Special Education in the Baltimore City High Schools: Perspectives, Challenges, Recommendations

At stake: the education due every student; the taxpayers' dollars to support it; the viability of Baltimore City's work force

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Table of Contents

Executive Summary

The long-standing focus on compliance with special education mandates in the Baltimore City Public School System (BCPSS) is necessary, but compliance alone will not be enough to improve achievement for the city's students with disabilities. More attention, time, and resources must be devoted to teaching, learning, and instruction; determining whether the city's current reform efforts are benefiting students with disabilities; and exploring additional programs to help these students. These concerns are pressing: starting with this year's freshman who must pass Maryland's new High School Assessments (HSA) in order to graduate, the majority of Baltimore's students with disabilities who would otherwise graduate may be denied diplomas.

This report examines how well students with disabilities are being incorporated and served by the different types of high schools in the Baltimore City Public School System (BCPSS), especially the new Innovation and restructured high schools, and identifies strategies and programs the district may wish to explore. While there are some differences among types of high schools, there are far more similarities, both in terms of achievement and needs. After years of imposed solutions, controversy, waxing and waning vigilance, finger-pointing, political battles, good intentions, and hard work, special education at the high school level in Baltimore remains in need of significant assistance and improvement.

BCPSS high school special education students' are included in general education classrooms at much higher rates than are elementary or middle school students. It is unclear why high schools' inclusion rates are higher and whether this benefits special education students, since BCPSS school level staff report a lack of preparation for inclusion. While special education students are included at high rates into regular education classrooms, special education students are unequally integrated into the different types of high schools in the city. Special education students are relatively underrepresented in the new Innovation high schools, and these students continue to make up a small proportion of students in the city's vo-tech high schools.

Attendance and some standardized test scores have improved for high school students in special education, but a great deal of work remains to be done. Only a third of special education seniors graduated in 2005, compared to almost two thirds of regular education students. Two percent or less of special education students passed either the algebra or English II High School Assessments (HSA). In addition, the gaps between the performance of special education students and that of regular education students have not closed or are growing wider. Not surprisingly, large gaps between the achievement of regular education and special education students are the norm in urban school districts; no large urban school districts are doing a significantly better job of educating high school students with disabilities than is Baltimore. For example, while roughly 37% more regular education students than special education students in Baltimore passed the English graduation test, the comparable figure is 46% in Boston, 41% in Cleveland, and 38% in Oakland.

Yet there is no denying that not enough is being done for the city's special education students. The data and interviews with BCPSS high school staff reported on here suggest an urgent need for more and better professional development for special and regular education teachers, additional qualified staff and service providers, a better student assignment process, wider adoption of research based programs in reading and math, and better preparation for students for life after high school. For example,

- BCPSS school staff reported that they often choose certain instructional practices because they don't have the training or resources to do what they believe would be best for children; they often do not know which teaching models and programs in math and reading have shown to be effective; and the district's focus on inclusion limits their ability to use pullouts and self-contained classrooms when appropriate.

- While BCPSS staff were supportive of the idea of inclusion, they said that there were insufficient resources and staff training for the student inclusion model, and they were concerned about additional behavior management problems due to inclusion.

- Staff at schools believe that Individualized Education Programs (IEPs) and other paperwork requirements are repetitive, too time-consuming, and ultimately not very useful documents. The problems suggest that staff need better information about the availability of services, more extensive training on IEP documentation, and a new understanding of the rationales for required paperwork.

- The problems caused by staff shortages are compounded by the difficulty in finding special education staff with a broad range of content knowledge, high teacher turnover, and absenteeism. BCPSS' staffing plan may also be contributing to the problem. Of the 15 BCPSS high schools with 50 or fewer special education students, 10 have only a half-time or one full-time special education teacher.

- In several BCPSS high schools, interactions between regular and special education teachers geared toward improving instruction seem limited to classroom visits by special educators once or twice a week and meetings as needed. Most school staff thought that this was insufficient and that there should be more collaboration school-wide and especially between special educators and general educators since "general educators are doing most of the heavy lifting" when it comes to teaching students with disabilities.

- Special education students' transition from middle to high school is challenging. The difficulties include moving to more inclusive, general education classrooms in high school; a high school selection process that does not yet encourage special education students to apply to the full range of high schools; and the inefficient transfer of student records and other paperwork.

- BCPSS school staff reported that there are almost no transition services to life after high school, and it appeared that schools are taking few concrete steps to address this need because staff are overwhelmed by the task.

Other school districts are struggling to address very similar issues. The Oakland Unified School District characterizes its student assignment process as "an incoherent, inequitable" system. A Boston Public Schools report on the achievement gap between regular and special education students found that both "a high turnover among qualified teachers of students with disabilities" and the fact that "special education instruction is today where regular education instruction was several years ago in terms of understanding and implementing standards" were contributing to the achievement gap. No districts are doing much better than Baltimore, and

none appear to know how to do a better job. Nor is there a body of research to turn to. Most research on effective practices for special education students focuses on elementary school students, and solid research on effective practices in high schools is rare and usually looks at all students, not students with disabilities.

The lack of clear-cut solutions to improve high school special education does not mean that educators, administrators and policymakers should give up on the city's special education students or that there is nothing to be done. Rather it means that improving special education is difficult and that school systems must often rely on best guesses about what will work. For example, there might be not be a specific well-researched program to provide better professional development in special education in high school, but there is clear evidence that on-going professional development in general is better than one-time events. There are some basic principles that are worth a try for special education in high schools.

This report attempts to outline the needs and outcomes of special education in Baltimore's high schools and to provide ideas and examples of useful programs from other districts. Meeting increased expectations and fulfilling the community's responsibility to special education students will require more resources; better communication among the district, schools, staff, parents, and students; and a willingness to take some risks. There are no magic bullet solutions, but certainly more blame, underresourced programs, and defeatism will not improve special education in Baltimore's high schools.

Chapter 1: Introduction

The performance of high school special education students in the Baltimore City Public Schools System (BCPSS) is reaching a critical point. Starting with this year's freshman, high school students must pass Maryland's new High School Assessments (HSA) in order to graduate. Roughly a third of special education students in BCPSS graduate, and now those students who would otherwise graduate may be denied diplomas.

Often high schools are low on a district's reform agenda because educators understand the importance of early intervention and prevention. However, BCPSS and local partners are putting high schools are in the spotlight. In particular, the current wave of high school reform in BCPSS began with the 2001 Blueprint for Baltimore's Neighborhood High Schools. The Blueprint called for the redesign, transformation and revitalization of Baltimore's neighborhood high schools and the creation of new Innovation high schools, which would be run by outside operators. The first restructured zoned high schools opened in the fall of 2002, and the first Innovation high schools opened in the fall of 2003.

This is an opportune moment to examine how high school reform has affected special education students. First, the high school reform effort has been in place long enough to begin to examine some preliminary findings. Second, the spotlight has turned back to special education in Baltimore because of recent findings that in 2004-2005, many more students with disabilities failed to receive required services such as speech therapy and counseling than in the years before. This represents a major setback in BCPSS' success at meeting the requirements of the long-standing special education court case typically referred to as Vaughn G.

Recent developments in Baltimore and at the federal level also place additional responsibility on BCPSS. The court-ordered remedy in the Vaughn G. case, which gives the Maryland State Department of Education (MSDE) a significant role in special education decision-making, means that the school system is in significant transition as competing goals and working relationships are sorted out. In addition, proposed regulations for the reauthorized Individuals with Disabilities Education Improvement Act (IDEA) came out in the summer of 2005, and any significant changes from the previous version of the law will require a great deal of retraining at the district and schools levels. These changes will put extra strain on the district's capacity, at least in the short term, and may hinder its ability to act on all the needs identified in this report. The future isn't bleak though. BCPSS has made improvements even with budget shortfalls, and district officials are eager to continue to work toward providing a better education for Baltimore's students with disabilities.

Methodology

The report looks broadly at high school special education at the district level and also at special education in the seven substantially different types of high schools in Baltimore. These types of schools are:

- Zoned—large neighborhood schools, whose students come from a predetermined geographic zone (e.g., Northwestern and Frederick Douglass).
- Restructured—the smaller schools created when a zoned school has been restructured (e.g., Thurgood Marshall and W.E.B. DuBois). These are also sometimes called campus

choice schools. Students who live in a campus zone can choose from among the restructured schools. There are no entrance criteria.

- Special education—schools designed to address the needs of students receiving special education services in a restricted environment (e.g., George W.F. McMechen and the Claremont School).
- Alternative—schools designed for students identified as being at-risk for dropping out of school (e.g., Francis M. Wood and Harbor City).
- Vo-tech—schools that provide vocational-technical educational programs (e.g., Edmondson and Carver). These schools have entrance criteria, and students from across the city may apply for admission.
- Citywide—schools with an academic or subject area focus (e.g., Baltimore Polytechnic Institute and Paul Laurence Dunbar). These schools have entrance criteria, and students from across the city may apply for admission.
- Innovation—small independent schools developed and operated by outside contractors (e.g., New Era Academy and Baltimore Freedom Academy). Students from across the city may apply for admission, and there are no entrance criteria.

The study took place over the course of approximately five months. In that time the Foundation:

- Conducted interviews in seven Baltimore City public high schools chosen with the input of BCPSS—Frederick Douglass, Baltimore Freedom Academy, New Era Academy, Francis M. Wood, Central Career Academy at Briscoe, W.E.B. DuBois, and Lake 426—and two non-public high schools—Kennedy-Krieger and St. Elizabeth's;
- Analyzed a variety of data on achievement, staffing, and special education indicators including, where available, the progress of BCPSS in meeting the requirements of Vaughn G.;
- Interviewed multiple stakeholders, advocates, and special education leaders in Baltimore and other districts, including the Fund for Educational Excellence; the Maryland Disabilities Council; the Maryland Coalition on Inclusive Education; the Maryland Disability Law Center; the Special Education Citizens Advisory Committee; the National Association of State Directors of Special Education; the Maryland Association of Nonpublic Special Education Facilities; the Pennsylvania Education Law Center; the Baltimore Parent and Community Advisory Board; the Gates Foundation; Susan Leviton; Buzzy Hettleman; the director of special education for small schools in New York City; Boston Public Schools; Anne Arundel County Public Schools; Howard County Public Schools; Oakland Unified School District; several staff members from schools around the country identified as best practices sites; the PBIS Maryland Initiative; software companies; and researchers at many universities and national think tanks; and
- Consulted with a variety of Baltimore City district officials and advocates to ensure that the work was complete and accurate to the best of their knowledge.

This study has three important limitations. First, the interviews were conducted in only seven of the city's high schools; while this report reveals the types of challenges that schools face and their reported needs, it cannot estimate the magnitude of many of these problems. For example, this report explains the compelling reasons why several schools reported that they

needed additional guidance counselors, but it cannot specify the number of guidance counselors needed throughout the system.

Second, as in any report that provides information about numbers of students or staff, the data were collected at a certain point in time (Summer 2005). These data are constantly updated in the district's various data management systems as students and teachers leave and change schools. Therefore, any future analyses of similar topics will yield slightly different findings.

Finally, this report does not estimate the cost for BCPSS to replicate programs from other districts that are highlighted in this report, for several reasons. As mentioned above, this report does not assess the magnitude of the needs in BCPSS. In addition, any program from another district would have to be modified to fit BCPSS' organizational structure and goals. Finally, to specify the cost of each program requires that every detail of that program be defined and quantified; this leaves no room for creative solutions or adaptations of the programs to the district's environment. Such specifics could limit the generation of new ideas and shut down conversations about the district's broader needs if someone objects to specific details. However, when possible, the report does list resources that might be needed.

Structure of the Report

The remainder of the report is divided into the following chapters:

- Chapter 2: Location and Inclusion of Students with Disabilities
- Chapter 3: Student Achievement
- Chapter 4: Vaughn G. Outcomes
- Chapter 5: Instructional Practices and IEPs
- Chapter 6: Staffing, Professional Development, and Planning Time
- Chapter 7: Transitioning and Career and Technical Education
- Chapter 8: Recommendations
- Chapter 9: Concluding Thoughts

This report provides a snapshot of the state of high school special education in BCPSS both for outcomes and for a needs assessment. It points out positive impacts and shortcomings and is also meant to be a working document that provides an outside perspective and identifies promising practices through a research review and discussions with other urban districts. This report provides the viewpoint of a critical friend, rather than another voice enumerating the difficulties that all urban districts have in providing quality special education.

Chapter 2: Location and Inclusion of Students with Disabilities

One goal of BCPSS' high school reform effort in BCPSS is to provide greater choice for high school students through the creation of several citywide Innovation high schools and the restructuring of several large, zoned high schools into smaller high schools. Some reasonable questions to ask of this reform effort are whether students with disabilities are well-represented in these schools and, if not, what might be driving unequal distributions across schools. Distribution is not the only measure of access that matters. Knowing how much time students with disabilities spend in classes with regular education students rather than programs and classes specifically for students with disabilities is important, too.

Students with Disabilities—One Term for Many Different Students

Throughout this report, the terms "students with disabilities" and "special education students" are often used. This grouping is a convenient way to think about certain students who are identified as having challenges that require extra consideration through the law. **Students with disabilities are not a homogenous group; they have very different needs and abilities**. Table 1 provides a quick glimpse of the distribution of different types of disabilities in the city's high schools.

Table 1: Distribution of Learning Disabilities in BCPSS High Schools (2004)[1]

Disability	Number of Students	% of Special Education Students
Specific Learning Disability	1705	43.9%
Mental Retardation	722	18.6%
Emotionally Impaired	662	17.0%
Other Health Impairments	350	9.0%
Speech or Language Impaired	230	5.9%
Autism	94	2.4%
Multi-Handicapped	54	1.4%
Traumatic Brain Injury	21	0.5%
Visually Impaired	20	0.5%
Hearing Impaired	19	0.5%
Orthopedically Impaired	9	0.2%
High Schools	**3886**	

Roughly 60% of BCPSS special education high school students have emotional impairments or specific learning disabilities. They spend most of their time in general education classrooms. These students are the focus of this report. Many of the most disabled students, such as children with autism, a traumatic brain injury, or moderate to severe mental retardation, spend a significant part of their time in special self-contained programs or classes.

[1] BCPSS, 10/29/04 Child Count

An examination of the quality of services and resources for these most disabled students and an identification of specific programs to improve their education was beyond the scope of this study. These students are included in the analyses of student distribution and achievement, but the programs discussed in this report are rarely for these students. Programs that can serve all students, such as transition services, will be identified explicitly.

Distribution of Students with Disabilities across Schools

As high school reform continues in the city, one issue of great concern is whether students with disabilities are benefiting from high school restructuring and are participating at rates that are proportionate to their representation in the student population. The schools in Table 2 have been grouped by school type to highlight the distribution pattern across the city. (All other tables in this report are grouped similarly.)

Table 2: Percent of BCPSS High School Student Population in Special Education in Fall 2004, by School[2]

	School	Name	Percent of Students in Special Education	Special Education Citywide Program	Number of Students in Special Education
Zoned	**040**	**Lake**	15.8%	Yes	49
	070	**Southern**	22.3%		25
	401	**NW**	24.8%	Yes	286
	405	**Patterson**	18.5%	Yes	326
	406	**Forest Park**	23.2%	Yes	177
	411	**Walbrook**	23.7%	Yes	301
	412	**SW**	22.5%		210
	450	**Douglass**	19.0%		225
	Type Subtotal		**21.4%**		**1599**
Restructured	**416**	**Digital**	7.5%		53
	418	**DuBois**	27.0%	Yes	172
	419	**Lewis**	17.8%	Yes	107
	420	**Banks**	20.7%		136
	424	**Marshall**	18.7%		94
	425	**Fairmount**	17.1%		85
	426	**Lake**	30.2%	Yes	90
	429	**Medical**	27.7%		74
	430	**Arts Ind.**	30.2%		86
	431	**Maritime**	20.0%		49
	Type Subtotal		**20.1%**		**946**
Inno-vation	**422**	**New Era**	15.8%		20
	423	**Freedom**	9.5%		16
	427	**ACCE**	16.2%		25
	428	**Talent**	24.64%		34
	Type Subtotal		**16.2%**		**95**

[2] BCPSS, 10/29/04 Child Count

Spec. Ed.	**177**	**McMechen**	99.0%	Yes	192
	307	**Claremont**	103.3%[3]	Yes	63
	451	**Briscoe**	99.0%	Yes	100
	Type Subtotal		**99.8%**		**355**
Alt.	**178**	**Wood**	28.9%	Yes	142
	413	**Harbor City**	18.9%	Yes	318
	457	**Paquin**	8.1%		17
	Type Subtotal		**20.0%**		**477**
Vo-tech	**400**	**Edm/West**	8.5%	Yes	97
	410	**Mervo**	7.6%	Yes	107
	454	**Carver**	9.1%	Yes	122
	Type Subtotal		**8.4%**		**326**
Citywide	**181**	**Southside**	5.4%		11
	403	**Poly**	0.1%		*
	407	**Western**	0.3%		*
	414	**Dunbar**	1.0%		6
	415	**BSA**	2.5%		8
	480	**City**	0.3%		*
	421	**NAF**	4.2%		8
	Type Subtotal		**0.9%**		**41**
	Baltimore City HS		**15.8%**		**3839**

* denotes 5 or fewer students.

Schools with entrance requirements like citywide, vo-tech, alternative, and special education high schools have either very high or very low percentages of students with disabilities, which makes sense. Special education schools are designed for students with disabilities, and students with disabilities generally have more difficulty meeting the academic requirements of citywide and vo-tech schools.

More significantly, there is an uneven distribution of students with disabilities across schools without entrance requirements—zoned, restructured, and Innovation high schools. Among these schools, Innovation high schools have the lowest percentage of special education students, roughly 16%, while restructured and zoned schools have significantly higher percentages of special education students, 20% and 21% respectively. **This relatively low percentage is probably explained by the absence of citywide special education programs in Innovation schools and the perception of staff and parents that these new schools cannot appropriately serve students with disabilities.** There are roughly 20 citywide special education programs in BCPSS high schools. These citywide programs typically serve students with one type of disability, such as emotional disabilities or autism, or focus on one set of skills such life skills. These programs draw students from across the city and, in many ways, appear to be separate entities from the school where they are located. Sixteen high schools in Baltimore have one or more of these programs.

Schools with citywide special education programs have higher percentages of students with disabilities than they would otherwise. For example, W.E.B. DuBois high school has a citywide program for students with emotional disabilities, which accounts in part for the fact that almost 27% of its students are disabled while overall roughly 16% of students in Baltimore city high

[3] This percentage should be 100%, but the figure is higher due to the difference in the time of the enrollment and child counts.

schools are disabled. None of the Innovation high schools has a citywide program, while more than half of zoned schools and three restructured schools do. Thus, the distribution of citywide program may help account for the differences in percentages of students with disabilities across schools. However, information was not available on how many students were enrolled in each citywide program so their exact impact could not be measured. Nor can this report assess how the presence of a citywide special education program affects the instruction of the other students in that school. Managing a citywide special education program is probably a significant extra duty for school staff, and the type of program in the school also probably matters. For example, a program for students with emotional disabilities could add to the discipline problems in a school.

Interviews and document reviews suggest a few other factors that help account for the relatively low percentages of students with disabilities in Innovation high schools. First, principals, parents, and advocates report that students are being steered away from these schools because of the perception that Innovation schools cannot provide the services outlined in students' Individualized Education Programs or IEPs. An IEP is the document that details the needs, goals, and service to be provided for each student with a disability. Second, the student guides on school choice stress that the focus of Baltimore high schools is college readiness, which some parents and students may not believe is an appropriate or desired goal. This perception is especially strong for Citywide and Innovation high schools. Finally, early in the process of designing Innovation high schools, some school leaders envisioned the schools as being primarily for college-focused students; this disconnect between their intended missions and the students who attend the schools may have made for a difficult adjustment for school staff both in terms of school culture and for planning. School staff report that they do their best to ensure that students with disabilities are served once they are placed in their schools and that staff do not attempt to transfer students with disabilities to other high schools.

Advocates for students with disabilities report that some students, such as those on the certificate rather than the diploma track, report a sense of isolation in Innovation high schools and that the relatively small special education staffs may be inadequate. Special education students who are on a certificate track cannot meet the coursework and testing requirements necessary to receive a diploma. To earn a certificate, students must develop appropriate skills to enter the world of work, to act responsibility as citizens, and enjoy fulfilling lives. The IEP team determines whether students have met these goals. Since students on the certificate track may have very different academic experiences from students working toward a diploma, it is easy to understand the isolation of a student who is among the few in a high school on the certificate track.

Inclusion of Students with Disabilities

Inclusion of students with disabilities in general education classrooms and in the least restrictive environment (LRE) possible has been a high priority for the city not only because of the requirements of IDEA and the Code of Maryland Regulations (COMAR) but also because of the requirements of the Vaughn G. consent decree, and the city has made significant progress in this area. Inclusion of students with disabilities means that students with disabilities are served in regular education classes to the extent possible rather than being pulled out of regular classes for special education services or being assigned to separate classes only for students with disabilities. There are different levels of inclusion:

- LRE A is defined as the removal of students with disabilities from the general education classroom for less than 21% of the school day.
- LRE B is defined as the removal of students with disabilities from the general education classroom for more than 21% of the school day but less than 60% of the school day.
- LRE C is defined as the removal of students with disabilities from the general education classroom for 60% or more of the school day.
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The trend in BCPSS is toward more inclusion. The Vaughn G. case is the reason behind much of this push. System-wide, kindergarten through twelfth grade, the percentage of students in LRE A or B settings has grown from 49.4% in June 2001 to 64.5% in June 2005.[4] **In addition, BCPSS students with disabilities are much more likely to be included in general education classrooms in high school than in either elementary or middle school, and this has been the case for several years.** In fall 2004, the city's high schools had a higher percentage of their students in LRE A or B settings, 74.5%, than in BCPSS in general. While increased inclusion is a goal of the district, it is not clear what the final percentage should be. If some students with disabilities were inappropriately included, this could damage their education and also the education of their regular education classmates.

The literature on the effects of inclusion on student achievement for both special and regular education is mixed at best.[5] While there are studies that find a positive impact for both groups of students, many others report that inclusion only benefits certain students such as low achieving but not high achieving regular education students or special education students with only mild disabilities.[6] At this point, there are no conclusive results on the effects of inclusion. To better understand inclusion's impact, there will need to be more research that considers

- the supports, instruction, and professional development associated with inclusion because there is no unified vision of what inclusion looks like,
- the types and severity of disabilities represented in inclusion settings,
- outcomes including achievement, behavior, and social competence,
- the number and proportion of students with disabilities in inclusion settings,
- and the differences between inclusion in elementary and secondary schools.

Whether inclusion is beneficial is a much more nuanced question than most research currently acknowledges.

As shown by Table 3, schools' inclusion rates vary widely. Each school's population dramatically affects its inclusion rates. Almost none of the special education students in special education high schools are in LRE A or B, and almost all in citywide schools are.

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[4] Baltimore City Public School System. (2005). Disengagement Outcomes Historical Summary Report. Baltimore, MD: BCPSS.

