

Legislative Research Commission

Review of Special Education in Kentucky

Research Report No. 358

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Review of Special Education in Kentucky

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Foreword

In November 2007, the Education Assessment and Accountability Review Subcommittee approved a research agenda for the Office of Education Accountability that included the *Review of Special Education in Kentucky*.

This publication is intended to offer legislators and the public an overview of Kentucky's special education program. It includes data on both preschool and K-12 populations. The report focuses on special education identification trends, finances, assessment, and the Gifted and Talented program. Federal Department of Education data and Kentucky Department of Education data are analyzed to show trends over time. The report raises questions about special education identification procedures, financing, and student performance. It also highlights areas where Kentucky is exceeding the nation, for instance, in mainstreaming special education students. The conclusion focuses on the main themes suggested by the data and provokes a number of potentially worthwhile future research topics.

Robert Sherman
Director

Legislative Research Commission
Frankfort, Kentucky
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Summary

This report analyzes data related to the identification, funding, and outcomes of special education and gifted and talented (G&T) children in Kentucky. Data are interpreted in light of education research and concerns reported by practitioners in the Commonwealth. The report highlights a number of issues relevant to ensuring effective and efficient services for exceptional children. These issues include

- appropriate identification of special education students;
- increase of special education expenditures relative to revenue;
- variation among districts in expenditures for special education students;
- discrepancy between academic expectations and current performance of special education students and possible unintended consequences associated with this discrepancy; and
- equal access among student groups to G&T services.

Data analyzed for this report do not reveal whether and how these and other issues are currently affecting the quality of services for exceptional children in the Commonwealth. The committee may choose to explore these issues in future research.

Chapter 1 presents background information on the federal Individuals with Disabilities Education Act (IDEA) that governs special education programs in the United States. Through recent reauthorizations of IDEA, the United States Department of Education has encouraged states to place special education students, to the extent possible, in regular classrooms and to increase the academic expectations for and rigorous assessment of special education students.

Chapter 2 focuses on identification of special education students in Kentucky. The data show that Kentucky's identification rate is higher than the U.S. rate and has been growing over time. Kentucky has particularly high rates of developmentally delayed students. Identification procedures might account for discrepancies in disability prevalence rates found between Kentucky and the nation. Black special education students tend to be highly represented in certain disability classifications such as emotional and behavioral disorders. Kentucky fares well in national comparisons in the percentage of special education students who are taught in regular education classroom settings.

Chapter 2 also reports great variation in special education identification rates within the Commonwealth. Lower-wealth districts tend to have higher identification rates than wealthier districts. The limited objective of this study precluded more in-depth analysis of factors associated with this trend. One factor that could contribute to varying identification rates is districts' access to diagnostic professionals. Districts vary in their employment of psychologists, diagnosticians, and other professionals who are highly qualified in assessing learning disabilities. Each district has qualified professionals on staff, but the number and variety of special education specialists is not uniform across districts.

Special education finance is analyzed in Chapter 3. Growth in special education revenue and expenditures are both outpacing the rate of student growth. However, expenditures have grown faster than revenue over the last 5 years throughout the state. Many districts receive more in

special education revenue than they code to special education expenditures. This trend is most noticeable within districts that have limited local tax wealth. In the most affluent districts, expenditures typically exceed revenue. The data analyzed in this report do not permit a more detailed explanation of the factors associated with the difference between revenue and expenditures.

Chapter 4 reviews assessment and attainment data for special education students. While special education students have increased academic performance on assessments over the last several years, they are unlikely, as a group, to meet adequate yearly progress goals associated with the federal No Child Left Behind Act. Performance gaps between regular education students and special education students are large and persistent over time.

Graduation rates for special education students have increased while dropout rates have decreased over the last several years. However, current data may not accurately capture the number of special education students who are dropping out. Kentucky is in the initial stages of collecting data related to the transition of special education students into adult life. Practitioners note that transition from high school to the work force is largely a function of local resources.

Chapter 5 analyzes student identification, placement, and outcome data associated with Kentucky's Gifted and Talented (G&T) program. The program is allocated \$7.2 million per year, or \$62 per pupil enrolled in the program in FY 2007. It is not possible to evaluate the effects of G&T services on the 17 percent of Kentucky students enrolled in the program. However, data indicate a need to ensure that students from all demographic and geographic groups have opportunities to excel through G&T services.

Chapter 6 highlights the central findings from each chapter. It discusses issues emerging from analysis of special education data, and it identifies potential concerns related to identification, finance, and assessment.

Chapter 1

Background and Regulations for Special Education

Introduction

Special education programs provide individualized instruction and other services necessary so that students with disabilities have access to educational opportunities. Outcomes for these students have improved steadily in recent years.

Special education programs provide individualized instruction and other services necessary in order for students with disabilities to have access to educational opportunities. Mandated by the federal Individuals with Disabilities Education Act (IDEA) since 1974, these programs are credited with providing access and legal protection to many students with disabilities who would have been denied educational opportunities in the past. In recent years, federal and state regulations have focused on raising academic expectations and improving outcomes for students with disabilities. In Kentucky and the nation, students with disabilities have made steady gains in academic achievement and attainment.

Despite their acknowledged benefits, special education programs have raised a number of policy concerns. These include increasing enrollments, significant costs, and questions about the appropriate academic expectations for students with disabilities.

Despite their acknowledged benefits, special education programs have raised a number of concerns for policy makers, including how to address the increasing percentages of students identified for special education, the significant program costs, and questions related to the appropriate academic expectations for students with disabilities. State and national policy makers continue to adjust policies related to identifying, funding, teaching, and assessing special education students.

In 2007, the General Assembly directed the Office of Education Accountability to provide an analysis of existing data related to special education in the Commonwealth.

In December, 2007, the Education Assessment and Accountability Review Subcommittee directed the Office of Education Accountability (OEA) to analyze existing data related to the identification, assessment, and attainment of special education students in the Commonwealth as well as fiscal data associated with special education programs. The approved study plan included an analysis of these data in light of education research, recommendations of state advocacy and advisory groups, and previous reports related to special education in Kentucky.

Description of This Study

This report analyzes enrollment, placement, achievement, and attainment data related to special education students. State and district fiscal data are also analyzed.

Data analyzed for this report include fiscal data provided by the Kentucky Department of Education (KDE) and districts' annual financial reports; student enrollment and placement data from KDE and the United States Department of Education; and academic achievement data and exiting data from KDE and the U.S.

Department of Education. Analyses include state, national, district, and school-level data.

OEA staff conducted interviews with representatives from a number of practitioner groups and with staff from KDE's Division of Exceptional Children (DEC) to identify concerns related to the quality of special education programs in the Commonwealth. Appendix A contains a list of special education groups and staff interviewed in connection with this report.

This report includes a brief analysis of data related to Kentucky's Gifted and Talented program. Gifted and talented students are considered to be a category of exceptional children.

In addition, staff analyzed data related to Kentucky's Gifted and Talented (G&T) program. G&T students are widely considered to be a category of exceptional children. G&T programs are subject to different regulations than are special education programs, however, and are funded at significantly lower levels. Staff analyzed Student Information System data and fiscal data from KDE and districts' annual financial reports. This study does not include an analysis of the quality of gifted and talented programs in Kentucky districts and schools.

Organization of the Report

Chapter 1 summarizes state and federal regulations and major policy concerns.

The remainder of Chapter 1 provides background and contextual information, beginning with an overview of the federal and state regulations governing special education. The chapter concludes with a short summary of major policy issues related to special education programs.

Chapter 2 summarizes data related to total special education enrollment rates, enrollment rates in particular disability categories, and student placement data.

Chapter 2 analyzes data related to the total enrollments and specific disability categories of special education students in Kentucky and the nation. The chapter includes an analysis of differences in identification rates between Kentucky and the nation and among Kentucky districts. The chapter also includes an analysis of the educational settings of special education students in the Commonwealth.

Chapter 3 summarizes data related to revenue and expenditures. It includes a comparison of expenditures among Kentucky districts.

Chapter 3 summarizes data related to revenue and expenditures for special education in Kentucky. The analysis includes a comparison of revenue and expenditures among Kentucky districts and a comparison of funding mechanisms among Kentucky and its surrounding states.

Chapter 4 summarizes assessment and accountability requirements for students with disabilities. It presents current and trend data related to the academic achievement of students with disabilities.

Chapter 4 begins with a summary of assessment and accountability requirements for students with disabilities under the Commonwealth Accountability Testing System and the federal No Child Left Behind Act of 2001 (NCLB). This discussion includes the testing accommodations permitted for students with disabilities in Kentucky and the regulations related to alternate assessments for the most severely disabled students. Next, the chapter summarizes assessment and attainment data for special education students in Kentucky. Analyses include trend data for students with disabilities, a comparison of achievement for students with and without disabilities in fiscal year 2007, and the school-level achievement of students with disabilities in FY 2007. Graduation, dropout, and transition data are also reported.

Chapter 5 summarizes the regulation and data related to Kentucky's Gifted and Talented program. It includes an analysis of Advanced Placement data among Kentucky schools.

Chapter 5 describes funding and regulations related to Kentucky's G&T program. Data related to student identification, student services, and the performance of G&T students on Kentucky Core Content Tests are summarized. The chapter also provides an analysis of Advanced Placement test data. Many of Kentucky's gifted and talented high school students are enrolled in Advanced Placement courses.

Chapter 6 discusses data reported in Chapters 2 through 5 in light of concerns raised by education research and by special education practitioners in the Commonwealth.

Chapter 6 summarizes issues identified in Chapters 2 through 5 in light of education research and concerns raised by DEC and state practitioner groups. These issues include identification rates of special education students, varying levels of expenditures among Kentucky districts, and discrepancies between the expectations for and achievement levels of students with disabilities in Kentucky.

Federal Regulations

Special education is governed primarily by the federal Individuals with Disabilities Act (IDEA) that guarantees a free, appropriate education to students with disabilities.

Special education programs are governed primarily by IDEA. As stated in Section 601(d)(1A) of the Act's latest 2004 reauthorization, the purpose of the law is to ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living.

Table 1.1 summarizes major requirements linked with federal funding through the reauthorization of IDEA in 2004.

Table 1.1
Major Requirements of the
Individuals with Disabilities Education Act

<p>Child Find and Identification. Admissions and Release Committees (ARC). All school districts are required to locate, evaluate, and identify children with disabilities. In order to be eligible for special education services, children must be identified with a particular disability. Specific identifications are made at the school level by a multidisciplinary team of educators, administrators, and parents known as the Admissions and Release Committee. States must develop criteria for determining which children with disabilities may receive special education services.</p>
<p>Individualized Education Program (IEP). Each child's unique needs and measurable academic and functional goals must be described by the ARC in an individualized education program . IEPs also describe, in detail, the services required by students to achieve their educational goals. By age 16, IEPs must include a statement of postsecondary goals related to training, education, employment, and independent living skills, where appropriate.</p>
<p>Least Restrictive Environment. Students with disabilities, to the maximum extent possible, are to be educated with students who are not disabled unless prevented by the nature or severity of their disability. This should be accomplished in regular classrooms with supplementary services or through collaboration between regular teachers and special education teachers or aides. Special education students who require instructional adaptations that are not possible in regular classrooms are serviced in self-contained classrooms or resource rooms as specified in their IEPs.</p>
<p>Participation in Assessments. All students with disabilities must participate in state and district assessments or in alternate assessments designed to assess similar content. Performance of students with disabilities must be included in state accountability systems.</p>
<p>Procedural Safeguards. Parents must be kept informed about the education of their children and must be included in decisions regarding the education of their children. Parents also are allowed to file complaints and request mediation from state education agencies when they feel that schools are not fulfilling the requirements of the Individuals with Disabilities Education Act.</p>
<p>Response to Intervention. Schools are encouraged to focus on meeting the needs of students experiencing academic difficulty in regular classrooms through tiered, research-based interventions. Referral to special education should occur only after students do not respond to initial interventions. Schools are permitted to use up to 15% of IDEA funds to support tiered interventions for students who have not been formally identified as special education students.</p>
<p>State Performance Plan (SPP). Every 5 years, states must submit state performance plans (SPPs) related to 20 required indicators that reflect IDEA's goals and requirements. SPPs must also outline action plans designed to improve states' performance on each indicator. Annual performance reports describe states' performance on these indicators. A summary of Kentucky's annual performance report for federal financial year 2006 is available in Appendix B.</p>

Source: Staff summary based on regulations posted by the National Dissemination Center for Children with Disabilities.

Federal Policy Trends

In recent years, federal policies have focused on including students with disabilities in the regular education system. The federal No Child Left Behind Act of 2001 (NCLB) has increased educators' accountability for the academic achievement of students with disabilities.

In the early years of IDEA, policies focused primarily on identifying students with disabilities and providing services related to their disabilities and to their individualized learning goals. In the past decade, federal regulations have emphasized the importance of including students with disabilities in the general education system. Revised regulations focus on increasing the amount of

time special education students spend in regular education classes and including special education students in state assessment and accountability systems. NCLB, which is discussed in greater detail in Chapter 4, increases educators' accountability for the academic achievement of special education students. IDEA's Response to Intervention program requires schools to address students' learning difficulties through systematic assessment and intervention in regular classrooms prior to referral for special education services.

