wide participation in the process. Further, DOE's new composition created teams to review budgets and programs of each district to identify realloca-

tions necessary to establish whole-school reform.

¹⁵⁷⁶Likewise, the State's plan required *Abbott* districts to develop systems of accountability. First, they must develop three-to-five year schedules for phasing in whole-school reform. These schedules must identify which schools would be affected each year. Second, districts must establish baseline data and identify benchmarks to ensure they achieve the core curriculum content standards.

V

THE PLAINTIFFS' PRESENTATION
ON SUPPLEMENTAL
PROGRAMS

Plaintiffs alleged the Commissioner's study did not meet the specific requirements of the Supreme Court's order. They argued the Court drew a sharp distinction between regular and supplemental programs. For regular education, the Court directed the State to provide comparable instructional programs between the property-rich I and J districts and the property-poor, urban *Abbott* districts, *i.e.*, horizontal equity. The Court, then, ordered the State to identify educational programs especially designed to address the special needs of *Abbott* students, *i.e.*, vertical equity. Although the wealthier school districts did not require these supplemental or extra programs, they were urged by plaintiffs as fundamental prerequisites to achieving a "thorough and efficient" education in the SNDs.

Supplemental programs provide unique services to disadvantaged children which are "over and above" regular education. These programs attempt to wipe-out learning disadvantages and improve academic achievement levels. Indeed, such initiatives are deemed essential if students in the SNDs are to take full advantage of the regular education programs funded at parity with the I and J districts.

To determine which supplemental programs were necessary, the Court in *Abbott IV* directed the State, through the Commissioner, to study the special educational needs of students in the SNDs. ¹⁵⁷⁷The State, however, did not perform a comprehensive needs

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assessment, claiming the problems of disadvantaged students already were well-documented at both the local and national levels. Plaintiffs alleged the State failed to comply with the Court's order to identify those educational programs or services designed specifically to help students in *Abbott* districts. As Dr. Gary Natriello, a plaintiffs' expert, testified, "the status of being disadvantaged usually comes about because of a whole variety of things. But they appear in different combinations, and they appear in different intensities."

Consequently, plaintiffs challenged the State's plan to adopt whole-school reform for two primary reasons. First, the State failed to study the actual needs of these students. Rather, the State relied on illustrative models which, like CEIFA, gave no recognition to the diversity of risk factors at play between and within *Abbott* districts. Plaintiffs claimed these abstract models were incapable of delivering an equal educational opportunity to children in the poorer urban districts because they did not target remedies with the greatest chance of addressing actual needs. Further, without initial needs assessment, there would be no way for the State to measure future accomplishments.

Second, plaintiffs objected because the State proposed to fund whole-school reform through a combination of existing funding streams without adding new money. Particularly, the State plan would divert regular education funds including the additional \$246 million directed to the twenty-six eligible *Abbott* districts for the 1997-98 school year under court order to achieve spending parity with I and J districts. Plaintiffs argued the regular education funding issue already was settled and could be reconsidered only by the Supreme Court. (P-73). Moreover, plaintiffs relied on the Supreme Court's declaration that supplemental programs represented "an educational cost not included within the amounts expended for regular education." *Abbott IV*, 149 N.J. at 180, 693 A.2d 417 (quoting *Abbott III*, 136 N.J. at 453-54, 643 A.2d 575). Thus, plaintiffs urged, the State could not pay for supplemental ¹⁵⁷⁸programs using parity funds allocated for regular edu-

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cation. Instead, plaintiffs viewed supplemental programs as necessarily an additional cost.

Plaintiffs proposed an alternative approach to urban education based on assessment, research, and practice. This approach combined high quality regular education with research-based supplemental programs designed to address the specific needs of children in the SNDs. The goal was to develop family and community schools in the *Abbott* districts which would improve achievement levels of disadvantaged students and make significant differences in their education. Plaintiffs' proposal included the following components: full-day preschool for three and four-year olds; full-day kindergarten for five-year olds; class size reductions to an average of fifteen or even below in preschool through third grade for all subject areas; after-school programs for grades one through twelve; summer program for grades one through twelve; school-based health and social services; student nutrition; alternative education programs; school-to-work and college transition programs; security; instructional technology; parent education and involvement; and programs or strategies to improve standards-based regular education.

Plaintiffs identified a full-day early childhood program for three, four, and five-year olds as an essential element of their "new, urban schools." This program would be offered year-round and would include extended-day or wrap-around child care for parents who need to drop-off their children at 7 a.m. and return for them at 6 p.m. After examining the literature on short and long-term effects of similar programs, plaintiffs urged that early, intensive intervention in the lives of *Abbott* children was necessary to build a solid foundation for their future academic success. (P-26).

Plaintiffs' proposal for more intensive early childhood education seeks to increase school readiness of children in the *Abbott* districts. This recommendation is consistent with Administrative Law Judge Lefelt's conclusion in 1988 that

¹⁵⁷⁹[m]any poor children start school with an approximately two-year disadvantage compared to many suburban youngsters.

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This two-year disadvantage often increases when urban students move through the educational system without receiving special attention. Poor children often do not receive the same verbal stimulation as children in middle class homes. They are not exposed to things like books and blocks, essential for reading readiness. They are often from single-parent households, headed by a mother who is poorly educated. They are exposed to more stress, from street crime, overcrowding and financial problems. . . . Nutrition and health care are also likely to be deficient.

[*Abbott v. Burke*, No. EDU 5581-88 at 28 (OAL 1988) (ALJ Decision) (quoted in substance in *Abbott IV*, 149 N.J. at 179, 693 A.2d 417).]

Dr. Barnett also testified for plaintiffs about the “very large gap” in school readiness between children in wealthier and poorer districts. He noted that disadvantaged students often enter school lacking essential language skills and vocabularies which are prerequisites for literacy. Dr. Barnett then observed that high-quality preschool programs could provide these poor children with the necessary resources to close the gap. Although the State did not study differences in learning readiness, Dr. Anderson acknowledged the importance of a preschool experience for children from low-income families. In her testimony, she referred to research showing these students often lack access to books, enrichment materials, and medical, dental, and social services which facilitate learning. Dr. Slavin also stated: “a middle-class child is much more likely to have an enriched experience as a three- and four-year-old that would be a better preparation for success in school than would be what a poor child would likely experience.”

To support their recommendation for a longer and more intensive early childhood program than proposed by the State, plaintiffs relied on two longitudinal studies. The Perry Preschool Program, begun in the 1960s, randomly assigned African-American, low-income children in southeastern Michigan to intensive, half-day preschool at ages three and four. (P-28). Two certified teach-

ers taught a class of twelve students in the morning; they spent their afternoons preparing lesson plans and making ninety-minute weekly home visits. Researchers studied the progress of these students until they reached age twenty-seven. Initially, the Perry ¹⁵⁸⁰children ranked at the fifth percentile in terms of school-readiness skills. However, Dr. Barnett testified that early intervention made a substantial difference. The study revealed “strong effects” on school achievement, number of children in special education, high school graduation rates, adult economic success, and involvement in delinquency and crime. (P-29). The high school graduation rate increased from one-half to two-thirds.

The Abecedarian study also demonstrated the importance of early childhood education for low-income, mostly African-Americans from North Carolina. (P-29). This long-term study placed children from approximately four months of age to five years in full-day, year-round child care with an educational focus. According to Dr. Barnett, results compiled when these children were age fifteen revealed much larger effects of preschool than the Perry study probably due to the earlier intervention and greater intensity of the experience. While the Perry Preschool Program yielded gains in achievement and social behaviors, the Abecedarian study also produced permanent gains in IQ of about one-third of a standard deviation, or the equivalent of five IQ points.

Finally, plaintiffs argued their proposal would yield significant educational cost-savings over time. A cost-benefit analysis of the results from the Perry Preschool Program revealed economic benefits of preschool education which were quite large relative to its costs. Benefits ranged from reduced child care costs, reduced costs of a public school education through grade twelve because of lower retention rates from failures, reduced costs of adult education, more college graduates, increased earnings and benefits, decreased costs of crime, and reduction in welfare dependency. (P-28).

Dr. Barnett’s cost-benefit analysis of thirty-eight early childhood programs supported these findings. W. Steven Barnett, *Long-*

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term Cognitive and Academic Effects of Early Childhood Education on Children in Poverty, Preventive Medicine (publication due March 1998). (P-28). This study examined such outcomes⁵⁸¹ as IQ, achievement, and academic success as measured by special education placement, grade retention, and high school graduation. In addition to improved cognitive development and academic success, Dr. Barnett found the economic return on preschool education exceeded “the average rate of return on investments in the stock market over the last 30 years.” (P-28). He then concluded every child living in poverty in the United States should be provided with “at least one year” of quality education in a “part-day preschool education program or a full-day developmental child care program rich in cognitive interactions between teachers and children.” (P-28). However, in another paper, Dr. Barnett observed that studies on the effects of age of entry failed to find any significant advantage for children who entered at age three, rather than age four. W. Steven Barnett, *Long-Term Effects of Early Childhood Programs on Cognitive and School Outcomes*, The Future of Children, Winter 1995, at 42.(D-8). See also Ellen C. Frede, *The Role of Program Quality in Producing Early Childhood Program Benefits*, The Future of Children, Winter 1995, at 122-23 (finding that variations in duration and intensity across programs are not associated with striking differences in program effects). (D-10).

Nonetheless, plaintiffs recommended an early childhood program with more duration and intensity. While research on this issue may be inconclusive, plaintiffs agreed with Dr. Slavin, the State’s expert, that children who attend full-day preschools beginning at age three were more likely to have success in school. Consequently, plaintiffs’ supplemental program for three-, four-, and five-year olds included the following components: full-day, year-round school; classrooms of fifteen students; one certified early childhood education teacher and one trained aide per class; extended day care; health and social services; collaborations with Head Start and other community-based agencies and provid-

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ers; extensive professional development and supervision; and the creation of preschool councils in each district to foster collaboration between different providers of services, design school-level programs,⁵⁸² coordinate resources, and oversee implementation and evaluation of educational programs for children under age six.

Before implementing this supplemental program for early childhood education, however, plaintiffs asserted there must be a needs assessment to justify its specific design for the *Abbott* districts. Dr. Barnett testified that such a study is essential because needs of children “vary dramatically from community to community.” The State, plaintiffs claimed, presented no evidence of actual needs of children in *Abbott* districts for early childhood programs. Dr. Anderson testified she could not determine the current universe of four-year olds needing preschool or the ability of the schools to accommodate all of them. She also could not estimate the number of preschoolers in *Abbott* districts who currently attend private, community-based programs. Therefore, plaintiffs contended the State must survey each of the twenty-eight SNDs to determine: 1) the number of preschool children; 2) the number of preschool children currently enrolled in school and community-based programs; 3) the quality, costs, and funding of those programs; 4) the availability of child care, health, and other social services for preschoolers; and 5) any barriers to collaboration between *Abbott* districts, Head Start, and community-based providers.

Currently, every school district in the State receives regular education funding for a half-day kindergarten program at a minimum of four hours. CEIFA allegedly provides \$200 million in early childhood program aid (ECPA) “to all school districts with high concentrations of low-income pupils.” *N.J.S.A.* 18A:7F-16. *Abbott* districts therefore can use ECPA to fund full-day kindergarten and preschool programs. These funds co-exist with other public programs for disadvantaged children such as federal Head Start. Until recently, New Jersey also provided funds to urban districts to implement Good Start, a program developed by DHS in

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conjunction with DOE to provide educational, health, and social services to children ages three and four. Good Start has been discontinued.

¹⁵⁸³As of October 15, 1996 there were 266,163 students enrolled in the *Abbott* districts including 1848 in half-day preschool and 2322 in full-day preschool. Enrollment figures also showed there were 7283 students in half-day kindergarten and 15,461 students in full-day kindergarten. (D-15).

Plaintiffs estimated the cost of one year of full-day preschool would equal the average amount currently spent by the I and J districts for an elementary school pupil, \$7900. Plaintiffs said this figure must then be increased by the amount necessary to reduce class size to fifteen, include wrap-around child care, extend the school year to fifty weeks, and provide nutrition, health and social services. Dr. Barnett estimated costs between \$9,000 and \$14,000 per pupil.

Assuming the number of three and four-year old students each would approximate the 22,744 kindergarten students enrolled in *Abbott* districts as of October 15, 1996, Dr. Goertz multiplied 44,000 total students by the figure of \$12,000 per pupil. (D-15). She derived an estimated cost of \$528 million for comprehensive full-time preschool for three and four-year olds. (P-67). This amount could be reduced by using existing community facilities for child care, Head Start, and local health and social services programs depending upon the findings of the needs assessment. This total did not include costs for such program components as preschool councils, statewide certification for teachers and administrators, statewide accreditation for early childhood programs, or continuing training of teachers and aides.

Dr. Goertz then calculated the cost of full-time kindergarten. First, she multiplied 22,744 students times the same per-pupil cost of \$7900 and arrived at \$179.7 million. Second, she estimated that 433 additional teachers would have to be hired if class sizes were reduced to fifteen students. Using an average starting salary of \$40,000 plus 18% benefits, she determined the program would cost

an additional \$20.4 million. (P-67). Therefore, Dr. Goertz's total estimated economic cost of plaintiffs' recommended early childhood⁵⁸⁴ program for three, four, and five-year olds was \$728 million less of course, the experts' estimated long-term benefits generated by these programs, which could exceed \$100,000 per child, potentially millions of dollars, a consideration when weighing social costs. This is a \$528 million net expense, allowing for the \$200 million ECPA funds already committed by CEIFA. This probably could be reduced further by Head Start and other government preschool money already available.

Plaintiffs also proposed to reduce class sizes in all subjects to an average of fifteen students for preschool, kindergarten, and grades one through three. This recommendation responded to evidence showing that minority, inner-city children benefitted academically and socially from more direct and concentrated instructional time. Particularly, smaller classes allowed teachers to use more flexible teaching strategies, gave them more opportunities to respond to the special needs of their students, and reduced discipline problems.

An experiment conducted in Tennessee documented the importance of reduced class sizes in the early grades, especially for disadvantaged, nonwhite students. This study, referred to as Project Star (Student Teacher Achievement Ratio), began in 1985 and involved seventy-nine schools across Tennessee including urban, suburban, and rural. Over 10,000 students in kindergarten through third grade were assigned at random to a small class (thirteen to seventeen pupils), a regular class (twenty-two to twenty-six pupils), or a regular class with a full-time teacher's aide. Teachers also were assigned at random to the class groups and given no special instructions. After two years, the effect of smaller class size on the achievement of African-American children was double that of white children.

After four years, results showed students in smaller classes did significantly better on achievement tests than their peers in the comparison classrooms. (P-4). Other primary findings included: 1) the benefits were

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the same for boys and girls; and 2) in each ¹⁵⁸⁵grade, there was a greater small-class advantage for minorities or students attending inner-city schools. (P-33).

In the second phase of the Tennessee project, the Lasting Benefits Study, researchers followed these students after they returned to regular classes in fourth grade. The fourth and fifth graders who had been in the smaller classes scored higher on achievement tests than their counterparts. In fact, the small-class advantage continued through at least seventh grade. (P-33). Further, students who had been in small classes from kindergarten through third grade did significantly better in behavior ratings than students in regular-size classes. Small-class participation produced long-term social benefits by increasing student initiative-taking and decreasing non-participatory behaviors (disruptive, inattentive or withdrawn).

While the Tennessee experiment showed small classes were more effective academically than larger classes in the elementary grades, questions still remain about long-term consequences (after eighth grade). Unfortunately, research on the effects of small classes in the upper grades is "fragmented and even contradictory." Jeremy D. Finn, *Class Size and Students At Risk: What is Known? What Next?*, prepared for The National Institute on the Education of At-Risk Students, Office of Educational Research and Improvement, U.S. Department of Education, December 1996, at 30. (P-34).

Nonetheless, certain general observations can be made on the average effects of class sizes. First, the "effect size" at the end of kindergarten amounted to about one-month; this means children in small kindergarten classes tended to finish the year with a one-month advantage in terms of academic performance. Second, the "effect size" increased to two months in each subject area at the end of first grade and remained constant through sixth grade. Third, Dr. Finn said that "effect sizes" increased noticeably at the end of seventh, eighth, and ninth grades. In Dr. Finn's opinion, the average advantage in these upper grades could be as large as ¹⁵⁸⁶six months of a ten-month aca-

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demic year and perhaps as large as eight to ten months for minority students.

More research would be helpful on the overall benefits of reduced class size compared to cost. Indeed, the expense of additional teachers and classrooms severely limits the implementation of smaller classes. Even Dr. Barnett admitted on cross-examination he could not state with certainty that gains produced from the proposed reductions would be sufficiently large when compared to the costs. He said methodological research difficulties hinder any meaningful cost comparisons between general reductions in class size and comprehensive approaches used by other instructional strategies which reduce class size, such as SFA.