[5] Daniel, L.G. & D.A. King. (1997). Impact of Inclusion Education on Academic Achievement, Student Behavior and Self-Esteem, and Parental Attitudes. *Journal of Educational Research*, v. 91, n. 2, p. 67-80, Nov-Dec. 1997; Harrington, S. A. (1997). Full Inclusion for Students with Learning Disabilities: A Review of the Evidence. *School Community Journal*, v. 7, n. 1, p. 63-71, Spr-Sum 1997.; Rogers, D. P. & I.M. Thiery (2003). Does an Inclusive Setting Affect Reading Comprehension in Students with Learning Disabilities?. Paper presented at the Annual Meeting of the Mid-South Educational Research Association (Biloxi, MS, November 5-7, 2003).

[6] Huber, K.D., J.G. Rosenfeld, & C.A. Fiorello. (2001). The Differential Impact of Inclusion and Inclusive Practices on High, Average, and Low Achieving General Education Students. *Psychology in the Schools*, v. 38, n.6, p. 494-504, Nov. 2001; Manset, G. & M. I. Semmel. (1997). Are Inclusive Programs for Students with Mild Disabilities Effective? *Journal of Special Education*. v. 31, n.2, p. 155-180, Sum 1997.

Table 3: Percent of BCPSS High School Special Education Students in LRE A or B Settings, by School[7]

	School	Name	Percent of Special Education Students in LRE A or B, Fall 2004	Number of Students in Special Education, Fall 2004	Special Education Citywide Program
Zoned	040	Lake	40.8%	49	Yes
	070	Southern	100.0%	25	
	401	NW	86.4%	286	Yes
	405	Patterson	74.8%	326	Yes
	406	Forest Park	78.5%	177	Yes
	411	Walbrook	66.1%	301	Yes
	412	SW	89.0%	210	
	450	Douglass	91.1%	225	
Restructured	416	Digital	100.0%	53	
	418	DuBois	73.8%	172	Yes
	419	Lewis	66.4%	107	Yes
	420	Banks	91.9%	136	
	424	Marshall	84.0%	94	
	425	Fairmount	88.2%	85	
	426	Lake	62.2%	90	Yes
	429	Medical	73.0%	74	
	430	Arts Ind.	70.9%	86	
	431	Maritime	98.0%	49	
Inno-vation	422	New Era	100.0%	20	
	423	Freedom	100.0%	16	
	427	ACCE	88.0%	25	
	428	Talent	94.1%	34	
Spec. Ed.	177	McMechen	3.1%	192	Yes
	307	Claremont	0.0%	63	Yes
	451	Briscoe	5.0%	100	Yes
Alt.	178	Wood	72.5%	142	
	413	Harbor City	93.1%	318	Yes
	457	Paquin	100.0%	17	
Vo-tech	400	Edm/West	70.1%	97	Yes
	410	Mervo	98.1%	107	Yes
	454	Carver	95.1%	122	Yes
Citywide	181	Southside	81.8%	11	
	403	Poly	100.0%	*	
	407	Western	100.0%	*	
	414	Dunbar	100.0%	6	
	415	BSA	100.0%	8	
	480	City	100.0%	*	
	421	NAF	100.0%	8	
	Baltimore City		74.5%	3886	

Note: Total includes 47 students in the Baltimore City Detention Center.

[7] BCPSS, 10/29/04 Child Count; Vaughn G. The Baltimore City Public Schools System's Compliance Statements for School Year 2004/2005, filed August 22, 2005.

Table 4: Percent of BCPSS High School Special Education Students in LRE A or B Settings with and without Students in Citywide Programs, by School[8]

	School	Name	Special Education Citywide Program	Percent of Special Education Students in LRE A or B, June 2005	Percent of Special Education Students in LRE A or B Not Counting Citywide Programs, June 2005
Zoned	040	Lake	Yes	3.8%	100.0%
	070	Southern		100.0%	100.0%
	401	NW	Yes	89.0%	92.8%
	405	Patterson	Yes	69.0%	73.8%
	406	Forest Park	Yes	63.3%	72.1%
	411	Walbrook	Yes	67.6%	84.8%
	412	SW		91.0%	91.0%
	450	Douglass		97.6%	97.6%
Restructured	416	Digital		100.0%	100.0%
	418	DuBois	Yes	69.1%	85.1%
	419	Lewis	Yes	69.2%	84.1%
	420	Banks		86.3%	86.3%
	424	Marshall		95.4%	95.4%
	425	Fairmount		84.5%	84.5%
	426	Lake	Yes	55.2%	90.6%
	429	Medical		57.1%	57.1%
	430	Arts Ind.		68.4%	68.4%
	431	Maritime		100.0%	100.0%
Inno-vation	422	New Era		100.0%	100.0%
	423	Freedom		100.0%	100.0%
	427	ACCE		90.9%	90.9%
	428	Talent		100.0%	100.0%
Spec. Ed.	177	McMechen	Yes	1.3%	0.0%
	307	Claremont	Yes	0.0%	0.0%
	451	Briscoe	Yes	3.6%	33.3%
Alt.	178	Wood	Yes	69.2%	92.6%
	413	Harbor City		95.2%	98.4%
	457	Paquin		100.0%	100.0%
Vo-tech	400	Edm/West	Yes	69.5%	98.4%
	410	Mervo	Yes	100.0%	100.0%
	454	Carver	Yes	100.0%	100.0%
Citywide	181	Southside		90.0%	90.0%
	403	Poly		100.0%	100.0%
	407	Western		NA	NA
	414	Dunbar		100.0%	100.0%
	415	BSA		100.0%	100.0%
	480	City		100.0%	100.0%
	421	NAF		100.0%	100.0%
	Baltimore City			72.1%	87.2%

[8] BCPSS, 10/29/04 Child Count; Vaughn G. The Baltimore City Public Schools System's Compliance Statements for School Year 2004/2005, filed August 22, 2005.

Students in citywide special education programs account for a large proportion of students in LRE C settings. Schools with a special education citywide program have a significantly have a significantly lower percentage of LRE A or B students because these special education students spend most of their time in self-contained or LRE C settings. Table 4 illustrates this point. The second column shows the total percentage of special education students in LRE A or B settings in June 2005; the third column also shows the percent of special education students in LRE A or B in a school but excludes the students who are in citywide special education programs. For example, in Lake 426, roughly 55% of special education students are in LRE A or B settings, and almost 91% of the special education students who are not in the school's citywide special education program are in LRE A or B. The other 9% are occasionally pulled out for instruction or are in other self-contained classrooms in the school.

After taking citywide special education programs into account, Innovation schools clearly have a larger percentage of students in LRE A and B settings than do restructured or zoned schools. One reason may be that restructured schools can have more pullouts and self-contained classrooms because their larger student populations entitle them to larger special education staffs.

School staff and advocates report that student IEPs are regularly changed to decrease the services required and to shift students' classification from LRE C to LRE A or B so that they can attend Innovation schools, which are perceived as having insufficient resources to serve these higher need students. Staff and advocates report that some parents want their children to benefit from smaller learning communities and so agree to these changes in their children's IEPs. While these accounts are frequent, they are anecdotal. A clear decrease in the percentage of eighth graders classified as LRE C once they enter the ninth grade during the subsequent school year might confirm these stories. The only available relevant data are that the LRE A and B percentage for BCPSS middle schools at the end of the 2004-05 school year was 55.6%, but the percentage for high schools was 72.1%. However, this difference might be the result of improved student performance and a natural progression to more inclusive settings. Or as one local advocate suggested, the inclusion rates at the high school level might be higher because more students in LRE C drop out than do students in LRE A and B.

Overall, the findings from this chapter suggest that it may be necessary to rethink how resources are distributed and how students are assigned to ensure that students with disabilities, especially those in need of self-contained programs, benefit from the high school reform effort.

Chapter 3: Student Achievement

The next logical question is how well are high school students with disabilities doing in individual schools and across Baltimore City on measures such attendance, graduation and dropout rates, and scores on standardized tests. There is no evidence whether small schools like Innovation high schools improved the achievement of students with disabilities. Evaluations of the benefits of small schools generally focus on school-wide outcomes. When achievement results were disaggregated, the research studied poor students and occasionally English language learners rather than students with disabilities.

Demographic and achievement data for several other urban districts are included in this chapter so that BCPSS' achievement can be compared to other similar districts. Of course, no district is a perfect match with BCPSS. The percent of students qualifying for free or reduced lunch may be lower or higher, states' standardized tests vary in difficulty, graduation rates are calculated differently, and a student who would be identified as disabled in Baltimore City might not be in another district. Therefore, this report focuses on the gaps in achievement rather than on how well or poorly each district does in absolute terms. Table 5 provides demographic data for the districts used as comparisons throughout this chapter.

Table 5: Demographic Characteristics of a Sample of Urban School Systems, 2001-02 School Year[9]

	% Race and Ethnicity				% Free or Reduced Lunch	% Special Education District-wide	Total Student Enrollment	Per Pupil Expenditures[10]
	African American	Hispanic	White	Other				
Baltimore	88.0%	0.9%	10.2%	0.9%	67.4%	16.7%	97,817	$9,639
Cleveland	71.3%	8.9%	18.8%	1.1%	76.6%	15.9%	72,199	$10,199
Milwaukee	60.3%	16.1%	18.3%	5.3%	71.6%	16.4%	97,762	$10,352
Oakland	42.3%	33.7%	5.8%	18.0%	65.5%	10.0%	49,214	$8,600
Detroit	90.8%	4.5%	3.5%	1.2%	69.9%	12.0%	166,675	$9,063
New York	34.4%	37.9%	15.2%	12.6%	73.3%	13.9%	1,049,831	$11,640
Philadelphia	65.4%	13.5%	15.9%	5.2%	71.0%	11.9%	197,083	$7,554
Chicago	49.7%	37.6%	9.1%	3.5%	85.2%	14.4%	420,322	$7,967
Jackson, MS	96.3%	0.3%	3.2%	0.2%	76.6%	11.3%	31,436	$6,106
Boston	45.5%	31.2%	14.0%	9.0%	25.3%	19.6%	57,742	$13,730

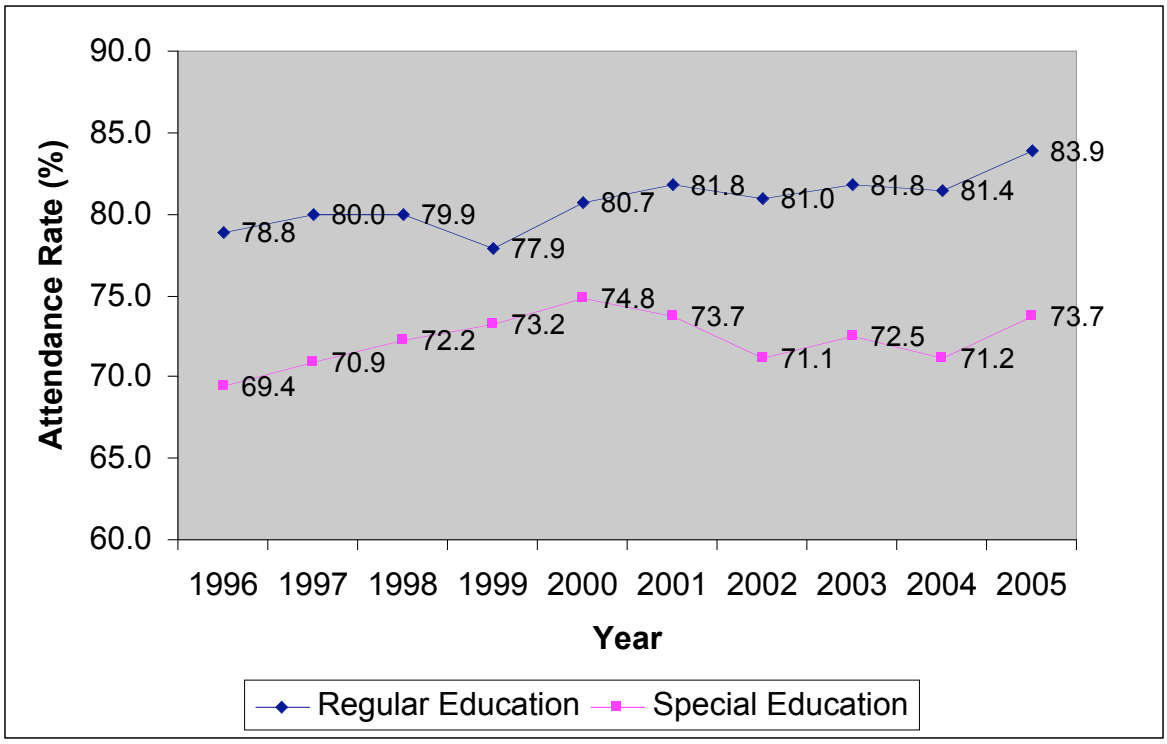
[9] U.S. Department of Education, National Center for Education Statistics, Common Core of Data, 2001-2002 and 2002-2003.

[10] Per Pupil Expenditures are for School Year 2002-2003 and are total current expenditures, which does not include capital outlays or interest on debt.

Attendance

Over the past ten years, Baltimore high schools have shown steady improvement in attendance rates for both regular education and special education students, but the gap between these groups' attendance rates has stayed fairly consistent—roughly 10 percentage points. Since many of the small schools in the district are just starting and have only one or two grade levels at this point, the discussion will focus on ninth grade attendance rates to ensure consistency across schools. Table 6 shows some interesting differences in attendance among school types.

Chart 1: Percent Attendance Rate in Grades 9-12 for Regular and Special Education Students[11]



[11] 2005 Maryland Report Card: Baltimore City.

Table 6: Ninth Grade Attendance in BCPSS for 2003-2004 School Year, by School and Student Education Program[12]

	School	Name	Attendance Rate 03-04 SY 9th grade		
			All Students	Special Ed. Students	Regular Ed. Students
Zoned	040	Lake	97.6%	97.2%	100.0%
	401	NW	73.9%	66.3%	76.5%
	405	Patterson	74.8%	75.3%	74.7%
	406	Forest Park	79.7%	78.3%	80.1%
	411	Walbrook	81.0%	79.7%	81.5%
	412	SW	58.4%	57.5%	58.8%
	450	Douglass	79.8%	71.5%	82.3%
Restructured	416	Digital	91.7%	90.5%	91.8%
	418	DuBois	71.5%	72.6%	70.9%
	419	Lewis	73.7%	78.8%	73.0%
	420	Banks	83.7%	78.8%	85.2%
	424	Marshall	81.4%	81.2%	81.5%
	425	Fairmount	67.0%	70.8%	65.9%
	426	Lake	80.7%	84.0%	79.2%
Inno.	422	New Era	90.6%	89.8%	90.7%
	423	Freedom	84.9%	84.0%	85.1%
Spec. Ed.	177	McMechen	89.1%	89.1%	NA
	307	Claremont	85.0%	85.0%	NA
	451	Briscoe	36.5%	36.5%	NA
Alt.	178	Wood	60.1%	54.6%	63.5%
	413	Harbor City	41.3%	35.4%	42.8%
	457	Paquin	66.1%	78.1%	65.2%
Vo-tech	400	Edm/West	91.2%	89.2%	91.3%
	410	Mervo	92.2%	91.1%	92.3%
	454	Carver	86.4%	86.6%	86.4%
Citywide	181	Southside	94.9%	94.4%	94.9%
	403	Poly	96.2%	NA	96.2%
	407	Western	94.3%	96.1%	94.3%
	414	Dunbar	93.7%	81.6%	93.7%
	415	BSA	96.4%	99.4%	96.4%
	480	City	95.1%	73.7%	95.2%
	421	NAF	95.8%	98.7%	95.7%

Innovation high schools generally post higher attendance rates for special and regular education students than zoned or restructured high schools. Data were available for only two Innovation schools—New Era and Baltimore Freedom Academy—but their special education attendance rates are relatively high. Only one of the seven zoned schools (Lake 040) and one of the seven restructured schools (Digital) have higher attendance rates. While district-wide regular education student attendance is roughly ten percentage points higher than for

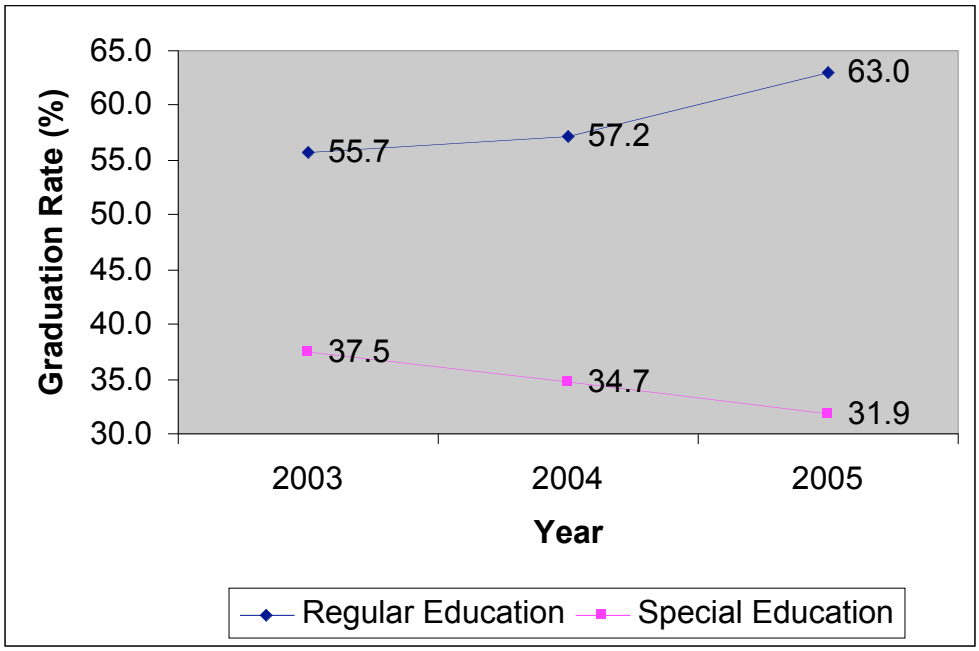
[12] School Attendance Comparison Report for Grades 06-12, Baltimore City Public School System, Data as of 03/03/2005

special education students, special education student attendance is higher than regular education student attendance at four of the seven restructured schools (Fairmount, Lake 426, DuBois, and Lewis). In only one of seven zoned schools (Patterson) is special education attendance higher. Attendance rates for other districts were not available.

Graduation and Dropout Rates

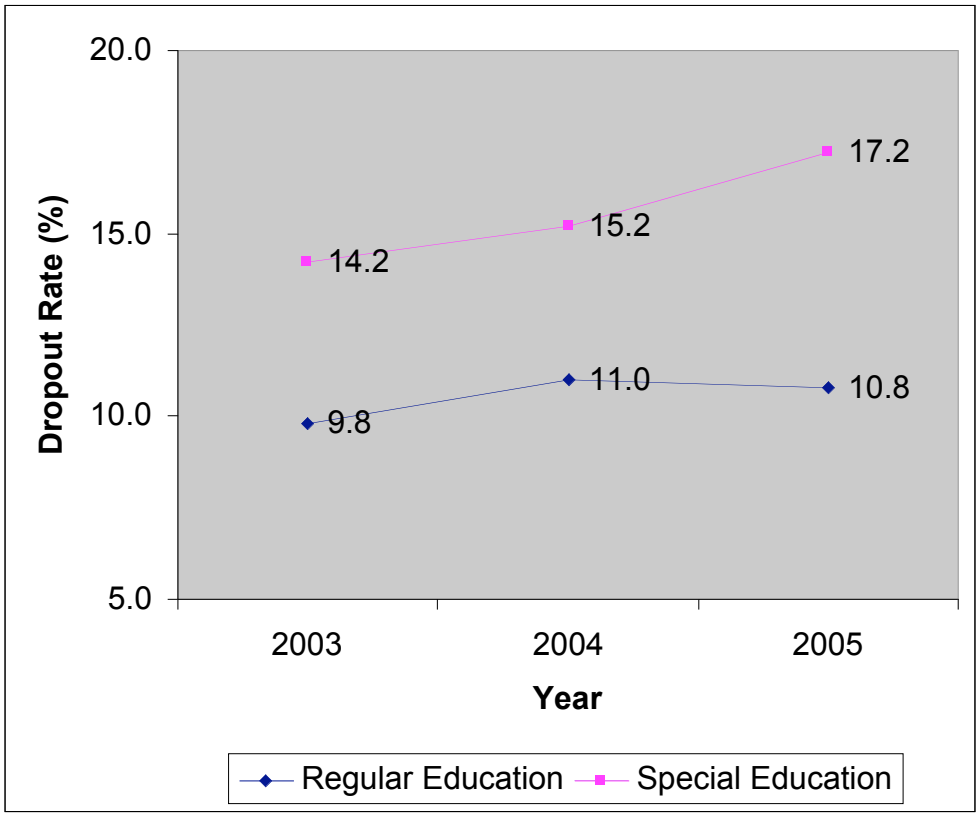
Restructured and Innovation schools have not yet graduated their first classes, so their graduation and dropout rates cannot be compared to those of other school types. However, the district-wide picture in both these areas is fairly straightforward: **there are significant gaps in the graduation and dropout rates between regular education and special education students in BCPSS, and these gaps have grown over the past three years.**

Chart 2: BCPSS Graduation Rates, by Year[13]



[13] 2005 Maryland Report Card: Baltimore City

Chart 3: BCPSS Dropout Rates, by Year[14]



Disaggregated graduation rates from other districts are rare. The one district similar to Baltimore for which data were also available has a sizeable gap in graduation rates between special and regular education students. For the 2002-03 school year, Milwaukee's graduation rates were 62.0% for regular education students and 42.9% for special education students.

While Baltimore's overall graduation rates for students are similar to those of other urban school districts, the decrease in graduation rates and increase in dropout rates for special education students demand attention.