Kentucky Administrative Regulations

Kentucky regulations define the specific conditions necessary for compliance with federal regulations.

Kentucky regulations define the specific conditions necessary for compliance with federal regulations. Kentucky's administrative regulations 707 KAR 1:270-1:380 contain the majority of regulations governing special education programs in Kentucky. Content covered by Kentucky's regulations are summarized in Table 1.2.

Table 1.2
Kentucky Special Education Regulations
707 KAR 1:270-1:380 by Content

Section	Content
002	Definitions
280	Kentucky special education mentor program
290	Free appropriate public education
300	Child find, evaluation, and reevaluation
310	Determination of eligibility
320	Individual education program
340	Procedural safeguards and state complaint procedures
350	Placement decisions
360	Confidentiality of information
370	Children with disabilities enrolled in private schools
380	Monitoring and recovering funds

Note: These regulations were updated August 5, 2008.

Regulations related to identifying special education students and determining services for these students are summarized below. These regulations provide context relevant to the discussion of special education enrollment rates in Chapter 2.

Identification of Special Education Students

Districts are responsible for locating, identifying, and evaluating students ages 3-21 who may need special education and related services.

Child Find, Evaluation, and Reevaluation. According to 707 KAR 1:300, districts are responsible for locating, identifying, and evaluating children with disabilities ages 3-21 who may need special education and related services. The regulation requires that districts conduct comprehensive evaluations of individual children prior to providing special education services. The regulation also requires reevaluation of children's eligibility for special education services at least once every 3 years.

Initial and continuing eligibility for special education services is determined at the school level by a team of parents, teachers, and administrators known as the Admissions and Release Committee (ARC). ARCs identify students with particular disability types as defined in regulations.

ARC Membership. Within the regulatory framework, school-level Admissions and Release Committees (ARCs) are given primary responsibility for evaluating individual students and making decisions regarding the initial and continuing eligibility of students for special education services. 707 KAR 1:320 requires that the committee include the child's parents, a regular education teacher (when students may be participating in the regular education environment), a special education teacher, a representative of the local educational agency (LEA) who is qualified to provide or supervise specially designed instruction, an individual qualified to interpret instructional implications of evaluation results and, if appropriate, the child. The committee also may include other professionals such as school psychologists or diagnostic staff. 707 KAR 1:310 requires that ARCs include "other professionals, relative to the areas(s) of concern" when evaluating students for a specific learning disability. Regulations do not specify additional ARC membership in association with other disability categories. Any of the individual ARC members required by regulation may be dismissed from attendance if the parents and the LEA agree in writing prior to the ARC meeting that the member is not necessary or can make a written contribution to the meeting.

Eligibility Guidelines. ARCs must identify students within a regulatory framework that includes definitions of disability types and guidelines related to data and identification procedures. 707 KAR 1:280 provides definitions of the disabilities that make children eligible for special education services.

Regulations provide broad guidelines related to the types of data and procedures that may be used in the evaluation process but do not always identify specific types of assessments that must be used in connection with particular disabilities.

707 KAR 1:300 and 1:310 provide broad guidelines related to the types of data and procedures that may be used in the evaluation process. In most cases, regulations do not identify specific types of assessments that must be used in connection with particular disabilities. Regulations do stipulate that evaluation procedures must not discriminate against children based on race, culture or native language. Regulations were revised in August 2008 to

reflect new requirements of IDEA. 707 KAR 1:300 Section 3 now requires that all children be provided “appropriate, relevant, research-based instruction and intervention in regular education settings” prior to special education referral.

Eligibility criteria are more specific for some disability categories than they are for others.

Eligibility Criteria More Specific in Some Categories Than in Others. Identification criteria and requisite data needed to determine special education eligibility are more specific for some disability categories than they are for others. For example, criteria related to identifying students with a specific learning disability are described in greater detail than are criteria required to identify students with a developmental delay or other health impairment. Appendix C contrasts eligibility criteria for these disabilities.

Students with disabilities are only eligible for special education if the nature of their disability requires specially designed instruction.

Section 504 Students. Students with disabilities are only eligible for special education services if the nature of their disability requires specially designed instruction. The vast majority of students (approximately 96 percent) with disabilities are special education students.

Students with disabilities who are not eligible for special education services are ensured access to public education programs under Section 504 of the Americans with Disabilities Act if the nature of the disability limits their major life activities. Students covered under Section 504 may require adaptations or modifications in the regular classroom or school building (Commonwealth. Dept. of Ed. *Section 504*). However, these students are not funded separately through the Support Education Excellence in Kentucky (SEEK) formula described in Chapter 3. Regulations do not require Section 504 students to have IEPs or to be instructed by special education teachers.

In this report, “students with disabilities” means all students with disabilities, “special education students” means only those students with disabilities who receive special education services.

In this report, the term “special education students” is used to refer to students with disabilities who have been identified for special education services. The term “students with disabilities” includes both special education students and students with disabilities protected by Section 504.

Individualized Education Programs

ARCs must develop individualized education programs (IEPs) for every student identified for special education. IEPs specify the instruction and related services required by each student. Districts are legally obliged to provide these services, regardless of cost.

707 KAR 1:320 requires that Admissions and Release Committees develop an individualized education program for every student that is identified as eligible for special education services. Under IDEA, districts are legally obligated to provide the services specified on each child’s IEP, regardless of cost. Thus, while districts are allocated state funding on a per-pupil basis, the actual

cost of educating students with disabilities is linked most directly to services specified on IEPs.

IEPs must include a statement of measurable annual goals that take into account a child's disability and present level of performance. They must also include detailed descriptions of the nature, location, and duration of special education services required by individual students and of related services required to assist students in reaching their educational goals. In addition, IEPs must describe whether a child will be assessed using regular or alternate assessments, whether a child will be allowed any accommodations on regular assessments, and whether a child will be receiving a diploma or a certificate of completion. Issues related to assessment accommodations are discussed further in Chapter 4.

Table 1.3 provides examples of the service delivery and placement, supplemental aids, and related services typically provided to students with different types of disabilities. Related services include speech-language pathology, physical and occupational therapy, counseling, transportation, and vocational training.

IEPs are individualized for every student; however, services provided to the most severely disabled students are, on average, more intensive than those provided to students with mild disabilities.

IEPs are individualized for every student based upon their specific education needs. There are no restrictions on the types of services that can be provided to students with any particular disability type. However, services provided to the most severely disabled students are, on average, more intensive than those provided to students with mild disabilities. For example, some students with severe disabilities may spend the majority of their time in resource rooms, whereas students with mild disabilities may spend only a few hours of each week in a resource room. In general, the services provided to students with more severe disabilities are more costly than services provided to students with mild disabilities. These broad differences are reflected in the pupil weights associated with students with different disabilities types in the SEEK exceptional child add-on, described in Chapter 3, which is used to fund special education in Kentucky.

**Table 1.3
Matrix of Services Commonly Specified on
Individualized Education Programs**

Disability Category			
	Mild Disability	Moderate Disability	Severe Disability
	Communication Disorders of Speech/language	Mild Mental Disability, Other Health Impairment, Specific Learning Disability, Orthopedic Impairment	Functional Mental Disability, Emotional-Behavioral Disorder, Deaf-Blind, Autism, Visual Impairment, Hearing Impairment, Autism, Traumatic Brain Injury
Service Delivery and Placement			
General Education	X		
Collaboration in General Education*	X	X	X
Resource Room (full time or part time)		X	X
Supplemental Aids and Service			
Accommodations	<ul style="list-style-type: none"> • Pre-teach abstract concepts • Graphic organizers • Mnemonics 	<ul style="list-style-type: none"> • Audio books • Reader • Use of calculator 	<ul style="list-style-type: none"> • Augmentative communication device
Related Services**			
Speech Therapy	X	X	X
Physical Therapy		X	X
Occupational Therapy		X	X
Job Coach		X	X
Assistive Technology		X	X
Transportation (With Lift)		X	X
Braille*Visually Impaired Students Only			X

Notes: Table 1.3 reflects services that are commonly provided to students with different disability types. However, there are no restrictions on the types of services that can be provided to students with particular disabilities. Students can receive any service described in their IEPs. *Many special education students are assisted in general education classrooms by special education teachers or aides who collaborate with the regular education teachers. **Related services can be provided by district personnel, contract employees, or staff from other state agencies such as the Office of Vocational Rehabilitation.

Source: Staff compilation based on discussions with staff of the Kentucky Dept. of Ed. Division of Exceptional Children.

Students With Disabilities in Private Schools

Districts are required to locate, identify, evaluate, and provide services for children with disabilities in private schools.

Under 707 KAR 1:370, districts are required to locate, identify, and evaluate children with disabilities in private schools. Districts are required to spend a portion of their IDEA grants, described in Chapter 3, on providing services to students with disabilities in private schools. Districts are required to consult with representatives of private schools in developing service plans for students with disabilities. Students with disabilities placed by their parents in private schools are not guaranteed the right to the same special education and related services as are public school students.

Administration of and Support for Special Education Programs

The Division of Exceptional Children (DEC) at the Kentucky Department of Education (KDE) is responsible for collecting and analyzing special education data, monitoring district data, providing technical assistance to districts and schools, and helping to resolve disputes in districts.

The Division of Exceptional Children at KDE employs 23 staff, which includes a director, 2 branch managers, 13 consultants, and an attorney. DEC is funded entirely with federal money. The number of employees working on special education matters has decreased since the early 1990s. Currently, DEC staff are responsible primarily for the following activities:

- gathering and analyzing data required through IDEA
- producing annual reports and updating the State Performance Plan as described in Table 1.1
- analyzing district data to establish district performance rankings
- providing technical assistance to administrators and educators regarding regulations and data reporting
- guiding the work of special education cooperatives that provide professional development and assistance to districts and schools
- responding to parent requests for information, and
- helping to resolve disputes and taking corrective action, including follow-up with districts when necessary (Taylor. “Re: Revised”)

In addition, there is one staff member in the Office of Teaching and Learning who works on special education issues.

Kentucky Continuous Monitoring Process

KDE is responsible for monitoring district compliance with state and federal regulations and for requiring districts to take corrective action when necessary.

707 KAR 1:380 requires KDE to monitor districts' special education programs to determine their compliance with state and federal regulations. Monitoring must include audits of child count data submitted by districts to KDE. Section 6(e) requires that KDE monitor

unusual child count data, such as, more than fifteen (15) percent of the total school population reported as having disabilities, no change in numbers from year to year, high numbers of low incidence populations, or unusually low percentages of children with disabilities compared to similar LEAs.

Through the Kentucky Continuous Monitoring Process, DEC collects and analyzes data related to the 20 indicators required by the Office of Special Education Programs (OSEP) for the State Performance Plan. Fourteen of these indicators are taken from district-level data that include graduation rates, discipline rates, and disproportionate identification of minority students for special education. Indicators are described in full in Appendix B.

Corrective Action Plans

KDE must investigate allegations of district noncompliance with special education regulations. Districts found to be out of compliance are provided with corrective action plans.

Regulations require KDE to develop a corrective action plan (CAP) for districts that are found to be out of compliance with state regulations. KDE must provide intensive assistance for a 2-year period to districts that do not take corrective action within the timelines specified in the action plan. Should districts fail or refuse to correct an identified deficiency, KDE can impose appropriate sanctions as set out in regulation. The range of sanctions varies in severity and includes the ability of KDE to withhold SEEK and IDEA funds. However, funds have not been withheld from any districts in recent years (Taylor. "Re: Questions").

In the 2006-2008 school years, 11 districts received corrective action plans.

In the 2006-2008 school years, DEC investigated 60 complaints. In most districts, areas of noncompliance were corrected without implementation of CAPs. Eleven districts received CAPs and subsequent assistance from KDE special education mentors. CAPs were most commonly issued in connection with issues of compliance with child find evaluation and reevaluation procedures, development and implementation of IEPs, and inclusion of Admissions and Release Committee members during meetings. Appendix D summarizes regulations violated in connection with CAPS in fiscal years 2006-2008.

Annual Performance Report

The federal Office of Special Education Programs (OSEP) has commended DEC for its timely resolution of written complaints and its timely adjudication of due-process hearings. OSEP also requested that DEC improve collection of required data in a number of categories.

In its evaluation of Kentucky's federal financial year 2005 Annual Performance Report, the federal Office of Special Education Programs commended DEC for its timely resolution of written complaints and its timely adjudication of due-process hearings.¹ OSEP also determined that Kentucky continues to need assistance in a number of categories. OSEP requested that DEC improve collection of required data in the following areas: transition planning on IEPs, timely development and implementation of IEPs for children found eligible for services at age 3, and facilitation of parent involvement. OSEP directed the state to improve its supervision and correction of findings related to district noncompliance with IDEA and NCLB. OSEP also requested that DEC ensure districts' public reporting of special education alternate assessment results.

Special Education Cooperatives

Technical assistance to districts and schools is provided primarily by regionally based, federally funded special education cooperatives.