Plaintiffs recognized any class-size reduction program must be implemented carefully to ensure the special needs of *Abbott* students were met in the most cost-effective manner. First, there must be sufficient numbers of qualified teachers, aides, and materials. Second, there must be adequate classroom space. To determine actual requirements, the State must perform a needs assessment including: 1) average class sizes in the I and J districts for kindergarten through third grade to identify the class size to be supported by regular education funding; 2) the difference between the I and J average class size and fifteen students using actual enrollments in the *Abbott* districts to establish the number of additional classrooms and teachers; 3) the number of students in each grade; 4) the availability of existing and temporary classroom space in the *Abbott* schools; and 5) the difference between additional classrooms needed and availability of space.

Final program costs would depend upon the results of the needs assessment. Plaintiffs, however, offered a general estimate based on the current enrollment of 70,689 *Abbott* students in grades one through three. (D-15). Assuming the current, average class size is twenty-one, Dr. Goertz determined that an additional 1346 teachers would be required if class size was reduced to fifteen ¹⁵⁸⁷students. Next, she multiplied 1346 by an estimated salary of \$40,000 (anticipated starting salary for a new teacher) plus 18%

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benefits to arrive at a total of about \$63.5 million for teachers excluding facilities or other supporting costs. Funding for class size reductions could be distributed to the *Abbott* districts through Demonstrably Effective Program Aid (DEPA). *N.J.S.A.* 18A:7F-18 (allegedly providing about \$100 million in the 1997-98 school year to districts with greater than 20% low-income students for instructional, school governance, and health and social services programs).

Plaintiffs' plan also stressed the importance of extending the school day for students in the *Abbott* districts. This supplemental program gives disadvantaged students a structured alternative to unsupervised after-school hours. In fact, a recent survey of six SNDs revealed all had implemented after-school programs which provided a mix of curricular and extracurricular activities. William A. Firestone, Margaret E. Goertz, and Gary Natriello, *From Cashbox to Classroom: The Struggle for Fiscal Reform and Educational Change in New Jersey* 134-35 (Teachers College Press 1997). (P-36). For children whose families are not supportive academically, these extended-day programs provide homework assistance, tutoring in specific subjects, and more access to educational resources such as computers and libraries. In addition to extending the instructional day, these programs offer recreational opportunities, social support services, health services, and community outreach programs including parent centers. Some schools even open their doors earlier in the morning to establish free breakfast programs for children who qualify because of low family income. While these extended-day programs are designed to meet the needs of at-risk students, similar programs now exist in non-*Abbott* districts, as part of regular education.

Dr. Natriello, a co-author of *From Cashbox to Classroom*, testified in support of plaintiffs' recommendation to extend the school day in the *Abbott* districts. Dr. Natriello stressed the importance of extending and expanding the learning experience for

disadvantaged students. Specifically, these students tend to lack the family resources to engage in learning beyond the school day. Further, their communities cannot provide them with the range of extracurricular experiences available in wealthier I and J districts. Consequently, poorer urban children often spend their after-school hours engaged in nonproductive and sometimes undesirable behaviors. Thus, by using existing facilities and coordinating after-school classes with the regular education curriculum, extended-day programs provide students with the supervised, direct support they need to attain the core curriculum content standards.

The State's proposal did not recognize extended-day programs as necessary interventions. While testifying for the State, Dr. Slavin admitted their potential effectiveness but noted "simply making the day longer in itself has not been shown to have much of an impact on achievement." Nonetheless, Dr. Slavin later said on cross-examination that a study in Memphis showed that children in SFA schools actually received an additional benefit from an extended-day program. This tends to support plaintiffs' position that after-school programs which are coordinated with the regular education curriculum can prove effective in improving student achievement.

Plaintiffs recommended extended-day programs for all elementary, middle, and high schools in the *Abbott* districts. These programs contained both instructional and recreational components. To determine actual costs, plaintiffs contended the State first must complete the Court-ordered study of actual needs in each district so that appropriate after-school programs could be designed. However, plaintiffs suggested a typical program would consist of three extra hours of activities each day for five days a week over thirty-six weeks which is the length of the school year. For a model school of 500 students, Dr. Goertz estimated 60% of students in grades one through twelve would attend; although, she admitted that this participation rate was "more anecdotal than anything else." Total program costs then were calculated based on the participation of

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141,013 *Abbott* students in grades one through twelve. (P-71).

Using union rates which teachers are paid in Philadelphia, Dr. Goertz estimated program costs would include salaries for two teachers at \$25 per hour each, three recreation aides at \$10 per hour each, ten student or practice teachers at \$7 per hour each, and one custodian at \$15 per hour. Benefits were calculated at 18%. Materials were estimated at 30% of salaries and fringe benefits. Dr. Goertz then arrived at an approximate per pupil figure of \$455 and an overall program cost of \$64.2 million. (P-70; P-71). Plaintiffs claim this money should be provided to the *Abbott* districts through DEPA.

Plaintiffs also recommended that schools in the *Abbott* districts provide mandatory summer school programs. Research has suggested that improvements in achievement levels are related to the amount of time spent on learning. (D-4). Studies also have indicated that students from low-income families typically lose more ground over the summer than do advantaged students, especially boys. Dr. Barnett suggested this gender difference may exist because boys spend less time in the house during the summer and lack the parental interaction which stimulates language development and learning. More significantly, this summer learning-loss tends to be cumulative so that the gap grows greater every year. The typical disadvantaged student cannot make up this difference during the school year. Extended term or summer school provides children in the SNDs with structured educational programs which improve their academic performance by increasing their exposure to instruction and sustaining their gains over the summer. Additionally, summer programs provide a socially acceptable alternative to unsupervised vacation time. This latter reason takes on increased importance as welfare reform returns more parents to the workforce with its concomitant effect on the supervision of children in those families.

¹⁵⁹⁰Again, the State did not include a summer program as part of its whole-school reform. However, the Commissioner did not study actual needs of disadvantaged children

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for such a program or present evidence that summer school was ineffective or unnecessary. Dr. Natriello testified that his research for *From Cashbox to Classroom* revealed there was good student attendance in summer schools. However, he noted these programs frequently were eliminated or severely reduced as other demands competed for limited urban school budgets.

Plaintiffs recommended that summer academic programs be offered to all students in the *Abbott* districts from grades one through twelve. To be effective, these programs must become permanently institutionalized to attract high-quality teachers and avoid the stigma of becoming a penalty for students who failed classes during the school year. For students in grades one through ten, programs would combine instruction, recreation, and nutrition. For students in grades eleven and twelve, programs would consist of academics and work-study opportunities with pay. For these older students, the offer of jobs in return for extra schooling serves as inducement for their participation in the program.

The calculation of per-pupil and per-program costs for this supplemental program again depended on the results of an initial needs assessment. After determining student needs in each district, appropriate summer programs can be designed. At that point, costs of the different components can be determined. These amounts can factor in additional expenses for staffing, materials, and facilities as well as such cost savings as fewer student retentions.

Because of the State's decision not to conduct such a study, plaintiffs offered their sample budget for an illustrative summer school program. For grades one through ten, plaintiffs proposed a program lasting six hours, five days a week for eight weeks. This program was designed to serve 60% of the students in the ¹⁵⁹¹model school of 500. Budget items included: one program coordinator; fifteen teachers; fifteen recreation aides; five student teachers; fringe benefits; and materials. Dr. Goertz testified the overall cost would be \$736 per pupil for a total amount of \$91 million. (P-70; P-72).

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The configuration differs for grades eleven and twelve because these older students would receive four hours of instruction and anticipate four hours of employment. Here, plaintiffs assumed stipends would be paid partly by the program and partly by the employer. This program also would run five days a week for eight weeks and would serve 60% of all eligible students; although, Dr. Goertz admitted she actually computed these figures using less than 60% attendance to account for alternative job opportunities available to special education students. Budget items included: one program coordinator; fifteen teachers, fifteen practice teachers; five recreation aides; fringe benefits; materials; and a \$2 program share of the stipend. Using the same percentages of fringe benefits (18%) and materials (30% of salary and benefits), Dr. Goertz arrived at a per-pupil cost of \$811 for a total amount of \$11 million. (P-70; P-72). The overall cost for an extended term program was estimated at \$102 million.

Another substantial difference between the State's and plaintiffs' proposals was in the area of health and social services. However, both parties recognized the need to address these concerns. The Commissioner in his report acknowledged that low-income families "often live in communities that have weakened infrastructures which pose a number of problems for families requiring health and social services which may not be available or, when available, are not accessible." (D-2). The State, however, did not study the actual needs of *Abbott* children or assess the availability and quality of existing community resources to service them. Rather, Dr. Anderson testified that such an assessment would be undertaken if the whole-school reform approach was accepted by the Court.

¹⁵⁹²Plaintiffs objected to the State's proposal to refer *Abbott* students to community health care providers and social service organizations. (D-2). Specifically, plaintiffs contended a referral-based system failed to: 1) guarantee children actually received such services; 2) resolve issues related to transportation, family availability, and hours of operation; 3) assure problems would be ad-

dressed quickly after their identification; 4) recognize that fewer services were available in poorer communities; and 5) reduce the likelihood of inadequate service and absence of case management.

Instead, plaintiffs recommended bringing health and social services into the *Abbott* schools. This supplemental program could be funded under the leadership of DOE and would address those non-cognitive needs of students which affect their readiness to learn. On-site clinics would remove obstacles to academic achievement caused by unmet health and social service needs. They would include such services as physical and mental health care, dental care, health education, individual and family counseling, drug and alcohol counseling, parenting education, and child care, where appropriate. These school-based centers would: 1) give teachers more time to educate; 2) shorten the time between identification of a problem and access to services; 3) reduce absenteeism; 4) limit the problem of unavailability of community services; 5) address the health needs of uninsured students; 6) prevent more serious health and mental problems; 7) reduce expensive hospital emergency room admissions; 8) maintain patient confidentiality; and 9) ensure access to basic medical, dental, and other health care essential to achieving early and sustained success in school.

Plaintiffs based their recommendation on programs currently operating successfully in the *Abbott* districts and elsewhere in this country. Lawrence E. Gottlieb, senior program officer at the NBI Health Care Foundation (NBI Foundation) in Roseland, New Jersey, testified the Robert Wood Johnson Foundation identified 900 school-based health care programs in the United States as of ¹⁵⁹³"right now." In fact, Gottlieb indicated the idea of providing on-site health care services to school children was growing "pretty rapidly." Many of these programs were based on partnerships between community service providers and schools.

For example, the NBI Foundation worked closely with the Newark Public Schools (a State-run district) and Saint Barnabas Health Care System which includes the Newark Beth Israel Medical Center to create a

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school-based health center at the George Washington Carver Elementary School. Carver is a kindergarten through grade eight family school of 1100 students located in the South Ward of Newark. The on-site center, scheduled to open in January 1998, will use the existing school nurse as the "gatekeeper" to make initial evaluations. Proposed school-based staff include a full-time clinic director, full-time nurse practitioner, part-time physician, full-time dental hygienist, part-time dentist, and a full-time social worker. Optional health care professionals such as nutritionists and health educators will be added as needed. (P-40). While the NBI Foundation will provide the financial resources to initiate the program, Gottlieb testified that in-kind resources will be contributed by the Newark Public Schools and Saint Barnabas Health Care System. Reimbursements also will be pursued through Medicaid, managed care, and charity care. The total program budget is estimated at \$552,700 including salaries, benefits, administrative costs, supplies, equipment, marketing, architectural fees, renovation costs, and furnishings. (P-41). After subtracting start-up costs, this budget suggests the annual operating cost at the Carver School should be in the vicinity of \$397,000. However, the NBI Foundation will reevaluate funding for the program "year to year."

Edward Tetelman, Assistant Commissioner for Legal and Regulatory Affairs, DHS, testified that fourteen *Abbott* districts had implemented the School-Based Youth Services Program (SBYSP). This program, developed in 1986 by DHS, under then-Governor Kean's administration, represented the first statewide effort in the country to provide adolescents with convenient access to health ¹⁵⁹⁴and social services. Only applicants that received support from a broad coalition of local voluntary and public agencies could apply for the \$250,000 grants; communities with extensive teenage problems received priority for approval. (P-53). SBYSP supported projects offering a range of services including health care, mental health and family counseling, health education, drug and alcohol abuse counseling,

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crisis intervention, educational remediation, employment services, training and placement, parenting education, and recreation. (P-40). Other services such as transportation, teen parenting, family planning, child care, and nutritional counseling were implemented on an as-needed basis. Grants from DOE and the Department of Health also could be used to supplement the core services. Individual sites with this program have reported reductions in dropouts, suspensions, teen births, and incidents of violent behavior. (P-4).

Plaintiffs' proposal to establish school-based health and social services emphasized the importance of long-term funding commitments. While applauding the collaborative efforts of private and public partnerships to establish on-site health care and social services, plaintiffs noted such initiatives could disappear if private foundations lose interest or grants expire. For example, Leslie Morris, project coordinator of the Adolescent Center at Snyder High School in Jersey City, New Jersey, testified that the Center opened in March 1988 under the auspices of a grant from the Robert Wood Johnson Foundation. Initially, the Center provided a full, comprehensive health program including primary health care, dental care, reproductive health services, mental health services, diagnosis and management of chronic problems, laboratory tests, and prescription services. When the grant expired in 1993, the Center had provided services to over 6,000 students who made about 18,000 patient visits. Subsequently, the Jersey City Board of Education funded the program at \$100,000 with the difference coming from in-kind services and Medicaid reimbursements. However, in 1995, the Center lost its ability to provide primary health care services because it no longer could bill ¹⁵⁹⁵Medicaid directly. Attempts to restore these services through contractual arrangements with managed health care organizations or private foundations have not met yet with success.

Plaintiffs also questioned the sufficiency of funds under the DHS program. As Assistant Commissioner Tetelman testified, the "flat" budget for this program was \$6 million when it began in 1986 and currently is \$7.1 million. The relatively flat legislative appro-

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priation reflects that increased funding for school-based youth services is recognized but is not a top priority at DHS. Consequently, over the past decade, only a small percentage of potential applicants have received funding for this program.

Because of limited DHS funding, plaintiffs recommended that DOE fund school-based clinics to address the health and social services needs of students in the SNDs. Each school in the *Abbott* districts should receive \$300,000 based on the current cost of operating the DHS school-based youth services program. The estimated total cost of establishing these programs in all 420 elementary, middle, and high schools is \$126 million. (P-70). Plaintiffs claimed this amount could be offset by funds already appropriated for the SBYSP. Also, plaintiffs estimated approximately 20-30% of program costs could be recovered through reimbursement for health services provided to students from medicaid, health maintenance organizations and charity care.

However, plaintiffs alleged particular program components could not be determined until the State conducted a needs assessment of each individual school and its community. In particular, the State must determine the social and health conditions of students served, the numbers of students involved, the availability and quality of existing community health and social services providers, and need for additional space. Depending on the findings, plaintiffs suggested a sample program would include one director, one nurse practitioner, one counselor, one social worker, one part-time medical director, and one nurse.

¹⁵⁹⁶ Plaintiffs also request supplemental funding to establish a comprehensive nutritional program for students. This funding would pay for uncovered costs of the federally-funded breakfast and lunch programs, 42 U.S.C.A. § 1751 to § 1769(h), as well as nutritional snacks for after-school programs and summer school. By fostering good health, nutritional programs increase a student's readiness to learn. Dr. Natriello testified that nutritional needs of students must be met to ensure that students are well-fed

and attentive in school. He suggested that all students receive two free high-quality meals daily plus nutritional snacks during extended school days. This approach would eliminate any stigma attached to receiving free or reduced price lunches and would ensure 100% participation in the nutritional program.

Plaintiffs did not estimate the cost for implementing this program in all *Abbott* schools. They said such a figure could not be offered until the State conducted a needs assessment including: 1) identification of non-reimbursable costs of existing breakfast and lunch programs; 2) likely participation rates in after-school and summer programs; 3) sufficiency and quality of available facilities; 4) assessment of current breakfast and lunch participation rates; and 5) the difference between existing and full participation in a high-quality, nutritional program. The Commissioner in his report presented no evidence of the actual nutritional needs of children in the SNDs nor did he make any recommendation for student nutrition.

Plaintiffs and the Commissioner did agree that schools in the *Abbott* districts should provide alternative education programs, school-to-work and college transition programs, adequate security measures, instructional technology, and increased opportunities for parental involvement. However, they disagreed on specific designs, components, costs, and implementation of these supplemental programs.