Statewide Testing Programs

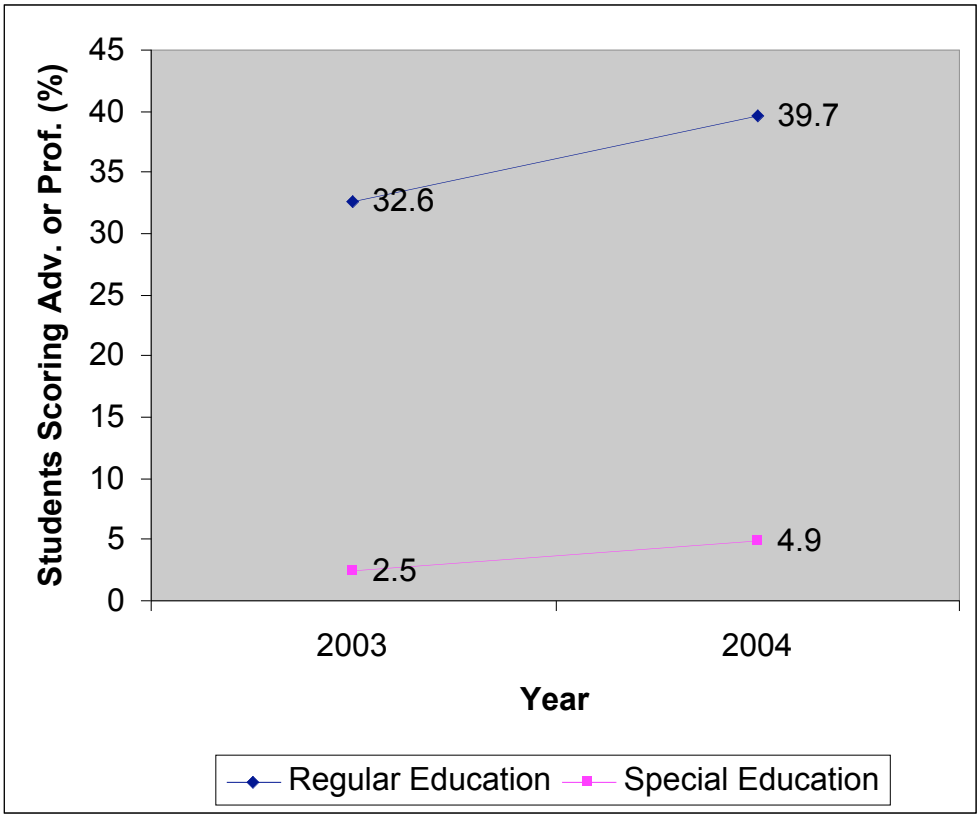
Since many of Baltimore's high schools house citywide special education programs (serving students with autism or emotional disabilities, those who need help with life skills, etc.) and have very different student populations, comparisons across schools can be misleading. Even with access to individual student records, there simply aren't enough students, years of data, and information about programmatic and instructional differences in the schools to conclude that one type of school does a better job of improving student achievement than another type. However, some things can be said about the achievement gaps, especially at the district level.

[14] 2005 Maryland Report Card: Baltimore City

Maryland State Assessments (MSAs)

The Maryland State Assessments (MSA) have been used to measure school level achievement for several years. The good news is that there has been improvement for all students in Maryland State Assessment (MSA) scores in Baltimore City Public Schools in reading from 2003 to 2004 and geometry from 2003 to 2005.[15] **Nonetheless, 2% or fewer of high school special education students in BCPSS are meeting MSA standards in English II and geometry, and the already enormous gaps in performance have continued to widen.**

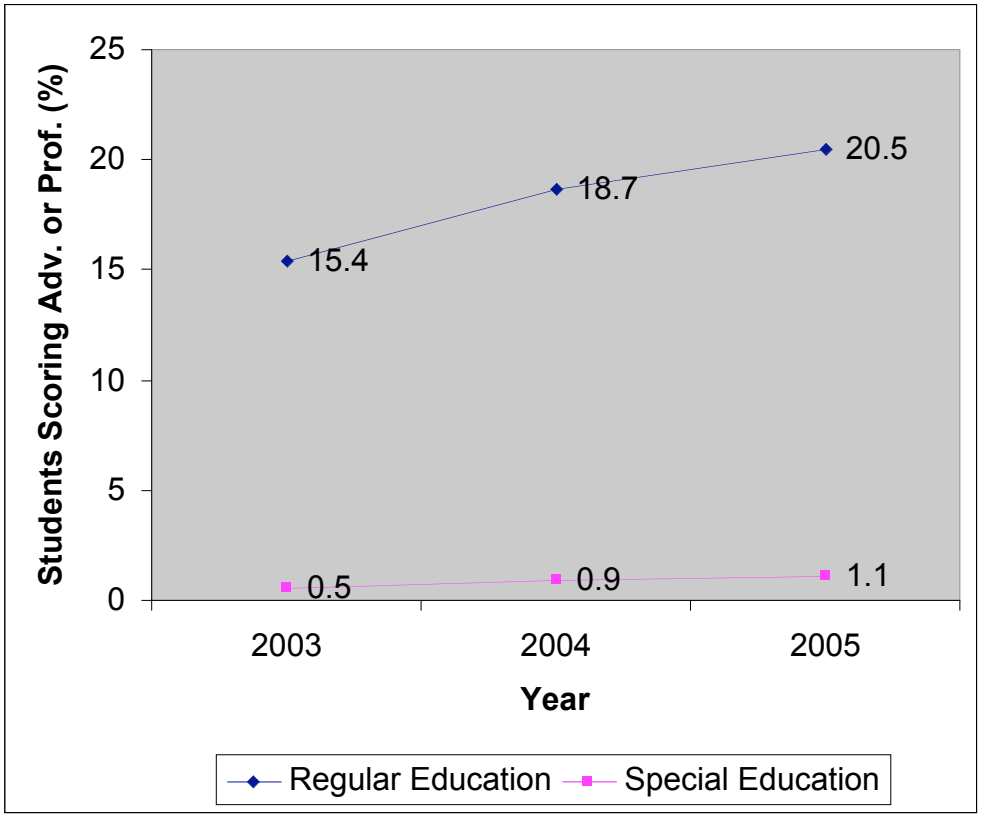
Chart 4: Percent of BCPSS High School Students Performing at the Proficient or Advanced Level on the Reading MSA, by Year and Education Program[16]



[15] In 2004, students took the Reading MSA. In 2005, that test was replaced by a new English II MSA—the same test as the English II HSA. 2005 English II MSA scores are available, but since it is a different test, those data should not be used the same chart or compare growth over time.

[16] 2005 Maryland Report Card: Baltimore City.

Chart 5: Percent of BCPSS High School Students Performing at the Proficient or Advanced Level on the Geometry MSA, by Year and Education Program[17]



Other urban districts have similar or even larger gaps between the percentage of regular and special education students meeting or exceeding the performance standards of state examinations (see Table 7). However, it would be misleading to compare the absolute percentages of students passing the exams in different cities and conclude that students in Chicago are doing better than students in Baltimore because states' tests vary in difficulty and special education students are classified differently from state to state.

Table 7: High School Student Achievement in Mathematics and English/Reading, by Educational Program and District[18]

	% Meeting or Exceeding Standards in Mathematics			% Meeting or Exceeding Standards in English		
	All	Regular Ed.	Special Ed.	All	Regular Ed.	Special Ed.
Baltimore (MSA,2005)	18.5%	20.5%	1.1%	34.6%	38.8%	2.0%
Chicago (PSAE, 2005)	27.8%	33.1%	3.0%	36.3%	40.3%	5.8%
Milwaukee (WCKE, 2004)	28.0%	33.0%	5.0%	40.0%	47.0%	9.0%
Oakland (CST, 2004)	1.0%	1.0%	0.0%	15.0%	16.0%	5.0%
Philadelphia (PSSA, 2004)	22.9%	NA	1.8%	27.0%	NA	3.1%

[17] 2005 Maryland State Report Card: Baltimore City.
[18] State Department of Education websites

Table 8 shows the percentage of Baltimore students who were proficient or advanced on the reading MSA of 2004, the English II MSA of 2005, and the geometry MSA in 2004 and 2005[19]. The schools with the strongest performances by special education students were Thurgood Marshall and Digital in reading in 2004; Forest Park and Baltimore Freedom Academy in English II in 2005; Digital in geometry in 2004; and Forest Park, Fairmount (425), and Digital in geometry in 2005. However, these comparisons do not account for the differences in the schools' student populations. Some schools have more severely disabled students or more low-income students than others.

For example, only one of the schools with high special education MSA scores has a special education citywide program—Forest Park. Digital has relatively few special education students, and almost all of them are in inclusion settings—the highest percentage in the city—which suggests that the school has few students with severe, low incidence disabilities. The most surprising results are at Thurgood Marshall and Fairmount (425), both of which have an average sized special education population with an average distribution of disabilities. However, even in these schools, there are significant gaps in the achievement of regular and special education students.

[19] In 2004, students took the Reading MSA. In 2005, that test was replaced by a new English II MSA—the same test as the English II HSA. 2005 English II MSA scores are provided, but since it is a different test, those data should not be used to compare growth over time.

Table 8: 2004 and 2005 Baltimore High School Achievement on the MSAs by School[20]

	School	Name	% of Students Passing Reading MSA (2004)		% of Students Passing English II MSA (2005)		% of Students Passing Geometry MSA (2004)		% of Students Passing Geometry MSA(2005)	
			Special Ed.	Regular Ed.	Special Ed.	Regular Ed.	Special Ed.	Regular Ed.	Special Ed.	Regular Ed.
Zoned	040	Lake	0.0%	16.0%	*	2.9%	*	3.9%	NA	0.0%
	070	Southern	**	**	**	12.5%	*	0.0%	NA	0.0%
	401	NW	1.9%	13.4%	0.0%	20.4%	*	3.1%	0.0%	7.1%
	405	Patterson	0.0%	22.6%	1.7%	18.1%	0.0%	3.6%	0.0%	8.0%
	406	Forest Park	4.8%	29.4%	8.1%	26.8%	0.0%	4.1%	2.8%	7.4%
	411	Walbrook	2.4%	23.1%	0.0%	21.4%	0.0%	1.1%	0.0%	4.5%
	412	SW	3.6%	18.7%	0.0%	9.6%	0.0%	1.7%	0.0%	1.8%
	450	Douglass	3.3%	13.4%	0.0%	18.2%	0.0%	2.4%	0.0%	3.9%
Restructured	416	Digital	31.8%	45.4%	8.3%	48.3%	4.2%	8.8%	16.7%	24.8%
	418	DuBois	0.0%	17.8%	2.2%	19.5%	0.0%	2.0%	0.0%	13.7%
	419	Lewis	5.6%	15.7%	0.0%	13.7%	0.0%	0.0%	0.0%	1.2%
	420	Banks	0.0%	25.0%	0.0%	21.6%	0.0%	1.0%	0.0%	14.0%
	424	Marshall	33.3%	40.3%	0.0%	10.9%	*	0.0%	0.0%	2.8%
	425	Fairmount	0.0%	24.8%	4.5%	15.5%	0.0%	3.2%	4.5%	9.9%
	426	Lake	**	**	7.7%	31.1%	**	**	0.0%	11.0%
	429	Medical	NA	NA	0.0%	27.5%	NA	NA	0.0%	2.8%
	430	Arts Ind.	NA	NA	0.0%	27.3%	NA	NA	0.0%	8.6%
	431	Maritime	NA	NA	0.0%	13.3%	NA	NA	0.0%	0.0%
Inno.	422	New Era	**	**	0.0%	60.0%	NA	NA	*	50.0%
	423	Freedom	**	**	16.7%	47.9%	NA	NA	0.0%	18.9%
Spec. Ed.	177	McMechen	**	*	NA	NA	NA	NA	NA	NA
	307	Claremont	**	**	NA	NA	**	**	NA	NA
	451	Briscoe	0.0%	*	0.0%	0.0%	0.0%	**	0.0%	0.0%
Alt.	178	Wood	2.5%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	413	Harbor City	2.4%	4.4%	0.0%	8.7%	0.0%	0.0%	0.0%	0.0%
	457	Paquin	0.0%	42.9%	*	19.2%	*	8.1%	*	4.3%
Vo-tech	400	Edm/West	0.0%	52.8%	5.9%	42.2%	0.0%	10.6%	0.0%	6.1%
	410	Mervo	9.5%	57.2%	0.0%	39.3%	4.0%	7.0%	4.2%	21.4%
	454	Carver	5.7%	39.2%	0.0%	36.8%	0.0%	5.1%	0.0%	14.2%
Citywide	181	Southside	*	67.9%	*	60.0%	*	45.7%	*	31.7%
	403	Poly	*	96.2%	**	94.2%	**	85.8%	NA	91.9%
	407	Western	**	76.4%	**	86.0%	**	37.9%	NA	58.7%
	414	Dunbar	*	78.9%	*	63.2%	*	17.1%	*	25.3%
	415	BSA	*	87.3%	**	81.8%	*	81.2%	NA	82.4%
	480	City	*	93.8%	**	81.2%	**	59.4%	*	67.4%
	421	NAF	*	52.9%	NA	NA	*	39.1%	*	12.9%
	Baltimore City		4.9%	39.7%	2.0%	38.8%	0.9%	18.7%	1.1%	20.5%

"*" means less than 5 students in the category
"**" means no students in the category

[20] 2004 and 2005 Maryland Report Cards: Baltimore City.

High School Assessments (HSAs)

Starting with this year's ninth graders, students will be required to pass the High School Assessments (HSA) to graduate from high school, and HSAs will soon also be used to determine adequate yearly progress for schools and districts under the No Child Left Behind Act, adding to the HSAs' importance. **The most recent HSA pass rates show that 2.0% or less of special education students passed the algebra and English II HSAs.** In addition, the state and the city experienced a downturn in HSA pass rates in 2005, the year before the first incoming class of ninth graders will be required to pass the HSAs. **As with MSA scores, gaps in performance between general education and special education students in Baltimore City are large.**

Table 9: Percent of Baltimore City High School Students Passing the HSAs, by Year and Education Program[21]

	Algebra			English[22]			Biology			Government		
	2003	2004	2005	2003	2004	2005	2003	2004	2005	2003	2004	2005
Regular Education	24.7%	34.7%	24.7%	19.9%	38.2%	38.8%	29.4%	40.9%	31.8%	45.7%	55.0%	45.3%
Special Education	1.5%	1.9%	1.2%	0.5%	1.7%	2.0%	2.5%	3.3%	1.2%	3.4%	6.8%	4.6%

Other urban districts in states with high school graduation exams show similar and often larger gaps in pass rates between regular and special education students (see Table 10). The results for Baltimore and Cleveland are for administrations of the exams that students did not need to pass in order to graduate. Several states have shown dramatic increases in initial pass rates on exit examinations when the tests become a requirement for graduation.[23] Maryland and BCPSS may see similar growth in the spring 2006 HSA scores, the first time the scores will count toward graduation for a large group of students.

Table 10: Pass Rates on High School Graduation Exams for Students' First Attempt to Pass the Exams, by Educational Program and District[24]

	% Passing Math			% Passing English		
	All	Regular	Special	All	Regular	Special
Baltimore (HSAs, 2005)	21.8%	24.7%	1.2%	34.6%	38.8%	2.0%
Boston (MCAS, 2005)	42.0%	53.0%	12.0%	38.0%	52.0%	6.0%
Cleveland (OGT, 2004)	28.0%	32.0%	3.0%	44.0%	50.0%	9.0%
Jackson (SATP, 2004)	87.1%	88.1%	29.2%	76.9%	77.3%	40.0%
Oakland (CAHSEE, 2005)	52.0%	55.0%	23.0%	55.0%	58.0%	20.0%

[21] 2005 Maryland Report Card: Baltimore City.

[22] In 2004, students took the English I HSA. In 2005, that test was replaced by a new English II HSA. 2005 English II HSA scores are provided, but since it is a different test, those data should not be used to compare growth over time.

[23] Gayler, K., N. Chudowsky, M. Hamilton, N. Kober, and M. Yeager. (2004). State High School Exit Exams: A Maturing Reform. Washington, DC: Center on Education Policy.

[24] State Department of Education websites. After exit exams become a requirement, students may retake exit exams if they did not pass an exam the first time. The pass rates reported are students' first attempt on the exit exams rather than the percentage of students who eventually pass the exams.

The Baltimore high schools with higher than average special education performance are:

- in English I, Douglass, Digital, and Baltimore Freedom Academy in 2004;
- in English II, Forest Park and Baltimore Freedom Academy in 2005;
- in Algebra, Digital in 2004 and Digital and Southside in 2005;
- in Biology, Digital and New Era in 2004 and in Baltimore Freedom Academy in 2005; and
- in Government, Digital, and Baltimore Freedom Academy in 2004 and Patterson, Thurgood Marshall, and New Era in 2005.

Only Digital has had consistent strong achievement in its special education population, but that is only in one subject, Algebra. Digital also has a relatively small special education population, and as almost all of them are in inclusion settings, there are probably few students with severe, low incidence disabilities. In fact, many of the schools with higher special education HSA scores have low to average percentages of students with disabilities. The most encouraging results by students with disabilities come from the Innovation high schools on some sections of the HSAs.

Table 11: 2004 and 2005 BCPSS High School Achievement on the English and Algebra HSAs, by School[25]

	School	Name	% of Students Passing English I HSA (2004)		% of Students Passing English II HSA (2005)		% of Students Passing Algebra HSA (2004)		% of Students Passing Algebra HSA (2005)	
			Special Ed.	Regular Ed.	Special Ed.	Regular Ed.	Special Ed.	Regular Ed.	Special Ed.	Regular Ed.
Zoned	040	Lake	**	**	*	2.9%	**	18.2%	*	12.2%
	070	Southern	NA	NA	**	12.5%	NA	NA	NA	10.6%
	401	NW	0.0%	14.8%	0.0%	20.4%	0.0%	8.0%	0.0%	11.3%
	405	Patterson	1.4%	18.7%	1.7%	18.1%	2.2%	17.4%	0.0%	12.0%
	406	Forest Park	0.0%	18.0%	8.1%	26.8%	0.0%	6.4%	0.0%	9.5%
	411	Walbrook	2.0%	7.7%	0.0%	21.4%	0.0%	3.0%	0.0%	4.3%
	412	SW	0.0%	10.1%	0.0%	9.6%	0.0%	9.1%	0.0%	3.7%
	450	Douglass	10.0%	10.4%	0.0%	18.2%	0.0%	1.5%	0.0%	5.8%
Restructured	416	Digital	11.1%	41.8%	8.3%	48.3%	14.3%	45.4%	20.0%	43.1%
	418	DuBois	0.0%	23.3%	2.2%	19.5%	3.3%	9.2%	0.0%	17.8%
	419	Lewis	0.0%	17.0%	0.0%	13.7%	0.0%	14.9%	0.0%	8.1%
	420	Banks	0.0%	21.0%	0.0%	21.6%	0.0%	6.6%	0.0%	4.4%
	424	Marshall	0.0%	13.0%	0.0%	10.9%	0.0%	4.2%	0.0%	6.2%
	425	Fairmount	0.0%	9.4%	4.5%	15.5%	0.0%	6.8%	0.0%	10.3%
	426	Lake	0.0%	16.8%	7.7%	31.1%	0.0%	10.5%	0.0%	11.7%
	429	Medical	NA	NA	0.0%	27.5%	NA	NA	0.0%	11.3%
	430	Arts Ind.	NA	NA	0.0%	27.3%	NA	NA	0.0%	7.5%
	431	Maritime	NA	NA	0.0%	13.3%	NA	NA	0.0%	2.6%
Inno-vation	422	New Era	0.0%	47.2%	0.0%	60.0%	0.0%	55.1%	0.0%	21.2%
	423	Freedom	14.3%	33.8%	16.7%	47.9%	0.0%	14.1%	0.0%	13.6%
	427	ACCE	NA	NA	NA	NA	NA	NA	0.0%	45.1%
	428	Talent	NA	NA	NA	NA	NA	NA	3.7%	11.3%
Spec. Ed.	177	McMechen	NA	NA	NA	NA	NA	NA	NA	NA%
	307	Claremont	**	**	NA	NA	**	**	NA	NA%
	451	Briscoe	*	**	0.0%	0.0%	0.0%	**	0.0%	0.0%
Alt.	178	Wood	0.0%	0.0%	0.0%	0.0%	0.0%	3.9%	0.0%	0.0%
	413	Harbor City	*	10.8%	0.0%	8.7%	0.0%	4.0%	0.0%	0.7%
	457	Paquin	*	18.2%	*	19.2%	*	10.3%	*	12.5%
Vo-tech	400	Edm/West	4.8%	37.7%	5.9%	42.2%	0.0%	17.8%	0.0%	12.1%
	410	Mervo	0.0%	31.4%	0.0%	39.3%	7.7%	29.2%	3.8%	18.4%
	454	Carver	0.0%	30.2%	0.0%	36.8%	0.0%	21.1%	0.0%	8.8%
Citywide	181	Southside	*	48.4%	*	60.0%	*	49.2%	14.3%	39.7%
	403	Poly	**	93.1%	**	94.2%	**	88.1%	*	79.6%
	407	Western	*	84.2%	**	86.0%	*	63.9%	NA	50.0%
	414	Dunbar	**	47.9%	*	63.2%	**	53.6%	*	44.0%
	415	BSA	*	82.7%	**	81.8%	**	57.4%	NA	49.3%
	480	City	*	85.9%	**	81.2%	*	84.9%	*	78.5%
	421	NAF	*	55.3%	NA	NA	*	53.8%	*	23.7%
	Baltimore City		1.7%	32.8%	2.0%	38.8%	1.9%	34.7%	1.2%	24.7%

"*" means less than 5 students in the category

"**" means no students in the category

[25] 2004 and 2005 Maryland Report Cards: Baltimore City.

Table 12: 2004 BCPSS High School Achievement on the Biology and Government HSAs, by School[26]

	School	Name	% of Students Passing Biology HSA (2004)		% of Students Passing Biology HSA (2005)		% of Students Passing Govern. HSA (2004)		% of Students Passing Govern. HSA (2005)	
			Special Ed.	Regular Ed.	Special Ed.	Regular Ed.	Special Ed.	Regular Ed.	Special Ed.	Regular Ed.
Zoned	040	Lake	*	20.0%	NA	5.4%	8.3%	31.4%	*	16.1%
	070	Southern	NA	NA	NA	3.3%	NA	NA	NA	18.5%
	401	NW	2.2%	15.0%	0.0%	11.5%	0.0%	31.0%	0.0%	22.6%
	405	Patterson	0.0%	4.5%	*	16.2%	0.0%	60.9%	12.0%	32.9%
	406	Forest Park	0.0%	8.3%	*	14.7%	4.3%	31.0%	2.9%	29.5%
	411	Walbrook	**	**	0.0%	2.9%	0.0%	26.6%	0.0%	14.0%
	412	SW	0.0%	8.4%	0.0%	3.9%	2.7%	31.6%	0.0%	14.8%
	450	Douglass	0.0%	12.5%	0.0%	1.5%	6.5%	33.5%	0.0%	12.6%
Restructured	416	Digital	26.1%	37.1%	NA	*	26.1%	53.0%	NA	33.3%
	418	DuBois	4.0%	17.2%	NA	0.0%	6.7%	38.8%	*	11.1%
	419	Lewis	5.0%	10.2%	NA	6.3%	*	26.3%	*	22.2%
	420	Banks	**	*	0.0%	6.8%	0.0%	9.2%	0.0%	31.0%
	424	Marshall	0.0%	8.7%	*	7.7%	*	25.0%	13.0%	27.9%
	425	Fairmount	NA	NA	NA	NA	7.7%	25.3%	NA	NA
	426	Lake	0.0%	9.2%	NA	NA	**	**	NA	NA
	431	Maritime	NA	NA	0.0%	7.8%	NA	NA	6.7%	11.9%
Inno.	422	New Era	12.5%	70.2%	NA	NA	**	**	10.0%	73.3%
	423	Freedom	NA	NA	16.7%	37.1%	12.5%	41.0%	NA	NA
Spec. Ed.	177	McMechen	NA	NA	NA	NA	NA	NA	NA	NA
	307	Claremont	**	**	NA	NA	**	**	NA	NA
	451	Briscoe	0.0%	**	0.0%	0.0%	0.0%	**	0.0%	0.0%
Alt.	178	Wood	0.0%	2.7%	*	0.0%	6.3%	9.1%	0.0%	0.0%
	413	Harbor City	0.0%	6.3%	0.0%	3.3%	0.0%	20.0%	0.0%	12.2%
	457	Paquin	*	13.6%	*	0.0%	*	28.6%	*	23.3%
Vo-tech	400	Edm/West	0.0%	36.8%	0.0%	36.8%	0.0%	59.6%	4.5%	51.9%
	410	Mervo	3.4%	40.5%	0.0%	24.6%	15.0%	63.7%	22.2%	49.5%
	454	Carver	0.0%	11.4%	0.0%	12.1%	3.2%	41.7%	5.0%	42.1%
Citywide	181	Southside	**	**	*	33.3%	*	52.5%	NA	100.0%
	403	Poly	**	94.0%	*	90.4%	**	99.6%	NA	96.8%
	407	Western	*	79.9%	*	56.5%	**	93.7%	NA	91.8%
	414	Dunbar	*	62.5%	*	61.5%	*	80.8%	NA	58.6%
	415	BSA	*	88.9%	NA	80.0%	*	93.2%	NA	78.7%
	480	City	*	81.5%	*	68.7%	*	97.7%	NA	86.3%
	421	NAF	*	55.7%	NA	NA	*	75.6%	*	64.5%
	Baltimore City		3.3%	40.9%	1.2%	31.8%	6.8%	55.0%	4.6%	45.3%

"*" means less than 5 students in the category
"**" means no students in the category

[26] 2004 and 2005 Maryland Report Cards: Baltimore City.