DEC uses federal IDEA money to fund 11 special education cooperatives. These cooperatives are regionally based to provide technical assistance to local school districts under the supervision of DEC. Staffing of each cooperative includes one full-time director and one full-time literacy consultant; in addition, funds are designated to support specific initiatives in the areas of transition services, hearing impairment, vision impairments, and discipline.

Personnel Development Grants

DEC is also administering \$5.8 million in personnel development grants from the federal Office of Special Education Programs. These grants are designed to develop the skills of Kentucky's special education personnel. Below are some of the projects currently funded through this federal grant.

- School Climate - KY Center for Instructional Discipline, Eastern Kentucky University
- Teacher Recruitment and Retention - Kentucky State University Online Teacher Training Program
- Postsecondary Transition - University of Kentucky Human Development Institute
- Low Incidence Initiative-University of Kentucky and University of Louisville

¹ Due to differences between the start of Kentucky's fiscal year and the start of the federal government's fiscal year, federal fiscal year data are not always taken from the same year as state fiscal data.

- Early Childhood-KDE Division of Early Childhood Education (Taylor. “Re: Revised”)

Interagency Collaboration

Special education personnel must collaborate with other state agencies to ensure that students meet the goals specified on their IEPs.

The success of special education services depends, more so than regular education services, on collaboration among districts, schools, and other state agencies. Prior to kindergarten, collaboration is necessary to ensure that families are aware of available services and that students are correctly identified for special education.

Collaboration among districts, schools, and other state agencies is often necessary to ensure that special education students receive the services outlined on their IEPs. This is especially true for services related to students’ transition to adult life. For example, the Community Based Work Transition Program is a cooperative effort between local school districts, the Kentucky Office of Vocational Rehabilitation, KDE, Kentucky Office for the Blind, and the Human Development Institute at the University of Kentucky. Local programs are funded jointly by school districts and the Office of Vocational Rehabilitation. The programs help students with disabilities explore careers in their communities during their last 2 years of high school.

Through Kentucky’s Interagency Transition Council, representatives from many state agencies meet quarterly to coordinate efforts to assist students in the transition from high school to adult life. Regional transition councils also meet to coordinate transition resources at the local level.

Policy Concerns Related to Special Education

Special education programs attract great scrutiny from parents, educators, and policy makers. This attention is due largely to the fact that special education programs serve large numbers of students at significant costs to federal, state, and local governments. In addition, unlike regular education students, special education students have legal rights to specific, individualized educational services. Districts are under great pressure from parents and are frequently subject to greater liability in connection with the educational services they provide to special education students than they are in connection with the educational services they provide to regular education students.

This report focuses on three major issues that emerge from data analyzed for this study: the identification of students for special education services, the funding of special education programs, and the academic performance of students with disabilities.

Appropriate Identification of Special Education Students

Policy makers are concerned about the growing percentages of students enrolled in special education and the disproportionate enrollment of some minority students in special education programs.

The percentages of students who are enrolled in special education programs have increased steadily in Kentucky and the nation. This is discussed in more detail in Chapter 2. Accompanying these increases are concerns related to the inappropriate identification of students for special education. One concern is the disproportionate identification of minority students for special education (Posny). Through the most recent reauthorization of IDEA, states are required to collect and report district-level data related to the disproportionate identification of minority students for special education.

Another concern is that students who are struggling academically are identified for special education whether or not their poor performance can be attributed to a disability. In some cases, for example, poor performance may be the result of inadequate instruction in regular classrooms or language difficulties rather than learning difficulties related to a disability. A primary goal of the Response to Intervention Program, described earlier in Table 1.1, is to reduce the number of students referred to special education due to lack of intervention in the regular classroom.

Funding of Special Education

Special education expenditures comprise an estimated 21 percent of education spending in the United States. Levels and methods of funding special education have been criticized. There is as yet no consensus among states related to appropriate funding levels and methods.

Special education expenditures comprise an estimated 21 percent of spending on all elementary and secondary education in the United States (Chambers. *What v*). Some have criticized the federal government for insufficiently funding special education services mandated through IDEA, thus placing huge financial burdens on states and districts (National Education). Others claim that special education expenditures are driven, in part, by some funding mechanisms that provide incentives for the identification of special education students (Greene). There is no consensus among states on the overall funding levels required for special education programs or the specific funding levels required for students with particular disabilities. Research related to special education finance is limited by great discrepancies among districts and states in the mechanisms used to fund special education programs, the practices associated with coding special education expenditures, and the methods of estimating portions of regular

education expenses associated with special education students (Chambers. *What*).

Academic Expectations for Special Education Students

NCLB has been credited with increasing access of students with disabilities to the regular curriculum. It has also been criticized for placing unrealistic expectations on students and teachers.

The majority of students identified for special education have mild or moderate disabilities that should not, in theory, prevent them from participating in postsecondary education and the workforce at rates similar to their nondisabled peers. Special education programs have been criticized, however, for removing special education students from regular education programs and lowering academic expectations for special education students (U.S. Dept. *President's*). In response, NCLB increased educators' accountability for the academic achievement of students with disabilities. Assessment and accountability requirements for NCLB are described in Chapter 4.

While NCLB has been credited with increasing the access of students with disabilities to the regular curriculum, the law has been criticized for placing unrealistic expectations on students and teachers and for failing to provide practitioners with the support necessary to improve instruction for students with disabilities. Advocates for students with disabilities also highlight tensions between IDEA's goal of meeting students' individualized learning needs and NCLB's practice of requiring standardized levels of academic performance (National Council).

Chapter 2

Disability Trends and Analysis

Introduction

In this chapter, KDE and IDEA data on special education identification, placement, and proportional representation of subgroups are presented. A brief analysis of districts by wealth quintile is included.

This chapter focuses on characteristics of the special education population in Kentucky. A tremendous volume of data is available from the U.S. Department of Education (USDOE) from data reported by states. These data are collected annually by the department's Office of Special Education Programs in accordance with Section 618 of IDEA. In this chapter, KDE and IDEA data have been culled to focus on identification, placement, and representation of minority groups in special education programs. Detailed analysis of subgroups is included to better understand proportionality in the identification and placement of special education students.¹ Finally, child count and identification data for both preschool and K-12 students are analyzed at the district level. The district-level analysis sheds light on identification trends across district wealth quintiles in Kentucky. Implications of the data are discussed in the concluding section of the chapter.

Organization of the Chapter

Child count and disability trends are presented first, followed by district level analysis of special education identification rates.

The first section of this chapter presents general trends in child count and disability incidence. Following that, more in-depth analysis by age cohorts is presented. In some cases, analysis is limited to the 3-5 age cohort and the 6-21 age cohort. Data are reported by the USDOE in these broad age categories, or cohorts.² Kentucky reports the number, types and demographic characteristics of its special education population to USDOE, as required by IDEA. More detailed age breakdowns are presented where distinct differences in the data have been observed.

¹ According to USDOE: "The State must have in effect, consistent with the purposes of 34 CFR Part 300 and with section 618(d) of the Act, policies and procedures designed to prevent the inappropriate overidentification or disproportionate representation by race and ethnicity of children as children with disabilities, including children with disabilities with a particular impairment described in 34 CFR 300.8 of the IDEA regulations" (U.S. Dept. of Ed. *Building the Legacy*.)

² A cohort is a group of people who share a common event or experience within a defined period. For instance, age cohorts share a common birth date.

The term “prevalence rate” refers to the percentage of students within a population diagnosed with a particular disability. Prevalence of disability is also analyzed by race and gender to determine whether any subpopulation is overrepresented in the special education populations or classifications. Proportionality is an important concern due to NCLB’s focus on equality in educational opportunity for all students.

The second part of the chapter focuses on district-level analysis of special education identification trends. Data are aggregated by district wealth quintile to show differences in identification rates across the state.

Disability Classifications

Throughout this report, disabilities are categorized in groups as defined by state and federal statutes. IDEA uses categories that do not always match the classifications used by Kentucky. For instance, IDEA uses the label “mental retardation” (MR), whereas Kentucky distinguishes between “mild mental disability” (MMD) and “functional mental disability” (FMD). IDEA data combines mild mental and functional disabilities reported by Kentucky to derive child counts for MR. The classifications and abbreviations used throughout this report are shown in Table 2.1.

Table 2.1
Disability Classifications Used by Kentucky

Disability Classification	Abbreviation
Mild Mental Disability*	MMD
Functional Mental Disability*	FMD
Speech/Learning Disability	S/L
Hearing Impairment	HI
Visual Impairment	VI
Emotional Behavioral Disorder	EBD
Orthopedic Impairment	OI
Other Health Impairment	OHI
Specific Learning Disability	SLD
Multiple Disabilities	MD
Deaf-blindness	DB
Autism	Autism
Traumatic Brain Injury	TBI
Developmental Delay**	DD

Notes: *IDEA combines both MMD and FMD and uses the term mental retardation (MR). **DD is only reported for children aged 3-9 as per federal regulation (U.S. Dept of Ed. Use of “*Developmental*”).

Source: Commonwealth. Dept. of Ed. Kentucky Special Education Regulations.

This report focuses on high incidence disabilities like developmental delay (DD), specific learning disability (SLD), other health impairment (OHI), speech/language (S/L), emotional behavioral disorder (EBD), and mental retardation (MR).

Some disabilities, like TBI, HI, VI and OI, are relatively rare and normally distributed across populations, thus they are not shown in all tables. The focus in this report is on the high prevalence disability classifications like DD, SLD, OHI, S/L, EBD, and MR, which vary greatly depending upon the age cohort.

IDEA Data and Age Cohorts

The data reported to USDOE by Kentucky cover the ages of 3-21. In most cases, the data are broken down into the following age cohorts: 3-5, 6-11, 12-17, and 18-21. The cohort analysis allows review of distinct populations to determine how special education services vary by student age in terms of disability types, placement, and proportionality. In general, older age cohorts have higher percentages of children with more severe disabilities. In contrast, younger age cohorts tend to have higher percentages of speech and communication disorders and developmental delay that are remediated as students mature or transition into more specific diagnoses.

General Trends

Child Count

The rate of growth in Kentucky's special education population has surpassed the rate of growth in Kentucky's regular education population over the last several years.

As Table 2.2 shows, Kentucky's K-12 student enrollment has grown from 649,986 in FY 2000 to 668,337 in FY 2007, an increase of 2.8 percent. The Kentucky enrollment data do not include 3- and 4-year-old preschool students. KDE reports children by age, and that data can be added to the total enrollment count to approximate a 3-21 enrollment count. Regardless of the methodology used, the data indicate that the student population receiving special education services has grown at a faster rate than other population groups. The special education population grew from 94,572 in FY 2000 to 109,354 in FY 2007, an increase of 15.6 percent.

The special education population is further broken down into cohorts to examine growth rates by age groups. The 3-5 age special education cohort has grown the fastest since FY 2000, increasing by 28 percent. The other age cohorts have grown as well, but less dramatically, ranging from 12 percent in the 12-17 age cohort to almost 14 percent in the 6-11 age cohort.

Table 2.2
Growth Trends in Kentucky Populations, FY 2000-FY 2007

	Population	FY 2000	FY 2007	Net Gain	% Change
KDE Data	Total Enrollment, K-12	649,986	668,337	18,351	+2.8
	Total Enrollment, 3- and 4-year-olds	659,225	680,512	21,287	3.2
	Regular education*	555,414	558,983	3,569	+0.64
Special Education Population by Cohort					
IDEA Data	3-5	16,372	21,007	4,635	+28.3
	6-11	42,030	47,804	5,774	+13.7
	12-17	32,858	36,815	3,957	+12.0
	18-21	3,312	3,728	416	+12.6
	3-21	94,572	109,354	14,782	+15.6

Notes: IDEA data are reported by calendar year every fall. KDE data are reported by fiscal year. IDEA's 1999-2006 data are equivalent to KDE's FY 2000-FY 2007 data. Regular education enrollment was calculated by subtracting the IDEA count from KDE enrollment data for 2000 and 2007.

Sources: Staff compilation of U.S. Dept. of Ed. IDEA B Child Count Data, Fall 2000-2006; Kentucky Dept. of Ed. enrollment data.