Both parties recommended the *Abbott* districts provide alternative education programs. However, plaintiffs' proposal differed in ¹⁵⁹⁷ two major respects from the State's recommendation by: 1) establishing an alternative program within each middle and high school; and 2) determining program components only after completion of a full needs assessment. Particularly, plaintiffs' plan required an assessment of the number and needs of potential participants, an evaluation of currently existing alternative programs, and a review of various dropout prevention approaches. Plaintiffs identified the following goals for their program: 1) to respond to those students with learning deficiencies who would benefit from more infor-

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mal, individualized instruction; 2) to prevent students from leaving school before graduation; and 3) to promote a more coordinated approach to students with behavioral problems.

Plaintiffs noted the amount of supplemental funding to establish alternative education programs in the *Abbott* districts could be determined only after completion of the needs assessment. Dr. Natriello testified that costs for such programs could vary substantially depending upon different staffing configurations. For example, in some schools, drug abuse could be an important issue requiring specialized staff but in other schools, drugs may not be a problem. Further, high school completion or dropout rates vary across the *Abbott* districts. Recent data from a cohort study which followed a group of students from grades nine to twelve showed that graduation rates in 1995 ranged from lows of 33% in Trenton, 42% in Newark, 48% in Jersey City, and 60% in Paterson City to a high of 80% in Perth Amboy. (P-61). Thus, the nature, extent, and cost of dropout programs in the *Abbott* schools would differ.⁵

Nonetheless, plaintiffs suggested a general design for this supplemental program would consist of one program director, one teacher per ten students with an undetermined number of aides, ¹⁵⁹⁸counselors, and specialists. Per-pupil and per-program costs would include salaries, benefits, materials, supplies, equipment, and the creation or renovation of additional facilities space, as necessary.

Both parties also recognized the importance of school-to-work and college transition programs for students in the *Abbott* districts. The major difference between the two recommendations involved the funding source. Whereas the State proposed to implement these programs using existing regular education funding, plaintiffs claimed extra resources and supports were necessary to meet the special needs of *Abbott* students for programs to strengthen workplace-readiness skills and better prepare them for college. To determine these additional requirements and their costs, plaintiffs asserted there must

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be an assessment of: 1) the costs of similar programs in the I and J districts; 2) actual needs of middle and high school students in the *Abbott* districts for college and career counseling; and 3) current guidance staff workloads to determine capacity for implementation.

Further, plaintiffs agreed with the Commissioner's general recommendation for increased security. However, once again, the Commissioner proposed to use regular education funding to pay for additional security personnel even though he never studied the actual needs of students in the *Abbott* districts. In fact, Assistant Commissioner Azara said on cross-examination that he derived the ratio of 1:225 guards per student from the Elizabeth and Perth Amboy proposals for security personnel in their 1997-98 parity expenditure plans.

Alternatively, plaintiffs' recommendation assumed there were additional security needs in the *Abbott* districts which were "over and above" the needs of I and J districts. These poorer urban school districts, often located in high crime neighborhoods, have increased incidents of violence and crime. To determine an appropriate funding level for security in these schools, plaintiffs requested more study, including an examination of: 1) security ¹⁵⁹⁹measures and spending in the I and J districts; 2) the number and adequacy of *Abbott* district security personnel and other measures; and 3) appropriate security staffing levels in the SNDs. Dr. Goertz testified she could not determine the cost of supplemental security without this comprehensive needs assessment.

Plaintiffs and the State both proposed to give students in the SNDs more access to instructional technology than their peers receive in I and J districts. Both parties agreed that children in wealthier districts had greater exposure to computers in their homes and communities. However, plaintiffs claimed the Commissioner did not study the actual needs of *Abbott* students and failed to examine technology expenditures in the I and J districts. Without knowing the extent or cost of the technology programs provided

5. A recently-released study suggests 1994 high-school "dropout rates" at 50% or worse in Cam-

den, Jersey City, Newark and Paterson. *Education Week*, January 8, 1998 at 67.

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to the wealthiest districts, Dr. Goertz again testified she could not determine the supplemental or extra technology needs of poorer, urban districts or their costs.

Both parties also recognized that increased parental involvement in *Abbott* schools would address another special need of disadvantaged students. These children often do not have the necessary home support for learning. Their parents are less educated and some lack appropriate parenting skills. Culturally sensitive parent training programs have proved successful in improving student achievement rates and reducing retentions. (P-4). These programs view parents as essential actors in school restructuring, planning, and governance.

Plaintiffs rejected the State's recommendation to provide one parent liaison in each elementary school and to integrate this program's cost into the regular education budget. Instead, plaintiffs proposed a more aggressive program of parent training and education. First, the program would be tailored to the particular needs of parents in each school. Second, parent liaisons would be created in all elementary, middle, and high schools. Third, the number of parent liaisons at each school would depend upon the school's size with a minimum of one for every 500 students. ¹⁶⁰⁰Fourth, this program would be implemented from funds "above and beyond" what currently is available for regular education. To determine actual costs, more study of student needs must be undertaken. However, plaintiffs estimated the total cost of providing parent coordinators in the *Abbott* districts at \$12.5 million (\$20,500 salary plus 18% benefits). (P-70).

In addition, plaintiffs recommended a series of strategies to improve regular education in the SNDs. Initially, they would require the Commissioner to: 1) conduct a comprehensive study of the regular education program and professional development in *Abbott* and I and J districts; 2) compare program components and staffing requirements between these low and high-performing districts; and 3) identify changes and additional funds necessary to improve core curriculum and instruction in *Abbott* schools so their

students can achieve the State's heightened standards. Plaintiffs proposed a court-supervised proceeding to present these findings no later than December 1, 1998 with recommendations forwarded to the Supreme Court by December 31, 1998. (P-26).

Plaintiffs also would require the State to establish an interim, state-level *Abbott* School Improvement Fund. This Fund, administered by the Commissioner, would provide schools in the *Abbott* districts with resources to evaluate and implement whole-school reform, SFA or other research-based programs designed to improve the core curriculum and instruction under the new standards. Plaintiffs suggested that \$31.4 million was an appropriate level of funding. (P-70). Specifically, Dr. Goertz derived this figure based on her determination that it would cost approximately \$313,730 per school to support whole-school reform and that 100 or about 25% of the *Abbott* schools would be in a position to implement improvements by the fall of 1998.

Lastly, plaintiffs proposed the addition of one instructional improvement facilitator for each *Abbott* district and each school. This individual would "plan, assess, coordinate and implement programs and strategies to improve curriculum and instruction." ¹⁶⁰¹(Plaintiffs' proposed finding # 170.) Dr. Goertz testified other cities which implemented whole-school reform funded such staff to assess student needs and design appropriate programs. Goertz estimated the cost for facilitators in each of the 420 schools plus twenty-eight districts at \$26.2 million using the average salary in I and J districts (\$51,000) plus benefits (18%).

Plaintiffs contended the implementation of supplemental programs could not be accomplished solely by school-based decision-making and budgeting but required a clear plan for State assistance. They proposed the creation of a state-level Interagency Council consisting of the Departments of Education, Human Services, Health, and Labor with representation from higher education, advocacy groups, and the *Abbott* districts. The Council would serve to: 1) oversee the implementation of a coordinated plan to deliver health and social services to students in the

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poorer urban schools; 2) assist in the formulation of policy and programs; 3) address specialized needs and populations; 4) solicit proposals to conduct State-funded research on new developments in the education of disadvantaged students; and 5) train supplemental program coordinators including one district-level staff person and one person per school who would be funded through DEPA.

Likewise, each district would establish local leadership councils comprised of representatives from the public and private sectors. These local councils would oversee individual school needs, assist in the evaluation and implementation of programs, and coordinate the various community services devoted to children and their families. (P-26).

Finally, plaintiffs requested the State to promote inter-district networking, collaboration, and dissemination of ideas through the creation of a Council of Abbott Districts. This Council would meet regularly and would be supported by a small staff to be funded from per-pupil assessments applied to each district. (P-26).

¹⁶⁰²Plaintiffs proposed a three-year period of implementation for their supplemental programs. During 1998-99, the State would: 1) conduct a needs assessment; 2) collaborate with community-based providers of health care, social services, and early childhood programs; 3) establish and fund the State Interagency Council, Council of Abbott Districts, Abbott School Improvement Fund, and the Research and Development Program; and 4) place trained instructional improvement facilitators in each school to design required programs. (Plaintiffs' proposed finding # 199.) The supplemental programs then would be implemented over the next two years subject to the availability of appropriate facilities. These programs would continue until the Commissioner can demonstrate they are no longer needed.

Plaintiffs estimated the overall cost of their supplemental programs (excluding early childhood programs) was \$453.6 million. (P-70). This amount, however, included only the following programs: 1) reduced

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class size; 2) after-school and summer programs; 3) school-based health and social services; 4) parent coordinators; 5) instructional coordinators; 6) the interim Abbott School Improvement Fund; and 7) supplemental program coordinators (instructional improvement facilitators). (P-70). Because the State did not conduct a comprehensive needs assessment, plaintiffs said they could not determine the costs for alternative education programs, school-to-work and college transition programs, security, technology, nutrition, and professional development. (P-26).

VI

ANALYSIS OF SUPPLEMENTAL PROGRAMS ASPECT

This court's analysis and conclusions of the program aspect are based on testimony taken over the twelve hearing days, review of the ninety-seven exhibits, consideration of the views of this court's consultant, Dr. Odden, who also consulted with the parties' representatives and expert witnesses, this court's review of the professional⁶⁰³ literature alluded to in the testimony, the experts' reports, and ten visits to court-selected schools in the City of Camden School District, most in the company of the parties' representatives, and all on notice to the parties. The court also relied extensively on the excellent proposed findings of fact and conclusions of law submitted by the parties at the conclusion of the hearings, in lieu of a trial brief. See 9A Charles A. Wright and Arthur R. Miller, *Federal Practice and Procedure* § 2578 (1995).

This case involves the application of constitutional principles to public policy decision-making. The testimony presented no conflict in credibility of the witnesses. Indeed, the court finds no need to resolve any specific credibility issues in order to make its findings, conclusions and recommendations. Each witness appeared truthful, relating facts and opinions as perceived by them. Naturally, since the dispute was over educational and social policies, and ultimately the welfare of children and the expenditure of taxpayers' money, disagreements on specific

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points were wide-ranging. With these generalities and implications in mind, this court reaches the following conclusions from the evidence considered in light of the social science background against which the proofs were presented.

This court is in substantial agreement with the analysis and recommendations of Dr. Odden on the programmatic issues. This court's conclusions are not based exclusively on his views but rather are based substantially on the court's independent inferences and conclusions from the testimony presented and available social science data. In several instances, this court might be more inclined to favor the plaintiffs' view than Dr. Odden does. Ultimately, any disagreement on that score is up to the Supreme Court to resolve.

This court indeed "has before it two different visions of the scope of programs to be included in the resolution" (Odden at 1)⁶ Of this constitutional dilemma. The State's vision is likely driven by a certain measure of political pragmatism; the plaintiffs' vision is likely driven by optimistic, well-meaning idealism. This court's proposed solution may be viewed in a certain sense as a compromise but the court is always aware that State constitutional rights cannot be discounted with the same currency as commercial or political utility.

Our starting "point is that the education program in the I and J districts is the *de facto* [constitutional] standard." (Odden at 2.) The State apparently accepts this reality, that fiscal deficit funding for horizontal equity is morally, if not constitutionally required, at least, as the Supreme Court put it, until "it can be convincingly demonstrated . . . that a substantive thorough and efficient education can be achieved in the SNDs by expenditures that are lower than parity with the most successful districts. . . ." *Abbott IV*, 149 N.J. at 196, 693 A.2d 417. Realistically, fiscal parity between *Abbott* districts and I and J districts probably will remain the norm until a more manageable State system evolves, *i.e.*, fewer and more efficient districts than the current 611, with more cohe-

sive and natural boundaries—such as county or natural regional districts. This system would recognize more robust and sound political and financial foundations than the present school districts, which are defined almost exclusively by municipal boundaries, *see N.J.S.A.* 18A:8-1, to the exclusion of any other consideration.

We agree with the State's position that fundamental school-based educational reform in the SNDs is entirely consistent with the philosophy of *Abbott IV* and its precursors. Indeed, we doubt that the plaintiffs seriously disagree with this point. The State's reform "proposal has an effective literacy program at its core." (Odden at 3.) We accept this proposal totally. The emphasis on reading, writing and communication espoused by Dr. Slavin's program is the quintessential foundation for all future gains. The SFA program is proven effective. Based on the testimony in this record and on the professional literature, this court heartedly¹⁶⁰⁵ endorses the State's plan for SFA, or other comparable whole-school reform programs, such as the Comer School or family and community school programs, in the *Abbott* districts.

We also agree with the State's view that now is the time to rebuild both the curriculum and the financial structure from the "ground up," *i.e.*, from the school level and not the district level, with a "school-based" budget approach. Perhaps this embrace of whole-school reform has been prompted by the State's recent experience in managing the "takeover" districts, Paterson, Newark and Jersey City. No matter what the inspiration, financial management and curriculum reforms at the foundation level of education are greatly encouraged over the prior "top-down" approach—DOE down to district then to school-level. We sense from the evidence presented in this proceeding that there has long been too little State involvement at the school-level and too much reliance on remote control through the districts. This whole-school reform from the ground up also may lead to financial efficiencies which could be disclosed only through careful examination of each school (and district administrative) budget. Indeed the court thinks a two-year

6. Odden references are to Appendix A.

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budget cycle, instead of a one-year cycle, might permit closer, more effective scrutiny of district fiscal affairs.

As noted, this court strongly endorses the concept of whole-school reform with the presumption in favor of Dr. Slavin's SFA program. He was a most impressive witness. His program is encouraging and proven. Indeed, Dr. Slavin was urged upon this court by plaintiffs, in August 22, 1997 correspondence, as a possible judicial consultant when the court sought the parties' advice on the point.

This court personally observed the SFA program in Principal Annetta Braxton's Cramer School (pre-kindergarten to grade four) in East Camden, a most impressive operation. These children clearly were eager, ready and learning. Of course, we recognize that the intangibles of fine leadership and dedicated ¹⁶⁰⁶teaching are the keys to any program. Unfortunately, these qualities are not derived from an accountant's balance sheet or stratagems of the bargaining table. While we endorse the State's program of whole-school reform under the aegis of SFA or analogues, we stress several caveats. The needs of special education students must not be compromised where these needs are legitimate. See *N.J.S.A. 18A:7F-19* (CEIFA funding for special education). We recognize and hope that successful implementation of this SFA program may eliminate some, perhaps many, of the special education needs, as Dr. Slavin so described. We do not construe the State's position as designed to "short-change" special education, as plaintiffs suggested. And this surely must not happen. Any Supreme Court order should require that sufficient funds for special education purposes remain in any school-based budget. We interpret the Commissioner's testimony as assuring adequate money in individual school-based budgets for all extant worthy programs, including special education, and we take him at his word on this point. According to the Commissioner's budget models, and in Dr. Odden's opinion, there will be enough money available to the schools under the State's proposal (with the parity money) to sustain the whole-school reform program.

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Again, if there is not enough money—if the calculation turns out wrong—the Supreme Court's order should compel adequate State funding to support the whole-school reform program notwithstanding.

We also must comment that programs like art and music should not be minimized in the whole-school design and reform model. These culturally enriching, life-enhancing programs are even more important for the typical "at-risk" student in the SNDs or *Abbott* districts than in the I and J districts, where family and community resources for cultural pursuits are much more likely available to their typical students. If anything, appropriate art and music programs and facilities should be stressed more in *Abbott* districts and the Supreme Court may desire to so recognize in its order.

¹⁶⁰⁷We agree with Dr. Goertz, a well-qualified plaintiffs' expert, that SFA is a supplemental program, although integrated with a foundational education program, within the intent of the Supreme Court expressed in *Abbott IV* and its precursors, and that SFA will be most especially efficacious in poorer urban districts with high populations of "at-risk" students. In sum, this court agrees with the State's overall approach for educational and financial reform *at the school level*. We concur with Dr. Odden "that the approach taken by the State, if fully and faithfully implemented, would represent the cutting edge of re-engineering school finance to the purposes of standards—and school-based education reform, the objective of which is teaching all students, including low-income students, to high standards." (Odden at 5.) This reform approach proposed by the State also should be appropriate for the middle and secondary schools. (Odden at 10–11.) Again, if the economic forecast is wrong and if there is not enough money in the system, then the Commissioner must, as promised, seek appropriate funding for these middle and secondary levels.

We proceed to the specific points and recommendations.