The Maryland State Department of Education (MSDE) is currently exploring alternative assessments to the HSAs for students with disabilities, and recent court cases and legislation in Alaska, Arizona, California, and Massachusetts have either exempted students from disabilities from exit exams like the HSAs or lowered the standards for them to pass. However, BCPSS and other districts in the state should not count on any easing of the standards for students with disabilities and should instead step up their remedial and preventive programs.

Unfortunately, there is little guidance for districts. **Exit exams like the HSAs are a relatively new reform effort so there is no quantitative research on which programs most effectively raise pass rates.** However, some common themes do emerge from the qualitative research and cost studies of exit exams; these findings are for all students not specifically for special education students. First, preventive programs are significantly cheaper than remediation and increase the chances that students will pass exit exams on their first attempt, which may be an important factor in minimizing dropouts due the exams.[27] District officials also generally report that student participation is more reliable in programs that take place during the school day rather than after-school or in the summer so students have more consistent and lengthy exposure to the instruction provided by these programs. These findings have not been confirmed by quantitative studies.

Common district level efforts to improve performance on exit exams include the distribution of pacing guides and lesson plans to the teachers of courses covered by the exams and the development of quarterly and semester district-wide exams as an early gauge of students' likely success on exit exams. Pacing guides tell teachers what material they should have covered in the curriculum by certain points in the school year, and the results of the district exams are meant to help teachers adjust instruction. For example, Anne Arundel County Public Schools (AACPS) has taken both these steps and is working with a test developer to support its own assessment development.

Below is an example of New Bedford, Massachusetts' comprehensive model for supporting students that includes many of the elements discussed above and also incorporates a case management component to ensure that students are on track to graduate and to develop post-secondary plans before they leave high school, with or without a diploma. This is system of supports has not been proven by research to improve achievement, and it is not a recipe for success for all districts. However, it is a good example of the network of supports and broad thinking that will be required to help Baltimore students pass the HSAs.

[27] Center on Education Policy. (2004). Pay Now or Pay Later: The Hidden Costs of High School Exit Exams. Washington, DC: Center on Education Policy.

New Bedford (MA) High School Services to Assist Students with Meeting their MCAS Competency Determination[28]

This is a partial list of what New Bedford does to help its high school students pass the exit level Massachusetts Comprehensive Assessment System (MCAS). None of the strategies were specifically for special education students.

- Department chairs and faculty modified the curriculum after an item analysis of students' scores on the MCAS test.
- All students who failed a portion of the eighth grade statewide tests were required to participate in an MCAS review course during their freshman year, either a regular course, a summer course, or a weekly 3-hour, after school, evening, or weekend meeting.
- An internet support program paid for by the district was made available for use from home, along with a state-sponsored program (Princeton Review). A computer laboratory was designed solely for use in MCAS preparations, and three additional preparation programs were available in this laboratory.
- MCAS facilitators provided individual assistance, initially targeted to students who were closest to attaining a passing score. Eventually the facilitators created individual student success plans for all students who had taken but not passed the test. The plans were discussed with students and shared with the appropriate instructors and with parents. Staff members were relieved from some of their teaching duties to become facilitators.
- One school level supervisor directed all MCAS academic support services and developed an action plan for expanding learning opportunities. An additional senior year MCAS advisor assisted seniors in passing the MCAS, explored alternative pathways if the MCAS requirement was not met by the end of the senior year, created agreements with local community colleges to serve students not successful on the MCAS exam, developed a program of community involvement, and helped students through the state's appeals process, an alternative way to show that the standards tested by the MCAS had been met.
- The district appointed four community contact workers (and one interchurch council member) representing the three major cultures served by the New Bedford High School bilingual program to increase participation and attendance in MCAS programs.
- The district also created agreements with businesses for student employment while students worked toward passing the MCAS after their senior year.

The district claims that the most important aspects of its program are the individual attention that students receive and the scope of supports available.

[28] Ibid.

Chapter 4: Vaughn G. Outcomes

In 1984, the Maryland Disability Law Center filed a lawsuit, *Vaughn G., et al. v. Mayor and City Council of Baltimore, et al.* (commonly referred to as Vaughn G.) on behalf of students with disabilities in Baltimore City who did not receive evaluations and reevaluations within timelines mandated by law and/or who did not receive timely development and implementation of individual education plans (IEPs). The case was settled by the parties in 1988 with a consent decree embodying the agreement of the BCPSS to comply with all federal and state laws and provided for additional remedial measures to benefit students with disabilities. Since then the Court has continued to monitor BCPSS' progress in achieving compliance with the federal and state laws and Court decrees.

In 2000, the Court adopted 15 ultimate measurable outcomes (UMOs) negotiated by the parties. **Overall, BCPSS has made significant progress in meeting the requirements of Vaughn G. BCPSS has met and has been released from seven of the fifteen UMOS, and district has either met and not yet been released from or is close to meeting five others.** Those five are outcomes are:

- Outcome 7, which measures the percentage of students with disabilities who were expelled or were suspended more than 10 cumulative or consecutive days in accordance with IDEA;
- Outcome 8, which measures the percentage of students with disabilities who received required IEP services within the general education classroom (LRE A or B settings);
- Outcome 9, which measures the percentage of students who were transferred to receive special education services in schools other than the one they would attend if they were not disabled;
- Outcome 13, which measure whether or not an IEP team review meeting was convened for all special education dropouts to determine if all diligent efforts to retain the student who is dropping out were attempted; and
- Outcome 15, which measures whether IEP Progress Reports include certain indicators.

A detailed description of these five outcomes, their status, and recent data reported by BCPSS on each is included in Appendix A of this report.

Three outcomes—graduation rates, dropout rates, and especially the provision of special education services like speech therapy and counseling—continue to be challenges, and they are the focus of this chapter.

Ultimate Measurable Outcomes 3 and 4: Completion and Graduation Rates

Both Outcome 3 and Outcome 4 are unmet. Outcome 3 is meant to increase the number of students with disabilities who exit BCPSS with a diploma or certificate instead of dropping out of school prior to completion of a program. The ultimate goal of Outcome 3 is to have 57.2% of students with disabilities leave the school system with a diploma or certificate. Outcome 4 is meant to increase the number of students with disabilities who leave BCPSS with a diploma instead of receiving a certificate or dropping out of school. The ultimate goal of Outcome 4 is to have 41.6% of students with disabilities exit the system with a diploma. This graduation rate is calculated differently than the one discussed in chapter 3 of this report, which is used for No

Child Left Behind accountability requirements. In fact, the graduation rate for students with disabilities in school year 2003-2004 as reported by the Maryland State Report Card is higher than the one reported below for Outcome 4.

Over the years, BCPSS has struggled to meet both of these outcomes. The latest numbers from June 2004 show some improvement after several years of declines. These outcomes are calculated using all 14-to 21-year-old students with disabilities, and since some of these students are still in middle school, these figures are not only for the city's high schools.

Table 13: Disabled Students Leaving BCPSS with Diplomas or Certificates[29]

UMO	Goal	June Status			
		2001	2002	2003	2004
Outcome 3: Students Leaving School with a Diploma or Certificate	57.2%	48.1%	46.1%	36.1%	42.4%
Outcome 4: Students Leaving Schools with a Diploma	41.6%	37.6%	37.0%	23.2%	27.6%

Of the 1068 students with disabilities who exited BCPSS schools or non-public placements in school year 2003-2004, 57.6% dropped out, 27.6% received a diploma, 12.8% received a certificate, and 2.0% reached age 21 and must therefore leave the system.

Table 14 shows data on Outcomes 3 and 4 by high school for the 2003-2004 school year. In that year, Marshall, Fairmount, Lake 426, and Banks had no seniors; data for these schools did not have any seniors; however, students with disabilities in those schools still might have been able to receive a certificate or might have dropped out. School-by-school comparisons are impossible to make because there are no data on how many students are on a diploma or certificate track or on the severity of each school's student population's disabilities. However, it is clear that completion, graduation, and dropout rates all need substantial improvement.

[29] Baltimore City Public School System. (2005). Disengagement Outcomes Historical Summary Report. BCPSS: Baltimore, MD.

Table 14: Disabled Students Leaving BCPSS with Diplomas or Certificates for School Year 2003-2004, by School[30]

	School	Name	Outcome 3: Students Exiting with A Diploma or Certificate	Outcome 4: Students Exiting with a Diploma	Number of Students with Disabilities Exiting
Zoned	040	Lake	73.5%	51.0%	49
	070	Southern	37.5%	35.0%	40
	401	NW	51.9%	42.3%	52
	405	Patterson	49.2%	35.4%	65
	406	Forest Park	54.3%	53.4%	35
	411	Walbrook	20.4%	12.2%	49
	412	SW	47.1%	41.4%	70
	450	Douglass	33.9%	33.9%	62
Restructured	418	DuBois	34.1%	34.1%	41
	419	Lewis	73.9%	39.1%	23
	420	Banks	20.0%	NA	*
	424	Marshall	0.0%	NA	*
	425	Fairmount	0.0%	NA	*
	426	Lake	20.0%	NA	*
Spec. Ed.	177	McMechen	84.8%	0.0%	46
	307	Claremont	94.7%	0.0%	19
	451	Briscoe	39.0%	12.2%	41
Alt.	178	Wood	12.5%	6.9%	72
	413	Harbor City	3.7%	0.6%	163
	457	Paquin	25.0%	25.0%	*
Vo-tech	400	Edm/West	88.2%	58.8%	17
	410	Mervo	96.0%	96.0%	25
	454	Carver	80.6%	77.8%	36
City-wide	414	Dunbar	100.0%	100.0%	*
	480	City	100.0%	100.0%	*
	421	NAF	100.0%	100.0%	*
	High Schools Only		41.8%	28.3%	937

* 5 or fewer students in category

Ultimate Measurable Outcome 11: Interruptions in Service

Outcome 11 is unmet. The goal of Outcome 11 is that no more than 2% of students with disabilities will have interruptions in services such as speech therapy or counseling in any school year. There are no aggregate data for all high schools, but data for individual schools for the 2000-2001 through 2003-2004 school years show that most high schools have been in compliance (see Table 15).

[30] Vaughn G. The Baltimore City Public Schools System's Compliance Statements for School Year 2004/2005, filed August 22, 2005.

Table 15: Interruptions in Services, by High School[31]

	School	Name	% of Special Education Students with Interruptions in Service			
			00-01 SY	01-02 SY	02-03 SY	03-04 SY
Zoned	040	Lake	5.2%	3.2%	0.4%	0.0%
	070	Southern	0.0%	1.0%	0.0%	0.0%
	401	NW	0.5%	0.8%	0.4%	0.0%
	405	Patterson	1.7%	0.4%	0.0%	0.0%
	406	Forest Park	0.0%	0.0%	0.0%	0.7%
	411	Walbrook	0.6%	1.3%	0.4%	0.6%
	412	SW	0.0%	1.6%	0.3%	1.0%
	450	Douglass	0.0%	0.5%	0.0%	0.5%
Restructured	416	Digital	NA	NA	2.4%	2.0%
	418	DuBois	NA	NA	1.0%	2.3%
	419	Lewis	NA	NA	1.2%	47.1%
	420	Banks	NA	NA	2.2%	2.2%
	424	Marshall	NA	NA	NA	0.0%
	425	Fairmount	NA	NA	NA	0.0%
	426	Lake	NA	NA	NA	0.0%
Inno.	422	New Era	NA	NA	NA	10.0%
	423	Freedom	NA	NA	NA	0.0%
Spec. Ed.	177	McMechen	0.0%	0.0%	0.0%	0.0%
	307	Claremont	0.0%	1.5%	0.0%	0.0%
	451	Briscoe	5.6%	1.2%	0.0%	0.0%
Alt.	178	Wood	0.0%	0.0%	0.0%	1.1%
	413	Harbor City	0.0%	0.0%	0.0%	0.6%
	457	Paquin	16.7%	0.0%	0.0%	0.0%
Vo-tech	400	Edm/West	1.0%	0.0%	0.0%	1.3%
	410	Mervo	0.0%	0.0%	0.0%	1.2%
	454	Carver	0.8%	0.0%	0.0%	0.0%
Citywide	181	Southside	0.0%	0.0%	0.0%	0.0%
	403	Poly	0.0%	0.0%	0.0%	NA
	407	Western	0.0%	0.0%	0.0%	0.0%
	414	Dunbar	0.0%	0.0%	0.0%	0.0%
	415	BSA	0.0%	0.0%	0.0%	0.0%
	480	City	0.0%	NA	0.0%	0.0%
	421	NAF	NA	NA	0.0%	0.0%

For all special education students in the district, the percentage of students with interruptions in services ranged from 1.7% in 2001-2002 to 5.4% in 2003-2004. However, recent findings of the court report that at least 54.2% of special education students K-12 in school year 2004-2005 had interruptions in services.[32] It was these findings that prompted the Court in 2005 to give MSDE substantial control over special education in Baltimore City. It is unclear what led to this dramatic increase in the percentage of special education students having interruptions.

[31] BCPSS 4th Quarter High School Profile Data for School Year 2003-2004.
[32] Vaughn G. Consent Order on Contempt RE: Interruptions in Service. Filed August 12, 2005.

Chapter 5: Instructional Practices and IEPs

This chapter explores resources, instructional programs, IEPs, and training, which all greatly influence the kinds and quality of instruction that students receive. While this report did not study enough classrooms to assess overall quality of special education instruction, data from the interview with BCPSS staff permit some conclusions about special education instruction might be like in BCPSS high schools, or at least what school staff believe about special education instruction in their schools.

Instructional Models

Most staff at the seven Baltimore high schools in this study reported that they choose certain instructional practices because they don't have the training or resources they need to implement the programs they believe would be best for children, and because the district's focus on inclusion limits their ability to use pullouts and self-contained classrooms. Most schools report following a collaborative consultation (CC) model for special education: special education teachers visit regular education teachers' classrooms anywhere from once a day to once a week to provide some support for special education students. Many of these schools also have a few self-contained classrooms (usually in courses like Algebra I or English I) and occasionally pull students out of classes. Smaller schools like Baltimore Freedom Academy and New Era often do not have enough staff for self-contained classrooms. A few schools claimed that they would prefer to use more self-contained classrooms but feel pressure from the district for more inclusion, even if it was not what students "really needed." Staff believe that self-contained classes are needed when class sizes are particularly large or when there are large percentages of special needs students in regular education classrooms. When pressed to specify at what percentage of special needs students does instruction become less successful, teachers usually mentioned 25%, but this depended on the kinds of disabilities represented in the classroom.

Many school staff explained they use the CC model due to a lack of special education teachers and that they believe that co-teaching would be more effective. In co-teaching model, two or more teachers in the same classroom deliver substantive instruction to a group of students with diverse learning needs. Having one qualified teacher and one aide in a classroom is not co-teaching. One school in the study switched from a co-teaching model to CC because their staff had not been trained to co-teach, and the special education teacher was in the role of "a very expensive assistant." **However, school-level staff were not familiar with the research on instructional models but based their ideal instructional models primarily on their beliefs.** (The only instructional model change that research shows may have impacts is block scheduling, which is more conducive to differentiated instruction and improves the success of students with disabilities who are studying general education curricula.)[33]

[33] Stodden, R., L.M. Galloway, & N. J. Stodden. (2003). Secondary School Curricula Issues: Impact on Postsecondary Students with Disabilities. *Exceptional Children*, v. 70, n. 1, p. 9-25.

Co-teaching

An increasing number of districts around the country are using co-teaching as part of their high school reform models for students with disabilities. Howard County is using it as a part of an intervention process while New York City Public Schools are using it more widely. The text box below for further information on both programs.

Co-teaching in New York City and Howard County Public School

Interviews and documents showed that both New York City and Howard County are pleased with their decisions to use co-teaching to improve achievement for low-performing students and students with disabilities in their high schools.

New York City has a grant-based program to help high schools plan for special education. New York is focusing on developing collaborative team teaching (CTT) programs in its small high schools and plans to have all the small high schools participate eventually. CTT is essentially co-teaching, but schools decide how broadly they want to implement CTT—in a few key classes or in all classes. The grant application process is fairly loose, and it appears to mostly function as an indicator of whether schools are committed to trying CTT. Schools that receive the $10,000 planning grants must attend grantee meetings and professional development sessions, and must report on progress and lessons learned. The grantee meetings and professional development sessions focus on building support for CTT within schools, creative budgeting, scheduling solutions, and other nuts and bolts strategies of using the model. Schools seem to be expected to tailor the program to individual school needs.

Staff from New Visions Public Schools, which oversees the project, acknowledged that no research supports co-teaching high schools at this point. However, staff said that they believe that only one high school in NYC does a great job of educating and incorporating students with disabilities, and it has a CTT model. Therefore, they believe that supporting schools that want to engage in CTT coupled with research-based programs like Ramp-Up to Literacy is a reasonable solution to a difficult program.

Howard County Public Schools (HCPS) has a pilot intervention program at some of its high schools and expects to expand the program over the coming years to more high schools. The program is for students who are simply "below average" rather than those in need of an intensive intervention program such as Wilson Reading, which is for students reading at below a fifth grade level. Students are identified for the program in the eighth grade. Up to 20% of the students in the program can have IEPs.

In the program, classes of 20 students are co-taught for two period blocks in both English 9 and Algebra I; most students only have one period of each subject. The second period of each block is a seminar and counts as elective credits for these students. The four teachers who teach these classes teach for 4 of the 7 periods in a day rather than the district's standard 5 so they get an extra period for professional development and team meetings. The teachers receive targeted professional development focused on the core curriculum, content literacy, differentiated instruction, and co-teaching strategies. Professional development is provided by the district's secondary curriculum group and by the special education department. Schools place either 40 or 80 of their students this program—40 if the same students need help in both math and English,

80 if the school identifies 40 students who need math help and 40 other students who need English help.

Officials in HCPS believe that this model provides some of the benefits of a small learner community by reducing the number of teachers that a student has, and the district reports that teachers use research-based instructional programs like the Carnegie Cognitive Tutor Program. The average quarterly district assessment scores for the most recent cohort of students in the program are higher than the average of their schools and the countywide average. In addition, attendance has improved, and teachers note a difference in students' demeanor, organizational skills, self-esteem, and level of commitment. The district also attributes increased HSA pass rates to the program. No costs for the program were readily available.

The two districts' strategies for using co-teaching have some important similarities. First, the programs are not just for students with disabilities. Second, both use research-based reading and math strategies for their programs. Third, school staff are provided extensive professional development before the programs start and then also on an on-going basis during the school day. While these features may not be essential for co-teaching programs, they are useful principles to keep in mind if a district decides to support co-teaching.

Staff at several BCPSS schools said that they would like to use co-teaching in their efforts to help students with disabilities, but at this point, research does not confirm that it is a strategy that BCPSS should pursue. As co-teaching slowly gains popularity, many researchers and practitioners doubt that co-teaching in high schools actually raises achievement for special education students. Most of the studies of the effectiveness of co-teaching are at the elementary school level. The Council for Exceptional Children notes that research on the effectiveness of co-teaching in high schools is "woefully inadequate." Despite the many resources available to tell practitioners how to implement co-teaching, virtually no data tell districts or teachers that it is worth doing.[34] Mastropieri and Scruggs' review of the literature also found a shortage of research on co-teaching.[35] However, a few studies have focused on co-teaching in high schools.

Boudah, Schumacher, and Deshler studied the effects of co-teaching on high school students' performance on content subject quizzes and on test scores. They found that the scores of high school students with high–incidence disabilities worsened during the experimental co-teaching treatment. Further, students in co-taught settings were only minimally engaged in instructional tasks.[36] However, there are questions as to how well trained the staff were in co-teaching and if there was sufficient time for effects to be seen. Often when a new program is implemented, test scores initially drop.

In a large suburban high school in the Southwest, Keefe and Moore asked teachers what effects of co-teaching they saw. The researchers noted an elimination of the stigma attached to disabled students and an increased amount of individualized help and attention for students without disabilities. One special education teacher commented about co-taught special education

[34] Current Practice Alerts: A Focus on Coteaching. Current Practice Alerts Division for Learning Disabilities (DLD) and Division for Research (DR) of the Council for Exceptional Children. (2001). Issue 6. <www.didcec.org/alerts/>

[35] Mastropieri, M. A. & Scruggs, T. E. (2001). Promoting Inclusion in Secondary Classrooms. *Learning Disability Quarterly*, v. 24, p. 265-274.

[36] Boudah, D., Schumacher, J., & Deshler, D., (1997). Collaborative Instruction: Is It an Effective Option for Inclusion in Secondary Classrooms? *Learning Disabilities Quarterly*, v. 20, p. 293-316.

students: "I really saw a big difference in the way those kids in the inclusion class functioned. They learned a lot more. What they produced was a lot higher level." The special education teacher noted negative student outcomes as well: "for some kids inclusion is appropriate, for some it's not." For students who needed a great deal of help, the co-taught classes "were too big." [37]

Murawski and Swanson's meta-analysis of co-teaching research across all grade levels found that co-teaching "is a moderately effective procedure for influencing student outcomes," with better outcomes in reading and language arts and smaller effects in mathematics and student referrals. However, "further research is needed to substantiate that co-teaching is an effective service delivery option for students with disabilities."[38]

Thus, the research suggests that co-teaching holds some promise and should not be discouraged in schools that are committed to the model. However, it does not seem appropriate to impose it upon a whole district, particularly without a cost effectiveness analysis.

Reading and Mathematics Instruction

Reading

Many Baltimore high schools mentioned the need for better reading instruction not only for special education students but also for their regular education student population. This need is substantiated by state test scores. In addition, school staff report that they either do not know what works for reading instruction or do not have the resources to implement better programs.