3-5 Age Cohort National Comparison

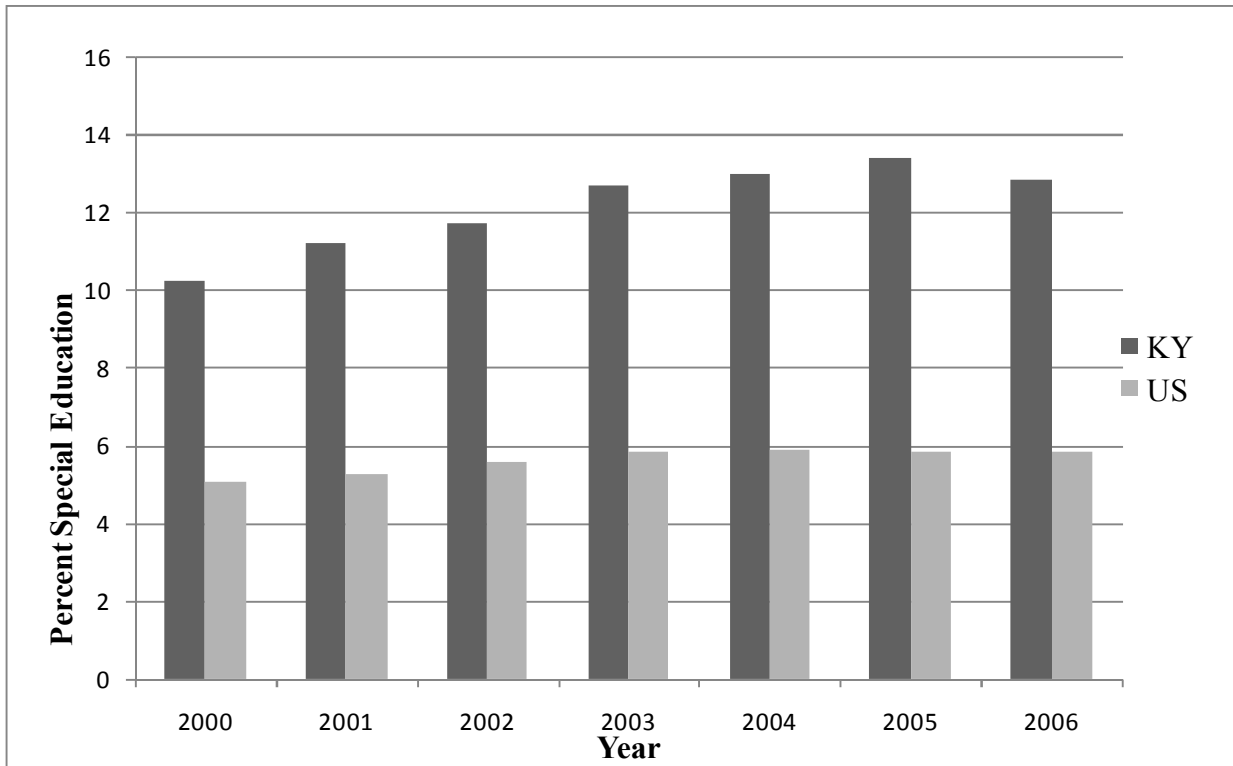
Growth in Kentucky's special education identification rate has outpaced the nation in both the 3-5 age cohort and the 6-21 age cohort.

Figure 2.A compares Kentucky to the nation in special education prevalence within the 3-5 age cohort. It is important to note that Kentucky's preschool program is unique and differs from other states. KRS 157.3175 mandates that Kentucky's preschool program focus on at-risk children and children with special needs. Students who are 3-4 years old with disabilities or developmental delays are eligible for free preschool services. In addition, 4-year-olds whose family income is less than 150 percent of the poverty rate are eligible for free preschool services. Due to this mandate, the special education population in Kentucky is skewed toward high rates of identification in the younger age cohort.

The growth in the percentage of children 3-5 years old identified as special education in Kentucky has outpaced the nation.³ Kentucky's population identified as special education grew from 10.2 percent to 12.8 percent between 2000 and 2006. For the nation, the rate grew from 5 to 5.8 percent between 2000 and 2006.

³ USDOE uses Census Bureau estimates of the 3-5 and 6-21 population cohorts as the universe of all children within the state. Thus, identification rates using IDEA data tend to be lower than those found using KDE data.

Figure 2.A
Percent Served Under IDEA, 3-5 Age Cohort, 2000-2006

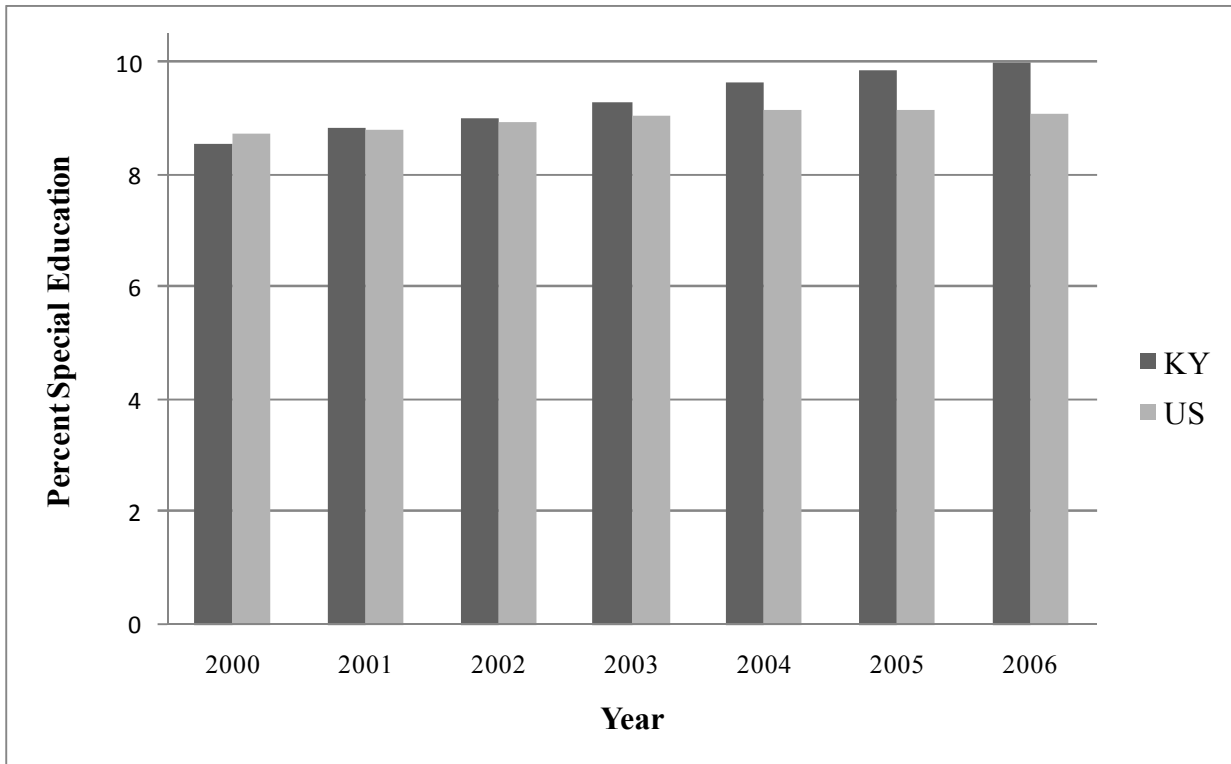


Source: Staff compilation of U.S. Dept. of Ed. IDEA B Child Count Data.

6-21 Age Cohort National Comparison

Figure 2.B compares Kentucky and national trends in disability prevalence in the 6-21 age cohort between 2000 and 2006. The prevalence rate in Kentucky for the 6-21 age cohort was less than the national average in 2000. In 2006, Kentucky passed the national average. Kentucky's rate grew from about 8.6 percent to 10.1 percent, while the national rate grew from 8.7 percent to about 9.1 percent.

Figure 2.B
Percent Served Under IDEA, 6-21 Age Cohort, 2000-2006



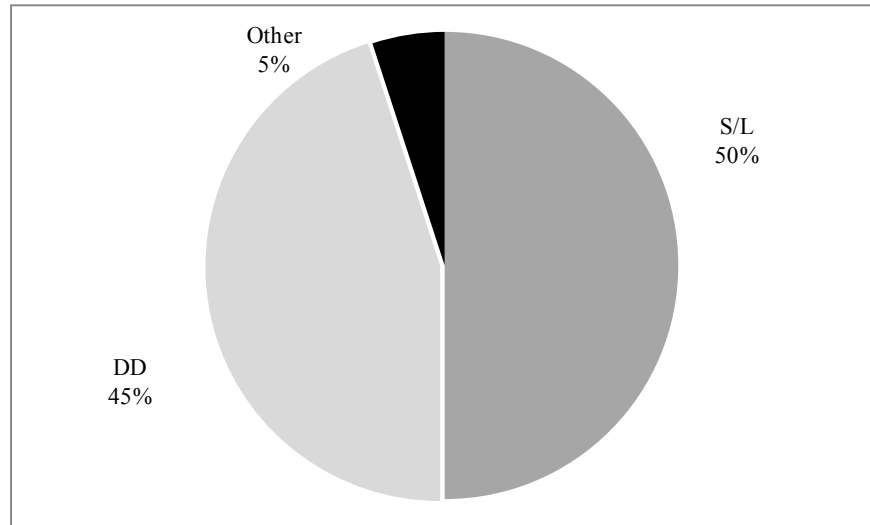
Source: Staff compilation of U.S. Dept. of Ed IDEA B Child Count Data.

Trends in the 3-5 Age Cohort

Ninety-five percent of the 3-5 age cohort is diagnosed as either speech/learning or developmental delay. Only 5 percent of children in this age group are diagnosed with other disabilities.

As Figure 2.C shows, 95 percent of Kentucky children in the 3-5 age cohort are either DD or S/L. Nationally, 82 percent of children in this cohort are diagnosed S/L or DD (U.S. Dept. of Ed. IDEA Child Count Data). Due to the prevalence of DD and S/L found in the 3-5 age cohort, all other disability categories are grouped together and labeled “other.”

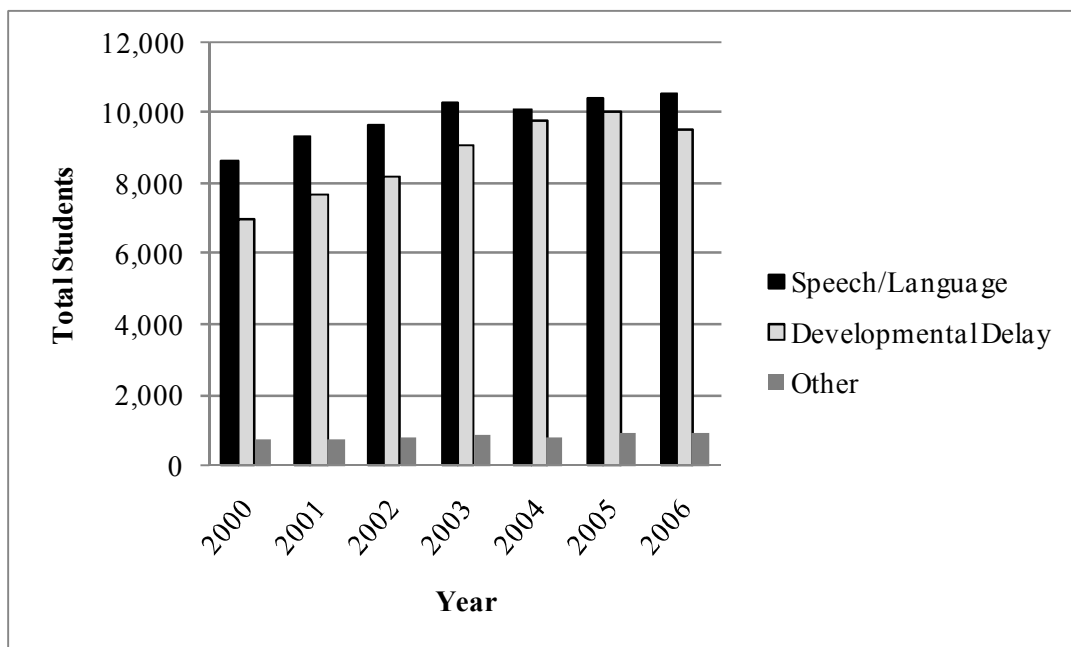
Figure 2.C
Distribution of Disabilities, 3-5 Age Cohort, 2006



Note: S/L refers to speech/language and DD refers to developmental delay. Category labeled “other” includes hearing impairment, visual impairment, orthopedic impairment, deaf-blindness, and traumatic brain injury.
Source: U.S. Dept. of Ed. IDEA B Child Count Data.

Figure 2.D shows the growth in DD and S/L in Kentucky between 2000 and 2006. Both categories have grown in aggregate while all other disabilities have remained relatively stable.

Figure 2.D
Trends in Disability Types, 3-5 Age Cohort, 2000-2006



Source: U.S. Dept. of Ed. IDEA B Child Count Data.