1. *Parity Spending.* We recommend that the State continue to guarantee the *Abbott* districts the average spending level of the I and J districts for the 1997–98 school

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year (\$8664 per pupil) with inflationary adjustments (presently 2.72%) in subsequent years. This should continue as the base funding for regular education in the *Abbott* districts, providing the “horizontal equity” alluded to by the experts at the hearing. If agreeable, the Supreme Court also must decide whether future parity or deficit funding must track the annual changes in I and J average spending. We suggest that it should.

2. *Whole-School Design.* We recommend that the State require the *Abbott* districts to adopt some version of a proven, effective whole school design with SFA—Roots and Wings as the presumptive elementary school model. Other very effective school models we have observed were: 1) the Comer School Development ⁶⁰⁸Program at the Francis X. McGraw Elementary School in East Camden, Principal Dr. Paul L. Stephenson (pre-kindergarten through grade five); 2) the “uniformed” Professional Development Family School at Cooper’s Poynt in North Camden, Principal Annie B. Rubin (pre-kindergarten through grade eight); and 3) the “uniformed” R.T. Cream Family School in Central Camden, Principal Dorothy W. Wyatt (kindergarten through grade eight).

We here repeat the caveat that the State must adequately fund special education, art and music under any of these models, recognizing that exemplary programs and facilities therefor should be stressed in the *Abbott* districts in these subjects because of lack of community or family resources. If sufficient financial support cannot be derived from the illustrative school budget, the State, true to the Commissioner’s promise, must make up the difference to insure the quality of SFA—Roots and Wings including special education, and exemplary art and music classes. This commitment by the Commissioner also applies to alternative schools at the secondary level, in this court’s view.

3(a). *Kindergarten.* The State agrees that full-day kindergarten should be furnished, rather than half-day as at present. Full-day kindergarten would cost about \$173.8 million (estimated 22,000 students at \$7900, the I & J average per elementary

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school pupil). (P-26). The State has provided \$86.1 million in “T & E” and parity funding for full-day kindergarten programs in its illustrative revenue budget (D-2); thus, the net cost of implementing full-day kindergarten is about \$87.7 million.

This court strongly endorses the State’s commitment to full-day kindergarten. CEIFA itself specifically addresses early childhood program aid “for the purpose of providing full-day kindergarten and preschool classes and other early childhood programs and services.” *N.J.S.A.* 18A:7F-16. The funding formula in CEIFA, *id.*, which allegedly provides \$200 million to *Abbott* districts for early childhood aid, gave no assurance facially of adequate funding for this program and was found defective for that reason. This ⁶⁰⁹full-day kindergarten program should be implemented *immediately*.

3(b). *Preschool for ages three and four.* While recognizing the efficacy of preschool programs for low-income children, ages three and four, the State proposed only a half-day program for four-year olds. This court disagrees with the State’s recommendation and urges a full-day program for all children ages three and four whose parents desire enrollment. We anticipate a participation rate of about 75%. This court is convinced that such a program will have a significant positive impact on academic achievement in both early and later school years. As Dr. Barnett related, “people often say that poor kids are two grade levels behind by the time they’re in elementary school . . . behind the average.” (December 1, 1997 at 141). As the experts described, the long-term benefits amply justify this investment. The cost estimates for the early full-day childhood education program which this court recommends are significant: \$260.7 million for three- and four-year olds (estimated 22,000 for each group with 75% utilization at \$7900 per pupil). These programs also must be implemented promptly, by the 1998–99 term, if at all possible.

3(c). *Early Childhood Costs.* The total incremental cost for recommended full-day kindergarten and preschool programs would be \$148.4 million or \$434.5 million less the \$286.1 million the State allegedly has com-

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mitted already to early childhood programs in ECPA, “T & E” and parity funds. If the Supreme Court opts for a less intense program, full-time classes for four-year olds only, or half-day classes for three-year olds still would be very beneficial.

4. *Class size reduction.* This court agrees with Dr. Odden’s analysis on rejecting class size reduction to fifteen for kindergarten to third grade. Conceptually, whole-school reform like SFA and class-size reduction to fifteen are alternative programs. If SFA is implemented effectively and works, this is sufficient. SFA reduces class size in grades one through three in reading to fifteen ¹⁶¹⁰children for ninety minutes or for about 30% of the instructional day (298 minutes). This court presumes from the record that the enhanced ninety-minute reading period could be made available if needed after grade three. Reading is the key program. If SFA does not work or is not implemented effectively, overall class size reduction to fifteen for students in kindergarten through third grade is strongly recommended by this court. Unfortunately, this possibility of failure exists because whole-school reforms, such as SFA, depend greatly on faculty skills and enthusiasm.

This court was very impressed with Dr. Finn’s testimony about the effect of small class size shown by the longitudinal Tennessee Star Study. The impact of small classes on educational advances by racial minorities was even more substantial, according to Dr. Finn. (See Odden at 17.) This court will accept the State’s recommendation for reduced class size to twenty-one but only if whole school reform, stressing reading as in SFA, is vigorously and successfully pursued. If not, class size reduction to fifteen from kindergarten to grade three should be mandated promptly. The program cost of reducing class size to fifteen at these four levels could be about \$80 million according to the plaintiffs’ proposals. (Plaintiffs’ proposed findings # 58 and # 77.) While published studies are not extensive on the power of class size reduction, we may not see anything in the research more persuasive for the next decade, if not the next generation. These

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longitudinal studies are laborious and expensive. However, the virtually universal intuition on this aspect, as gleaned from this court’s experience, supports the view that “smaller is better” for early schooling purposes. If more money is invested, this is where this court would put it, ever mindful, of course, of the strains on the facilities’ budgets.

5. *Summer school or extended term.* This court agrees with the recommendations of Dr. Odden (at 18), Dr. Goertz, plaintiffs’ expert, and others that the State fund an extended term or summer school program for all interested children. The cost estimate is \$100 (Odden) to \$102 (Goertz) million. Because many ¹⁶¹¹children in the *Abbott* districts have had difficulty learning to high standards, this extended-term effort will provide for extra opportunity to learn to expected levels and is a worthwhile investment in conjunction with this court’s recommended emphasis on the preschool or early childhood education, and smaller and more intensive reading programs. This court concludes that the extended term program is probably a better educational investment than an extended-day program. The cost of extended term is estimated at \$100 million.

6. *School-based health and social services.* This court adopts the views of Dr. Odden (at 19 to 22) on this supplemental program and incorporates them in the recommendation. Again, as in class size reduction, this court is inclined to perhaps a more generous State financial contribution towards school-based health and social services than Dr. Odden. The need for these services in the *Abbott* districts is manifest and the benefits are undeniable. The DOE eschews this mission as beyond its educational mandate as compelled by law and asserts this task is or should be exclusively within the charge of the State’s public health and social service delivery agencies.

A rethinking of government’s role in this respect and more efficient logistical methods are probably in order. These services should optimally be provided at the school, confidentially and distinct from the school’s educational administration, because as Human Services’ Assistant Commissioner Tetelman

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testified: “That is where the kids are.” This court has observed these programs at Camden High School (including on-site maternity care) and at Woodrow Wilson High School, also in Camden. These programs, when adequately staffed and funded, are designed precisely to overcome the “extreme disadvantages facing children in the SNDs,” which impede educational improvement. *Abbott IV*, 149 N.J. at 179, 693 A.2d 417; *see Abbott II*, 119 N.J. at 369, 575 A.2d 359. And these programs are contemplated specifically in CEIFA’s enumerated DEPA program mandate. N.J.S.A. 18A:7F–18a (includes “health and social service programs”).

^{[6]2}Currently, the twenty-five existing school-site programs (fourteen in the *Abbott* districts) are spliced together by modest grants from Human Services, local district support, in-kind space contributions by schools, and annual grants secured and annually resecured by local personnel. This court has no hesitancy in supporting Dr. Odden’s recommended \$40 million in funding on this score for middle and secondary schools, where the need is probably greatest. The estimated total cost by plaintiffs for school-based health and social services at every level in every *Abbott* district school is about \$126 million (less uncertain collateral sources), or \$300,000 per school, an ambitious number but no doubt sincerely advocated. Of course, any ultimate State funding input would probably and justifiably be mostly non-educational in character, perhaps from Health or Human Services, and not DOE. We note that these programs as currently envisioned also would provide extended-day academic assistance. (See Odden at 20–21.)

7. *Accountability.* This court endorses the consultant’s recommendations on accountability at a total cost of \$24 million. (Odden at 22–25.) Both the plaintiffs and the State recognized the need for accountability mechanisms, both fiscal and academic, as did the Supreme Court in *Abbott IV*, 149 N.J. at 193, 693 A.2d 417. This element is essential to high performance and effective restructuring. Reforms in this context should encourage competition and not reward failure. Lynn Olson & Caroline Hendrie,

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Pathways to Progress, Education Week, January 8, 1998, at 244–45; Eric A. Hanushek, *Making Schools Work: Improving Performance and Controlling Costs* 85–124 (1994).

8. *Security costs.* Unfortunately, testimony about the added security costs in the *Abbott* districts was not articulate at the hearings. This court concludes that the State thought the costs were covered adequately in the proposed illustrative or model school-based budgets, as augmented by continued parity funding. Obviously, any additional security needed in the environment of the *Abbott* schools should not be allowed to eat away at the regular education budget. *See Abbott IV*, 149 N.J. at 172–73, 693 A.2d 417. If the Supreme Court is dissatisfied with the State’s treatment of security costs, the Court could order supplementary funding consistent with the State’s recognition of this reality. “The estimated additional costs for these [*Abbott* district] security measures is \$61 per pupil at the elementary level and \$146 per pupil at the middle and high school levels.” (State’s proposed finding # 91.)

9. *Summary.* The net cost of these supplementary program recommendations is an estimated \$312 million. This cost is net of funding committed by the State for early childhood programs in its illustrative revenue budget: \$200 million in ECPA and about \$86 million in “T & E” and parity funds. This court’s recommendations also include continuing deficit fiscal contributions for regular education by the State to maintain the *Abbott* districts at the spending level of the economically privileged districts, the so-called “parity” funding mandated by *Abbott IV* or about \$246 million for the 1997–98 term. This recommendation is included because this deficit funding by the State is necessary to sustain the whole-school reform proposal. Larger program expenditures than the recommended net \$312 million estimate may be considered by the State or the Supreme Court to reduce class sizes in kindergarten through grade three across-the-board, to augment further school-based social services, and to recognize security costs which can erode regular education budgets.

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VII

THE PRESENTATION ON THE
FACILITIES ASPECT

In *Abbott IV*, 149 N.J. at 186, 693 A.2d 417, the Court recognized that adequate physical facilities are key to achieving a thorough and efficient education. Many school buildings in the SNDs are “crumbling and obsolescent;” 64% of the buildings are over fifty years old. *Id.* at 187, 693 A.2d 417. See also William A. Firestone, Margaret E. Goertz, and Gary Natriello, *From Cashbox to Classroom: The Struggle for Fiscal Reform and Educational* ^[614]*Change in New Jersey* 140–54 (Teachers College Press 1997) (P–36). In general, schools lack adequate space to deliver effective educational programs:

Most schools in the special needs districts lack library/media centers, are physically incapable of handling new technology, are deficient in physical facilities for science, and cannot provide sufficient space or appropriate settings for arts programs. Most schools also lack adequate physical-education space and equipment. There is simply no space in these districts to reduce class size; no place for alternative programs; no room to conduct reduced or eliminated programs in music and art; and no space for laboratories. The State’s new core curriculum standards will only increase the need for capital expenditures to improve and to augment physical facilities. And, as noted, many SNDs will continue to be incapable of providing early childhood programs because of a lack of space to house the additional student enrollment.

[*Abbott IV*, 149 N.J. at 187, 693 A.2d 417.]

On remand, this court ordered the Commissioner of DOE to review the facilities needs of the SNDs and provide recommendations, including proposed means of financing, to address those needs. *Id.* at 225, 693 A.2d 417. The financing plan could not be contingent upon a district’s ability or willingness to raise necessary funds, either through increased taxes or debt. *Id.* at 188, 693 A.2d 417.

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As the Court noted, implementation of the core curriculum content standards may increase facilities requirements. On May 1, 1996 DOE issued these standards to assure the thoroughness of education at the primary and secondary levels. (D–12). The standards set goals in seven core academic areas: visual and performing arts; comprehensive health and physical education; language arts literacy; mathematics; science; social studies; and world languages. Each standard is supported by a set of “cumulative progress indicators” establishing specific expectations for grades four, eight, and twelve. DOE also issued five cross-content workplace readiness standards integrated into all core academic programs: career planning skills; technology; critical thinking, decision-making, and problem-solving skills; self-management skills; and safety principles.

^[615]To effectively implement and monitor progress against the core curriculum content standards, DOE is developing related curriculum frameworks and assessment tools. To date, DOE has released several of the curriculum frameworks including health and physical education, mathematics, and science. Local districts should use the frameworks as guidelines to program development, but their use is not mandatory. The assessment program consists of standardized tests administered at the fourth, eighth, and eleventh grade levels, phased-in over the next six years. *Abbott IV*, 149 N.J. at 162, 693 A.2d 417.

Pursuant to the Supreme Court’s May order, DOE issued *A Study of School Facilities and Recommendations for the Abbott Districts*, (Facilities Report) in November 1997. (DF–1). The Facilities Report consisted of three basic areas: an educational facilities assessment, educational adequacy standards for facilities, and an improvement plan, including a proposed funding scheme. The educational adequacy standards and facilities improvement plan contain only preliminary recommendations. DOE plans to issue final educational adequacy standards in January 1998 after considering this court’s recommendations on supplemental programs.

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A. *Facilities Assessment*

DOE engaged Vitetta Group, architectural and engineering consultants, to perform an assessment of facilities in the twenty-eight SNDs. Vitetta Group had two objectives: 1) to determine the cost of repairing or replacing deficiencies in the *Abbott* schools and 2) to determine additional capacity requirements, in order to accommodate the existing student population in each *Abbott* district. (DF-2). Stephen Carlidge, Director of the Educational Facilities Program for Vitetta Group, planned and coordinated the study. Carlidge has worked with five of the *Abbott* districts (Camden, Irvington, Long Branch, New Brunswick and Perth Amboy) to renovate existing facilities and build new facilities.

^[616]DOE hired Vitetta Group to develop a survey form for completion on each of the 429⁷ schools in the *Abbott* districts, train employees and consultants who conducted the surveys, provide evaluative standards and quality control, compile survey data in an electronic data base, evaluate survey results, and estimate the cost to correct existing deficiencies and provide additional classroom space. DOE did not require Vitetta Group to consider the core curriculum content standards when preparing the survey. Due to time constraints, Vitetta Group and the school districts had only about two months to conduct the study and issue a report.

Vitetta Group developed a detailed survey instrument which was completed by district personnel or consulting architects and engineers appointed by the district. The survey consisted of six categories: general description and program provisions; site characteristics; architectural and structural features; mechanical and plumbing systems; electrical systems; and current code deficiencies. The general description included capacity, enrollment, conformance with the State Technology Plan, age of buildings, and construction types. Surveyors evaluated each building component as either “functional” or “not functional.” Vitetta designed the survey in-

strument so that any “not functional” response required a comment about the nature and extent of the deficiency. The form contained several common criteria which applied to all schools, minimizing subjectivity and facilitating compilation and evaluation of survey results for all twenty-eight districts.

Vitetta Group conducted a training session on September 4, 1997 to familiarize the facility surveyors with the form. As part of the training, surveyors went to a practice site to receive hands-on instruction and promote consistency among surveyors’ responses.

The deadline for submitting completed surveys to Vitetta Group was October 1, 1997. Quality control review by Vitetta Group ^[617]revealed that many surveys were incomplete or incorrect upon first submission; surveys were returned for correction and in some cases, more than once. About 10% of surveys still had errors even after the third submission; however, according to Vitetta Group’s report, such errors did not have a significant impact on the survey as a whole. Vitetta Group then compiled survey results and prepared a summary of findings for each district.

Based on information from the survey summary, 1997–98 enrollment for the *Abbott* districts was 261,738 students. Facilities totalled 35.6 million square feet, or 135.15 square foot per student. The average school was built in 1941 and the average addition was built in 1964. Although the survey revealed that some schools were underutilized, the districts required additional capacity for 49,558 students, or 3137 classrooms, primarily at the elementary school level, to serve the State’s proposed whole-school reform program. (DF-2).

Using the survey data, Vitetta Group estimated the cost of repairing or replacing existing deficiencies, classifying such deficiencies as functional, life cycle or current code. Functional deficiencies consisted of any acceptable “not functional” responses to the survey form; responses were acceptable only if the surveyor provided sufficient explanation for the deficiency. Life cycle deficiencies or annex structures used as one school.