School staff generally reported that the reading ability of special and regular students was often similar and that a reading specialist would be a great help for their entire student population. Additional professional development in reading for all subject area teachers was also requested since training in reading is generally not required for secondary certification. Finding appropriate reading materials (high interest, low level) has also been a struggle for schools, especially in areas other than English.

Schools are working to improve reading instruction. Reading programs that schools mentioned as most helpful were Wilson Reading, which got high marks from every interviewee; Directed Reading; and Corrective Reading. School 426 has developed a class as a bridge between Wilson Reading and regular high school English. It is for students for whom Wilson Reading (3rd to 5th grade level) is no longer appropriate but who still need additional help to be prepared for high school reading materials. The class starts before the regular school day, and students take it in addition to their regular English class. In Spring 2005, Catapult Learning piloted Education Station's Mastery Learning program — a reading intervention program designed primarily to serve special education and low-achieving middle school students during the school day — with 96 Baltimore City middle school students. Catapult Learning hopes to work with Baltimore City to provide this individualized instructional program to high school students in the future, but the program is still early in the development and evaluation process.

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[37] Keefe, E. B. & V. Moore. (2004). The Challenge of Co-Teaching In Inclusive Classrooms At The High School Level: What The Teachers Told Us. *American Secondary Education*, v. 32, p. 77-88

[38] Murawski, W.W., H.L. Swanson, & H. Lee, (Sep/Oct 2001). A Meta-Analysis Of Coteaching Research. *Remedial & Special Education Research*. v. 22, n. 5.

Another school uses the Scholastic Reading Inventory to test all its students, and then teachers use a database called Lexile to find books of the appropriate reading level for their students. Teachers said that in the past they had trouble identifying materials and that school staff are very happy with the results of this tool.

There is extensive research on effective reading programs for middle and high school students. Programs differ great in their purposes and the reading deficiencies they target, and the eleven programs described in the text box below have documented positive results.

Research-Based Reading Programs[39]

- First Steps is a school-wide professional development program in reading, writing, spelling, and oral language for teachers of students in kindergarten through tenth grade. It is not a curriculum, but instead provides teachers with the knowledge and support they need to implement effective reading strategies in their classrooms. It has a strong research base and has been evaluated by the Australian Council of Educational Research and other research groups.
- The Strategic Instructional Model (SIM) is a system of student learning strategies and teacher instructional routines. SIM was developed over twenty years at the University of Kansas to support students with learning disabilities. It is increasingly being adopted by general education teachers to help them work with their struggling readers. It has been implemented in thousands of schools across the country and has documented results.
- Accelerated Reader (AR)/Reading Renaissance Program uses computer assessment to determine a student's level of reading comprehension (K-12) and then provides a list of appropriate books and quizzes for each. Studies have shown growth in achievement on standardized tests for primary and secondary students, increased library use, and increased time-on-task reading.
- Benchmark Word Detectives Program for Fifth Grade and Above is a series of programs and strategies for students struggling with decoding problems and reading at second grade level and above. It is well-researched in students in grades 1-8, but the program for struggling adolescent readers is new and has not been evaluated for students beyond middle school.
- Project CRISS (Creating Independence through Student-owned Strategies) supports secondary teachers in helping students with a variety of strategies for reading text in various content areas. There is evidence of improved delayed recall.
- Read 180 is a computer-supported program to build the reading fluency and comprehension of struggling secondary readers.

[39] Peterson, C.L., D.C. Caverly, S. A. Nicholson, S. O'Neal, & S. Cusenbary. (2000). Building Reading Proficiency at the Secondary Level. Southwest Educational Development Laboratory: Austin, TX.; Summary of the Second Adolescent Literacy Workshop: Practice Models for Adolescent Literacy Success. (2002). National Institute for Literacy, National Institute of Child Health and Human Development, and US Department of Education.; Grossen, B. (2002). The REACH system. Blacklick, OH: Science Research Associates.; Fletcher, J.M., S. E. Shaywitz, D. P. Shankweiler,, et al. (1994). Cognitive profiles of reading disability: Comparisons of discrepancy and low achievement definitions. *Journal of Educational Psychology*, v. 86, p. 6-23; Torgesen, J.K., A. W. Alexander, R. K. Wagner, C. A. Rashotte, K. Voeller, T. Conway, & E. Rose. (2001). Intensive remedial instruction for children with severe reading disabilities: Immediate and long-term outcomes from two instructional approaches. *Journal of Learning Disabilities*, v. 34, p. 33-58.

- Reading Power in the Content Areas (RP) is designed to help general education and vocational education teachers improve the content reading of secondary-level students through assessment and instructional strategies. Studies have shown significant gains on standardized tests of reading comprehension.
- Wilson Reading Program (WRS) targets students with severe decoding and spelling difficulties. Its effectiveness has been shown for dyslexic students and those with other reading disabilities.
- The Corrective Reading Model is designed for older nonreading or struggling readers. The model has 30 years of data indicating that it improves the reading acquisition of older students with reading problems. With good implementation, students generally improve by two or three grade levels in one year.
- The Language! Model is a comprehensive literacy intervention curriculum for grades 4-12 used in general and special education. It is for students who are reading two or more years below grade level. It has been shown to improve reading in junior high and high school students, including nonreaders, special education students, and English language learners.
- The Strategic Reading model is an instructional component of the Talent Development High Schools (TDHS) model. The course is designed for ninth-grade students who are two or more years below their expected reading level. It has increased reading levels in some Baltimore and Philadelphia schools.

With so many choices, a school system or an individual faced with decisions about selecting reading strategies could be easily overwhelmed. One excellent resource is an extensive guide for reading strategies for students with disabilities, developed by Anne Arundel County Public Schools (AACPS).[40] In addition, AACPS has developed a three-tiered reading model, which recommends a variety of research-based reading programs depending on a student's needs and reading levels. The programs range widely in intensity, and the reading model is supported by several diagnostic and screening assessments. The tiers are organized as follows:

- Tier 1: Core Reading Program—Voluntary State Curriculum, Pacing Guide & Alignment Documents, and scheduled formative assessment. This is the baseline of what students receive.
- Tier 2: Core Reading Program + Targeted Intervention—Adds Early Reading Intervention, Spell Read P.A.T., Corrective Reading Decoding, Soar to Success, and ongoing progress monitoring. This tier is for students with moderate reading problems.
- Tier 3: Core Reading Program + Intensive Intervention—LiPS w/Visualize & Verbalize, Wilson Reading System, Failure Free Reading, Fast ForWord followed by a decoding intervention, and ongoing progress monitoring. This tier is for students in need of the most reading assistance.

While AACPS does not have school-based reading specialists, reading specialists are available for diagnosis and screening. Professional development is widely available, and AACPS expects to have evidence of impacts in the near future. See Appendix B for amore detailed description of

[40] Alternative Reading Strategies: Preparing Students with Disabilities to Read in the 21st Century. (1999). Annapolis, MD: Anne Arundel County Public Schools, Division of Special Education.

the assessments and strategies in each tier of this reading model. Implementation of this model or one like it would require substantial staff time for training, a large investment in materials and software, and new staff such as reading specialists and technical assistance providers.

Mathematics

As with reading instruction, special education and regular education students need better mathematics instruction. However, assistance with mathematics instruction was less frequently mentioned as an area of need, but schools reported having trouble finding special education staff with mathematics backgrounds. State achievement scores, however, show that additional assistance is required.

Some school staff asked if there were any research-based mathematics programs they could use to strengthen their instruction. While there is much less research on impacts of mathematics programs than of reading programs, the U.S. Department of Education's What Works Clearinghouse (WWC) is a valuable resource. WWC has published a thorough analysis of research of the effectiveness of forty mathematics instructional programs. These programs are primarily used in middle schools, but the students who participated in the studies ranged from sixth to tenth grade.[41] WWC found that it could document the effectiveness of only five of the math interventions. The five programs are:

- Cognitive Tutor
- Connected Mathematics Project
- The Expert Mathematician
- I CAN Learn Mathematics Curriculum
- Saxon Math

To improve reading and mathematics instruction and achievement, schools must have better access to materials, professional development, guidance on research-based programs, and reading specialists. While more supports are available at the district level than schools are aware of, better communication about what is available is needed.

School Climate and Reactions to Inclusion

According to school staff, increased inclusion has made instruction more difficult. Most school-level BCPSS school staff believe inclusion is the right approach for most, but not all, special education students. This is surprising because administrators expected that there would be more resistance to the idea of inclusion. **Yet while they are generally supportive of inclusion, BCPSS school staff noted that there are insufficient resources and staff training to properly implement the student inclusion model, and that behavior management problems due to inclusion are a concern.**

Some staff feel that when inclusion is poorly implemented, some students with disabilities are less well-served than they would be in self-contained classrooms. In addition, staff spoke of special education students who disrupt class so often that instruction for all students suffered. There are some data that support the assertion that, in proportion to their numbers, special education students cause more disruptions than regular education students. Roughly 16% of high

[41] What Works Clearinghouse. (2004). Curriculum-based Interventions for Increasing K-12 Math Achievement-Middle School. Washington, DC: United States Department of Education.

school students in BCPSS are in special education, but roughly 41% of high school students referred to the Office of Suspension Services (OSS) were special education students.[42] Principals refer students to OSS for possible long-terms suspensions, suspensions of more than 10 days.

Several schools reported the need for a common strategy to deal with classroom and behavior management both to handle seriously disruptive special education students and to substantially reduce the instructional time spent on sorting out discipline issues early in the school year for both special and regular education students. Many districts around the country, the state, and even some non-public special education facilities in Baltimore City have adopted such strategies and have been pleased with the results (see the text box below).

Classroom and Behavior Management Programs

Discussions with educators at non-public special education facilities and a literature review of classroom and behavior management systems identified two programs that appear to improve behavior and classroom management for both regular and special education students.

The Prevent, Act, Resolve (PAR) model developed by Dr. Michael Rosenberg and associates at Johns Hopkins University has been implemented in schools in the Washington/Baltimore area, including Howard County. The program reports significant decreases in the number of administrative referrals and suspensions, and improvement in measures of school climate in middle schools and high schools.[43]

The Positive Behavioral Interventions and Supports (PBIS) system was initially developed at the University of Oregon and now has a wide variety of research and implementation partners such as Sheppard Pratt Health System, the Illinois State Board of Education, and the Universities of Missouri, Kansas, South Florida and North Carolina. While a significant body of research on impacts at the elementary and middle school levels is available, systematic evaluations of implementation and outcomes of PBIS in high schools are just beginning.[44]

The PBIS initiative in Maryland is led by partners from the Sheppard Pratt Health System, the Maryland State Department of Education, and Johns Hopkins University's Center for the Prevention of Youth Violence, and the program has been implemented in public schools in Anne Arundel, Baltimore, Charles, Prince George's, and Washington counties as well as in several nonpublic facilities like St. Elizabeth's High School in Baltimore. Twenty-one elementary and middle schools in Baltimore City began training in PBIS during summer 2005.

PBIS includes a School-wide Evaluation Tool (SET), and early data from SET in Maryland are promising.[45] For example, Meade High School in Anne Arundel County began its PBIS program by focusing on ninth graders and the special education population. Both groups have shown a significant reduction in office referrals, and the school has therefore begun school-wide implementation. Glen Burnie High School in Anne Arundel County experienced an 18% drop in expulsions during its first year using PBIS. High schools in Baltimore County have also reduced

[42] BCPSS 4th Quarter High School Profile Data for School Year 2003-2004.

[43] Rosenberg, M.S. and L.A. Jackman. (1997). Addressing Student and Staff Behavior: The PAR Model. In The Fourth Conflict Resolution Network newsletter, v. 79, August/September 1997

[44] Sugai, G., K. B. Flannery, & H. Bohanon-Edmonson. (2005). In Positive Behavior Support in High Schools: Monograph from the 2004 Illinois High School Forum of Positive Behavioral Interventions and Supports. U.S. Department of Education, Office of Special Education Programs Center on Effective School-Wide Interventions: Washington, DC

[45] PBIS Maryland Newsletter. (Spring 2005). Retrieved from www.pbismaryland.org.

suspensions and expulsions after implementing PBIS. Staff in Charles County report that PBIS had led to an increase in community, parent and staff satisfaction based on surveys; a reduction in staff absenteeism; a reduction in teacher transfer requests and turnover; and increased administrative time. Boston Public Schools is planning to implement PBIS in its high schools.

PBIS requires significant school-level resources, including coaches for the program, time to train all the staff in the schools, and stipends for data entry. No cost estimates were available.

IEPs and Other Paperwork

Individualized Education Programs (IEPs) are meant to drive instruction, and therefore, any findings about these documents have implications for the quality of instruction. This section focuses on BCPSS staff perceptions about IEPs. For a detailed analysis of the shortcomings in the development and implementation of IEPs in BCPSS, see the Abell Foundation's publication *The Road to Nowhere* by Kalman Hettleman.[46]

Quality and Completeness

Many teachers, instructional associates (IAs), and related services providers reported that IEPs and other required paperwork, such as documents associated with the child study teams, are repetitive, too time-consuming, and ultimately not very useful documents. Many said that they spent a great deal of time on paperwork rather than on providing services to students. BCPSS has recently shifted the bulk of administrative duties to IAs, which should ease the burden on related services providers and teachers but may lessen IAs' impact on instruction.

Data management for special education is a challenge across the country. A recent evaluation of New York City's special education system found significant inaccuracies and unnecessary complexities in the city's data system, hindering the district's ability to manage special education in an effective and efficient manner.[47] NYC's poor data management has also undermined its compliance with its on-going special education litigation (*Jose P.*). Some districts have reported substantial benefits from upgrading the data tracking systems that support the administrative work associated with special education (see the text box below).

[46] Hettleman, K. R. (2004). The Road to Nowhere: The Illusion and Broken Promises of Special Education in the Baltimore City and Other Public School Systems. Baltimore, MD: The Abell Foundation.

[47] Hehir, T., et.al. (2005). Comprehensive Management Review and Evaluation of Special Education. New York, NY: The New York City Department of Education.

Software Solutions for Paperwork Problems

Special education teachers, instructional associates, social workers, and psychologists in BCPSS report that they spend much of their time completing repetitive paperwork rather than serving students or supporting general education teachers. Indeed, a national survey by the Council for Exceptional Children found that across the country 65% of special education teachers said they spend more than 20% of their time on paperwork.[48]

BCPSS school staff believe that there were ways to streamline documentation while still complying with the requirements of IDEA, COMAR, and Vaughn G. Research on special education data management systems suggests that they are right: updated programs for data management might give schools more time and resources for student instruction and services.

The companies provide special education data management programs include Netchemia, Class Plus, Computer Automation Services, IEP Online, IEP Writer, e-IEP Pro, Tera Systems, Ewing Solutions and 4GL Solutions. Their programs perform various functions such as IEP development, case management, and invoice and billing software for related services. Most of these companies typically serve small school districts.

4GL Solutions serves many large districts such as San Diego, Pittsburgh, and Winston-Salem/Forsyth County Schools in North Carolina, and its software, ENCORE!, has been endorsed by the Council of Administrators of Special Education (CASE), an affiliate of the Council for Exceptional Children (CEC). Charles County Public Schools, which selected ENCORE! based on a national review of similar programs, reports in a national journal that the program has reduced the district's paperwork burden and costs by eliminating redundant data entry and paperwork; increased revenue reimbursement for student services; and improved data-based decision-making.[49]

The director of the Exceptional Children's Program in Winston-Salem/Forsyth County Schools in North Carolina reports a 75% decrease in the time it takes staff to draft an IEP; a savings of roughly $150 per special education student from a decrease in time staff spend in IEP meetings; an elimination of most IEP procedural compliance problems; better retention of special education staff; a redirection of district level compliance staff from fact checking to supporting instructional programs, and a 20% gain in reading scores for special education students.[50] 4GL reports that districts save roughly $300 to $700 per special education student.

None of the special education data management systems reviewed includes every component a large school district would need to track special education data. For example, interviews revealed that BCPSS staff are concerned that ENCORE! lacks a way to track discipline problems, and that there could be compatibility problems between the program and BCPSS' general data management system, SASI. However, ENCORE! appears to have some clear benefits, and the program might be worth reviewing as a possible upgrade in the future if BCPSS' concerns are addressed.

[48] Coleman, M.R. (2000). Conditions for Special Education Teaching: CEC Commission Technical Report. Arlington, VA: Council for Exceptional Children.

[49] Cox, J. H. (2005). Maryland District Evaluates a Special Education Management System's Impact on Its Bottom Line. *Technological Horizons in Education Journal Online*, May 2005.

[50] Dempsey, S. (2005). Data and Dollars: How one school district saved millions on its special education program. American School Board Journal: Technology Focus. Alexandria, VA: National School Boards Association.

Teachers reported that IEPs are often vague and general. One person said, "The useful parts of the IEP are the goals, accommodations, and modifications, and the rest is fluff." However, many teachers thought that goals were usually not specific to be useful either. For example, the goals are not individualized for the students but simply include items like "the student needs a reduced work load." Often the goals are not current; they reflect middle school material and goals rather than high school goals and standards. Finally, the IEPs only cover math and English; some staff said that IEPs should also cover other content areas such as science and social studies.

Many school staff members would prefer a scope and sequence of skills with a more detailed set of goals, perhaps in a matrix or checklist form based on skills and the curriculum for each class. Such a goal's section would be more readable and more related to the curriculum. Others suggested similar changes, or the need to examine and revise paperwork so that they could be made useful and efficient.

Some staff members felt that the paperwork associated with IEPs, child study teams, and the Vaughn G. case is somehow punitive rather than dictated by IDEA and COMAR. Others believed that Baltimore was "farther ahead than some urban systems [in ensuring services for students with disabilities are provided] because of Vaughn G." In any event, the paperwork for IEPs and children study teams is so staff-intensive that psychologists, speech pathologists, and other related service providers must do paperwork rather than work with children.

Staff were concerned that poor assessment of students leads to undiagnosed or misdiagnosed children. Some students should have more services; others do not really require IEPs or some of the modifications detailed in their IEPs. In addition, many students with disabilities are not identified as disabled and do not have IEPs. This may reveal an assessment problem or a reluctance to identify more students as disabled when the system lack the resources to serve currently identified students.

Teachers and principals remarked that the quality of incoming students' IEPs depends on the middle school that created them. Many IEPs from middle schools understate the amount of services students need, and the additional needed services are not added to IEPs during high school. School staff believe this happens for two reasons. First, the resources and service providers are simply not available. As one person said, "You may know that there are limited services for students so you don't write the needs in" because the school would be out of compliance when they cannot provide those services. Second, some thought that difficulties with documentation were the major obstacle to providing appropriate IEPs. As one interviewee said, "The district will say that we do not document what we do well enough not only to get the services [added to IEPs] in the first place but then to show that they have been provided." One high school even paid for independent assessments by Loyola College to ensure that students' needs were properly diagnosed and documented. A district administrator disagreed that there is a tacit message that IEPs should be adjusted because of limited resources

High school staff need better information about the availability of services, more extensive training on IEP documentation, and a clearer understanding of the rationale for the required paperwork.

Transferring Paperwork

High schools reported difficulty in acquiring IEPs from middle schools. Without timely information about the needs of students with disabilities, it is very difficult to ensure that appropriate resources and staff are available and to schedule classes. A high school with one or two feeder schools faces a far smaller challenge than Innovation or citywide high schools, which draw students from across the city. With or without a system of feeder schools, school staff end up driving form school to school to pick IEPs and students files. The problem is especially acute for special education high schools like Briscoe, which do not receive students rosters until later in than other schools. (Students are not placed at Briscoe until after an IEP meeting late in eighth grade to determine their placement.)

Students who transfer from one school to another may not have their IEPs follow them to their new schools. Francis M. Wood High School mentioned this as a particular problem since it has a highly transient population. The receiving school often does not know whether an arriving has an IEP, which can lead to interruptions in services.

Budget Cuts

School staff reported that the budget cuts at North Avenue have had little or no impact on the quality of special education instruction in their schools. School staff said that since special education funding is based on students' IEPs, funding for special education was protected from the cuts. However, advocates from the city said that many special education positions were cut from the central office staff, and a lack of contact between central office and school level staff might explain why school staff did not notice these cuts. Many of the schools studies were relatively new or at least had relatively new in special education, and perhaps a lack of contact between central office and school level staff might be why school staff did not notice that central office staff had been cut. It might also be that many of the schools visited were relatively new or at least had relatively new leadership and so could not compare past and present funding.

The principal at Briscoe reported that the budget cuts affected the school in two ways. First, as a special education school, she reports having very limited discretionary funds, and those funds are for materials. In school year 2002-03, the school had $25,000-$30,000 for materials, in 2003-2004 $12,000, and in 2004-2005 $9,000. Second, Briscoe has felt the budget pinch in career and technical education (CTE) support at the district level. Briscoe trains students in five trades, but no longer has much support to help keep the trades going. Other schools also mentioned the need for more spaces for students and support in CTE, but did not link this need to budget cuts.

Chapter 6: Staffing, Professional Development, and Planning Time

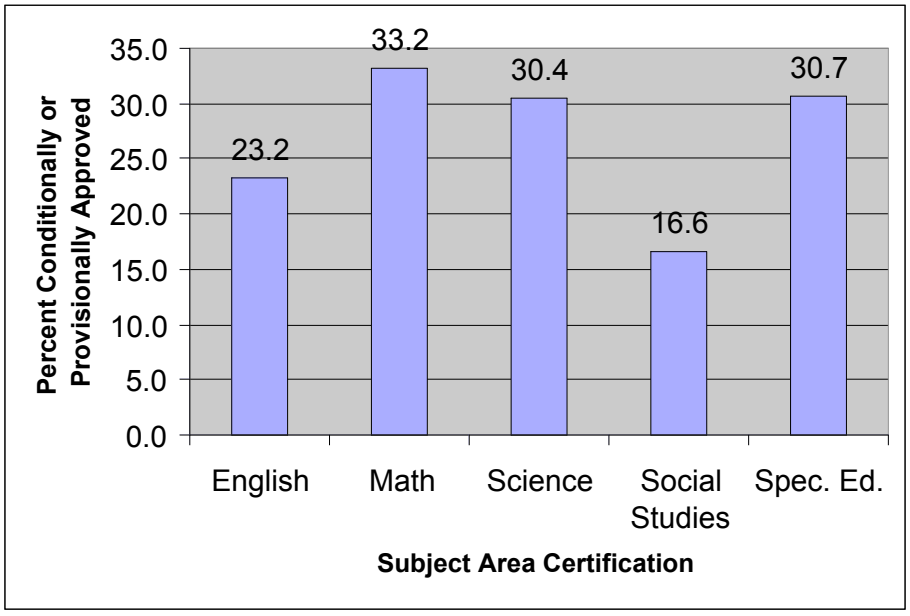
Many of the instructional goals discussed in previous chapters require a great deal of staffing and professional development. School staff make a compelling case for additional staff and training, and current staffing figures and research on professional development back up their claims.