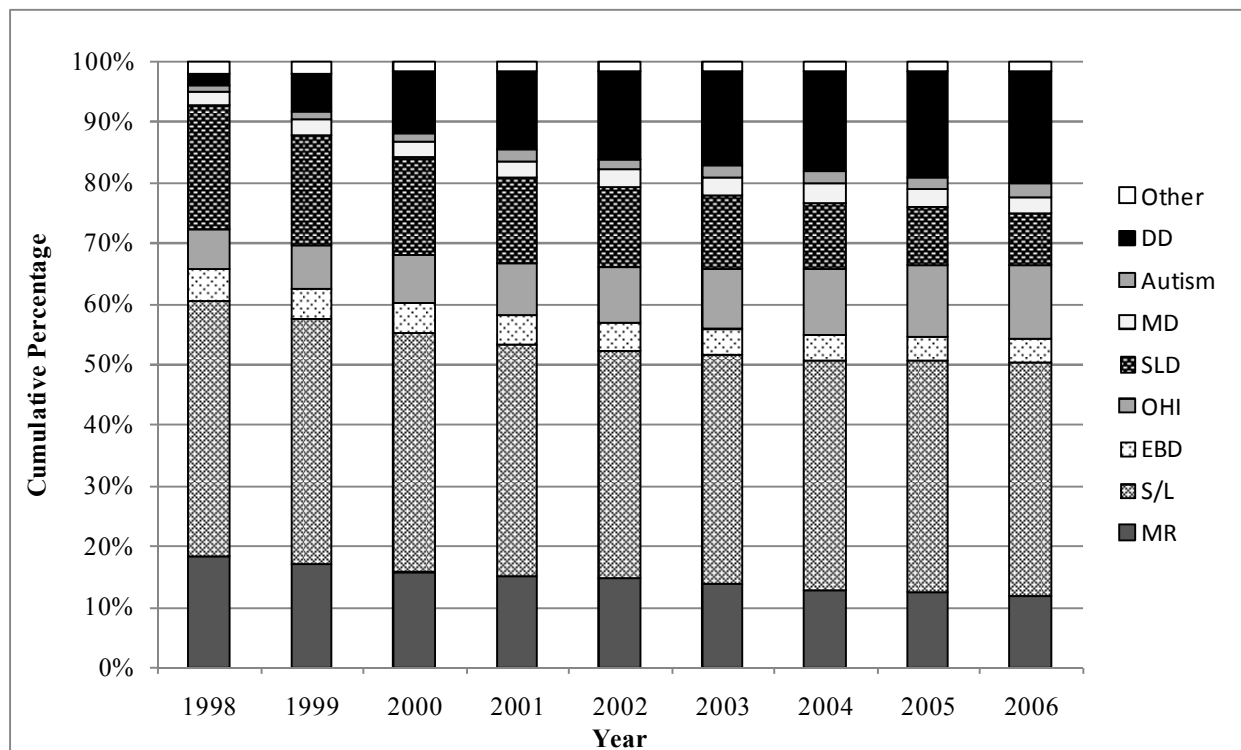
Trends in the 6-11 Age Cohort

Kentucky's identification rate for developmental delay (DD) in the 6-11 cohort greatly exceeds the national average. The rate in the other health impairment (OHI) category has grown steadily over the years while Specific Learning Disabilities (SLD) has declined.

Within the 6-11 age cohort, growth in the DD category is the most obvious trend. As Figure 2.E shows, the percentage of Kentucky special education students identified as DD grew steadily since 1998. In 1997, IDEA was reauthorized and modifications were made that expanded the age children were covered by DD from ages 3 through 5 to ages 3 through 9. This change is noticeable where the prevalence of DD markedly increases after 1998.

The prevalence of OHI has increased over the years, as well. SLD has consistently declined as a percentage of all disabilities, from about 20 percent in 1998 to 8.5 percent in 2006. This decline is counter to national trends. The category "other" includes HI, VI, OI, DB, and TBI. The relative percentage of these disabilities has remained constant over the last decade. Overall, S/L remains the most prevalent diagnosis for this cohort, accounting for about 38 percent of all identified disabilities in 2006.

Figure 2.E
Trends in Disability Types, 6-11 Age Cohort, 1998-2006



Note: DD refers to developmental delay; MD refers to multiple disabilities; SLD refers to specific learning disability; OHI refers to other health impairment; EBD refers to emotional behavioral disorder; S/L refers to speech/language; and MR. refers to mental retardation. Category labeled "other" includes hearing impairment, visual impairment, orthopedic impairment, deaf-blindness, and traumatic brain injury.

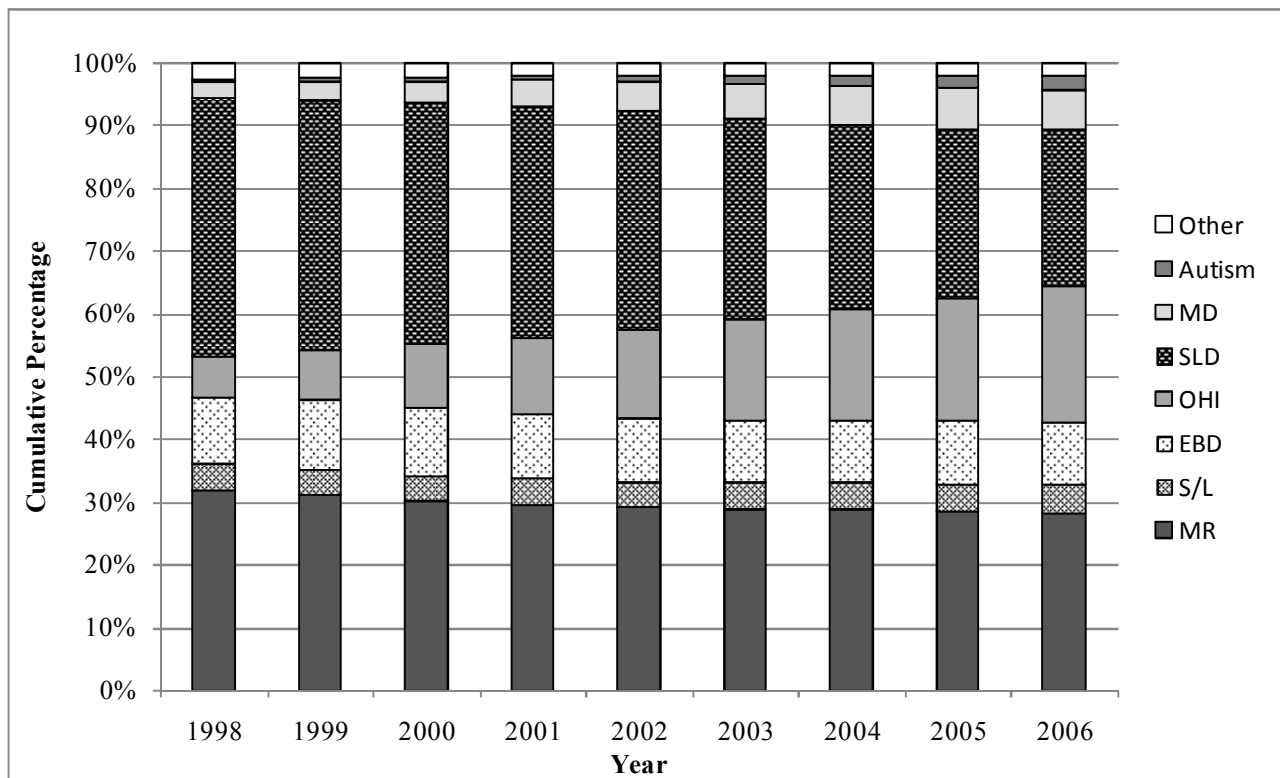
Source: Staff compilation of U.S. Dept. of Ed. IDEA B Child Count Data.

Trends in the 12-17 Age Cohort

The identification rate for OHI has grown by 315 percent for students in the 12-17 age cohort since 1998.

The biggest changes in the 12-17 age cohort are the increase in the percentage of special education students diagnosed OHI and the decline of students diagnosed SLD. As Figure 2.F shows, OHI diagnosis has increased dramatically since 1998, growing from 1,908 students to 7,908 students in 2006, a 315 percent increase. In 1998, SLD accounted for 41 percent of disabilities. By 2006, SLD accounted for about 25 percent of disabilities for this cohort. Since 1998, students with MD have grown by 180 percent. However, MD accounts for only 6 percent of disabilities within the cohort. The percentage of students classified as MR in Kentucky has declined slightly to 28 percent, but it still remains higher than the U.S. average of 9 percent (U.S Dept of Ed. IDEA B Child Count Data, 2006).

Figure 2.F
Trends in Disability Types, 12-17 Age Cohort, 1998-2006



Notes: MD refers to multiple disabilities; SLD refers to specific learning disability; OHI refers to other health impairment; EBD refers to emotional behavioral disorder; S/L refers to speech/language; and MR. refers to mental retardation. Category labeled “other” includes hearing impairment, visual impairment, orthopedic impairment, deaf-blindness, and traumatic brain injury.

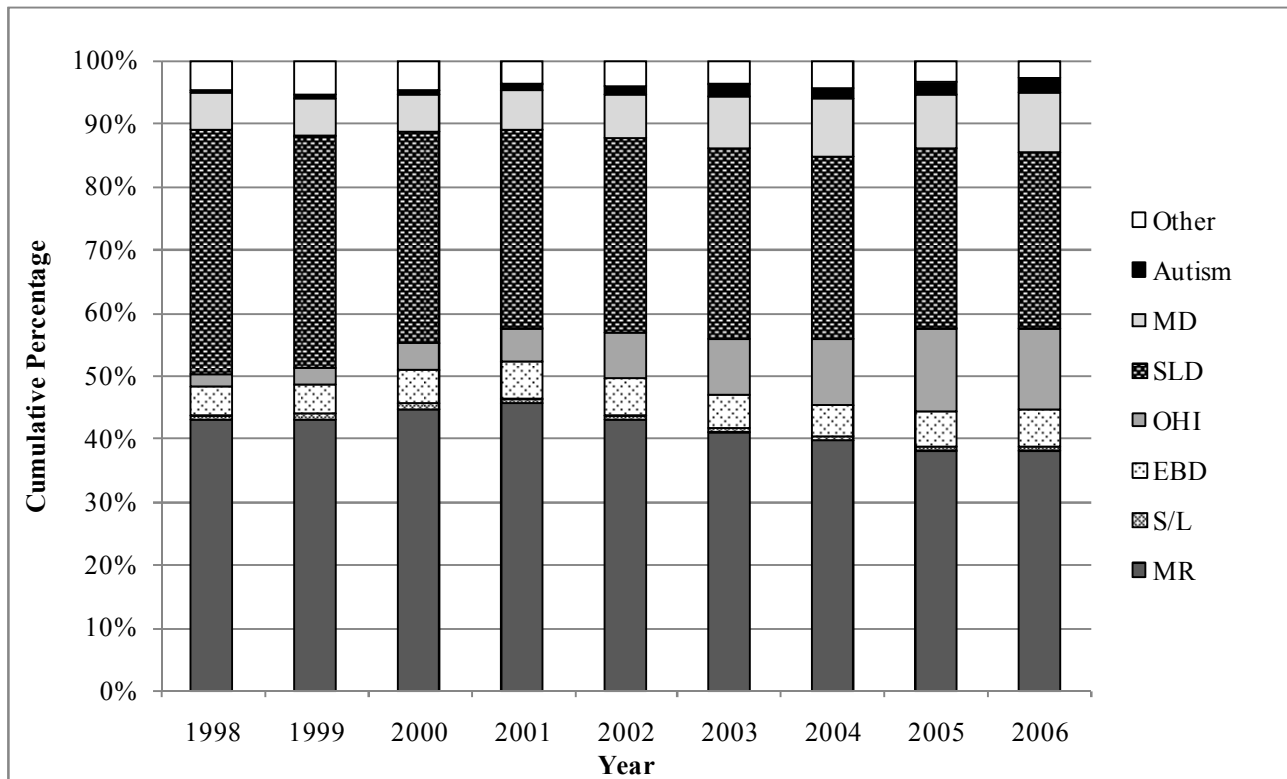
Source: Staff compilation of U.S. Dept. of Ed. IDEA B Child Count Data.

Trends in the 18-21 Age Cohort

Among students in the 18-21 age cohort, OHI has grown considerably since 1998, while SLD has declined.

The 18-21 age cohort is small, totaling 3,744 special education students statewide in 2006. As evident in Figure 2.G, OHI has grown since 1999, and MD has slightly increased during the same time period. Overall, though, MR is the most prevalent disability within the age cohort, accounting for about 38 percent of all disabilities. The two categories with the largest populations, SLD and MR, experienced declines in prevalence rates since 1998. SLD has experienced a decline of 20.6 percent since 1998, and MR has decreased by about 2 percent.

Figure 2.G
Trends in Disability Types, 18-21 Age Cohort, 1998-2006



Notes: MD refers to multiple disabilities; SLD refers to specific learning disability; OHI refers to other health impairment; EBD refers to emotional behavioral disorder; S/L refers to speech/language; and MR. refers to mental retardation. Category labeled “other” includes hearing impairment, visual impairment, orthopedic impairment, deaf-blindness, and traumatic brain injury.