7. The variation with the State’s 420 schools for program purposes is explained by empty build-

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cies reflected those components which were considered functionally adequate but older than expected useful lives. For example, if a boiler was more than fifty-years old, it was considered obsolete and in need of replacement, even if the survey reported the boiler was functioning adequately. In addition, Vitetta Group used conservative life expectancies because of the lack of regular facilities maintenance in the SNDs.⁸ Current code deficiencies were reported separately on the survey; to avoid duplication, Vitetta Group did not include any reported code deficiency that already was considered a functional or life cycle deficiency.

Vitetta Group then determined the cost of repair or replacement using published unit costs of R.S. Means Company. Vitetta Group increased these unit costs by 5 to 10% to reflect the cost of construction in New Jersey. According to Carlidge, this increase was consistent with other published data and Vitetta's own consulting experience. Cost of replacement included the cost to remove any existing fixtures and related installation costs.

Vitetta Group also utilized survey information to determine if a school needed additional classroom capacity to accommodate its current enrollment using the proposed whole-school reform model. First, all school capacities were calculated anew, based on minimum classroom sizes, recommended numbers of students per class, and an assumed utilization rate. The minimum classroom size was determined by allowing twenty square feet per student required by *N.J.A.C. 6:22-5.5*, then adding additional space for activity areas, furniture and equipment, and storage. DOE provided Vitetta Group with the recommended number of students per class. Utilization rates then were applied to students per class, giving flexibility to the estimate and allowing for growth in the student population.

For elementary schools, each existing pre-kindergarten classroom greater than 750

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square feet was assigned thirty students, consisting of two half-day classes of fifteen students each; each existing kindergarten classroom greater than 750 square feet was assigned twenty-one students; and, each existing general classroom in excess of 600 square feet was assigned twenty-one students. A utilization factor of 90% was applied to each class size, resulting in a net 13.5 students per class in each half-day pre-kindergarten session and a net 18.9 students per class in kindergarten through fifth grade. In middle schools, classrooms in excess of 600 square feet were assigned 22.5 students each, with a net class size of 20.25 students at 90% utilization. In high schools, classrooms in excess of 625 square feet were assigned twenty-four students each and classrooms between 425 and 625 square feet were assigned eighteen students each. A utilization factor of 85% was applied, resulting in 20.4 students in the larger classrooms and 15.3 students in the smaller classrooms.

Next, Vitetta Group calculated classroom deficiencies per the proposed model on a district-wide basis. Deficient capacity was calculated by dividing the current enrollment at each grade level by the net number of students per class listed above, then subtracting the number of currently available classrooms. Vitetta estimated that 3137 additional classrooms would be needed to accommodate the current student population, consisting of the following:

School Type	Additional Classrooms
Prekindergarten and Kindergarten	141
Elementary	1644
Elementary/Middle	899
Middle	202
High	235
Special Education	16
Total classrooms required	3137

Finally, Vitetta Group calculated the cost of constructing 3137 additional classrooms, using the following square footage parameters for new construction: 950 square feet for pre-kindergarten and kindergarten classrooms; 800 square feet for elementary and

8. For example, a report on facilities in the Paterson School District noted that "chronic yearly deferred maintenance plans" never were fulfilled, resulting in non-functioning and aban-

doned systems. EDuFAC, *Five Year Long Range Plan for the Paterson Public Schools 1* (March 1997). (PF-12).

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middle school general classrooms; and 750 square feet for high school general classrooms. Vitetta Group then applied a self-characterized⁶²⁰ “grossing factor” of 1.33 to these requirements, to account for walls, ventilation, and other necessary components which occupy classroom space. Cost of new construction was estimated at \$125 per square foot, consisting of \$122 for actual construction costs and \$3 for site development costs. These costs were obtained from Vitetta Group’s existing data base, then compared to New Jersey construction cost data published by F.W. Dodge. F.W. Dodge compiles data from public bids made over the previous twelve months.

Based on Vitetta Group’s study, the total estimate to expand capacity of the *Abbott* schools to comply with the State’s proposal and repair or replace existing facilities deficiencies was about \$1.8 billion. Of that total, about \$437 million is required for additional capacity and \$1.371 billion for repair and replacement. Major components of the \$1.371 billion are \$580 million for architectural and structural repairs, \$288 million for heating, ventilation, and air conditioning repairs, and \$242 million for power and distribution system repairs.

The Vitetta Group survey was extensive; it provided valuable details about the condition of existing facilities in each of the *Abbott* districts. However, due to the limited objectives of the survey, the \$1.8 billion estimate does not reflect the total cost of facilities improvements in the SNDs.

The Vitetta Report states that the following costs were not projected in the \$1.8 billion total:

- General conditions of construction contracts such as bonding, insurance, and other project requirements. These costs may range from 5 to 20% of total construction costs, but typically approximate 5 to 8%.
- “Soft costs,” including design and engineering expenses, bond issuance costs, and

legal and administrative expenses, which approximate 25% of total construction costs.

- Special project requirements such as site acquisition, historic preservation, and hazardous materials clean-up. These costs are difficult to estimate; for example, in many urban districts, parcels owned by the city are sold to the district for a nominal fee. Conversely, available sites may be scarce or contaminated from previous industrial use and require remediation.

- Inflation of 4% per year.

⁶²¹ Estimated contingencies of 15 to 20%, to account for unforeseen circumstances such as market conditions which cause project bids in excess of budget.

To account for these costs, Carlidge testified he would add 35% to the \$1.8 billion estimate, plus any increment for inflation. This would bring the estimate to at least \$2.4 billion based on the Vitetta Group study alone.

Also, due to the limited nature of the Vitetta Group survey, other potential facilities costs were excluded. Vitetta Group only considered the cost of building additional classrooms; if an additional building was required, costs for “core areas,” such as the gymnasium and media center, administrative offices, and small group instruction rooms were not included. Vitetta Group also did not address the adequacy of existing space other than classrooms. For example, completed surveys noted whether or not there was a media center or library. However, if the media center did not adequately serve the needs of the students or if there was no media center at all, the cost of renovating or building a new media center was not included in the estimate.⁹ In addition, the study did not address any new spaces required by the core curriculum content standards.

Moreover, the Vitetta Group study did not address the issue of renovation versus replacement of existing facilities. Dr. Jack DeTalvo, Superintendent of Schools for Perth Amboy, an *Abbott* district, recently

9. For example, in the Paterson School District, only 62% of the schools have dedicated space for a media center (library), and of those spaces, only 3% meet current minimum State standards. Similarly, only 53% of Paterson schools have a

dedicated computer room, of which only 25% meet state standards. EDuFAC, *Five Year Long Range Facility Plan for the Paterson Public Schools* 3 (March 1997). (PF-12).

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worked with Vitetta Group to renovate or replace six schools in his district at a total cost of more than \$100 million. (PF-10). According to Dr. DeTalvo, when a school is over one hundred years old, it often makes sense to replace the existing facility with a new one. One elementary school in Perth Amboy was built in 1897; it did not have adequate space for a playground¹⁰ nor did it have any corridors. Dr. DeTalvo decided to build a new facility because renovating the old facility would not meet the capacity needs of his district. Although the new building cost more in the short-run, the growing student population in Perth Amboy necessitated construction of a larger building which would be more cost-effective to operate.¹⁰

The Vitetta Group study also did not account for changing demographics, using only current data to determine capacity requirements. The survey reflects that most of the capacity needs are at the elementary level; of the 3137 additional classrooms estimated by Vitetta Group, 2684 are in pre-kindergarten, kindergarten, elementary, and elementary/middle schools. Over time, this deficiency should “flow-through” to the middle and high school levels, which eventuality Vitetta Group did not reflect in the survey. Also, based on testimony from school administrators and facilities planners, student populations are growing rapidly in many districts.¹¹

In some respects, however, the \$1.8 billion estimate may be overstated because of certain conservative assumptions used in the survey. Renovation costs were based on the

10. Lee Heckendorn, Educational Consultant from EDuFAC who worked with the Paterson School District, testified a new elementary school building, accommodating 760 students, would cost about \$20 million. Willa Spicer, Assistant Superintendent for South Brunswick schools, testified their new high school, completed in September 1997 and accommodating 1500 students, cost about \$50 million.

11. Dr. DeTalvo testified that in Perth Amboy, the total number of students is about 7800 and growing at the rate of about 200 students per year. On a statewide basis, it is estimated that between the 1992-93 and 2000-01 school years, the student population will grow by 226,000 students. *Abbott IV*, 149 N.J. at 188 n. 30, 693 A.2d 417 (citing Education Funding Review Commission,

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assumption that all buildings would have to comply with the current building code, resulting in total potential compliance costs of about \$607 million. (DF-2). However, not all school facilities are required to meet the standards of the current building code due to grandfather provisions. Proposed N.J.A.C. 5:23-6 of the Uniform Construction Code may significantly reduce code compliance for renovation projects, especially with respect to heating, ventilation, and air conditioning requirements and may reduce consequent costs. (DF-2).

Similarly, Vitetta Group did not consider opportunities for expanding capacity by restructuring space within existing buildings or reconfiguring grades within a school. Currently, the square foot per student in the *Abbott* districts is 135.15, which is consistent with the national average. Yet, in total, the survey shows a shortfall of 3137 classrooms, primarily at the elementary level. Newark, the largest *Abbott* district, has a total of seventy-nine schools at 177.37 square foot per student, well above the average for all districts. Newark schools have excess capacity at the middle and high school levels; however, there is an unmet need of 276 classrooms in the early grades. (DF-2). These statistics indicate significant opportunities for restructuring space and reconfiguring grades within Newark and other *Abbott* districts.¹² In addition, Vitetta Group did not consider trailers or leased facilities currently used by the district to accommodate excess capacity.

With respect to restructuring space, Dr. DeTalvo testified there may be significant

Financing New Jersey's Public Schools 16 (July 1994)).

12. Representatives from DOE also met with three educational consultants about the adequacy of school facilities. The consultants' report stated that “massive underutilization” of space is common to many schools, particularly underutilization of specialized spaces. For example, a chemistry laboratory may only be used two periods a day. The consultants also suggested dual or shared use of existing space such as sharing theater or library facilities with the local community. *Impact of Facilities Upon the Implementation of the Core Curriculum Content Standards in New Jersey's Twenty-Eight Abbott School Districts* 2 (report of meeting held October 22, 1997). (DF-11).

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opportunities for increasing student capacity in existing facilities, primarily when buildings are very old. With the assistance of Vitetta Group, Dr. DeTalvo undertook extensive renovation projects at two Perth Amboy middle schools originally ¹⁶²⁴constructed in 1906 and 1922. First, architects created new space by “infilling” existing light wells; these light wells often exist in buildings that pre-date mechanical ventilation. The new space was used for computer rooms and storage because it was windowless. Second, space was created by replacing boiler rooms on the ground floor with new roof-top systems. Third, classrooms were enlarged by about 8.5% by replacing old ventilation systems and storage cabinets with more modern designs. Fourth, each middle school contained separate large spaces for a gymnasium, cafeteria, and auditorium. By combining the cafeteria and auditorium into a “cafetorium,” architects significantly increased the building’s capacity. All of these improvements added capacity for 175 students without increasing the footprint of the existing structure. (PF-8).

The Vitetta Group survey alone is not a sufficient basis for estimating the cost of facilities improvements in the *Abbott* districts. Carlidge testified that a full study could not have been completed in the time allowed. If Vitetta Group had completed a full study, it would have cost about \$3.5 million, compared with the \$248,000 Vitetta Group had charged and which the State had allotted for the survey performed.

B. Educational Adequacy Standards

In the Facilities Report, DOE defines “educational adequacy” as facilities specifications necessary to achieve the core curriculum content standards. (DF-1). On October 22, 1997 DOE met with three educational consultants to determine which standards, if any, impacted facilities requirements. The State’s consultants were Dr. Emily Feistritzer, President of the National Center for Educational Information, Dr. Bruno Manno, senior fellow of the Hudson Institute, and Alton Hlavin, Assistant Superintendent for Facilities and

Operations of the Arlington, Virginia Public Schools. Hlavin alone testified at the hearing. He had extensive experience developing “educational specifications,” collaborating with educators to translate the requirements of a curriculum into satisfactory facilities.

¹⁶²⁵The State’s consultants discussed each core curriculum content standard separately and its impact on facilities. (DF-11). Generally, these consultants agreed that the standards did not affect facilities needs, with a few exceptions:

- Technology should be distributed into classrooms throughout the school, rather than merely having a centralized computer laboratory. Classrooms must have sufficient space and infrastructure to support technology.
- At the middle and high school levels, space must be made available for performance aspects of the arts.
- A separate gymnasium is necessary at the middle and high school levels.
- At the middle school level, general purpose laboratory space must be provided to support the science curriculum. At the high school level, a separate laboratory for chemistry is required, while other science disciplines, such as earth science and biology, can share the same laboratory.

Based on the consultants’ findings, field experience, and DOE’s own expertise, DOE recommended these minimum requirements for facilities:

1. All schools be connected to a high-speed fiber-optic network and all classrooms be wired for integration of technology into the instructional program;
2. All elementary schools include:
 - a) Adequate classroom space for class sizes of 15 in prekindergarten, 21 in kindergarten through grade 3, and 23 in grades 4 and 5.
 - b) Space or scheduling accommodations for 90 minutes of reading daily for students in grades 1 through 3 in class sizes of no more than 15;
 - c) Toilet rooms in all prekindergarten and kindergarten classrooms;

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d) Cafetorium and/or gymnasium with stage for breakfast, lunch, large group presentations, instrumental music and student performances;

e) Computer room for keyboard and computer instruction; and

f) Media center.

3. All middle schools or elementary schools housing grades 7 and 8 include:

a) Adequate classroom space for class sizes of 23;

b) Science demonstration room(s) with demonstration table and perimeter student areas with water for all students in grades 7 and 8;

c) Cafetorium and/or gymnasium with stage for breakfast, lunch, large group presentations, instrumental music and student performances; and

d) Media center.

4. All high schools include:

a) Adequate classroom space for class sizes of 24;

b) Art room;

c) Music room;

¹⁶²⁶d) Science demonstration room(s) for general science with demonstration table and perimeter student areas with water;

e) Science Lab(s) with gas, water and appropriate ventilation for chemistry and physics;

f) Auditorium with stage for large group presentations, instrumental music and student performances;

g) Cafeteria for breakfast and lunch;

h) Gymnasium with bleachers and locker rooms; and

i) Media center.

[New Jersey State Department of Education, *A Study of School Facilities and Recommendations for the Abbott Districts* (Facilities Report) 17–19 (Nov. 1997).] (DF–1).

According to DOE, “[t]here appears to be no empirical research that directly establishes a cause and effect relationship or correlation between academic performance and the presence, absence or configuration of

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specialized instructional spaces, provided that these facilities provide a clean, safe and functional environment which is conducive to learning.” *Id.* at 16. Several expert witnesses testified they concurred with this assertion. Carlidge testified that the decision to include specialized spaces is up to the individual district; some I and J districts do not have specialized spaces because they, as a matter of educational policy, believe that all programs should be delivered in the classroom or, as enrollments have grown, have converted specialized spaces into classrooms. On the other hand, Carlidge never has designed a new school without specialized spaces for a gymnasium, music room, art room, computer lab, media center, and cafetorium.

Physical classroom sizes were not listed in the Facilities Report. However, based on figures provided by DOE to Vitetta Group for its facilities assessment, “adequate classroom space” is 950 square feet for pre-kindergarten and kindergarten classrooms, 800 square feet for elementary and middle school general classrooms, and 750 square feet for high school general classrooms. (DF–2). Several witnesses involved with new school construction testified these spaces were adequate for the State’s recommended class sizes. For example, comparing these square footage recommendations to those for new construction in Paterson and Perth Amboy, the ¹⁶²⁷DOE recommendations were somewhat smaller but the number of students per class also was smaller. Perth Amboy uses a guideline of 1100 square feet for twenty students in pre-kindergarten, 1165 square feet for twenty-five students in kindergarten, and 850 square feet for twenty-five students in a general classroom. Paterson uses 1000 square feet for pre-kindergarten and kindergarten, 900 square feet for grades one and two, and 800 square feet for other standard classrooms.

Plaintiffs want the State to adopt guidelines for new facilities construction that mirror the guidelines in Perth Amboy and in South Brunswick, an I district. In those districts, separate spaces are provided for an art room, music room, gymnasium, and cafetorium at the elementary and middle school

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levels. Plaintiffs contend that lack of specialized spaces does impact the ability to deliver effective educational programs. Currently, the State requires elementary students to have 150 minutes of physical education class per week. Depending on the size of the student body, an elementary school well may need a dedicated gymnasium to fulfill this requirement rather than an all-purpose room which serves as a gym, cafeteria, and auditorium. Schools also are required to have a separate health unit with a nurse's area. *N.J.A.C. 6:22-5.4(b)(9)*.