Staffing

Teacher Shortages

Like most urban school systems, Baltimore has struggled to fill staff vacancies especial in special education, math, and the sciences. District wide, about 10-15% more high school math, science, and special education teachers are conditionally or provisionally certified than are high school social studies and English teachers (see Chart 6).[51]

Chart 6: District-wide Percentages of High School Teachers Conditionally or Provisionally Certified



Finding special educators with training in math, science, or social studies is serious concern. Many of the small high schools have only one or two special education teachers; having a wide range of subject area knowledge is crucial to them because special education teachers have to assist teachers in all content areas. As one principal said, "you can't expect one special educator to meet the needs of all students." The special education teacher one small schools said that her training is in English, but she is expected to help across the curriculum. She

[51] Based on data from BCPSS generated Excel file from human resource on certification for Area 6 as of May 25, 2005.

has relearned geometry on her own time, but doubts she will be able to master areas like chemistry and physics on her own.

School staff report that high teacher turnover and absenteeism also contribute to a school's sense that it is understaffed with special education teachers. When teachers leave they are often replaced by relatively new special education teachers who have little training or experience. Absenteeism among regular education teachers is problematic because even long-term substitutes lack the training to teach in inclusion settings, and schools often have special education teachers fill absent teachers' classrooms, keeping them from fulfilling their consultation duties with general education teachers.

All the schools visited except Briscoe said that they could use additional special education teachers to create more flexibility in scheduling, more time for consultations with regular education teachers, and provide additional content expertise. Briscoe, however, would like to trade two special education teachers for an English teacher and an Algebra I teacher.

Several schools acknowledged that they could probably use their current staff more effectively if they had additional assistance with issues like scheduling. Some schools are trying to make the most of their staff by regrouping the special education students who are in inclusion settings into only one or two sections of a class like Algebra I. This reduces the number of classes that special education teachers must visit so that they can be with special education students more regularly. No staff mentioned potential negative effects of this practice, such as a less rigorous curriculum for some students due to "tracking," or that special education students would interact with fewer regular education students.

Special Education Staffing Plan

Rather than examine the ratios of special education teachers to special education students at specific schools in BCPSS, this report looks at staffing ratios at groups of schools with different ranges of numbers of students with disabilities. For each group of schools, the number of special education students, as reported in the October 2004 Child Count is divided by the number of special education teachers in the schools, taken from a BCPSS generated list for high schools on May 27, 2005. Unfortunately, this method does not account for differences in each school's special education students populations (disability type, IEP specifications, etc.) However, they do provide some insight on staffing since teachers usually have to tailor their practices even for a student with the most basic IEP.

The first row of Table 17 shows that there are 10 high schools in the BCPSS with 1 to 20 special education students; these 10 schools have a total of 94 special education students and 8.5 FTE special education teachers in these 10 schools; and finally, in these schools, the overall ratio of special education students to special education teachers is roughly 11 to 1. Table 18 shows an additional category of special education population size.

Table 16: BCPSS Special Education Student Teacher Ratios[52]

Schools with Child Counts	Number of Schools in Category	Total Child Count	Total Teachers	Child Count/ Teachers
1 to 20	10	94	8.5	11.1
21 to 100	14	924	74.5	12.4
over 100	14	2821	199	14.2
City-wide	38	3839	282	13.6

Table 17: BCPSS Special Education Student Teacher Ratios[53]

Schools with Child Counts	Number of Schools in Category	Total Child Count	Total Teachers	Child Count/ Teachers
1 to 20	10	94	8.5	11.1
21 to 50	5	182	9.5	19.2
51 to 100	9	742	65	11.4
over 100	14	2821	199	14.2
City-wide	38	3839	282	13.6

Table 16 shows that the ratio of special education students to special education teachers appears to rise as the size of a school's special education population rises, but the differences are not very dramatic. Schools with 1 to 20 students have an 11 to 1 ratio, and schools with over 100 students have a 14 to 1 ratio.

However, some individual schools with between 21 and 100 students have ratios of up to 10 special education students to one special education teacher. As Table 17 shows, the five schools enrolling 21 to 50 special education students have a ratio of 19 to 1 overall. **The high schools with the highest ratios of special education students to teachers are generally zoned schools that are phasing out, the first wave of Innovation schools, and some of the restructured schools. This suggests that schools in transition (either scaling up or down) are understaffed. In fact, of the 15 BCPSS high schools with 50 or fewer special education students, ten have only a half-time or one full-time special education teacher**.

These data substantiate data from the interviews: **staff from small schools said having a small special education staff decreased their scheduling flexibility and meant that their special education staff had a narrower range of knowledge, both in content areas and in how to work with different types of disabilities, than schools with larger special education staffs.** The district may need to rethink staffing formulas for schools with very small populations of students with disabilities.

Staff often said that they did not know exactly how the district's special education staffing plan functioned, but most knew that staffing is determined by student needs and IEPs. Many staff members believed that the staffing plan does not account for several factors that lead to inadequate staffing**.** First, staff felt that the district's push toward more inclusion has led to fewer students being correctly classified as LRE B and LRE C; students in LRE B and LRE C generate more special education staff than LRE A students. Second, many people report that

[52] 10/29/04 BCPSS Child Count and BCPSS Position Report for Area 6 generated on May 27, 2005.
[53] 10/29/04 BCPSS Child Count and BCPSS Position Report for Area 6 generated on May 27, 2005.

middle school staff and teachers, often with the blessing of high school staff and parents, rewrite IEPs so that students appear to have fewer needs and can be placed at smaller schools. Third, the inadequacy of IEPs, as mentioned earlier, understates the amount of staff time needed to meet students' real needs. Finally, staff believe that the staffing model relies too heavily on the previous year's enrollment figures, and does not account for increasing enrollments in schools—specifically the Innovation and restructured schools—that are adding grade levels. District level officials point out that schools can apply for additional staff based on actual fall enrollment counts. However, it was not clear how easy the process was or how many principals go through that process.

These findings and concerns at the school level about staffing suggest that the district may need to rethink staffing formulas and provider clearer communication about staffing plans.

Instructional Associates

Instructional associates (IAs) can be key components of providing quality special education in high schools. They handle the bulk of paperwork associated with special education, they are often the main providers of site-based professional development on special education, and they provide another source of expertise for regular educators in the classroom.

Table 18: BCPSS Special Education Student/ IA Ratios[54]

Schools with Child Counts	Number of Schools in Category	Total Child Count	Total IAs	Child Count/ IAs
1 to 20	10	94	2	47.0
21 to 50	5	182	2.4	75.8
51 to 100	9	742	7.2	103.1
over 100	14	2821	22.8	123.7
City-wide	38	3839	34.4	111.6

Table 18 shows that schools with 1 to 20 special education students have a ratio of 47 students to 1 instructional associate, and in schools with over 100 students the ratio is 123 to 1—almost a three-fold difference. These differences likely affect what kinds of services instructional associates can provide. For smaller schools, these ratios translate into having an instructional associate one day a week. Instructional associates in smaller schools might have fewer students overall to manage, but they have less time to get to know a school than do instructional associates who are dedicated to a specific school. Staff at smaller schools did report that instructional associates provided little teacher assistance and focused more on paperwork support because of their limited time in schools. In larger schools, IAs also reported spending most of their time on paperwork while a head special education teacher provided more of the professional development and teacher assistance. Medium-sized schools usually have a full or half-time instructional associate, and these instructional associates often provide some teacher assistance and professional development in addition to their paperwork duties. BCPSS has recently shifted the burden of administrative work in special education to instructional associates and released related service providers from these duties. **Schools may find that instructional associates no longer have time to assist teachers or provide professional development.**

[54] 10/29/04 BCPSS Child Count and BCPSS Position Report for Area 6 generated on May 27, 2005.

Two issues should be considered when the district next revises its special education staffing plan. First, smaller schools may not be getting enough professional development and teacher assistance from their small special education teaching staff since they can't rely on an instructional associate to help out with these duties. Second, instructional associates' caseloads in larger school may be too big for them fulfill their paperwork requirements.

Professional Development and Common Planning Time

Two of the needs most widely mentioned by school staff are improved professional development and common planning time to work together and to learn about educating students with disabilities.

Regular Education Teachers

In BCPSS high schools, in-school professional development for regular education teachers tends to focus on subjects such as how to read an IEP, correlating the goals of the IEP with curriculum, classroom management, and differentiated instruction. **Most regular education and special education teachers interviewed in BCPSS high schools believe that the available special education training is insufficient given the demands of differentiated instruction, inclusion, and the IEP process.**

Many interviewees believed that training in the techniques for differentiated instruction would allow them to help special and regular education students, especially since the achievement levels of their regular and special education are often similar. Teachers would need not only training in strategies but also access to materials.

Other districts and the research literature generally agree that improving the capacity of general education teachers is crucial for improving special education, and that good professional development in special education for general education teachers is rare. A group of outside evaluators found that New York City provides insufficient staff development to ensure that students with disabilities received meaningful access to the general education curriculum.[55] The Boston Plan for Excellence's main strategy proposed to improve special education in Boston Public Schools is better special education professional development for general education teachers. "For more students to succeed in regular classes and for fewer to be referred to restrictive and less effective separate placements, all teachers must master routines and practices that enable students to internalize good behavior, have a deep understanding of the developmental stages of students' learning, know how to use multiple ways to assess what students know, and know how to revise instruction on a daily basis."[56]

Special Education Staff

Professional development and training for special educators, especially new special educators, is also a serious concern. In particular, the training programs for special educators lack internship opportunities that allow inexperienced teachers to observe good teaching and gain exposure to different kinds of student needs. In addition, the coursework requirements for special educators do not prepare special educators for the large variety of learning challenges

[55] Hehir, T., et.al. (2005). Comprehensive Management Review and Evaluation of Special Education. New York, NY: The New York City Department of Education.

[56] Boston Plan for Excellence. (2004). Accelerating Achievement of Those Farthest Behind: Improving Special Education in Boston Public Schools. A concept paper submitted to Jane's Trust, p. 3.

such as autism, learning disabilities, mental retardation, and deafness. Finally, since special education staff often lack specialized content knowledge, especially in areas such as math and science, it might be useful to provide basic professional development in those subjects to special educators.

One very positive finding is that special education staff in BCPSS high schools felt that the district is doing a much better job of involving them in professional development focusing on academic content such as reading, math, and standards-based instruction. They reported feeling much less isolated from the rest of the instructional staff.

Time for Planning, Consultation and In-School Professional Development

The time available for in-school professional development and for consultations between regular and special educators varies widely across schools. In one school visited, special education staff viewed all the classes with special education students and all the ninth grade classes daily. More frequently, a school-based special educator meets with each teacher weekly for specialized help in developing lessons, accommodating students, reading IEPs, classroom management, developing assessments, or learning special teaching strategies. Such an arrangement is more feasible for schools that have a special education department head or support teacher with no specific class assignments or limited teaching duties. **Mostly frequently, interactions between regular and special education teachers fits a limited collaborative consultation model in which special education teachers meet with teachers as needed and visit classes once or twice a week. Most school staff said that this was insufficient—that there should be more collaboration school-wide and especially between special educators and general educators who "are doing most of the heavy lifting" in teaching students with disabilities.** Evidence suggests that a lack of collaboration between special and general educators as well as insufficient professional development on inclusion for general educators have hindered the success of disabled students in inclusion settings.[57]

Staff in schools feel isolated from other schools and requested more time to meet with other schools' special education teachers. They would like to know how other high schools serve students with disabilities to get new ideas, to share successful practices, and to make sure that they are not "reinventing the wheel when another school is doing something good." Principals feel that this networking is important for all teachers but point out that new, inexperienced teachers have the greatest need for this time and classroom modeling. Such networking would require staff to cover for the teachers who are meeting, and when they go to other schools and planned time to meet.

Only instructional aides mentioned that they have a structured opportunity for this kind of collaboration through monthly IA meetings, and several reported that these meetings had been very helpful in building a sense of community as well as professional growth.

In both of the non-public high-school special education facilities visited, staff thought that their most important professional development activity was to talk and share ideas with a focus on individual students or had other clear purposes and goals. The sharing of practices seemed especially important.

Officials in NYC identified the Brooklyn Studio School as the high school that is doing the best job of serving its students with disabilities. Brooklyn Studio School staff claim that the keys to their success are training all teachers in inclusion and differentiated instruction and providing

[57] Stodden, R., L.M. Galloway, & N. J. Stodden. (2003). Secondary School Curricula Issues: Impact on Postsecondary Students with Disabilities. *Exceptional Children*, v. 70, n. 1, p. 9-25.

collaborative planning time, which is where their best professional development takes place. They believe that collaborative planning time and classroom visits must have some clear goals, focus, or structure.

Boston's Collaborative Coaching and Learning (CCL) program, the district's approach to on-site professional development, includes many of the features identified by the Brooklyn Studio School.[58] Teachers examine student work together and share best practices. CCL is also meant to reduce isolation and to create an environment where teachers visit each other's classrooms to observe and participate. Meetings also spend time reviewing the professional literature on teaching strategies and best practices. Outside evaluations of the project have been positive.

While there is a long history of research on the essential components of professional development in general and consensus that it can improve student achievement,[59] no specific research-based models for professional development in inclusion or differentiated instruction can be recommended. Several outside evaluations of Schools Attuned are underway. The model is described on its website as "a comprehensive professional development and service program that offers educators new methods for recognizing, understanding, and managing students with differences in learning" that "enriches the way in which all students are educated".[60] Several special education staff members from other school districts spoke highly of the program. Future research may make the program worth further review.

Research does suggest that collaborative professional development is more effective.[61] Professional development models that are peer-led, open-ended, classroom-based, and active are generally more effective. Extended, on-going professional development is also more likely to facilitate effective inclusive classroom practices, and it should involve new teachers as well as teachers who are already working in schools. Creating ample opportunities for teachers to see and attempt new teaching methods is also very helpful. Baltimore teachers are asking for all these forms of professional development.

Howard County Public Schools System is trying to address professional development and common planning time issues through its special education initiative, Developing Quality Inclusive Education (DQIE), which seeks to move each school in the direction of better inclusive education. In the program, schools apply for individual grants for common planning time, professional development, and support of core courses.[62] During the 2004-05 school year, the project supported 29 elementary, middle, and high schools. Schools in their second year with the project were supported through site-based activities and were given funding for workshop wages, substitutes, and materials for instruction. The schools in their first year were supported through

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[58] Boston Plan for Excellence (2002). Getting Started in Collaborative Coaching and Learning. Boston: Boston Plan for Excellence.

[59] Garet, M. S., Porter, A.C., Desimone, L, Birman, B.F. & K.S. Yun. (2001). What Makes Professional Development Effective? Results from a National Sample of Teachers. *American Educational Research Journal*, v. 38, n. 4, p. 915-45, Winter 2001.; Porter, A.C., Garet, M.S., Desimone, L, Yoon, K.S., and Birman, B.F. (2000). Does Professional Development Change Teaching Practice? Results form a Three-Year Study. Washington, DC: Planning and Evaluation Service, U.S. Department of Education.; OSERS/OECD International Symposium on Inclusion and Professional Development. (1998). Proceedings (Bethesda, MD, September 24-26, 1998). Edited by Anne Smith, Beth Doll, and Stacey Gengel. U.S. Office of Special Education Programs.

[60] Retrieved from http://www.schoolsattuned.org/.

[61] Klonsky, M. (2002). Small Schools and Teacher Professional Development. ERIC Digest, December 2002. ERIC Clearinghouse on Rural Education and Small Schools: Charleston, WV.

[62] Howard County Public School System (2004). Designing Quality Inclusive Education Project—Year 2. Ellicott, City, MD: Howard County Public School System

professional development for a team representing each school including an administrator, a special educator, a general education teacher, a school psychologist, a related arts representative, and related service representative; professional development for their school's staff; and materials for instruction. Professional development for the team occurs four times a year, and the curriculum office as well as the department of special education work together closely. The money for materials is specifically for items such as high interest-low reading level books related to content areas, adapted literature, and technology.

The Howard County Public Schools has documented that improved inclusive education has led to improved performance of students with disabilities and school organizational changes such as scheduling students with disabilities so that general education teachers have more manageable numbers of students with disabilities. In addition, more schools report that they are including students with more significant disabilities in their regular instructional programs. The budget for 2004-05 to support the 29 schools was $183,200, roughly $6,300 per school.

The United Kingdom relies on an addition strategy to help support professional development in special education. The UK has devoted over £1 billion to make information and communications technology part of the day-to-day practice in British schools, and has particularly promoted online discussion groups. The most widely studied of these groups is for special needs coordinators (SENCOs), the British term for teachers and other staff for students with disabilities. Studies have found that the SENCO forum was the most active teacher forum in the UK and that the forum supported professional development, made staff workloads more manageable through the sharing of information, and decreased feelings of isolation.[63] New York City is also building an online community to complement the monthly professional development on special education for a new network of high school administrators.

Based on the experience in the UK and BCPSS teachers' desire to track down special education materials more quickly, it appears that an online community for Baltimore's special education staff could directly support professional development, save staff time and energy, and improve the sense of community. An online forum for teachers to track down resources for special education and to share best practices and experiences would help fulfill two important needs identified by BCPSS school staff. Such a forum would have to be more than a list of links to other sites and an electronic chat room. The latest research, hundreds of lesson plans designed for differentiated instruction in different subjects and subunits of those subjects, and instructional techniques for special educators are available on the web from reputable sources—but these resources must be collected and organized in a way that makes it easy for staff to find them. This is a significant organizational task, including a thorough search of existing resources, brief descriptions of the resources, and a way to search for specific topics. Evidence suggests that such a forum would be a useful supplement to professional development, classroom practice, and community-building among teachers.

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[63] National Council for Educational Technology. (1997). SENCOs sharing solution: An evaluation of the SENCO Electronic Communications Project. Coventry, England: National Council for Educational Technology. The third and final evaluation of the SENCO project; Parker, B. & B. Bowell (1998). Exploiting Computer-mediated Communication to Support In-service Professional Development: the SENCO experience. *Journal of Information Technology for Teacher Education*, v. 7, n. 2. p. 229-246.; Selwyn, N. (2000). Creating a Connected Community? Teachers' Use of an Electronic Discussion Group. *Teachers College Record*, v. 102 n. 4, p. 750-78, August 2000.

Chapter 7: Transitioning and Career and Technical Education

One measure of a school system success in serving students with disabilities is how well it prepares them for major transitions. BCPSS school staff were asked about the supports in place and additional supports that might be needed to help BCPSS students move from middle school to high school and from high school to life afterwards. Many staff had strong feelings about how best to serve these students especially in career and technical education and in preparation for life after high school. Since there are no clear best practices in this area, only best guesses from the research, this chapter focuses on what supports might be needed.

The Transition from Middle School to High School

The transition from middle school to high school for students with disabilities has proven very difficult. First, as discussed in the section on IEPs, high schools have difficulty getting information about incoming students, and the quality of that information is mixed. **However, BCPSS school staff report that the more significant transition problems from middle school to high school stem from students' general anxiety about moving to a new school or from the sometimes overwhelming move from self-contained classrooms in middle school to inclusion settings in high school.**

Some schools are taking steps to ease this transition. Summer bridge programs, in which incoming ninth graders spend time in their new high schools before the start of the school year, are widespread, but students are not required to attend them. A few schools mentioned meeting informally with staff from middle schools to learn about incoming freshman students. These meetings discussed student needs and the curricula in both schools to ensure better continuity. Such meetings are far more feasible in high schools with clear feeder schools. High schools that draw students citywide have a much harder time with such collaboration. Several staff members suggested that high school teachers should have an opportunity to go to feeder schools and co-teach with middle school teachers so that students and teachers could be more familiar with each other before the transition to middle school.

While there is no specific research on successful transitions from middle to high school for special education students, several groups that advocate for parents and for inclusion have published guides for parents on how to improve the transition.[64] Their suggestions include:

- Provide a buddy or mentoring system so that students have a friend and resource through their first year.
- Make sure the IEPs are up to date.
- Ensure that all people who will be part of the student's high school experience are at the 8th grade IEP meeting, including the student.

[64] Lubbering, L. (1997). Transition Point 5: Junior High/Middle School to High School. Parent Information Network. Phoenix, AZ.; Institute for Community Inclusion. (March 2004) Moving on to High School: A Tip Sheet for Parents of Children on Individualized Education Plans. Institute for Community Inclusion. University of Massachusetts Boston. www.communityinclusion.org/publications; Mizelle, N. B. (August 1999). Helping Middle School Students Make the Transition into High School. LDOnline. EDO-PS-99-11. ;www.ldonline.org/ld_indepth/transition/middle_school_transition.html; Martin, J. E., Marshall, L. E. and P. Sale. (2004). A 3-Year Study of Middle, Junior High, and High School IEP Meetings. *Exceptional Children*, v. 70, n. 3, p. 285-297.

- Encourage parents to become familiar with the high school and staff before school starts. Provide plenty of orientation and open house opportunities for eighth graders and their parents before and after ninth grade starts.
- Bring middle school and high school personnel together to learn about each other's curriculum and requirements.

The only concrete examples of transition programs for middle school to high school are for students in general, not special education students in particular. These programs had not been studies extensively enough to show evidence of positive outcomes for students. However, they do address some of the needs involved in the transition from middle to high school that have been identified nationally.

Link Crew is a high school transition project developed by the Boomerang Project, a private company that trains juniors and seniors to help freshman build social networks and adjust to life in high school. It is comprised of orientation events and social and academic components throughout the year.[65] It claims improvement in attendance, decreases in discipline referrals and improved academic achievement. In August 2004, half a million freshmen in the United States were in the program.

Montclair High School in Montclair, New Jersey, has created a ninth grade academy that functions much like a small school within a larger school.[66] The Ninth Grade Academy has about 400 students, its own guidance staff, and a principal. It runs orientation programs for parents and students, a homework center, and a summer study skills institute to help students adjust to how high schools differ from middle schools.

These are not clear solutions for easing the transition to high school—but trying to incorporate some of the practices outlined above may be a worthwhile first step in improving the current situation.

Planning for and Enrollment of for Students with Disabilities in High Schools

While ensuring that high schools are prepared for students with disabilities and that students with disabilities are encouraged to enroll in a variety of high school types are not typically viewed as transition services, these steps expands the options for students with disabilities when they move from middle school to high school. For example, students with disabilities are underrepresented in Innovation high schools, and inadequate planning for these students may help explain why. **Planning for students with disabilities in small schools is a struggle across the country, not just in BCPSS.** Officials from other districts have struggled to ensure that students with disabilities benefit from high school redesign. For example, New York City initially planned not to let special education students who needed pull-out services or self-contained classrooms into small schools for the first three years of a school's existence. The school system, its partners in the small school movement, and principals widely regard that decision as a huge mistake. If schools had planned for students with disabilities from the beginning, these students would have been seen as integral part of the school rather than as intruders. In addition, because of problems with the school assignment system, students with significant disabilities were assigned to these schools anyway, but no resources or plans were in place to serve them.

[65] Retrieved from www.boomerangproject.com.

[66] Northwest Regional Education Laboratory (n.d.). Schools Making Progress Series. Retrieved from http://www.nwrel.org/scpd/sslc/descriptions/montclair/.