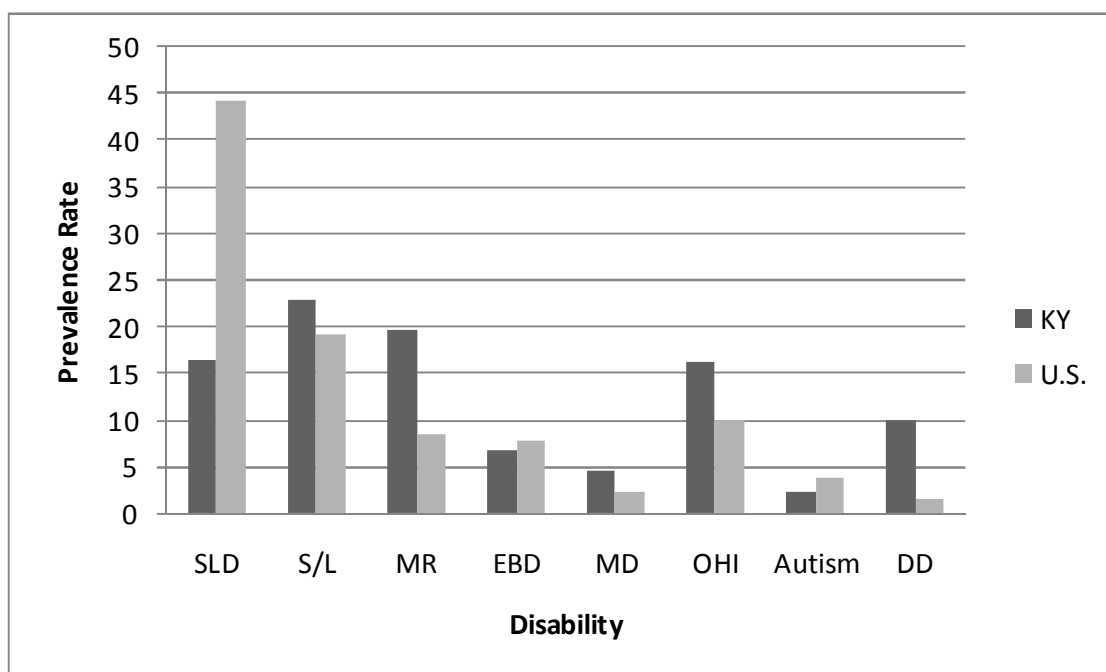
Source: U.S. Dept. of Ed. IDEA B Child Count Data.

Kentucky and U.S. Comparison by Disability Types

Kentucky identifies students with SLD at much lower rates than the nation. However, Kentucky's identification rates for mental retardation (MR), OHI, and DD are much higher than U.S. rates.

For comparative purposes, the 6-21 age cohort provides important context for understanding how Kentucky's special education population differs from the nation. Figure 2.H shows that in 2006, 44 percent of all special education students in the U.S. were classified as SLD. Yet, in Kentucky, the prevalence of SLD was only 16 percent. Kentucky exhibits much higher rates of MR, OHI, and DD than the nation.

Figure 2.H
Comparison of Prevalence Rates for Selected Disabilities in Kentucky and the U.S., 6-21 Age Cohort, 2006



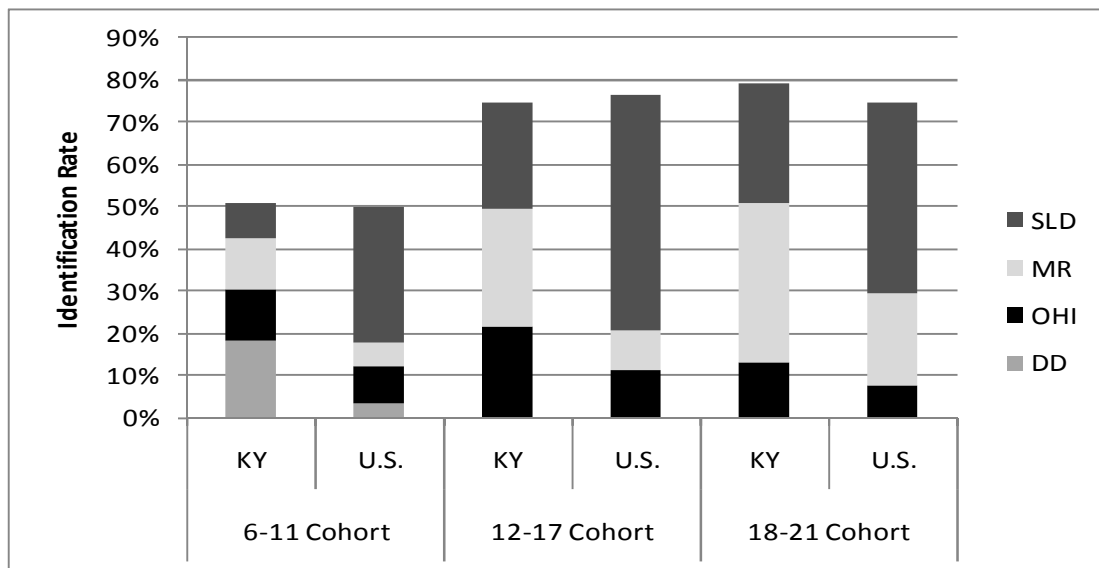
Note: SLD refers to specific learning disability; S/L refers to speech/language; MR. refers to mental retardation; EBD refers to emotional behavioral disorder; MD refers to multiple disabilities; OHI refers to other health impairment; and DD refers developmental delay.

Source: U.S. Dept. of Ed. IDEA B Child Count Data.

Differences Between Kentucky and U.S. Special Education Populations

Figure 2.I illustrates dramatic differences between Kentucky and the nation in prevalence rates for OHI, SLD, MR, and DD. In every cohort, Kentucky identifies fewer students as SLD than does the nation. In the 6-11 age cohort, rates of DD are higher in Kentucky than in the nation. In the 12-17 cohort and 18-21 cohort, Kentucky exceeds the nation in the percentage of MR and OHI special education students.

Figure 2.I
Cumulative Percentage of Selected Disabilities in Kentucky and the U.S.
by Age Cohort, 2006



Note: SLD refers to specific learning disability; MR. refers to mental retardation; OHI refers to other health impairment; and DD refers to developmental delay.

Source: Staff compilation of U.S. Dept. of Ed. IDEA B Child Count Data.

Identification Guidelines

While disability rates vary between Kentucky and the nation, the cumulative percentage of DD, OHI, MR, and SLD are almost identical for Kentucky and the U.S. Differences might be associated with different diagnostic guidelines rather than with genuine differences in the special education population in Kentucky and the nation.

One reason for the different identification rates may be the various disability identification guidelines established by different states. Kentucky, for instance, does not use the IDEA label mental retardation. As mentioned earlier, Kentucky distinguishes between mild mental disabilities and functional mental disabilities. About 82 percent of Kentucky's MR population has mild mental disabilities.

Without more in-depth analysis of classification procedures, it is impossible to determine why Kentucky's prevalence rates for specific disabilities differ from U.S. rates. Figure 2.I suggests that differences in classification guidelines and diagnostic procedures might contribute to variations in disability diagnoses between Kentucky and the nation.

Access to Diagnostic and Evaluative Staff

Practitioners report variation among Kentucky districts and schools in the availability of diagnostic professionals. District staffing data for FY 2006 indicate that 121 of 176 districts did not employ or contract with diagnostic or evaluative staff and 47 did not employ or contract with psychologists. IDEA staffing data for FY 2006

indicate that the ratio of students to related service providers, such as school psychologists and diagnostic staff, was 42 percent higher in Kentucky than the ratio of students to related service providers in the nation. Appendix E reports IDEA staffing data for FY 2006 in greater detail.

Growth in Autism

Rates of autism in Kentucky are lower than in the nation, but the number of Kentucky students diagnosed as autistic has grown steadily over time.

Autism diagnosis has grown rapidly at the state and national level since 1998. The number of Kentucky students aged 6-21 identified as autistic grew from 596 in 1998 to 2,367 in 2006, as shown in Figure 2.J. While the number of autistic students is relatively low, the percent increase in identification of autism since 1998 is substantial.

Two theories have been posited to explain the growth in autism disorders. One claims that autism is an epidemic and prevalence is increasing in the population. The second theory attributes the rise in autism to diagnostic substitution where changes in diagnostic procedures have led to higher identification rates (Bishop). At this point, the academic debate continues with no definitive conclusions.

KRS 194A.135, enacted in 2005, created the Kentucky Commission on Autism Spectrum Disorders. The commission's mission is to develop and monitor the implementation of a comprehensive state plan for an integrated system of training, treatments, and services for individuals of all ages with an autism spectrum disorder.

Figure 2.J
Trend in the Number of Kentucky
Children Classified as Autistic, 1992-2006



Source: U.S. Dept. of Ed. IDEA B Child Count Data.

Race, Gender, and Proportionality

In theory, subgroups should be proportionately represented in disability identification.

3-5 Age Cohort. The concept of proportionality holds that subgroups of students should not be distributed unevenly across different disability categories. For instance, if black students make up 15 percent of the regular education population, they should make up about 15 percent of the special education population.

Table 2.3 shows disability prevalence by race and gender for the 3-5 age cohort. Whites make up 86.4 percent of the 3-5 age population and blacks make up 9.2 percent of the population. Yet black students make up 10.7 percent of students in the DD category, slightly higher than their relative percentage of Kentucky's 3-5 aged population. On the other hand, black students are underrepresented by 2.3 percentage points in the S/L category.

Analysis by gender shows that male students in the 3-5 age cohort are much more likely than females to be identified as eligible for special education. This pattern is persistent across states and at the national level.

Table 2.3
Disability Prevalence by Race and Gender
3-5 Age Cohort, Fall 2006

Disability	Race			Gender	
	Black	White	Other	Male	Female
DD	10.7	86.1	3.2	64.6	35.4
S/L	6.9	90.5	2.6	61.8	38.2
KY Population	9.2	86.4	4.4	NA	NA

Notes: DD refers to developmental delay and S/L refers to speech/language. NA means Not Available. Population estimates for Kentucky are based upon U.S. Census estimates. Source: Staff compilation of U.S. Dept. of Ed. IDEA B Child Count Data.

6-21 Age Cohort. The racial composition of Kentucky's K-12 enrollment is roughly 84 percent white, 11 percent black, 2 percent Hispanic, and 3 percent other. For comparative purposes, the 6-21 age cohort is roughly similar to the K-12 population. Table 2.4 shows the racial proportion of special education students by disability type. In every disability category except MD and S/L, representation of black students exceeds their representation in Kentucky's school enrollment. The biggest identification rate discrepancy is found in EBD. Black students make up 10.6 percent of Kentucky's school enrollment, but they make up 24 percent of Kentucky's EBD population. Black students are moderately overrepresented in MR. Males are about twice as likely as females to receive special education services. The data show the

disproportionate representation of males in special education compared to females. Autism, EBD, OHI, and DD are areas where male representation is especially high.

Table 2.4
Representation of Disability Population by Race and Gender
6-21 Age Cohort, Fall 2006

Disability	Race (%)				Gender (%)	
	Black	White	Hispanic	Other	Male	Female
MR	14.8	83.8	1.1	0.3	58.5	41.5
S/L	8.8	88.8	1.8	0.6	62.7	37.3
EBD	24.4	74.4	0.8	0.4	80.6	19.4
OHI	12.3	86.5	0.9	0.3	72.7	27.3
SLD	10.5	86.9	2.2	0.4	72.7	27.3
MD	10.0	88.5	1.0	0.5	70.6	29.4
Autism	11.7	85.7	1.1	1.5	84.7	15.3
DD	14.0	83.7	1.8	0.5	68.5	31.2
KY Enrollment	10.6	84.2	2.4	2.8	51.5	48.5

Note: MR. refers to mental retardation; S/L refers to speech language; EBD refers to emotional behavioral disorder; OHI refers to other health impairment; SLD refers to specific learning disability; MD refers to multiple disabilities; and DD refers to development delay.

Source: Staff compilation of U.S. Dept. of Ed. IDEA B Child Count data.

For Emotional Behavioral Disorder, the identification rate for black students in Kentucky is double the rate for white students.

Another way of examining the subpopulation data is by comparing disability rates within racial and gender groups. These rates are shown in Table 2.5. The black identification rate for EBD is more than double the rate for white students. Compared to white students, black students also have higher identification rates of DD and MR and substantially lower rates of SLD. Hispanic students have high rates of S/L and SLD. By gender, females have a higher rate of MR and S/L than males. Males have higher relative rates across all other disability categories.

Table 2.5
Kentucky Identification Rates by Race and Gender
Fall 2006

Disability	White	Black	Hispanic	Male	Female
MR	19.3	23.3	14.4	17	25.2
S/L	23.6	16.1	28.0	21.1	26.2
EBD	5.7	12.8	3.8	7.8	3.9
OHI	16.2	15.8	9.6	17.3	13.5
SLD	16.6	13.7	24.8	17.6	13.7
MD	4.5	3.5	3.1	4.6	4
Autism	2.3	2.2	x	2.9	1.1
DD	9.7	11.1	12.1	10.1	9.7
Total	75,599	11,056	1,276	59,705	28,642

Notes: MR. refers to mental retardation; S/L refers to speech language; EBD refers to emotional behavioral disorder; OHI refers to other health impairment; SLD refers to specific learning disability; MD refers to multiple disabilities; and DD refers to development delay. x indicates that data are not reported due to low number.

Source: Staff compilation of U.S. Dept. of Ed. IDEA B Child Count Data.

Disproportionality in Kentucky Districts

The Division of Exceptional Children Services found high rates of black representation in special education populations in many districts.

KDE's Division of Exceptional Children Services has addressed the issue of overrepresentation of black students in some district special education populations. In a 2005 memo, KDE contrasted the percentage of black students in the overall district population to those in the special education population (Commonwealth. Dept. of Ed. Staff Note). In several districts, KDE found the percentage of black students in the special education population exceeded the percentage of the black population in the general student population.