Plaintiffs emphasized the need for separate music and art rooms at all levels. Willa Spicer, Assistant Superintendent for Curriculum and Instruction for the South Brunswick¹³ public school district, testified about the need for separate music and art rooms at the elementary level. Core Curriculum Standard 1.3 for Visual and Performing Arts requires all students to "utilize arts elements¹⁶²⁸ and arts media to produce artistic products and performances." The cumulative progress indicator for grade four states that students "[a]pply elements and media common to the arts to produce a work of art." (D-12). Spicer testified that if students are actually to produce art and music, they need a dedicated space, rather than "art-on-a-cart" or a music teacher who travels "room-to-room."

DOE has defined "educationally adequate facilities" in the context of compliance with the core curriculum content standards. The standards set goals for program delivery; however, the standards do not measure student achievement. When asked whether DOE's minimum facilities requirements would enable his students to meet the standards, Dr. DeTalvo of the Perth Amboy school system said that he did not know. He considered the standards only as a set of expectations; he needed the related frameworks and assessment tools to determine if

required programs could be delivered in the current facilities.

C. Facilities Improvement Plan

To conclude the Facilities Report, DOE proposed a facilities improvement plan consisting of a facilities management plan, an oversight plan, and recommendations for construction management and financing. (DF-1). Plaintiffs did not question DOE's proposal; however, recommendations for construction management and financing are only preliminary. DOE admitted that financing is outside of its normal expertise and will rely on the State to provide appropriate financial advice and management for any funding mechanism.

As part of the facilities management plan, each *Abbott* district will be required to submit a five-year plan by January 1999 that ensures

each school building is safe and healthy, in compliance with the Uniform Construction Code, conducive to learning and adequate for the delivery of programs and¹⁶²⁹ services necessary to enable all students to achieve the Core Curriculum Content Standards, and that sufficient instructional space is available within the district to house all resident students.

[*Facilities Report* (DF-1) at 29.]

The district plan should be prepared with the assistance of a facilities advisory board consisting of parents, teachers, school-level administrators, architects and engineers, community representatives, and a staff person from the DOE Program Review and Improvement Office. In conjunction with DOE, the district should explore creative options to satisfy its capacity needs such as extended school years and joint use of municipal and privately-owned facilities. The district also should hire a demographer to perform a five-year enrollment projection to determine if capacity is sufficient. The district then should contract with an educational facilities planner and licensed architect to

13. South Brunswick is an I district which spends \$6899 per high school pupil. See Jenny DeMonte, "Money Isn't Everything," *New Jersey Monthly* 46 (September 1997). This contrasts with the I and J average for parity purposes of

\$8664 for the 1997-98 term, and the State's spending of \$9700 per pupil in the Newark "takeover" district for the same term. See *Abbott IV*, 149 *N.J.* at 192, 693 A.2d 417.

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conduct a study of existing facilities and propose alternatives for meeting the requirements of DOE's management facilities plan. The district must prepare educational specifications, schematic plans, and enrollment projections to submit to DOE as an addendum to the plan. The district plan also must correct all deficiencies revealed in the facilities assessment performed by Vitetta Group.

As part of its oversight plan, DOE intends to develop facilities standards for all schools by January 1998, upon release of this court's report on supplemental program requirements. DOE will review all district facilities plans submitted to assure compliance with the educational adequacy guidelines. On a continuing basis, DOE staff will monitor progress against the plans to assure proper execution.

To determine best practices for construction management and financing in New Jersey, DOE reviewed educational facilities practices in four other states—Maryland, Pennsylvania, South Carolina, and West Virginia. Based on this review, DOE recommended⁶³⁰ the following elements of a comprehensive construction management and financing plan:

1. Long-term planning through a master facilities plan for each district incorporating best practices standards and other options to addressing [sic] facilities needs (i.e., inter-district facilities);
2. Public participation in the planning process;
3. Close participation of state technical staff;
4. Centralized construction management;
5. Central state financial management;
6. Needs-based funding formula which provides aid only for approved capital project costs;
7. Comprehensive mandatory maintenance plan.

[*Facilities Report* (DF-1) at 33.]

David Hespe, Assistant Commissioner for Division of Executive Services, DOE, testified about implementation of these steps to achieve an adequate and efficient facilities

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program. The plan is to phase-in construction over a three-year period, with priority to health and safety projects, early childhood programs, and other required supplemental programs. Hespe indicated that educational specifications will include a model of a prototypical school which incorporates DOE's minimum requirements for facilities.

Rafael Perez, Executive Director of the New Jersey Educational Facilities Authority (EFA), testified about DOE's proposed financing plan which would require the EFA to issue bonds on behalf of the *Abbott* districts. Although this is not the only available funding mechanism, Perez believes this is a good route for New Jersey. Other states have raised funds for local primary and secondary educational construction projects through increases in sales taxes, income taxes, and various legislative appropriations, in addition to bonding.

The EFA, *N.J.S.A.* 18A:72A-1 to -58, was created to assist public and private higher educational institutions raise funds for ⁶³¹construction of dormitories and other educational facilities. The EFA issues bonds in its own name to finance these construction projects; the bonds are secured by a trust agreement under which revenues or other moneys are pledged by the institutions. *N.J.S.A.* 18A:72A-9. EFA bonds are not a debt, liability or pledge of faith and credit of the State. *N.J.S.A.* 18A:72A-10. EFA operations are financed through charging a fee on each bond issue; EFA is not financed through State appropriations.

Under DOE's proposal, *Abbott* districts would issue bonds to EFA through a private placement. The dollar amount of the bonds would be limited to the level of "efficient funding" approved by DOE; funds for any expenditures in excess thereof would have to be raised by the districts themselves. EFA then would issue its bonds in a public offering using the district bonds to secure the debt. EFA does not require statewide voter approval to issue bonds because they are not considered general obligation bonds of the State. Although the State is not obligated legally to provide debt service for bonds issued by the EFA, it essentially is obligated financially and morally because the State's

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credit rating would suffer severely if EFA defaulted on its obligations.

According to Perez, the EFA is a good vehicle for financing construction projects in the *Abbott* districts. Because they are property-poor, *Abbott* districts have great difficulty issuing bonds in the open market; even if they could go to the bond market, the bonds would carry a substandard rating and high interest rate. The EFA has the needed expertise in accessing financial markets, unlike individual school districts which may access the market only once every ten to fifteen years or more. Issuing bonds through the EFA, after pooling underlying bonds from several districts, would reduce duplicative costs of issuance such as attorneys' and underwriters' fees. EFA bonds are rated slightly lower than State general obligation bonds, resulting in a higher interest rate ¹⁶³²of only .1 or .2%. In addition, EFA would obtain bond insurance to insure a high rating if that benefit outweighed the cost. EFA never has had a problem selling its bonds on the open market.

Bond proceeds would be placed with a trustee and invested pending disbursement. Funds would be disbursed to the districts only upon submission of certificates of completion to the EFA and confirmation by EFA personnel that funds have been spent appropriately. Any cost overruns would be absorbed by the EFA. Currently, the EFA does not provide construction management; however, it has done so in the past and would be able to manage construction in the *Abbott* districts with additional personnel. Because all financing costs are the responsibility of the EFA, the only risk to the *Abbott* districts occurs if the construction is substandard or not completed on a timely basis. There is one obstacle to utilizing the EFA for financing construction in the *Abbott* districts; the statute must be amended to allow the EFA to finance projects other than higher education.

As noted, the report by Vitetta Group indicated that facilities improvements in the *Abbott* districts will cost at least \$1.8 billion; including provisions for soft costs and contingencies, the estimate increases to \$2.4 billion.

Debt service on \$2.4 billion over thirty years at an assumed rate of 5.5% is about \$165 million per year.

VIII

ANALYSIS OF FACILITIES ASPECT

This court's analysis on the facilities aspect is based principally on the testimony taken over five hearing days and review of the twenty-five exhibits. The State's Vitetta Group study showed a need for 3137 additional classrooms to service the State's proposed whole-school reform program. These primarily were needed at ¹⁶³³the elementary school level. The total estimated cost to expand the capacity of the *Abbott* district schools to comply with the State's proposal and to repair or replace existing facilities comes to about \$2.4 billion when all relevant costs are projected. This cost related *only* to classrooms. Costs for other "core" components such as gymnasiums, media centers, offices, and small-group instruction centers were not included.

We conclude that these further costs can be established only after a detailed school-by-school evaluation, much more intense than the Vitetta study. The very difficult and site-sensitive decisions on renovation versus new construction further cloud attempted cost estimates for individual districts.

Plaintiffs' witnesses disagreed with DOE's facilities recommendations, primarily because the recommendations did not include separate spaces for all specialized programs. DOE's proposal was relatively incomplete and plaintiff did not offer a viable financial alternative which included facilities requirements for any supplemental programs in the *Abbott* districts.

In accordance with this court's program recommendations, additional classroom space is needed to accommodate three- and four-year olds in full-day pre-kindergarten programs. Based on current kindergarten attendance, an estimated 44,000 three- and four-year olds reside in the *Abbott* districts; at an estimated participation rate in pre-kindergarten programs of 75%, space for about 33,000 students is required. (Odden at

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14.) The estimated cost of constructing these classrooms is \$260.6 million.

This cost was estimated based on DOE guidelines for class size and square footage and cost data provided by Vitetta Group. To accommodate 33,000 students at fifteen students per classroom, 2200 classrooms should be provided. Each classroom is 950 square feet times a “grossing factor” of 1.33, or 1263.5 square feet. ¹⁶³⁴ Vitetta Group estimated the cost of new construction at \$125 per square foot; 2200 classrooms at 1263.5 square feet per room and \$125 per square foot totals \$347.5 million. Given that DOE’s estimate already provides for half-day preschool for four-year olds, total cost should be reduced by 25%, for a net cost of construction of \$260.6 million. Adding this cost to the Vitetta Group baseline estimate of \$2.4 billion, plus an indeterminate amount for “core facilities” costs, a total of \$2.7 to \$2.8 billion for facilities improvements and expansion may well be in order.

The State proposes comprehensive assistance to the *Abbott* districts through construction management and financing. The Educational Facilities Authority, *N.J.S.A. 18A:72A-1 to -58*, could, if amended, be used to secure financing with the State-facility-backed bonding capacity. This would doubtless be considerably less costly than local bond issues, which might never be undertaken anyway in these credit-poor *Abbott* districts. Perth Amboy apparently was an exception—the district was debt-free when the exceptionally vigorous Dr. DeTalvo arrived in 1991 and pursued facilities improvements with the backing of a cooperative school board and a sophisticated architectural consultant.

The facilities assessment conducted by the State points out much of the problem. About 4800 classrooms are needed, if the full-day two-year early childhood program is undertaken (estimated as 3137 additional classrooms projected by Vitetta Group plus 1650 classrooms for three- and four-year olds, recognizing that half-day preschool for four-year-olds is included in the Vitetta estimate). The cost of the proposed improvements, renovations and additions likely will climb to the

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\$2.7 to \$2.8 billion range. This does not include any necessary construction of new buildings. Nor does this estimate allow credit for already authorized capital funding. Any more precision is not possible at this time and on this record.

¹⁶³⁵ CONCLUSION

The recent 270-page national study on “Quality Counts ’98—The Urban Challenge—Public Education in the 50 States” in *Education Week* (January 8, 1998), meticulously describes the national dimension of the problems of urban education, state-by-state. The study fully demonstrates that “urban students perform far worse, on average, than children who live outside central cities on virtually every measure of academic performance.” *Id.* at 9. New Jersey’s big-city (Camden, Jersey City, Newark, Paterson) problems are documented fully in the study. *Id.* at 11, 63, 65, 67, 79 and 204–06.

This court finds that the editors fairly describe the difficulties inherent in the urban education problem when they say:

Many of the intractable problems that plague city schools are deeply rooted in the poverty, unemployment, crime, racism, and human despair that pervade the neighborhoods around them. Too often, teachers and administrators are asked to solve problems that the public and its leaders in statehouses and city halls have lacked the will and courage to tackle.

Some urban districts are rising to meet the enormous challenges before them. Here and there, test scores are climbing, dropout rates are falling, order is returning, and children are learning. Invariably, in these pockets of success we found bold leadership, imaginative initiatives, and extraordinary efforts by individual teachers and administrators.

But the problems still overwhelm the progress. And urban schools are fighting a battle they cannot win without strong support from local, state, and federal political leaders, and from voters and taxpayers outside the cities. If the states, in particular, do not accept this challenge, the continuing national movement to improve schools will fail. Today, one out of every

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four American children—11 million young people—to school in an urban district.

[*Id.* at 6.]

As *Education Week* demonstrates, the problems of urban education are national, not peculiar to New Jersey. The crisis is obvious; the solutions are elusive.

APPENDIX II

(referred to as Appendix A in
Judge Michael Patrick King's Report and
Decision
dated January 22, 1998)

**Recommendations for Resolving
New Jersey Abbott v. Burke IV, after
the November and December 1997 Hearings**

by

**Allan Odden
University of Wisconsin–Madison**

**Submitted to Judge Michael Patrick King
The Superior Court of New Jersey**

December 30, 1997

**Recommendations for Resolving the
New Jersey Abbott v. Burke IV,
Case, after the**

November and December 1997 Hearings

by

**Allan Odden
University of Wisconsin–Madison**

New Jersey is at a cross roads in resolving its school finance system, which literally has been a point of contention for over a quarter of a century. The November/December 1997 hearings in the resolution of *Abbott v. Burke IV* hopefully signal the last few steps in settling the important issues that are involved in this complex and comprehensive case. One could write a book of comments and recommendations. But there is not time for that. What follows is a succinct summary of key issues and my recommendations based on my research, my reading of research, and testimony in the hearings on these issues.

¹⁶³⁷During these hearings, the court was presented with two quite different visions about how to address all of the issues involved. The State essentially presented a comprehensive, K–12 school strategy, with class sizes of 15 for preschool and for reading, supplemented by a half-day of preschool for four-year olds, and a small referral program for social and health services students might need at all school levels. The Law Center presented a much more elaborate approach, which would essentially create full day, full year, community and family schools, with full day preschool for three- and four-year olds, class sizes of 15 for all programs from preschool through grade 3, a comprehensive mechanism to locate an array of health, social, family and nutritional services on all school sites, together with after school homework help at all school levels, and school-to-work, school-to-college and job placement programs for high school students. In short, the court has before it two different visions of the scope of programs to be included in the resolution of what many years ago began as a school finance court case, and of how dramatic improvements can be made in the performance of students now attending schools in the 28 Special Needs Districts (SNDs), for which the system has been found unconstitutional.

I would characterize the differences in the proposals in the following additional ways. The Law Center essentially sees the next step as identifying more, largely non-educational, K–12 related programs, and having the State fund them. Their assumption at this point is that the education program in the I and J districts is the de facto standard, not to be analyzed or assessed at this point, and that the court's job is to identify an array of additional programs, largely social and other supports, that would enhance the likelihood that student achievement would be enhanced if all these programs were implemented. Yes, the Law Center proposed full day preschool for three- and four-year olds, and class size reductions to 15 for students K–3, but it made no recommendations on the regular school program (again taking the I and J suburban strategies as the de facto strategies for the urban ¹⁶³⁸districts as well) and basically argued that in order for stu-

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dents in the SNDs to do well in school—to achieve to the new New Jersey curriculum standards—they need to be surrounded by a series of elaborate non-educational supports. Thus, the Law Center argued that the resolution of this case requires the State to collocate at schools social, family, health and other social welfare type services, nutritional services, homework help services, as well as college and work placement at the secondary level. At this point in the process, the Law Center raised no substantive issues about the I and J instructional program nor whether those strategies and structures—which work with suburban, economically advantaged students—are appropriate for the poor, economically disadvantaged students in the SNDs. The State took an entirely different tack. The State took seriously the shortcoming of the original proposed school model in CEI-FA, which was not only not related to any effective model for students in the SNDs but also not related to any effective school model for any students, and decided to identify a comprehensive, whole school model that was specifically created for the particular needs of economically disadvantaged, largely minority students in urban schools, essentially the vast bulk of students in the SNDs. By taking this approach the State also implicitly concluded that the specific educational and program strategies in the I and J districts would not be appropriate for the students in the SNDs and so sought to determine how the average level of money in those districts, now also the average level of base money in the SNDs, could be used but in the service of a comprehensive school program designed specifically for SNDs' students.