Boston Public Schools (BPS) has also struggled with how to incorporate students with disabilities into restructured high schools, and eventually all high schools in the city will be small high schools or be composed of small learning communities. As the director of special education in BPS said, "This issue [small schools and students with disabilities] is just rising to the surface across the country." In 2003, BPS convened a Special Education Equitable Distribution (SEED) Workgroup and, of all the districts contacted for this study, has made the most progress in incorporating students with disabilities into small school planning. See the text box for details about the group's guiding principles, preliminary decisions, and early implementation.

The Boston Special Education Equitable Distribution (SEED) Workgroup[67]

As Boston Public Schools reconfigured its large district high schools into small schools and learning communities, it wished to seize the "opportunity to redistribute special education programs and increase access to these newly designed schools for students with disabilities."[68] The Special Education Equitable Distribution (SEED) Workgroup was formed to recommend a path.

The SEED Workgroup's work, begun in early 2003, was premised on three main considerations. First, BPS was committed to placing students in the least restrictive environment possible while also providing a variety of settings and models for services ranging, from regular education classrooms to self-contained classrooms. Second it was starting from a situation where students with moderate disabilities who attend separate special education programs (which are like Baltimore's citywide special education programs) could choose from schools with these separate program offerings—but any of BPS' small schools did not have such programs and therefore were not accessible for students who require these programs. Third, it was clear that strong coordination and collaboration with headmasters, teachers, and other central office departments would be required to communicate the reasoning and recommendations of this working group to parents, students, and the community.

The SEED Workgroup identified four major goals:

- The redistribution of substantially separate high school programs would occur over a two-year period beginning in SY 2004-2005.
- Steps would be taken to build acceptance in all high school communities that students with disabilities can be successful and that it would be everyone's work to help them succeed.
- Schools would receive support to help them understand and meet the needs of students with a range of disabilities not previously served within their buildings.
- The initial focus of reorganization would be to distribute programs for students with common disabilities to improve their choices.

To meet these goals, the group recommended that the central office take a variety of actions, including the following:

[67] Boston Public Schools (2003). Special Education Equitable Distribution (SEED): Final Report. Boston, MA: Boston Public Schools.
[68] Ibid, p.1

- Discuss the concept of equitable distribution of substantially separate programs with Headmasters, Pilot School Leaders/Directors and other school leaders.
- Determine which schools and programs will be affected in SY2004 by the redistribution of programs.
- Submit recommendations for redistribution for SY2004-2005 based on the projected enrollment for SY2004-2005.
- Work with Headmasters and Pilot School Leaders and Directors to help schools take the lead in communicating with rationale for special education changes to families and school community.
- Work with on student assignment and choice for rising ninth grade students in SY2004-2005.
- Work on the development of the next Small School RFP process and to identify which schools are likely to be restructured into smaller groups during future phases of high school renewal.
- Work on budgetary and staffing implications.
- Meet with representatives from the Pilot School Network to review the distribution plan.
- Communicate with the Family and Community Engagement Department to coordinate the plan for notifying parents and the community about the SEED implementation plan.
- Provide technical support to schools on staffing and recruitment.

As of fall 2005, Boston Public Schools considers that the effort has led to both successes and failures. Programs have been shifted around the district to ensure that students with disabilities have access to a wider variety of schools, but resources do not allow for separate programs at all small schools. The district has experienced some resistance as it moves programs around. However, listening to school and community input and, where possible, making sure that the school's focus fits with the needs of students in the separate special education program have eased the process.

BPS identified several decisions that contributed to the redistribution's success. For example, rather than close a separate program at one school and then reopen it at another school, immediately shifting all its students the new school, rising ninth graders are added to the new program site over several years, and the old program is phased out as students graduate or leave. In addition, since the reform was a mandate from the superintendent, extra funds were available for the major start-up costs like materials and model programs to support students with disabilities in small schools. One such program was the Learning Center, staffed with one special education teacher and one regular education teacher at all times so that students can come in for help with study skills and other needs on a regular basis. The Learning Center is not a pull-out program that removes students from core classes. A few small schools also received extra resources to fund two self-contained classrooms staffed with teachers with dual certification so that the schools could enroll more students with moderate disabilities.

While the process is still in progress and has been painful at times, BPS has been proactive in addressing the needs of students with disabilities in small schools. There is not yet evidence of improved achievement, but there is a perceived value in simply giving students with disabilities a larger choice of high schools.

Several advocates for students with disabilities are concerned that BCPSS' high school choice guides for parents and students emphasize that Baltimore high schools focus on college readiness, and that the guides do not communicate that students with disabilities have access to and should be welcomed in all the city's high schools. These advocates suggested that the guides imply that small schools and citywide schools are not really for students with disabilities, and this has led to led to relatively small enrollments of special education students.

High school application materials from Baltimore and other large urban districts with small schools such San Diego and Chicago do not have clear, explicit language about whether students with disabilities are encouraged to attend small schools.[69] Other school systems' materials vary in their clarity and in the warmth of their language. Here are a few examples:

- "Our high schools provide supportive services for all students needing additional help to succeed, including students with disabilities and English language learners."[70] (Philadelphia).
- "Students with disabilities are eligible to apply to all programs listed in the Directory…It is the policy of New York City Department of Education High Schools to make its programs accessible to students with disabilities…The steps taken for any disabled student shall be designed to provide the student with an equal opportunity to obtain the same results, gain the same benefit, or reach the same level of achievement as that provided to other students."[71] (New York City).
- "We understand that finding the program that best meets your child's unique needs is a top priority to you. We are deeply committed to working with you to ensure success, and bring many years of experience in the field and a deep caring for children to our work. Call on us—we're here to partner with you for the benefit of your child. We'll need to work closely with you to determine the options and best choices for your child. Special education program supervisors can assist the IEP team in determining each child's needs and eligibility for programs."[72] (Seattle).

With the help of the American Institutes for Research, the Oakland Unified School District is currently examining how to make their school selection and assignment fairer and clearer to all students and parents as the district restructures its high schools.[73] An Oakland school district document characterizes the current system as "an incoherent, inequitable student assignment (enrollment) system." The city has completed a preliminary analysis of the problem and is in the midst of community engagement and final analyses. A final plan, which should be in place in

[69] Baltimore City Public School System. (2005). Choosing the High School That's Right for You: 2006-2007. Baltimore, MD: Baltimore City Public School System.; BCPSS and Fund for Educational Excellence. Portfolio of Small High Schools Without Entrance Criteria; San Diego City Schools. (2004). 2005-2006 San Diego City Schools Enrollment Options Catalog. San Diego, CA: San Diego City Schools.

[70] Philadelphia Public Schools (2004). The Office of Secondary Education Planning Guide for Eighth Grade Students: A Guide for September 2005 High School Admissions. Philadelphia, PA: Philadelphia Public Schools. P.6

[71] New York City Department of Education (2003). The Directory of the New York City Public High Schools. New York, NY: New York City Department of Education. p. vi.

[72] Seattle Public Schools. (2004). Middle & High School Choices 2005-2006: Enrollment Guide for Parents. P. 8. Seattle, WA: Seattle Public Schools.

[73] Oakland Unified School District. (2005). The Oakland School Options Project. Oakland, CA: Oakland Unified School District.

October 2005, will implemented by a newly developed Student Assignment Office. Staff from the Student Assignment Office said that a critical piece of the plan is to ensure that middle school guidance counselors know that services follow students with disabilities to any schools they choose. A lack of awareness about this policy has led to students' being presented with fewer options.

Many urban districts struggle to improve planning; develop clear statements and a shared understanding of whom schools are for; and provide better information to students, parents, and staff. Students with disabilities who are entering high school would be better served if all these areas are improved.

High School to Postsecondary Life

BCPSS school staff reported that there are very few transition services to life after high school, and it appears that schools are taking few concrete steps to address this need because staff are overwhelmed by the task. Respondents said that the provision of good transition services seemed too big a task, and that these services require time, resources, and community connections they feel they could not secure. High school teachers are expected to incorporate transition goals from students' IEP in classroom instruction, but staff said that this was an unrealistic expectation given other instructional demands. Staff believed that what students with disabilities really needed was a dedicated staff person at the school level to work as a transition coordinator or more time with a guidance counselor.

The resource most frequently mentioned for students transitioning to life after high school was the Division of Rehabilitation Services (DORS) at the Maryland State Department of Education, which provides some help with finding employment and independent living services, but staff felt that these services often provided too little and came too late.

School staff highlighted the lack of career and technology education opportunities for students with disabilities as a serious barrier to improved transitions for students. **Respondents from all BCPSS schools mentioned the need for more spaces in vocational education for students with disabilities, not only so that students would have an opportunity that may better fit students' interests during the school day but also because the school staff felt that the goal of preparing all students for college fails to recognize that what many students, not just special education students, really need is "to be self-sufficient."**

The Abell Foundation report, *Help Wanted: Career and Technology Education in Baltimore City Public Schools,* supports these concerns.[74] BCPSS' Career and Technology Education (CTE) budget was cut by 57% in the FY '05 budget. Before 2002, CTE in Baltimore City had 280 teachers and a central office staff of about a dozen. As of early 2005, CTE had 94 teachers and one central office administrator. While one might expect that students with disabilities would compose a large proportion of CTE students, in FY '03, 13 % of CTE students were in special education while 14.5% of high school students were in special education

The poor availability of career and technical was an emotional issue for many administrators and teachers in BCPSS schools, who acknowledged the tension between having high expectations for students and being realistic about students' abilities. For staff, a related question is what is meant by the goal of having all students college ready—does it merely express the need for higher expectations for all students, or is it meant to be taken literally?

[74] The Abell Foundation. (2005). Helped Wanted: Career and Technology Education in Baltimore City Public Schools. Baltimore, MD: The Abell Foundation.

While larger schools often had a few career programs, small schools are struggling with providing similar opportunities. School 426's solution was to implement a period called CREW, which is like a homeroom in which students have a class on art, journalism, law, or whatever else teachers feel prepared to teach. The class is meant to be fun and to include a job training component. Briscoe has its own career programs, but if the school does not have a program in the career area that transferring students studied in previous schools, school official try to secure access to other schools' career programs for these students. While this has been very time intensive, staff are pleased with the results.

Many schools would like more help in developing relationships with businesses. A few tenacious schools have developed relationships with employers such as Johns Hopkins Medical Center, which provides internships for students, but the number of spaces is very limited, as are the career fields.

Much more research exists on the components of a successful transition program from high school to the post-secondary world than from middle school to high school. Several practices and student accomplishments are associated with better retention and success in high school and better employment and education outcomes after high school.[75] They are:

- direct, individualized tutoring and support to complete homework assignments, attend class, and stay focused on school;
- participation in vocational education classes during the last two years of high school, especially classes that offer occupationally specific instruction;
- participation in paid work experience in the community during the last two years of high school;
- competence in functional academic skills (e.g., reading, math, writing, and problem solving) and transition skills (e.g., money management, personal-social interactions, career awareness, self-advocacy, and goal setting);
- participation in a transition process that promotes self-determination;
- direct assistance to understand and connect with resources related to post school work or education goals (e.g.,4-year college or universities, community colleges, and vocational rehabilitation); and
- graduation from high school.

Three models were identified as best practice sites or as programs with clear research-based foundations. All are very staff-intensive, incorporate many partners, and use a wide variety of strategies to serve students. They are the Transition Services Integration Model, for students in their last year of public school[76]; the Youth Transition Program (YTP), which is operated collaboratively by the Oregon Department of Education, the Oregon Vocational Rehabilitation Division, the University of Oregon, and local schools;[77] and Jefferson County Public Schools (Louisville, KY), which has been cited by the Council of Great City Schools as a "promising

[75] Sustaining Secondary Transition Programs in Local Schools. (Jan/Feb 2004) *Remedial and Special Education. v.* 25, n. 1. p. 39-50.

[76] Luecking, Richard G., Certo, & J. Nicholas. (December 2002). Integrating Service Systems at the Point of Transition for Youth with Significant Disabilities: A Model that Works. National Center on Secondary Education and Transition. Vol. 1, Issue 4. <www.ncest.org/publications>

[77] Sustaining Secondary Transition Programs in Local Schools. (Jan/Feb 2004) *Remedial and Special Education*. Vol. 25 No 1. pp 39-50.

practices site" for transition planning for students with disabilities.[78] The text box below provides and an account of Jefferson County's program.

Jefferson County Public Schools Transition Services[79]

Jefferson County's Public School Transition Services, which have been not been evaluated, do include many of the research based program components that have led to positive student outcomes in other research-based programs. The program is a good example of a comprehensive in that it includes a variety of programs to meet the wide-ranging needs of most students with disabilities.

The priorities of the district's system are professional development for teachers and researched best practices for the development of transition planning. Teachers are involved in Community-Based Education Activities, curriculum writing, in-service opportunities, and creating transition plans for students. The program's range of services recognizes that students have different needs and goals and require varying levels of support. The major components of the plan are:

- Work Transition Program (WTP). WTP is an optional full-time, community-based vocational education program. The program has paid and volunteer work positions. Academic and vocational skills needed for the job and in the community are reinforced in classes before and after the work day. The program, which seeks to prepare students for independent life and work in a community setting, is geared toward students 18 and older who are fairly high functioning.
- Community Based Vocational Education (CBVE). CBVE prepares students for WTP. It is a volunteer work-based program in which related academic skills are taught on the job site. This program is meant to be an extension of the classroom and initiates the process of training students for the world of work. This program is designed for students with functional mental disabilities, mild mental disabilities, and multiple disabilities.
- Vocational Opportunities in Community Environments (VOICE). The VOICE Program supports high schools as they focus on the vocational needs of students in their last years of school. Most students served by VOICE will need supported employment once they leave the school, which suggests that it is not for students with the most common disabilities. VOICE teams work with families and school staff to find individualized work sites for the students and to help them connect to adult and other community services they will need once they leave school.
- Community Based Instruction (CBI). CBI teaches functional living skills in a variety of community settings. The program emphasizes interaction with non-disabled peers, community functioning, home living, recreation and leisure, and vocational training. CBI instructors are classroom teachers and staff who have completed 18 hours of Community Based Instruction Training. The program is for students of all ages and disabilities.
- Career Opportunities through Vocational Exploration. COVE is funded through matching grants from the school system and the Kentucky Department of Vocational Rehabilitation (DVR). Transition liaisons work with students with a variety of disabilities during their last two years of school to evaluate and train them for post-school employment.

[78] Council of Great City Schools (n.d.). Retrieved from www.cgcs.org/promise/specialneeds/part05.html.
[79] Exceptional Child Education Transition Program Guide. (n.d.) Louisville, KY: Jefferson County Public Schools.

Administrators, school counselors, teachers, or DVR counselors refer students to the COVE Program during their sophomore year. Since this is a collaborative agreement, the students must first be authorized as clients of DVR to participate in the COVE Program.

- Plan for Achieving Student Success (PASS). PASS seeks to increase the number of students with disabilities who graduate from high school and make a successful transition to adult life. The focus is meeting graduation requirements, as well as dropout prevention. The program is staffed of PASS Facilitators at each high school and 10 Transition Liaisons who serve these schools. The facilitators identify and work with students who are not on track for graduation, help them develop long-range career plans, document the planning on student's Individual Graduation/Transition Plans, help students develop self-advocacy strategies to help them become active participants in the development and implementation of their plans, and connect with community resources to ensure a successful transition to post-secondary life. The transition liaisons, who serve two to three high schools, work with students in the PASS and COVE programs.
- Providing Access to Community Transition (PACT). The PACT Program serves approximately 10 students between the ages of 18 to 21 with moderate and severe disabilities. This collaborative effort between the school system and the University of Louisville gives students the opportunity to be with peers of their own age on a college campus as they complete their transition years of public education. In addition to their classroom curriculum, the students have opportunities to experience campus-life activities; participate in recreational activities, campus organizations, and clubs; and audit some university classes.

A few key themes from the research should guide the improvement of all transitions services in the district:

- Easing anxiety for special education students going into high school or completing high school should be an ongoing effort.
- The earlier planning for transitions takes place, the more successful it will be.
- Include as many key individuals and agencies in the process as possible. Parents, teachers, service providers, and the principal should be active participants in transitioning.
- Students must be helped to advocate on their own behalf, express their needs and desires, and take an active role in their own IEP meetings.

Chapter 8: Recommendations

Some of these recommendations are based on clear needs documented by hard, quantitative data; others stem from interviews, which may reflect perceptions as much as reality. Attempts were made to confirm interview findings with other sources of data, but even knowledge about perceptions can suggest solutions, such as improved communication.

At the core of most of these recommendations is a call for more resources in a district where current levels of funding are far from adequate to address the scope of needs and problems outlined in this report. They also call for better communication, closer relationships with other entities, and clearer purposes and goals—changes that could go a long way in improving special education in the city's high schools.

Convene a Series of Discussions on Better Serving Special Education Students at the High School Level

Many people interviewed for this study feel that answers are still needed for key questions about the purposes of high school reform, restructuring, the development of Innovation High Schools, and the place of students with disabilities in this work. Officials from Boston and advocates from other districts expressed similar concerns about development in their own districts.

Therefore, it could very helpful to convene a series of discussions to reevaluate and clarify the purposes and goals of high school reform and to include district staff, principals, teachers, parents, advocates and other stakeholders who feel that they have been left out of high school reform discussions in the past. The meetings should focus on a variety of questions including the following:

- Innovation schools are currently unable to serve LRE C students, and advocates report that students on certificate tracks often feel isolation in these schools. How can the district better deal with the tension between having small schools be academically rigorous but also be inclusive?
- Materials on school choice are not sufficiently clear that students with disabilities are welcomed at all high schools. Who are the various types of schools for, and how can BCPSS better include students with disabilities in them? Should the distribution of resources and special education citywide programs be changed?
- What does BCPSS really mean by its goal that all students should become college ready? Are students with disabilities well-served by this goal?
- Career and Technical Education (CTE) programs in BCPSS have been decimated, and many teachers and advocates were very upset by the lack of places for special education students in CTE programs. What is the place of CTE in the education of students with disabilities, and should access to CTE program be improved for these students?

Consider Revisions for the Next Iteration of the Special Education Staffing Plan

The next full review of the special education staffing plan should consider needs outlined in this report and adjustments in staffing formulas for small schools. Most high schools that enroll fewer than 50 special education students have one special education teacher and an instructional

associate one day a week. This appears insufficient to complete paperwork, provide adequate time and expertise to teachers across content areas, and lead professional development. Schools may need a minimum number of staff if they enroll any special education students. Schools with larger enrollments would need additional staff, which would be determined by more standard special education staffing formulas. No such models could be found, but the idea is worth considering. In addition shifting the burden of paperwork to instructional associates may have impacts that need to be addressed through the staffing plan.

Provide Better Professional Development for General Education Teachers and Encourage Time for Collaboration and Common Planning

Two of the clearest needs of the city's high schools are more and better professional development about inclusion and common planning time in schools. The benefits are clear as well. As Dr. Tom Hehir, former director of special education in Boston, Chicago, and the U. S. Department of Education said, "to fix special education, you've got to start with regular education."[80] Of course, the city provides some professional development on inclusion for general education teachers—but when asked about professional development opportunities in inclusion, teachers mostly commonly remarked, "What professional development?" They said that that they did not know about existing professional development, thought that is poorly designed, or is too limited in scope and frequency.

For the most part, teachers and staff in the city's high schools believe that it is important to include special education students in regular education settings, but feel unprepared to do so on a day to day basis. Appropriate preparation will require regular sessions of the kinds of professional development described earlier in the report, led by qualified staff at the school level. Larger schools often have a lead special education teacher or an assistant principal for special education who can take on this role, but the beleaguered instructional associates and special education teachers in smaller schools may well lack the time or expertise to do so.

It could also be useful to take a closer look both at Boston's Collaborative Coaching and Learning program (the district's approach to on-site teaching professional development) and Howard County's Developing Quality Inclusive Education program, in which schools apply for grants for common planning time, professional development, and support of core courses as the schools move toward more inclusion for special education. MSDE has helped fund the Howard County project for five years, and officials at Howard County report that MSDE is planning to replicate the process in other counties. BCPPS should considering seeking to join this project.

Continue to Improve Reading and Mathematics Instruction and Supports

BCPSS has spent a great deal of time and energy to improve reading and mathematics performance, and scores are going up albeit unevenly. Schools believe that Wilson Reading has substantially improved their ability to serve students, but the program is only being piloted on a small-scale. Based on national research, Wilson Reading does improve reading ability,[81] but local evaluations of the pilot have not yet provided convincing evidence of its success.

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[80] Boston Plan for Excellence. (2004). Accelerating Achievement of Those Farthest Behind: Improving Special Education in Boston Public Schools. A concept paper submitted to Jane's Trust.

[81] Peterson, C.L., D.C. Caverly, S. A. Nicholson, S. O'Neal, & S. Cusenbary. (2000). Building Reading Proficiency at the Secondary Level. Southwest Educational Development Laboratory: Austin, TX.

Additional guidance on and support for other research-based programs in math and reading would greatly benefit school staff who often asked, "What works?" This may require substantial investment in materials, technology, professional development, and reading specialists to help diagnosis and assess students. Programs that work are available, and districts have found ways to knit several of them together into a comprehensive strategy to improve achievement.

Step-up Preparation for the HSAs

Current HSA pass rates in BCPSS are extremely low, and beginning with the class of 2009 (today's ninth graders), students must pass these exams to graduate. Additional, mmediate attention must be given to improving student performance on these exams.

While there is not yet solid research on programs to help students pass these new exams, there is a great deal of information about what districts around the country are doing and what they believe is effective.

The Center on Education Policy, which has spent three years studying exit exams and talking to districts and schools around the country, offers these suggestions:

- Partner with other districts to develop, share and use curriculum maps, pacing guides, model lessons for the courses to be tested, and tests that monitor progress toward meeting the standards covered in tested classes so that instruction can be changed.
- Rather than rely primarily on remedial programs for students who have failed the HSAs, identify students who are at risk of failing based on their eighth grade MSA scores, and place them in prevention programs.
- Inform students of the test requirements and rules as well as available local and state supports. Students often do not understand the seriousness of exit exams and are unaware of how to get help.
- Invest in research-based reading and math review programs so that students can prepare at their own pace. Currently, programs in social sciences and biology are more difficult to find.
- Provide remediation at various times (summer school, after-school, and during the school day), and make sure that the instruction varies from that in the classroom—simply offering more of the same does not appear to help. Specifically, most districts report having the best success with providing a second year of a tested course after a student has failed the exam. Students use an elective credit to take the class.
- Use a case management approach whenever possible to ensure that students are meeting the requirements for graduation, are taking part in remediation and preventive programs, and have plans in place for if they do not pass the HSAs. Districts report that counseling staff in schools spend so much time recordkeeping for the tests and scheduling retests that they typically do not have time for this work.

None of these recommendations are specifically for students with disabilities. In fact, none of the districts that the researchers spoke had developed programs for students with disabilities to pass exit exams. One Minnesota district special education director said, "What we focus on in special education—basic math and reading skills—is what it takes to pass these tests. What else is there to do?"