Table 2.6 provides a current look at this proportionality issue by analyzing 2007 KDE data. Because most Kentucky districts have small numbers of black students, only those districts with black student enrollments greater than 100 students were selected for this report. In 12 of the 13 districts chosen, the proportion of black students in special education exceeded the percentage of the black enrollment in the regular school population. In some instances the difference was not great; however, a substantial gap was found in several. For instance, black students made up 24.5 percent of the regular education population and 33.3 percent of the special education population in District D.

Table 2.6
Percent of Regular and Special Education Students in Select Districts by Race, FY 2007

District	White		Black		All Other	
	Regular	Special	Regular	Special	Regular	Special
A	66.1	62.7	22.2	33.5	11.7	3.8
B	59.2	56.4	35.3	41.7	5.5	1.9
C	94	92.2	3.2	5.6	2.8	2.2
D	64.4	60.5	24.5	33.3	11.1	6.2
E	76.8	77.7	17.3	18.2	5.9	4.1
F	86.8	85.1	10.2	13.4	3.1	1.4
G	86	84.9	10.8	13.5	3.2	1.6
H	55.8	53.2	36.7	44.1	7.6	2.7
I	90.1	90.5	5.8	7.7	4.1	1.8
J	75.6	85.3	16.4	13.2	8	1.6
K	39.9	40.7	50.7	57.1	9.4	2.2
L	75.6	74.7	10	12.7	14.4	12.6
M	84.1	83.3	9.2	13.2	6.7	3.5

Source: Staff compilation of Commonwealth. Dept. of Ed. data.

KDE has linked overrepresentation of black students in special education to low expectations for black students, cultural differences between teachers and students of color, improper diagnosis and placement, and a broader need for appropriate instructional methodologies.

As KDE pointed out in its Staff Note, the disproportionate identification of black students is not occurring in all districts. KDE linked the problem of overrepresentation to broader themes affecting achievement such as low expectations of special education students, cultural differences between students of color and teachers, myths about the achievement capabilities of special education students, improper diagnoses and placement, and need for appropriate instructional methodologies.

Placement: Least Restrictive Environment

Placement refers to where special education services are delivered. Placement data are monitored to evaluate progress in assigning special education students to least restrictive classroom environments.

By administrative regulation 707 KAR 1:350, Kentucky mandates that special education students be placed in the least restrictive environment as frequently as possible. The intent of the regulation is to mainstream special education students with regular education students. The decision on where to provide instruction is made by the Admissions and Release Committee and set out in each student’s IEP.

The IDEA reporting categories for placement include the percentage of time a special education student is taught inside a regular classroom. The categories are as follows:

- 80 percent or more
- 40-80 percent
- Less than 40 percent
- Other

If students are provided an education in separate classrooms, separate schools, residential facilities, and home or specialized locations, they are included in the “other” category.

Kentucky places special education students in least restrictive environments at higher rates than most states and the nation.

As Table 2.7 shows, Kentucky surpasses the nation in the percentage of special education students placed in regular education classrooms. About 82 percent of the 3-5 age special education cohort in Kentucky spends more than 80 percent of its instructional time in a regular classroom. Nationally, only 44 percent of special education students in this age cohort are mainstreamed 80 percent or more of the time. Among the 6-21 age cohort in Kentucky, about two-thirds of special education students are placed in the regular classroom 80 percent or more of the time. In contrast, 54 percent of students nationwide spend similar amounts of time in regular classrooms.

Table 2.7
Comparison of Special Education Placement by
Age Cohort, Fall 2006

Age Cohort	Placement			
	>80%	40-80%	<40%	Other
3-5				
KY	82.5	2.2	1.4	10.9
U.S.	44.5	7.4	11.3	36.8
6-21				
KY	66.8	19.7	10.2	3.3
U.S.	53.7	23.7	17.5	5.1

Note: “Other” includes separate class, separate school, residential facility, home, or service provider location.

Source: U.S. Dept. of Ed. IDEA B Educational Environment Data.

Black students are less likely than white students to be taught in least restrictive environments. Over 18 percent of black students compared to 9 percent of whites are taught in regular classrooms less than 40 percent of the time.

When placement data are analyzed by race, as shown in Table 2.8, black students are found to spend less time than white students in a regular education classroom. Eighteen percent of black special education students in the 6-21 age cohort, compared to 9 percent of white students, are in the regular classroom less than 40 percent of the time. In addition, 5 percent of black students and 3 percent of white students are captured in the other category.

Table 2.8
Placement of Special Education Students by
Cohort by Race, Fall 2006

Age Cohort	Students	Placement			
		80%+	40-80%	<40%	Other
3-5					
Black	1,833	82.3	3.5	3.1	11.1
Hispanic	434	79.0	3.2	2.3	15.5
White	18,578	82.7	2.1	1.2	14.0
6-21					
Black	11,056	53.8	22.7	18.5	5.0
Hispanic	1,276	67.1	20.7	9.8	2.4
White	75,599	68.4	19.3	9.0	3.3

Source: U.S. Dept of Ed. IDEA B Educational Environment Data.

District-level Analysis

Analysis of Kentucky district identification rates shows great variation in the percentage of students receiving special education services. In FY 2007, the percentage of students aged 6-21 identified for special education ranged from 8.4 percent to 25.5 percent, with a median of 15.7 percent. One hundred districts identified students for special education at rates exceeding 15 percent. Identification rates exceeded 20 percent in 20 districts and were less than 12 percent in 16 districts.

District identification rates are calculated by the following equation:

$$\frac{\text{The number of children receiving SEEK funding for special education services}}{\text{The total membership reported by the district in its annual Superintendents Annual Attendance Report}}$$

The district-level data facilitate exploration of the link between identification and district wealth.

The district-level data show a link between identification and district wealth. In the following analyses, special education identification data are broken down by district level wealth quintiles.⁴ The quintiles are numbered 1 to 5, with 1 being the least wealthy and 5 being the most wealthy. Appendix F includes a full

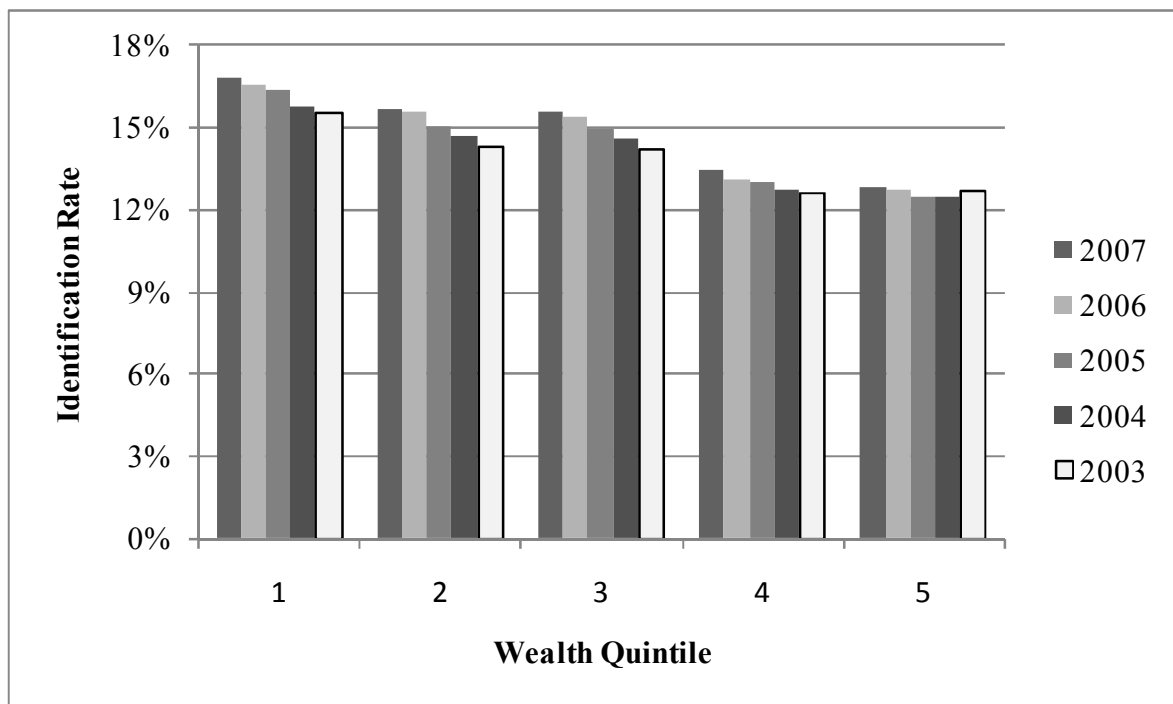
⁴ The wealth quintiles are determined by ranking school districts' per pupil property assessments from lowest to highest and using funded average daily attendance to separate school districts into groups, each containing approximately one-fifth of the state's students. Quintile 1 represents the districts with the lowest property wealth per pupil. Quintile 5 represents the districts with the highest property wealth per pupil.

list of districts by quintile. The KDE district-level data do not include preschool children. Thus, the identification rate applies only to the K-12 population.

6-21 Age Cohort

Figure 2.K presents special education child counts by district wealth quintile for fiscal years 2003-2007. The pattern is consistent for each year: identification rates and growth in identification rates are higher in lower-income quintiles than in higher-income quintiles. About 17 percent of children in the lowest-income school districts (Quintile 1) are identified as special education students in FY 2007, whereas about 13 percent of children in the wealthiest districts (Quintile 5) are identified as special education.

Figure 2.K
Identification Rate by Wealth Quintile
Fiscal Years 2003-2007



Source: Staff compilation of KDE special education data, FY 2003 through FY 2007.

The pattern shows that district wealth correlates with special education identification. Detailed case studies of districts in different quintiles would be needed to more fully understand the dynamics of the relationship between special education identification and district wealth.

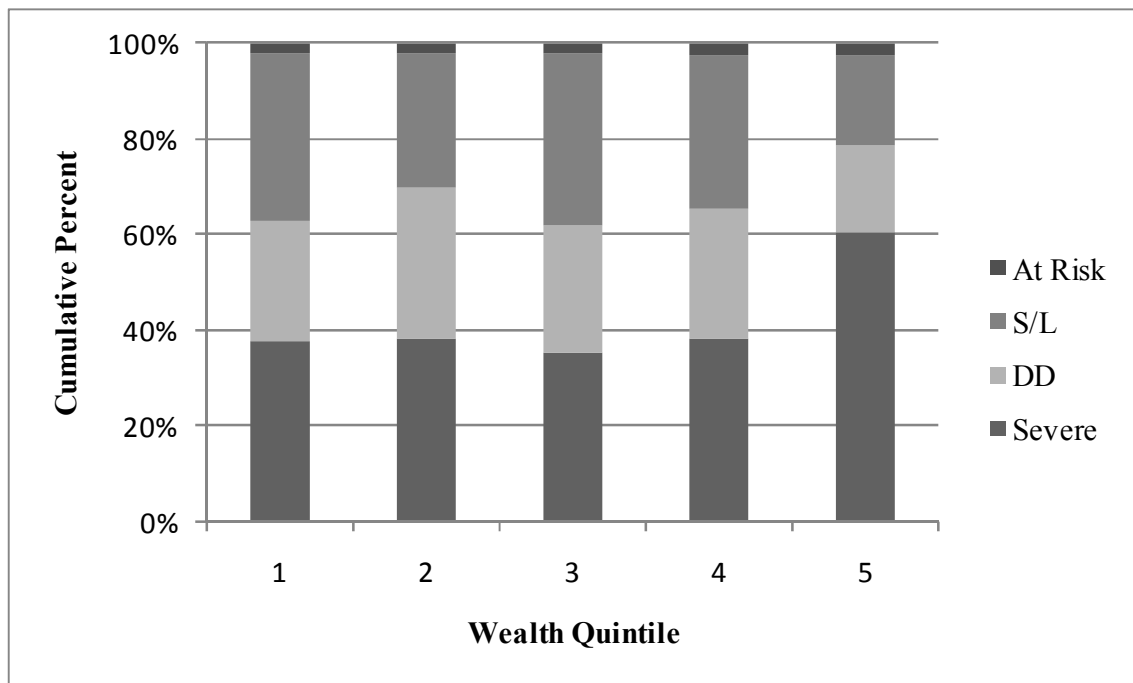
District Preschool Identification

Eligibility for state-funded preschool is determined by either economic hardship or special needs. Students are enrolled as at-risk, speech/learning disabled, developmental delay, or severe disability.

Preschool students are identified as at-risk, S/L, DD or severely disabled and are funded based on their eligibility status and special education identification, pursuant to 702 KAR 3:250. Each year the Kentucky Board of Education sets the per-child preschool funding rate based on the budget approved by the General Assembly. Additional issues related to preschool funding are discussed in Chapter 3.

Figure 2.L depicts the distribution of preschool enrollment by disability category. The distribution of children is similar in all quintiles except for Quintile 5 where the percentage of preschoolers classified as severe diverges sharply from state norms. About 60 percent of Quintile 5 students are identified as severely disabled compared to less than 40 percent for other quintiles.