In addition, the State has taken the position that the real purpose of the 27 years of litigation over New Jersey school finance is not just about providing more money to some districts, though money is certainly central, but it is about how to design an education system that can be successful in teaching New Jersey's students, particularly those in the SNDs, to the State's curriculum and student performance standards. More specifically, the State's 1639 approach is grounded in an elementary school strategy that has a

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specific, comprehensive, and highly successful approach to teaching students how to read, write and communicate effectively by the time they complete grade 3. Put differently, the State's proposal has an effective literacy program at its core, and nearly everyone in education, as well as most policy-makers, understand that unless students can read and write proficiently by grade three it is very difficult for them to perform well in any subject at any subsequent year of school. Further, the State's proposal also has a proven effective elementary school mathematics program that accompanies the reading program, so their proposal is designed explicitly to produce proficiency in both literacy and numeracy by grade 3 for all SNDs' children, and thus lay the needed foundation for all subsequent learning.

The fact is that a good reading and mathematics program cannot be assumed, nor would the reading and mathematics programs in the I and J districts likely be very effective in the SNDs. All the social supports in the world will not help students read and compute unless a solid reading and mathematics program drives the early elementary school curriculum. If there is one area in which the research center with which I am affiliated agrees it is that the curriculum and instruction programs is what matters the most in terms of student achievement; all other issues are secondary, even for students in high poverty urban schools. So the State has at least implicitly decided that now is not the time to just add non-educational programs and to get to instruction later, but that now is the time to rebuild "from the ground up" the whole notion of what an effective elementary, middle and high school is in the SNDs districts and to cost out that model, and then to compare those costs to what is considered across the country a very generous budget—the average spending in the I and J districts. Moreover, State testimony established that, under current parity requirements, any revenues provided to the SNDs that were not needed to fund the proposed school design would stay in the local school, i.e., would not be taken back by the State.

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¹⁶⁴⁰Largely because of its focus on curriculum and instruction, particularly in reading and mathematics, the decision to propose a comprehensive, cohesive, whole school effective model as the basis for considering education costs, and the link to a school finance system, I generally support the approach taken by the State but, as indicated below, I would augment it with a more ambitious set of support programs, though not as ambitious as those proposed by the Law Center.

The State's approach to education and school finance reform is one that I have addressed in several of my writings during the past several years. In a recent paper, my colleague at the University of Wisconsin-Madison, William Clune, and I (1997) argue that traditional school finance structures, such as those in New Jersey and all other states, are aging and in need of re-engineering. Moreover, in a forthcoming book entitled *Funding Schools for High Performance* (Odden & Busch, 1998), I argue that school finance funding levels should be determined by first starting with an effective whole school design, that school finance structures and funding levels should start with what works at the school level and provide to school sites funds to cover the costs of those schoolwide strategies. Thus, my professional opinion is that the approach taken by the State, if fully and faithfully implemented, would represent the cutting edge of re-engineering school finance to the purposes of standards- and school-based education reform, the objective of which is teaching all students, including low income students, to high standards.

Thus I would recommend the following:

1. *Provide the SNDs with the average spending of the I and J districts during the 1997-98 school year, with at least inflationary adjustments in subsequent years. Rule explicitly that this is the base funding; put another way, base funding would continue to include what is called "parity" funding this school year. Of course, the Supreme Court must decide whether future parity funding for SNDs means the amount per pupil in 1997-98 inflation ¹⁶⁴¹adjusted, or whether parity funding must track spending of I and J districts every year.*

2. *Require schools to adopt some version of a proven effective, or likely effective, whole school design as the basis for using those dollars, with the Success for All/Roots and Wings program the de facto or presumptive elementary school model. The Success for All/Roots and Wings school model turns out, at this point in time, to be the most expensive school model in the country (Odden, 1997), so if this is the de facto model, all other school models should be affordable as well, given the above base budget.*

In this light, it simply is an exaggeration at best to say the State, by offering Success for All/Roots and Wings, is trying to propose a school finance and education reform "on the cheap." The State not only picked the most expensive whole school model that currently exists (Odden, 1997; King, 1994), but also they expanded every element of the model. For example, the standard model assumes a class size of 25, while the State proposed a class size of 21. The standard model assumes four tutors for a school of five hundred with nearly all students eligible for free or reduced lunch; the State model proposes 5.5 tutors. The standard model assumes a full day kindergarten but does not require any preschool, while the State model proposes a half day four-year old preschool program (which I think should be expanded but it nevertheless is more than the standard Success for All/Roots and Wings model). The standard model assumes a part time family liaison or a full time para-professional parent liaison, while the State model not only proposes a certified professional as the family liaison, but goes beyond that and proposes a full, five member family, health, and social services team. The standard model assumes no technology but the State model includes substantial technology. The standard model assumes a full-time, schoolwide instructional facilitator, and the State model not only proposes that position but a technology coordinator as well. The standard model assumes about \$65,000 for professional development and materials, while the State has proposed nearly twice that amount. So the State ¹⁶⁴²has taken the best and most solid, research-proven effective, urban district elementary school model in the country and enhanced nearly all its key features. The

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proposal is a strong, expensive, substantive proposal which could serve as a model for the rest of the country.

Further, most of the elements of the proposed Success for All/Roots and Wings model can be found in some if not many of the I and J elementary schools, so the program can legitimately be simultaneously considered both a regular education program (reflecting I and J practices) and a supplemental program, as plaintiffs' expert Dr. Margaret Goertz so recognized. Many I and J districts have instructional facilitators, which is an element of the proposed model. Many I and J districts have some type of reading tutors, often Reading Recovery tutors, and individual tutors are part of the proposed model. Many I and J elementary schools have full day kindergarten and some amount of pre-school for four-year olds, which are parts of the proposed model. Most have substantial technology and a technology coordinator. Some even have family outreach persons, which also is part of the proposed model. While I doubt that any I and J school has the Success for All/Roots and Wings model, because it is a model explicitly designed for urban schools with high concentrations of low income and minority students, the point is that the model includes many elements that today are part of the regular elementary school program in I and J districts, which is an issue that emerged several times in the court hearings.

Further, despite these augmentations of an expensive model, and despite costing out all staff at the salaries of the I and J districts (i.e., salaries above what SNDs actually pay) the illustrative school budget shows that a typical school of five hundred students would still have around \$400,000 in additional unallocated resources to target to additional needs. If the court were to mandate that parity money has to remain in the system, which I would recommend and which the Commissioner's testimony so stated was the intent of the State, then the question is whether these dollars are ⁶⁴³simply excess or whether there are reasonable ways they could or should be used. I would argue the latter. First, convert the money to professional staff slots. Following the approach of

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Goertz in costing out the Law Center's plan, use a salary figure of about \$40,000, or about \$47,200 for salaries and benefits; this amount equates to about 8.5 professional slots (\$400,000 divided by \$47,200). So how could those teacher positions be used? Well, use could vary by school. Schools could hire an art, music and physical education teacher, if they wanted those specialists, and wanted to use their teaching time as a way to provide "prep" time for the regular classroom teachers. They could reduce class sizes to 15 in grades 1-3; that would require another 3 teacher slots. Or those three teacher slots could be used for more tutors, if that were a more effective way to insure that all students achieved to the curriculum standards. That would leave 2.5 teacher slots left. Those could be used for either special education requirements not covered sufficiently by the inclusion and neverstreaming approach of Success for All/Roots and Wings, or for ESL services to limited English proficient students. In short, the \$400,000 is not superfluous money; it could and should be used for other important school needs, some not covered by the proposed model, some perhaps required by the large number of State curriculum standards, and some for specific needs that would vary by school.

The fact that there is sufficient money in the I and J average budget to fund such an elaborate and relatively high cost school program should come as no surprise, and did not come as a surprise to me. First, New Jersey is one of the highest education spending states in the country, and the budget provided to the SNDs is the average of the highest spending districts in the State. So the base budget, by most comparative standards, is high. Second, as I and others have shown in many recent studies (Miles, 1996; Miles & Darling-Hammond, 1997; Odden, 1997; Odden & Busch, 1998, forthcoming), many traditional uses of resources— e.g., large numbers of education specialists working outside the regular classroom, instructional assistants, assistant principals—⁶⁴⁴appear to be ineffective and inefficient use of resources, and new school strategies and designs often reallocate these resources to different and more productive purposes. Given the high budget in the SNDs (the I and J budget),

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there simply are more of these resources in the typical school and none of these resources are used, except for instructional aides in pre-school and kindergarten, in Roots and Wings/Success for All or most other whole school designs either. Thus, I would have expected substantial opportunity for large scale resource reallocation in the SNDs' schools, given the high overall budget, and that is what the illustrative school budget in the State proposal shows.

Further, the I and J average budget per pupil provides the SNDs even additional possibilities for purchasing more resources. Recall that the illustrative budget proposed by the State used the average salaries in the I and J districts as the salary for each professional staff. Even with those salary levels, there was still \$400,000 in unallocated funds in the illustrative budget. But, the actual salaries in the SNDs are below those in the I and J districts, so the illustrative budget actually overestimates today's costs of implementing the State's proposed whole school design. If the proposed design were costed at the average actual salary of the SNDs, there were be additional unallocated funds, over and above the \$400,000. These dollars could be used to raise teacher salaries in the SNDs, and might best be used for that purpose. They also could be used to hire more teachers, again to reduce class size or to provide other services. The point is that the actual dollars provided to an average SND elementary school not only are sufficient to fund the expanded Success for All/Roots and Wings program, but also provides an unallocated sum of dollars that substantially exceeds \$400,000, allowing such schools to finance additional strategies complementary to the whole school design.

As was also clear by the State proposal, schools also could select models different from Success for All/Roots and Wings, and there are several possibilities that could include Comer Schools, Accelerated⁶⁴⁵ Schools, Coalition Schools, several other models that are part of New American Schools, Edison Schools, ED Hirsch Core Knowledge Schools, etc. (see for example, Comer, et al., 1996; Finnan, et al., 1996; Herman &

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Stringfield, 1997; Hirsch, 1996; Lamon, et al., 1996; Sizer, 1996; Stringfield, Ross & Smith, 1996; The Edison Project, nd). The funds should be sufficient for any and all of these models.

In addition, the State said that schools could propose their own designs. I would add to that that such "home grown" proposals would have to identify research support for each of their key elements and programs. For example, Fashola and Slavin (1997) and Herman and Springfield (1997) have recently produced a research summary of effective and replicable programs, that range from schoolwide strategies such as Success for All, Accelerated Schools and Comer Developmental Schools, to reform networks that focus on particular grade levels or subject areas (such as mathematics or writing), classroom organization and management strategies that can be used with a variety of specific curriculum (such as cooperative learning, non-graded classrooms), and curriculum specific programs such as DISTAR reading, reciprocal teaching (reading), cognitively guided instruction (mathematics), and Chicago Math. Most of these programs are both part of the regular instructional program and provide supplementary services for slower achieving students from low income backgrounds. The point is that each elementary school needs to identify some cohesive set of academic programs that research has shown to be replicable and effective in helping elementary students in urban districts learn to the rigorous standards of the regular curriculum and instructional program.

At the middle school level, sites should also need to identify their overall strategies for the regular program, as well as adopt effective supplemental academic programs. Again, Fashola and Slavin (1997) summarize the best of what is know about such programs, and their per pupil costs are similar to those for elementary students. In addition to these programs, there are ⁶⁴⁶several suggestions for the overall organization and structure of effective middle schools (Carnegie Council on Adolescent Development, 1989; Superintendents Advisory Task Force on Middle Schools, 1989). Further, Slavin and his Johns Hopkins Center have devel-

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oped both a middle school version of Roots and Wings and a different middle school model, called Talent Development Middle School. In addition, each of the New American Schools designs offer middle schools models (Stringfield, Ross & Smith, 1996) as do Hirsch (1996),Sizer (1996) and the Edison Project.

At the high school level, sites need to engage in the same process of selecting high quality, proven effective programs that help high school students achieve to high State standards. Most individuals suggest that in addition to the core curriculum, supplemental high school strategies could include smaller alternative schools, some strategy to reduce secondary school size (Lee & Smith, 1997), school to work programs, and school to college programs. In nearly all instances, though, these programs can be funded with the regular high school per pupil dollar budget. In terms of the core curriculum, research is showing that a "constrained" curriculum, i.e., one that requires students to take academic courses produces higher levels of academic learning (Lee, et al., 1997) and that all students can learn such curriculum if it is started early and taught at an appropriate developmentally rate (Smith, 1996; White, et al., 1996). Slavin's center has created a Talent Development High School Model, which breaks large high school buildings into smaller independent high schools is showing significant promise for success, and high school models also are offered by New American Schools (Stringfield, Ross & Smith, 1996) and at least Hirsch (1996),Sizer (1996) and the Edison Project.

Alternative schools generally are small educational programs (usually 200–300 students) created for students who have difficulty with the more impersonal environment of the typical large high school. Many alternative schools cater to students who have a combination of learning, behavior, and family problems and need a supportive learning environment. The small size helps alternative schools provide a more "personalized" educational environment. Teachers in alternative schools tend to teach as well as work with students on their non-education prob-

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lems. Alternative schools usually have their own physical sites, different and away from the high schools from which they receive the bulk of their enrollment. Research shows that alternative schools produce considerable success (Raywid, 1994).

3. *Full day kindergarten*, Research is very clear that full day kindergarten for students from low income backgrounds has a positive and significant impact on student academic achievement in the early academic years (Carnegie Task Force on Learning in the Primary Grades, 1996; Slavin, Karweit & Madden, 1989; Slavin, Karweit & Wasik, 1994). I would recommend that full day kindergarten be provided and funded by the State.

Most states that allow districts to provide full day kindergarten finance the program by providing the average costs for the extra half day, i.e., by letting districts count students as 1.0 rather than 0.5 students for the school aid formula. The State, however, has proposed a somewhat complex and bizarre way to cost out and fund the additional half day of kindergarten. First they argue the State should cover only so-called marginal costs—the extra staffing and materials. This would be fine if only 2–3 classes were affected, but the State is expanding all four kindergarten classes and adding preschool as well. These are major program expansions and need to be costed with average rather than marginal costs. Thus, I would recommend that the State finance a full day kindergarten program simply by allowing districts to count a kindergarten child as a 1.0 pupil (as compared to 0.5 for a half day program) for the regular school finance, foundation program.

This method would cost about \$95.3 million (22,000 kindergarten children times \$4332, half the foundation amount of \$8664) above current funding for half-day kindergarten.

4. *Full day, preschool for children age 4 and age 3*. Although the State recognized the positive impacts of preschool programs on low income children aged both 3 and 4, they only proposed a modest, half day program for four year olds. This recommendation should be strengthened to a full day program for all children aged 3 and 4, whose

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parents want them enrolled in a program. Research is very clear that high quality, pre-school programs for students from low income backgrounds have discernible, positive, and significant impacts on student academic achievement in the early academic years (cites in addition to those provided by Barnett at the hearings: Carnegie Task Force on Learning in the Primary Grades, 1996; Slavin, Karweit & Madden, 1989; Slavin, Karweit & Wasik, 1994). Further, because these programs increase employment, decrease welfare, decrease crime and decrease other socially non-desirable behaviors in the later adult life of children served, these programs have large positive benefits versus costs. This is precisely the kind of supplemental education program in which New Jersey should make significant investments; **long term all costs will be more than returned.**

If the Court decided from the record in the court hearings that there is insufficient evidence for this recommendation, it could require a full day of preschool just for four-year olds, or a full day of preschool for four year olds and just a half day for three-year olds.

Although the federal Head Start program could possibly provide some funding for this program element, Head Start usually provides only a partial day program and funding has been insufficient to provide a program that meets standards for a high quality, effective program (Carnegie Task Force on Learning in the Primary Grades, 1996). Funds for this supplemental program should be sufficient for a program that meets either rigorous New Jersey early childhood education program standards or the standards that have been developed by the National Association of Early Childhood Education.

It turns out that New Jersey has developed a model early childhood education program that meets high standards. It began in 1969 in the Kean Administration, called the Urban Early Childhood Initiative, and was implemented in Jersey City and Newark. It continued in the Florio Administration, renamed the Good Start program. My understanding is that the program also was continued at the

beginning of the Whitman Administration but funding for it has been decreased or eliminated recently. I believe the Early Childhood Group of the NJ Department of Human Services has conducted evaluations of this program and found it to be quite successful. In short, New Jersey already has developed an effective programmatic approach for high quality, early childhood education for children aged 3 and 4 in urban districts; I would suggest that a program build on and scale up this initiative.

In terms of funding, it is my understanding that during its Good Start version, districts simply were able to count every child enrolled in the program as 1.0 pupil in the regular foundation aid program, and that this provided sufficient funding. Indeed, many states across the country that are creating and funding early childhood programs for low income 4 and 3 year olds fund the initiatives by simply including such students in the pupil counts for the regular, general state aid program. I believe the Early Childhood Group of the NJ Department of Human Services has specific cost data, which the court might seek at some time. My belief is that the cost estimates will be in the same ballpark as simply including the children so involved in the district's pupil count for the foundation aid program.