Provide More Comprehensive Transition Programs to and from High School for Students with Disabilities

Improving the transition from middle to high school and from high school to the postsecondary world would be a great service to the city students with disabilities. The summer bridge program, for students entering ninth grade, has been a good start. There are no clearly successful models for transition services. However, research findings do suggest that the following features may create a better transition from middle school to high school:

- Improve the high school selection process, the first step in a successful transition.
- Create a mentoring system for incoming ninth graders.
- Before beginning ninth grade, students should spend time in their new high schools to become familiar the setting. This might take place during a regular school day or during open houses and orientation sessions.
- Convene an IEP meeting in the spring of eighth grade that includes staff from the receiving school.
- Revise and update IEPs more thoroughly prior to the move to high school. Based on staff reports, a new assessment of the student by outside experts is extremely helpful. More research on the quality of IEPs in BCPSS is necessary before this costly change is recommended.
- Students who are moving to a more inclusive education setting in high school should be exposed to those kinds of classes before the first day of ninth grade.

Several examples of comprehensive transition programs from high school to life after high school are discussed briefly earlier in the report. These examples are a good starting point for designing a better transition system. BCPSS should consider the following issues to improve this transition:

- A transition system should provide enough variety to groups to the meet the highly varied needs of students with disabilities.
- More active student participation in transition planning should be facilitated.
- Partnerships with state agencies and community resources are essential.
- Students need a transition facilitator—an adult who can advocate for that student, make sure that the steps in the transition plan are happening, and track progress toward a diploma or certificate. Teachers, instructional associates, and counselors lack the time and training to undertake these duties.

Continue Working with 4GL School Solutions to Upgrade the Special Education Tracking System (SETS)

For many years, BCPSS has used 4GL School Solutions, Inc.'s program, Special Education Tracking System (SETS) for data management of special education. SETS has had on-going problems communicating with the district's other data management systems. In addition, special education teachers, instructional associates, social workers, and psychologists report that much

of their time is spent on repetitive paperwork rather than serving students or supporting general education teachers. Indeed, a national survey found that this concern was common across the country. A study by the Council for Exceptional Children found that 65% of special education teachers said they spent more than 20% of their time on paperwork.[82]

BCPSS staff believed that reporting requirements could be streamlined while still complying with IDEA, COMAR, and Vaughn G. Research on special education data management suggests that 4GL's most recent program, ENCORE!, would likely solve some of the district's data management problems and free more time and resources for student instruction and services.

A number of companies provide programs similar to ENCORE!, including Netchemia, Class Plus, Computer Automation Services, IEP Online, IEP Writer, e-IEP Pro, Tera Systems, and Ewing Solutions. The scope of services they provide varies, from simply the development of IEPs, to case management, to invoice and billing software for related services. However, these companies typically serve small school districts.

4GL serves many large districts such as San Diego, Pittsburgh, and Winston-Salem/Forsyth County Schools in North Carolina, and ENCORE! has been endorsed by the Council of Administrators of Special Education (CASE), an affiliate of the Council for Exceptional Children (CEC). Charles County Public Schools selected ENCORE! after a national review of similar programs and reports in a national journal that the program has reduced the district's paperwork burden and costs by eliminating redundant data entry and paperwork, increased revenue reimbursement for student services, and improved data-based decision-making.[83]

The director of Exceptional Children's Program in Winston-Salem/Forsyth County Schools in North Carolina reports a 75% decrease in the time it takes staff to draft an IEP, a savings of roughly $150 per special education student solely from the decrease in the amount of time spent in IEP meetings; an elimination of most IEP procedural compliance problems; better retention of special education staff; a redirection of district level compliance staff from fact checking to supporting instructional programs; and a 20% gain in reading scores for special education students.[84] 4GL reports that districts save roughly $300 to $700 per special education student.

BCPSS has a proposal from 4GL School Solutions to upgrade the school's special education data system to ENCORE!, and district officials agree that ENCORE! is probably the best system currently available. However, BCPSS reports that negotiations have stalled because ENCORE! currently does not have a module for reporting discipline problems nor does it communicate well with the general student data system in the district—the SASI Student Information System. 4GL has indicated that it will provide a module for reporting discipline problems, but has not done so.

No special education data management system reviewed had every component that a large school district would need to track special education data, but at this point, ENCORE! appears by far the best choice. BCPSS should consider whether the benefits of this imperfect system are significant enough to move ahead with its adoption considering the current level of problems with SETS.

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[82] Coleman, M.R. (2000). Conditions for Special Education Teaching: CEC Commission Technical Report. Arlington, VA: Council for Exceptional Children.

[83] Cox, J. H. (2005). Maryland District Evaluates a Special Education Management System's Impact on Its Bottom Line. Technological Horizons in Education Journal Online, May 2005.

[84] Dempsey, S. (2005). Data and Dollars: How One School District Saved Millions on Its Special Education Program. American School Board Journal: Technology Focus. Alexandria, VA: National School Boards Association.

Support the Adoption of a Behavior and Classroom Management Program such as Positive Behavioral Interventions and Supports (PBIS) System at the High School Level

Several of the schools interviewed as part of this study wished to adopt a school-wide system of behavior management. Staff reported that the differing classroom and behavioral management techniques used led to the loss of significant instructional time as students adjust to the different styles during the first few months of the school year—instructional time that students with disabilities cannot afford to miss. Staff believed a unified approach would increase instructional time and decrease suspensions, expulsions, and other behavioral problems.

In summer 2005, twenty-one Baltimore City elementary and middle schools took part in PBIS training, and they plan to implement the program beginning in the fall. Currently no public high schools in the city use the program, but high schools on the persistently dangerous watch list were trained over the summer in Positive Behavior Facilitation (PBF), which is not a complete behavior management program but a communication technique that helps to deescalate behavioral problems while they are occurring.[85] According to BCPSS officials, PBF would be a useful supplement to PBIS and would not conflict with the program, and district officials reported that PBIS training will eventually be available for any high school that wishes to implement the program.

PBIS is well-researched, has shown results in Maryland high schools, would provide consistency across the system K-12—since it is already being implemented in several elementary and middle schools—and has local partners such as Sheppard Pratt and Johns Hopkins. BCPSS should inform city high schools of the program's potential benefits and begin to provide training to schools that request the program.

Develop Better Partnerships with Outside Organizations and Resources

BCPSS should develop stronger partnerships with a variety of organizations. Stronger partnerships could improve professional development, preparation for the HSAs, and transition services from high school to life after. First, the Maryland Association of Nonpublic Special Education Facilities (MANSEF) and some its local members, St. Elizabeth's and Kennedy-Krieger high schools, said they want more active relationships with BCPSS and individual schools. They suggested that they could provide some professional development on-site in schools, have public teachers observe classes at their facilities as a supplement to their professional development, suggest materials and resources, and help locate hard-to-find staff for related services for schools. The Kennedy-Krieger Institute currently provides special education services for some of the students in the Edison schools that operate in the city, but their assistance is very intensive and fairly costly. Further partnerships between BCPSS and MANSEF might be difficult because several interviewees from both institutions expressed some distrust of each other.

Second, local school districts including BCPSS should form a consortium to share materials and practices. Many local districts have already developed curriculum maps, pacing guides, quarterly and semester assessments, and lesson plans to help those who teach courses tested by the HSAs. Rather than have each district reinvent the wheel, districts could divide the

[85] Olive, E. C. (2004). Practical Tools for Positive Behavior Facilitation. *Reclaiming Children and Youth*, v.13, n.1, spring 2004, p. 43-47.

responsibility and costs associated with this work. There is already one such consortium in Southern Maryland.

Finally, more active relationships with a variety of state agencies could also be of great help in providing transition services to students. Such relationships might lead to creative ways to pool resources and ensure the continuation of wrap around services after high school.

Improve Communication about Resources and Priorities

Some of the concerns of schools and staff could be allayed through better communication about the availability of resources and about priorities. For example, better communication about IEPs is sorely needed. Staff report that students' needs for services are often understated on IEPs because the district says that schools have been unable to appropriately document the need for additional services or that services have provided in the past. Many school-level staff believe that the reported documentation problems are smokescreen for inadequate resources and the district's concern that adding services to IEPs will simply lead to service interruptions and more Vaughn G. compliance problems. As a result, the district and schools blame each other for watered down IEPs. The district should explicitly tell schools and staff to include all of a child's needs on an IEP and should emphasize that the district is willing to provide professional development to assist schools with their documentation issues.

In addition, many school level officials viewed the paperwork associated with IEPs and the Vaughn G. case as punitive measures. Staff need to be reminded that these requirements are not meant as punishments, even though many resulted from Vaughn G. Instead, the paperwork and data tracking are required by IDEA, COMAR, or Vaughn G. with the intent of providing the best education possible for students with disabilities. If the requirements could be reframed in this way, perhaps there would be fewer compliance problems and a better attitude toward the education of students with disabilities.

Finally, the outcomes of any conversation about the purposes of high schools should be reflected in future materials and meetings on school choice and planning students' high school careers. Middle school guidance counselors should be informed about these outcomes, since they are often the first source of information for students who are deciding about which high school to attend.

Develop an Online Forum to Share Resources and Experience

An online forum for teachers to locate resources for special education and share best practices and experiences would help meet important needs identified by staff. The forum would have to be more than a list of links to other sites and an electronic chat room. The latest research, hundreds of lesson plans for differentiated instruction in different subjects, and instructional techniques for special educators are all available over the web, but they must be organized in a way that makes it easy to teachers to find. This is a significant organizational task that includes a thorough search of existing resources, brief descriptions of the resources, and a way to search for specific topics of interest. There is evidence that such a forum would be a useful supplement to professional development, classroom practice, and community-building among teachers.

The United Kingdom has devoted over £1 billion to make information and communications technology part of the day-to-day practice in British schools, and it has particularly promoted

online discussion groups. The most widely studied group is for special needs coordinators (SENCOs), which is what teachers and other staff for students with disabilities are called in the UK. Studies found that the SENCO forum was the most active teacher forum in the UK and that the forum supported professional development and made staff workloads more manageable through the sharing of information, and decreased feelings of isolation.[86]

New York City is building an online community to supplement the professional development of a newly formed network for high school administrators who will meet monthly on special education starting in fall 2005. A similar on-line community here in Baltimore could help directly support professional development, save staff time and energy, and improve the sense of community also makes a great deal of sense.

[86] National Council for Educational Technology. (1997). SENCOs sharing solution: An evaluation of the SENCO Electronic Communications Project. Coventry, England: National Council for Educational Technology. The third and final evaluation of the SENCO project; Parker, B. and B. Bowell (1998). Exploiting Computer-mediated Communication to Support In-service Professional Development: the SENCO experience. *Journal of Information Technology for Teacher Education*, v. 7, n. 2, 1998. p. 229-246.; Selwyn, N. (2000). Creating a Connected Community? Teachers' Use of an Electronic Discussion Group. *Teachers College Record*, vol. 102 no. 4, pp. 750-78, August 2000.

Chapter 9: Concluding Thoughts

Baltimore City is not alone in its struggles to provide a quality education for its special education students and to improve their achievement. Special education in urban schools districts is a challenge across the country. Principals at small high schools in New York City are worried about the same things as BCPSS' principals—how to plan for special education students, a lack of training and resources, the difficulty of finding best practices and materials and how to engage all staff in inclusion. Similarly, the findings of Boston's recent study on its own special education achievement gaps look very familiar.[87]

- "Significant achievement gaps exist with regard to special education students, particularly between Boston Public Schools and the State and within Boston Public Schools, between special education students and other groups."
- "In most schools, special education is just at the beginning of standards-based reform. Special education instruction is today where regular education instruction was several years ago in terms of understanding and implementing standards."
- "The most effective strategy for changing belief systems about expectations is to demonstrate evidence of success. Teachers who believe special education students cannot achieve at high levels must observe and learn strategies from their colleagues who have successfully narrowed the gap."
- "Special education must be integral to the culture of every school, not a separate entity. Special education teachers should participate in all school-wide professional development, as well as specialized training about instructional strategies to address the particularly disabilities of their students…Teachers of regular education students and English Language Learners also must develop expertise in educating students with disabilities."
- "All students—including students with special needs—must have full access to grade-level curriculum. In too many schools, special education students are not taught from the same curriculum as their peers in regular education classrooms. Teachers must have a thorough understanding of the curriculum in addition to an array of strategies that support the achievement of students with disabilities."
- "Schools note a high turnover among qualified teachers of students with disabilities. The district must strengthen its efforts to recruit, train, and retain highly qualified teachers of special education students."

Noting these similarities can help move the discussion past finger pointing toward solutions, and highlights the opportunity to learn from and share with other districts.

This report is neither the final word on the state of special education in the city's high schools nor does it provide the solutions to all the issues identified. Many questions remain unanswered: What is the quality of instruction in inclusion and self-contained setting in BCPSS' schools? How well does a student's IEP match up with a more thorough assessment? Beyond the changes needed to meet the Ultimate Measurable Outcomes, how is Vaughn G. affecting the provision of special education in the city? What effects do citywide special education programs have on students in the programs and the schools in which these programs are located?

[87] Boston Superintendent's Leadership Team. (April 2004). The Special Education Achievement Gap in the Boston Public School. Boston, MA: Boston Public Schools.

However, the hope is that findings in this report and the promising practices and research it identifies will be considered as a guide from a critical friend and partner as the district moves forward with future plans and discussions.

Appendix A: Other Vaughn G. Outcomes

Ultimate Measurable Outcome 7: Student Removals

Outcome 7 seeks to eliminate illegal suspensions and expulsions of students with disabilities. The intended purpose of this outcome is to eliminate illegal suspensions/expulsions of students with disabilities. The outcome does not seek to reduce the total number of suspensions or expulsions of students with disabilities, but to ensure that all procedural protections are enforced under state and federal requirements. Procedural protections include a behavior intervention plan, and a plan to provide special education services, including transportation, during any removal of more than 10 school days. Progress is assessed by measuring the percentage of students with disabilities who were expelled or were suspended more than 10 cumulative or consecutive days and who received all the procedural protections required under state and federal law. Procedural protections include a behavior manifestation meeting by the Child Study Team, the completion of a functional behavioral assessment, the development of a behavior intervention plan, and a plan to provide special education services, including the provision of transportation, during any removal of more than 10 days. The goal is 100% compliance.

Outcome 7 figures are available on a school level basis for June 2004. Student removals are classified as full compliance (all procedural protections met), partial compliance (some procedural protections met), or noncompliant.

Table A1: Outcome 7 for 2003-2004, by School[88]

	School	Name	June 30, 2004			
			Full Compliance	Partial Compliance	Noncompliant	# incidents
Zoned	040	Lake	100.0%	0.0%	0.0%	*
	070	Southern	100.0%	0.0%	0.0%	*
	401	NW	87.2%	0.0%	12.8%	39
	405	Patterson	96.0%	4.0%	0.0%	25
	406	Forest Park	74.1%	0.0%	25.9%	27
	411	Walbrook	60.9%	2.2%	37.0%	46
	412	SW	100.0%	0.0%	0.0%	30
	450	Douglass	90.9%	0.0%	9.1%	11
Restructured	416	Digital	100.0%	0.0%	0.0%	*
	418	DuBois	95.0%	0.0%	5.0%	20
	419	Lewis	93.3%	0.0%	6.7%	15
	420	Banks	71.4%	28.6%	0.0%	7
	424	Marshall	100.0%	0.0%	0.0%	6
	425	Fairmount	100.0%	0.0%	0.0%	8
	426	Lake	100.0%	0.0%	0.0%	7
Inno.	422	New Era	NA	NA	NA	*
	423	Freedom	50.0%	0.0%	50.0%	*
Spec. Ed.	177	McMechen	100.0%	0.0%	0.0%	*
	307	Claremont	NA	NA	NA	*
	451	Briscoe	85.0%	10.0%	5.0%	20
Alt.	178	Wood	84.6%	3.8%	11.5%	26
	413	Harbor City	100.0%	0.0%	0.0%	11
	457	Paquin	NA	NA	NA	*
Vo-tech	400	Edm/West	100.0%	0.0%	0.0%	*
	410	Mervo	100.0%	0.0%	0.0%	*
	454	Carver	100.0%	0.0%	0.0%	*
Citywide	181	Southside	NA	NA	NA	*
	403	Poly	NA	NA	NA	*
	407	Western	NA	NA	NA	*
	414	Dunbar	100.0%	0.0%	0.0%	*
	415	BSA	NA	NA	NA	*
	480	City	100.0%	0.0%	0.0%	*
	421	NAF	NA	NA	NA	*
	BCPSS High Schools		86.3%	2.2%	11.5%	322

* 5 or fewer removals.

At least 50% of all removals in individual schools were in full compliance with IDEA requirements, and zoned schools seem to have the lowest compliance rates overall. The most recent data, which are for school year 2004-2005, shows that 100% of the 266 removals of high school students were in full compliance compared to 92.5% of removals overall in BCPSS.[89]

[88] BCPSS 4th Quarter High School Profile Data for School Year 2003-2004.
[89] Vaughn G. The Baltimore City Public Schools System's Compliance Statements for School Year 2004/2005, filed August 22, 2005.

Ultimate Measurable Outcome 8: LRE Setting

Outcome 8 is intended to increase the number of students with disabilities who received required IEP services within general education classrooms (LRE A or B settings). Chapter 2 provides a detailed discussion of school level and citywide performance on this measure in the section *Inclusion of Students with Disabilities*.

For the past three school years, BCPSS has exceeded the Vaughn G. outcome goal of placing 58.8% of students in LRE A or B settings, but the court is still monitoring this outcome.

Table A2: Outcome 8, by Year[90]

	Goal	Students in LRE A or B		
		June 2003	June 2004	June 2005
High School Area	58.8%	76.7%	77.0%	72.1%
Citywide		63.0%	62.3%	61.6%

Ultimate Measurable Outcome 9: Where Newly Identified Students Receive IEP Services

This outcome is intended to prevent BCPSS from segregating students with disabilities into a few locations by ensuring that newly identified students with disabilities receive IEP services in the school they would attend if they were not disabled. The goal is that no more than 20% of students found eligible to receive special education services will be transferred to other schools to receive these services.

No data school-level data are available, but each year from the 2000-2001 school year to the 2003-2004 school year, no more than 7% of BCPSS students were transferred to other schools to receive special education services. BCPSS has not been relieved of its obligations under this outcome, but the district is no longer required to extract any data for this outcome.

Ultimate Measurable Outcome 13: Students Who Received an IEP Team Review Meeting When Dropping Out

The goal of Outcome 13 is to ensure that an IEP team review meeting is convened for all special education dropouts to determine if all diligent efforts to retain that student have been attempted. For 2005, these meetings were held for 94.0% of high school dropouts; the goal is 100%.[91] This is a procedural outcome that does not provide information about the quality and types of efforts made to retain the student, which would be of more use.

[90] Vaughn G. The Baltimore City Public Schools System's Compliance Statements for School Year 2004/2005, filed August 22, 2005.

[91] Vaughn G. The Baltimore City Public Schools System's Compliance Statements for School Year 2004/2005, filed August 22, 2005.

Ultimate Measurable Outcome 15: IEP Report Card Audit

The goal of this outcome is to ensure that IEP Progress Reports, also called IEP Report Cards, meet the following established indicators:

- The IEP Report Card contains annual goal(s) for each IEP service.
- The IEP Report Card goals and IEP goals match verbatim.
- The IEP Report Card contains appropriate progress codes for each service provided.
- The IEP Report Card contains appropriate attendance information for each service provided.

The goal is 95% compliance system-wide. Each December and May, BCPSS audits a sample of IEP report cards for compliance, approximately 250 reports systemwide, 40 of which are from high schools.

Table A3: Outcome 15, by Year[92]

	Goal	Dec. 2002	May 2003	Dec. 2003	May 2004	Dec. 2004	May 2005
% High School Report Cards Compliant	95%	24%	51%	47%	84%	91%	100%
% Systemwide Report Cards Compliant		43%	63%	69%	82%	89%	98%

There is clear improvement both across the system and in high schools in meeting this outcome. However, these data do not indicate whether the report cards are useful documents. For example, the audit does not examine issues such as whether the goals included in report cards are appropriate or if the progress stated is accurate.

[92] Vaughn G. The Baltimore City Public Schools System's Compliance Statements for School Year 2004/2005, filed August 22, 2005.; 4th Quarter High School Profile Data for School Year 2003-2004.

Appendix B: Anne Arundel County Public School System's Reading Model[93]

		Essential Elements of Reading						
Grade Levels	Tier 1 Core Reading Program	Phonemic Awareness	Phonics	Fluency	Vocabulary	Comprehension		
PreK-5	Open Court Intervention, Classics ESOL: Scott Foresman ESL	✓	✓	✓	✓	✓		
6 to 8	MS Language Arts Lang. of Lit. Bridges to Lit. ESOL: Visions Basic, A, B			✓	✓	✓		
9 to 12	HS English Courses ESOL: Visions Basic, A, B, C				✓	✓		
Grade Levels	Screening Assessment	Phonemic Awareness	Phonics	Fluency	Vocabulary	Comprehension	Given to	Time in min.
1 to 12	TOWRE	✓	✓				Individual	10
K to 6	DIBELS	✓	✓	✓			Individual	15
K to 12	QRI-3 – passages				✓	✓	Individual	25
Grade Levels	Tier 2 Targeted Interventions	Phonemic Awareness	Phonics	Fluency	Vocabulary	Comprehension	Group Size	Lesson Length
K to 1	Early Reading Intervention	✓	✓	✓			5	30
2 to 12	Spell Read P.A.T.	✓	✓	✓	✓	✓	5	60-86
3 to 10	Corrective Reading Decoding A	✓	✓	✓			8-12	45
3 to 10	Corrective Reading Decoding B1	✓	✓	✓			8-12	45
3 to 10	Corrective Reading Decoding B2	✓	✓	✓			8-15	45
6 to 10	Corrective Reading Decoding C		✓	✓		✓	15-18	45
3 to 8	Soar to Success				✓	✓	6	45
Grade Levels	Diagnostic/Prescriptive Assessment	Phonemic Awareness	Phonics	Fluency	Vocabulary	Comprehension	Given to	Time in min.
K to 12	CTOPP	✓					Individual	30
K to 12	Woodcock Reading Mastery		✓			✓	Individual	60
1 to 12	CELF-4				✓		Individual	40
Pre-K to 12	PPVT				✓		Individual	15
2 to 12	GORT-4			✓		✓	Individual	25
K to 12	QRI-3—complete battery	✓	✓	✓	✓	✓	Individual	40
Grade Levels	Tier 3 Intensive Interventions	Phonemic Awareness	Phonics	Fluency	Vocabulary	Comprehension	Group Size	Lesson Length
K to 12	LiPS w/ Visualize & Verbalize	✓	✓	✓	✓	✓	6	45
K to 12	Fast ForWord Followed by a decoding intervention	✓	✓				5	50-100
K to 12	Wilson Reading System	✓	✓	✓	✓	✓	6	60
3 to 12	Failure Free Reading			✓	✓	✓	6	60

[93] Anne Arundel County Public Schools. (2005). Charting the Course: A Comprehensive Reading Model Pre-K through grade 12 2005-2006. Annapolis, MD: Anne Arundel County Public Schools