Thus, the cost of this recommendation would be \$286 million (\$8664 times 22,000 four year olds plus \$8664 times 22,000 three year olds, times an estimated 75 percent participation rate).

Thus, the total extra costs for these early childhood recommendations—full day preschool for children aged 3 and 4 and the other half day for a full day kindergarten—would be \$181 million (\$95.3 million for full day kindergarten plus \$286 million for preschool for children aged 3 and 4, minus the \$200 million in 1965 ECPA money which the State claims is already being and will continue to be provided to the SNDs).

5. *Re class size reduction to 15.* I basically view whole school reform and class size reductions per se (i.e., in and of themselves) as alternative programs; you do one or you do the other. You do class size reductions if you want to bet simply on lower class size

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and use current school strategies; you do whole school reform if you think elementary schools for urban kids, which do not work, need to be rebuilt from the ground up, usually including only targeted class size reductions, such as for reading in Success for All/Roots and Wings.

But first let me provide a short summary of my version of the research on class size reduction. The first review of the class size research was published in 1979 by Glass and Smith. They conducted a “meta” analysis of all studies. They concluded that smaller class sizes mattered, i.e., produced higher student learning, but not until class sizes were lowered to 15.

Subsequently, both Bob Slavin (1986, 1989, 1990) and I (Odden, 1990) conducted a re-analysis of their work. We both did essentially the same thing and came to the same conclusions. First, we said that it was not wise for Glass and Smith to have included all studies in their review—studies that had good experimental controls (so you could trust their findings) and those that did not. Second, therefore, we threw out all the studies that had no controls, or put differently, we retained only those studies with good controls, and which focused on student academic achievement as the outcome variable. Third, with that smaller set of studies, we found that there was no study with actual class sizes of around fifteen that produced improved student achievement. What we found was that class sizes of 25, 20 and 15 produced virtually no impact on student learning, but that very small class sizes—namely one-to-one tutoring—did produce effects and quite large effects. But when all studies were analyzed together, the large effect of the tutoring combined with the minimal or no effect of 1651the other studies resulted in an “average” effect beginning to emerge around class sizes of fifteen. Since there were no studies of around fifteen that actually produced a student achievement effect, this finding was actually a statistical artifact. So we concluded that the class size studies that we had documented achievement effects only for one-to-one tutoring. None of these studies, moreover, were true experi-

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mental designs with random student assignment to large or small class sizes, so even this research base was a bit “light.”

Then in the 1980s both Tennessee and Indiana conducted large scale, experimental studies of class size reductions (Achilles, 1996; Achilles, Nye & Zaharias, 1995; Achilles, Nye, Zaharius & Fulton, 1993; Finn & Achilles, 1990; Finn, 1996; Finn, n.d.; Folger, 1992; Tillitski, 1990; Word, 1990). The Tennessee STAR study had three treatments: reduced class sizes of 15, regular class sizes of 25 with an instructional aide, and regular class sizes of 25. The Indiana Prime study had class sizes of 15 and regular class sizes of 25. Both included several thousand schools, and randomly assigned students to large or small classes. The achievement effects measured were only for mathematics and reading, in terms of the published studies that I have read. But, these are the kinds of studies one wants in order to determine an effect of some treatment—in this case, small class size.

The results were robust. Students in the class sizes of 15 achieved at a higher level—about 1/4 of a standard deviation—not a tremendous improvement but a modest improvement. Class sizes of 15 with an instructional aide had a small but barely discernible improvement in performance, suggesting that adding an instructional aide in a regular classroom produces little if any achievement effect. The conclusion: reducing class size to 15 in grades K–3 could boost performance.

The results showed, however, that the achievement effect came after the kindergarten year, i.e., achievement rose in grades 1, 2 and 3, after the small kindergarten class size, but the small grade 16521 and 2 class sizes did not produce additional achievement bumps. This reality led some analysts to argue that the studies showed only that reducing class size to 15 in kindergarten is what these studies showed to be effective. It should be noted that kindergarten class sizes of 21 are included in the State’s proposals, together with an instructional aide that would provide a student-adult ration of 10.5 to one. Alternatively, the resources for the aides could be traded, pretty much even-up, for the addi-

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tional teachers needed to reduce class sizes to 15 (without an aide) for all SNDs' kindergarten classes.

But there is more to say. First, longitudinal studies are showing that the impacts might be larger than the original analyses, because over the four years of small classes, some students left the large classes (so they were lowered in size) and some students joined the small classes (so they were larger). When these anomalies were removed from the data, the achievement impacts rise sometimes to 1/2 a standard deviation, a fairly substantial impact. Second, in both the original and subsequent analyses, the impacts on minority students were larger, closer to 1/3 a standard deviation and then subsequently to above 1/2 a standard deviation. Third, analyses by Ron Ferguson shows that the impact on minorities, largely African-American students, do not begin to appear until grade 2, which argues more strongly for class size reductions for at least kindergarten through grade 2. Further, research is showing that the small class size effect on achievement is sustained into the middle grades, i.e., students in the small classes not only performed better in elementary school, but also are achieving at higher levels, compared to their peers in larger classes, in middle school. Although these latter comments are based only on the Tennessee study, they are strong findings. Their strength comes from their evolving from a real, randomized experiment. There weakness is that they derive from only one study.

On the other hand, there are some less optimistic reanalyses of the STAR study (Hill & Holmes-Smith, 1997). Interestingly, ⁶⁵³these authors conclude that class size reductions per se produce only modest impacts on student achievement (a 0.2–0.4 standard deviation effect size), and that “other strategies,” costing a similar amount as class size reductions, produce much larger effects—0.5 to 1.0 standard deviations. Interestingly, these “other strategies” are an Australian version of the Success for All program, called the Early Literacy Project, which employs a school facilitator, Reading Recovery tutors, and a focused, comprehensive, specific early

literacy curriculum program. Finally, the U.S. Success for All/Roots and Wings programs produces similarly large effects (Slavin, 1994; Slavin, et al., 1996).

In short, I do not recommend a separate and additional program for reducing class sizes below 21 because:

- the effect of small class sizes per se is modest
- assuming the parity money remains in the system, which I recommend and the State also proposed, there is sufficient unallocated money in the illustrative school budget that schools could deploy to reduce class size, so a separate and additional pot of money is not needed. Conversely, if the court wanted to accept the State proposal and *also* mandate smaller classes, it could decrease the \$400,000 by the cost of three teachers needed to reduce class size to 15 in grades 1, 2 and 3.
- the Success for All/Roots and Wings program reduces class size to 15 or less in the most important subject, reading, and the program produces an overall effect that is 2–4 times larger than that of class size reduction per se (Hill & Holmes-Smith, 1997; Slavin, 1994; Slavin, et al., 1996).

6. *Summer School.* I also would recommend that the State include some type of summer school program. Since the children in SNDs' schools have difficulty learning to high standards, every effort should be made to provide them the extra time needed to learn to expected levels. Summer school for many students would be well worth the investment. As I recall, Goertz costed such a program at about \$100 million.

7. *School-Based Youth Services.* Finally, both the State and the Law Center proposed to address some element of the non education needs of students in the SNDs, the State through a single person referral program and the Law Center through turning all schools into comprehensive family and community schools. My conclusion is that the State proposal was too lean and the Law ⁶⁵⁴Center proposal too ambitious. I would propose something in-between, i.e., some strategy to have both a social service provision and social service referral program at or near each school site. Students in the spe-

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cial needs districts need to have available at or near the school site an array of social services that help them deal with the health, family, and other non academic issues that impact negatively on their academic performance. There is an emerging consensus that the organizational structure for such services is a location on or near school sites that provide for "one stop" shopping for such services (Adler and Gardner, 1994; Carnegie Task Force on Learning in the Primary Grades, 1996; Kirst, 1992). The idea is not to have the education system fund all of the services but for the education system to provide an organizational arrangement in which the various social services, usually funded with regular federal, state, and country resources, are provided at one place in or near school sites. The education system would provide a coordination and referral function, as well as a case management function, in which a student would have a case manager orchestrate accessing the multiple services required—health, family, social, etc.

Fortuitously, New Jersey already has created a strategy for this type of social service provision in the special needs districts. The program is called School-Based Youth Services; it is run out of the Department of Human Services. It has been evaluated as highly successful, is part of an ongoing evaluation by the Annie Casey Foundation, and has been replicated in Kentucky, Iowa, California and the Beacon Schools in New York. This program was discussed at length in the recent court hearings.

The secondary program makes all students in a school eligible, provides services that would be included in extended day programs, and provides as core services:

- mental health and family counseling
- preventive and some primary health care
- employment services
- substance abuse prevention and counseling
- information and referral
- after school homework help
- after school and evening recreational programming.

Additional programs provided depending on need include:

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- in school child care for pregnant teens
- family planning
- parenting education.

This New Jersey program is recognized throughout the country and has received the Harvard Kennedy School Government Innovative Programs Award. It is an approach to school-based youth services that deserves to be scaled up and expanded to all schools in the special needs districts.

New Jersey also has created an elementary version of School-Based Youth Services, which provides:

- mental health and family counseling
- preventive and some primary health care
- an elementary version of substance abuse prevention and counseling
- parental outreach
- after school and evening recreation
- homework help.

In the approximately 25 schools sites where these programs exist, they have been funded with a fixed amount of money at each school site totaling about \$200,000 in State funds and then \$25–50,000 of in-kind school services, for a total of \$250,000. But this level of funding allows a full program for a school of only about 1200 students, or about \$200 per pupil. For larger schools, the program funding needs to be larger and should be based on a per pupil amount rather than a fixed amount by site that does not vary by size of school. Further, as the program provides the full array and especially evening programs and services, additional funding for janitorial and operational services are needed. Thus, a good approximation of the type of funding needed for the full program is in the neighborhood of \$300 per pupil, which is close to figures estimated for such programs in the court hearings.

This level of funds provides largely for the coordination of these programs, case management, and for some direct provision. But ⁶⁵⁶the bulk of the funding for the actual social services derives from governmental social services department funds already in the system; the objective of this program is to have the individuals who provide such services be located together in offices on or near

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school sites so students can access the services by going to one location in or around school.

I would recommend this program only for middle and secondary schools, largely because the family and health team in the proposed Success for All/Roots and Wings elementary program provides a similar set of services, through the Family Health team (which, as I recall, includes a social worker, psychologist, nurse, family liaison and guidance counselor). Should elementary schools want the New Jersey elementary School Based Services program instead of the Success for All/Roots and Wings Family-Health team, they could use the funds for that purpose.

Thus, the cost of this recommendation would pertain only to secondary school students. Assuming about 133,000 grade 7–12 students, at \$300 per student, **this recommendation would cost about \$40 million.**

8. *Accountability.* Few districts in New Jersey or across the entire nation performance manage their education system within an accountability structure. Yet, accountability matters; although many might argue that schools do not need to be held explicitly accountable for results, people who understand performance management would argue that accountability is critical for any organization, including schools, to become high performance organizations—which is the long term goal for all schools in the special needs districts. Indeed, emerging research shows that accountability is a key element of effective restructured schools (Joyce & Calhoun, 1996; Newmann & Wehlage, 1995; Odden & Busch, forthcoming, 1998; Wohlstetter, Van Kirk, Mohrman & Robertson, 1997).

A full-fledged accountability system would require:

- core curriculum content standards
- student performance standards
- a testing system measuring performance to the curriculum and performance standards
- school-based incentives for improving student performance
- a phased intervention program for schools not improving performance, leading in the

least successful site efforts to some type of school reconstitution.

Designs for school-based performance awards can vary in their specifics but should follow some common, general guidelines (Odden, Heneman, Wakelyn & Protsik, 1996; Odden & Kelley, 1997). Emerging research shows that these programs can be designed in ways to add an extra motivational force for teachers in schools to improve student academic achievement, including schools in urban communities (Kelley & Protsik, forthcoming; Heneman, forthcoming; Kelley, forthcoming).

Ongoing and new accountability programs have the following design features:

1. Student achievement in the core academics—reading, writing, mathematics, science, history/social science—forms the core of the performance measure. So student achievement on a state test in these subjects would constitute 75–80 percent of the performance measure.
For illustrative purposes, assume last year's composite performance measure for a school was that 40 percent of students were achieving at or above proficiency.
2. Each school competes with itself and specific targets are set for annual improvement. The most straight forward way to set a target is to specify that the performance measure to qualify for an award must be a certain percentage greater than the previous year, or so many percentile points higher. Sometimes the performance measure is linked to a proficiency standard, and the target is linked to closing the gap between the actual score and the proficiency standard.

For illustrative purposes, assume the proficiency standard is 85 percent. Then the State might set a target of improving the gap between actual performance (40 percent) and proficient performance (85 percent) or 45 percent points, by five percent each year, or 2.25 percent points (45 point gap divided by 20). So the target for this year would be $40 + 2.25$, or 42.25 percent. This approach has all schools performing at proficiency over a twenty year time period, but making improvements every year.

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Performance measures have to be calculated carefully, capturing improvements of students at the bottom end as well as the top end, including students with at least mild disabilities as well as students who speak a language other than English, and making appropriate adjustments for student mobility among schools.

3. Schools are eligible for incentive awards if they meet or exceed their improvement targets. Typically, the award is a \$1000 bonus for each professional staff ¹⁶⁵⁸member in the school, and about half that for each classified staff member. A second tier award often is also provided at half the above amounts for schools that meet or exceed 75 percent of their improvement targets.
4. Schools that consistently do not improve are first put on a "watch" list and then subject to intervention and sometimes take over and reconstitution. The Distinguished Educator program in Kentucky is an exemplar. Schools put on "watch," actually called "schools in decline" in Kentucky, are provided a full time distinguished educator for one year; the role of that individual is to help the school identify strengths and weakness and to design a dramatic improvement plan. Though schools do not want to be declared "in decline," those that have report superb experiences with their distinguished educator and in the first cycle of awards, three-fourths of the schools in decline qualified for an incentive award in the next cycle, showing that the distinguished educators were quite successful in turning schools around towards improvement.

The costs of an adequate school based incentive program is approximately 1–2 percent of a district's operating budget, which in New Jersey could be 1–2 percent of the base spending about of \$8500, or \$85–170 per pupil.

The total cost of such a program, at \$100 a pupil, would be **about \$24 million**.

Summary

Thus, my recommendations and their extra costs would be:

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1. Continue parity funding and provide each SND a total of \$8664, inflation adjusted in future years, for each student.
2. Require each school to adopt a comprehensive whole school design, with the Success for All/Roots and Wings the presumptive model for elementary schools. Allow elementary, middle and high schools to adopt other designs, but if they do so, require them to provide research based evidence that their adopted or created design shows high promise for producing student achievement results.
3. Provide full day kindergarten for all students, funded by counting all enrolled children as 1.0 pupil for the district's pupil count used for the foundation aid program.
4. Provide a full day, comprehensive preschool program for all three and four year olds who want to enroll, funded by adding all enrolled children as 1.0 pupil to the district's pupil count used for the foundation aid program.

Estimated extra cost of the early childhood programs for both the additional half day of kindergarten, so to provide a full day kindergarten, and for the full day preschool for children aged 3 and 4 is \$181 million, in addition to the CEIFA T & E, parity, and ECPA money, committed by the State and currently provided to Abbott districts and included in the revenue streams for the illustrative school budget.

- ¹⁶⁵⁹5. Do not provide extra money to reduce class size in elementary schools to 15. Allow schools to use base funding for this purpose if they choose to deploy this strategy among several additional programmatic strategies to complement their basic whole school design.
6. Provide a summer school program.
7. Provide a comprehensive School-Based Youth Services in all middle and high schools at about \$300 per pupil from the education system.

Estimated extra cost of School Based Youth Services: \$40 million.

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8. Create and administer a real accountability program with school based incentives for improved performance.

Estimated extra cost for accountability: \$24 million.

Total extra costs of recommendations: \$345 million. These are costs over and above the current CEIFA T & E, parity, ECPA and DEPA money already provided to the *Abbott* districts, and included in the revenue streams in the illustrative school budgets.

Finally, I would recommend that the State Department of Education create an implementation and technical assistance unit that would provide help to the SNDs and schools as they together embark on this agenda. I also would recommend enhancing the research and evaluation unit of the Department to gather and collect data on impacts and results. Specifically, the Department should organize a way to assess the impact of each school's program on student achievement so that over time New Jersey will know the progress each school is making to teach all its students to the States new and rigorous academic standards.

Two final points on security and professional development. I have not included extra funding for these items as they seem to be included in sufficient amounts in the State's proposals and additional funds for them are included in the illustrative school budgets. If the State's explanations for these inclusions are deemed insufficient by the Court, than an additional amount of money per student should be considered for the *Abbott* districts.

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