Figure 2.L
Preschool Identification by District Wealth Quintile, FY 2007



Notes: S/L refers to speech/language and DD refers to developmental delay. Category labeled “severe” includes hearing impairment, visual impairment, orthopedic impairment, deaf-blindness, and traumatic brain injury.

Source: Staff compilation of KDE special education data.

Identification Issues

Research links special education eligibility to poverty, gender, home environment, and other variables.

One of the biggest challenges facing special education practitioners and researchers is the accuracy and appropriateness of the identification. The guidelines for determining special education eligibility are not mandated by the USDOE and vary from state to state. In the literature, special education eligibility is linked to poverty, gender, home environment, and other variables (O’Conner). Some of Kentucky’s wealthiest districts report low rates of special education students, while some poorer districts report high rates. Yet, the district-level data show that patterns of identification are not always consistent and vary across the state.

Funding formulas like Kentucky’s could provide an incentive to identify preschool students as being eligible for special education rather than as economically at risk.

Kentucky has a high rate of childhood poverty, and adult educational attainment lags the nation (Childress). Consequently, experts argue that children may lack exposure to certain determinants of achievement at an early age, contributing to higher levels of developmental delay or speech disabilities, especially in the 3-9 age group (Duncan). As reported in figure 2.H, Kentucky’s identification rate for DD is very high.

Some analysts contend that the funding mechanism used by Kentucky, and many other states, provides an incentive for identifying children as being eligible for special education. They claim that when funding for a low-income child is less than the amount of funding available for a child with a learning disability, the incentive to identify the child as eligible for special education is compelling (Greene). The lure of additional funding could be an incentive to identify students this way rather than as at risk at the preschool level. Once diagnosed as eligible for special education, students could retain special education eligibility during the transition from the preschool to elementary school.

Implications of Race and Gender Data

Males make up about two-thirds of the special education population in both Kentucky and the nation. Placement rates in regular classroom setting are similar for both males and females.

Analysis of the IDEA data shows that Kentucky patterns are consistent with national data. Males make up about two-thirds of the special education population in both Kentucky and the nation. Theories about gender disproportionality focus on biological differences, behavioral differences, and bias in special education referral and assessment (Tschantz; Oswald).

Large percentages of black special education students are identified as MR, EBD, or DD, as shown in Table 2.4. These diagnoses can stigmatize students, leading to lower expectations

from teachers, parents, and the students themselves. In addition, studies have linked EBD identification to higher dropout rates among special education students (Osher).

Conclusion

Kentucky's special education population continues to grow in all age groups. The classification of special education students in Kentucky differs from the nation. Fewer Kentuckians are diagnosed with SLD than in other states.

This chapter presented an array of data on the special education population in Kentucky. Overall, the special education population continues to grow at rates greater than the regular education population, and the increases are occurring across all age and racial groups. Kentucky has higher proportions of MR and DD students than the nation. Conversely, the percentage of students diagnosed with SLD is much lower in Kentucky than in the U.S.

Black special education students are more likely to be diagnosed EBD than are white and Hispanic students. The USDOE and KDE monitor differences in racial identification for signs of disproportionality. Black special education students are also overrepresented in the special education population in several Kentucky districts. KDE is aware of this issue and is studying methods to overcome it.

Placement of students in least restrictive environments in Kentucky surpasses national averages and is in line with the goals of IDEA.

Kentucky's placement data show that special education students are more likely than students across the country to receive educational services in least restrictive environments. Finally, in Kentucky, district wealth seems to correlate with special education identification rates. Higher rates of special education identification in low income districts are a persistent pattern over the last 5 years.

Chapter 3

Finance

Introduction

This chapter presents data on special education revenue and expenditures. It also presents an overview of funding mechanisms used in other states to finance special education.

This chapter focuses on revenue and expenditures for providing special education services in Kentucky. Data from Annual Financial Reports, Support Education Excellence in Kentucky (SEEK), and district grant allocations are used to analyze special education revenue and expenditure trends over the last 5 years.

The first part of the chapter focuses on K-12 revenue and expenditures. Preschool revenue and expenditures are also covered, but are separate from K-12. After exploring trends in federal and state special education revenue, expenditures are analyzed in aggregate and by district wealth quintile.

At the conclusion of this chapter, input from finance officers is presented. The information provides context to some of the revenue and expenditure findings in the analysis. A brief overview of funding mechanisms in other states is provided for comparative purposes. Given differences in state identification rates, funding formulas, and special education policies, it is difficult to make valid comparisons of special education finance among states.

Coding of Expenditures

Annual Financial Reports were used to capture special education expenditure data.

In this analysis district Annual Financial Reports were utilized for expense information. While the bulk of special education expenditures are captured by 200-level program codes, some are captured by local-level program codes.¹ OEA's Efficiency and Effectiveness Study highlighted deficiencies in some of KDE's coding practices in 2006, yet KDE has not implemented the recommended changes at this time (Commonwealth. Legislative). In order to make sure that all expenditures were properly captured, OEA pulled in the local-level program code 098, in addition to the 200-level program codes.

The 200-level program codes titled "alternative schools," "culturally deprived," and "bilingual" are not included in this analysis. KDE's chart of accounts review committee decided that

¹ All districts have a statewide accounting system called MUNIS and have a uniform chart of accounts.

these codes did not constitute truly special education program expenses. Kentucky Education Collaborative for State Agency Children revenue and expenditures are not included in this analysis, as well. While some special education students are likely served in these programs, they are not exclusively special education programs.

Staff had originally planned to report special education expenses by using the lower-level program codes. The chart of accounts currently has codes for functional mental disability, emotional behavioral disorder, deaf-blind, hearing impaired, autism, and other disabilities. However, district use of these lower-level codes is optional. More detailed analysis would have been possible if districts were mandated to use these codes instead of coding expenses to the higher-level exceptional children program code.

It is difficult to precisely code all special education-related expenditures strictly to special education. Most teachers and administrators spend their time with all students to varying degrees; disaggregation for accounting purposes is not feasible.

It is also difficult to accurately capture expenditures that do not fit exclusively into either regular or special education. For instance, administrative staff and teachers alike serve regular education and special education students. Numerous administrators and staff are active on special education ARCs and help develop IEPs. Classrooms are integrated with a mix of regular and special education students. Proportionately allocating time to specific special education expenditure codes is not required and would use up a significant amount of staff time. At present, districts are only required to submit a manual count of full-time equivalent special education personnel and contract staff for IDEA purposes.

Sources of Revenue for Special Education

Special education funding is derived from multiple sources. The federal government provides grants as part of the Individuals with Disabilities Act. Kentucky and local governments also provide money for special education services.

District special education revenue comes from a combination of federal, state, and local sources. The federal government provides districts with funds through IDEA B. The SEEK formula contains specific calculations for educating and transporting students with disabilities. Many districts supplement federal and state funding with additional local funding. Districts receive separate state and federal funding for special education students in preschool.

State Funding

Exceptional Child Add-on. The exceptional child add-on, an adjustment to the guaranteed base provided to districts through the SEEK formula, provides districts with increased funding that reflects the additional cost of educating exceptional children. The exceptional child funding is based on the number and types of

exceptional children as defined in KRS 157.200. The weights and categories of exceptionality are listed in Table 3.1. The weights are multiplied by the guaranteed base and applied to the prior year December 1 child count by disability type. Disability types are grouped into three funding categories: high incidence, moderate incidence, and low incidence. The SEEK funding system acknowledges the gap in education funding based on variations in local wealth and provides a means to compensate poorer districts by providing them with relatively greater state funding.

Kentucky’s funding weights for special education pupils reflect the wide variation in the expenses associated with the services required by students with different types of disabilities. Expenses associated with high-incidence disability categories such as speech and language impairments are less than those associated with the most severe, low-incidence disabilities such as multiple disabilities.

Table 3.1
SEEK Add-on Weights for Students With Disabilities

Funding Category	SEEK Add-on Weights	Disability Type
High Incidence	0.24	Speech or language impairment
Moderate Incidence	1.17	Mild mental disability, orthopedic impairment or physically disabled, other health impaired, specific learning disability, developmental delay
Low Incidence	2.35	Functional mental disability, visually disabled, hearing impairment, emotional- behavioral disorder, multiple disability, deaf-blind, autism, traumatic brain injury

Source: Commonwealth. Dept. of Ed. *Financial Management Manual*.

By statute, Support Education Excellence in Kentucky (SEEK) funds transportation for qualified special education students at five times the rate of regular education students.

Transportation. The SEEK transportation calculation provides additional funding for students with disabilities who are transported with special assistance or by special vehicle. The transportation calculation, as defined in statute KRS 157.370, funds qualified special education students at five times the rate of other transported students. This applies to pupils requiring special vehicles to accommodate wheelchairs, other mobility and health devices, or students requiring monitors. Also, some special education students attend shortened school days, approved by their local boards of education, and may require transportation throughout the regular school day.

Federal Funding

IDEA. The federal government provides districts with direct funding to support special education services. In 1999, the USDOE amended the IDEA funding formula used to determine district allocations; the formula is no longer linked to current special education enrollments.²

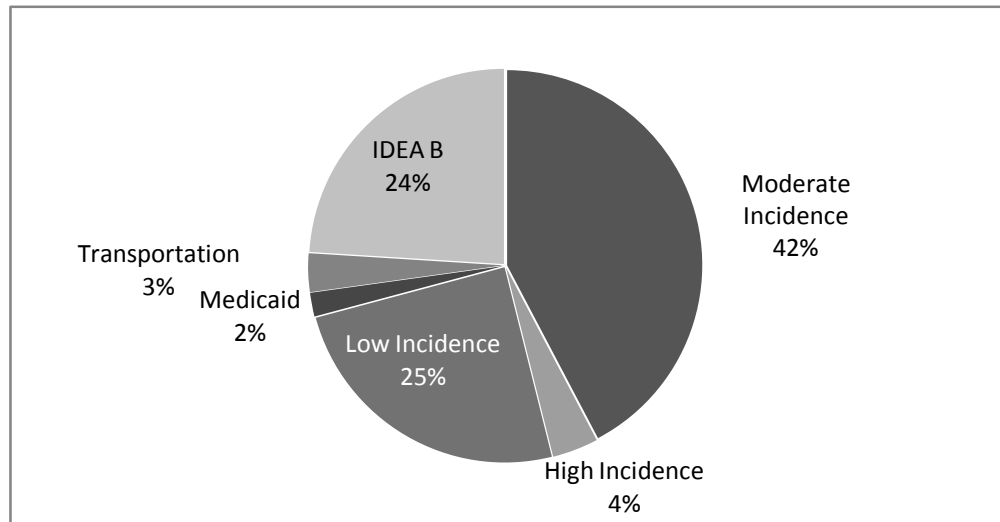
Medicaid. Districts are eligible to enroll as Medicaid health services providers under the federal Medicaid School Based Health Services program. Districts are reimbursed approximately 70 percent of their expenditures for related services provided to children with disabilities who are eligible for both IDEA and Medicaid funding. All but 34 districts received some Medicaid funding in FY 2007.

Revenue Trends

Figure 3.A breaks down the allocation of special education revenue in FY 2007 by source. About 42 percent of all special education revenue is associated with state funding of moderate-incidence disabilities. IDEA B accounts for about 25 percent of all revenue. The exceptional child SEEK add-on for low-, moderate-, and high-incidence disabilities totaled about \$382 million, or roughly \$3,977 per pupil. Transportation revenue totaled \$17 million, or about \$179 per pupil.

² The method for allocating IDEA-B funds to districts is currently calculated using base amounts established with 1998 child count data, current district total enrollment, and adjustments for district poverty.

Figure 3.A
K-12 Special Education Revenue by Source, FY 2007



Source: Staff compilation of KY Dept. of Ed. Annual Financial Reports, SEEK Final calculations, and federal grant allocations.

Moderate incidence disabilities are the leading driver of special education revenue. Federal IDEA money accounts for about 25 percent of all revenue.

Trends in revenue sources are shown in Table 3.2. Revenue has grown by 32.3 percent since FY 2003. The exceptional child add-on, through SEEK, has grown by 26.5 percent from FY 2003 to FY 2007. Over the last 5 years, IDEA B revenue has grown from \$91.8 million to \$129 million, an increase of 41 percent.

Table 3.2
Revenue Source Trends, FY 2003 to FY 2007

Revenue Source	Fiscal Year					% Change	
	2003	2004	2005	2006	2007	2003-2007	Adj.*
High Incidence	\$16,385,989	\$16,916,591	\$17,790,706	\$19,409,131	\$20,567,258	25.5	9.4
Moderate Incidence	\$185,285,172	\$195,984,157	\$203,922,294	\$221,657,542	\$228,038,239	23.1	7.3
Low Incidence	\$100,155,769	\$107,705,641	\$113,425,758	\$127,135,681	\$133,318,729	33.1	16.1
Subtotal	\$301,826,930	\$320,606,389	\$335,138,758	\$368,202,354	\$381,924,226	26.5	10.3
Transportation	\$12,610,711	\$13,135,242	\$13,995,055	\$15,368,007	\$17,238,221	36.7	19.2
IDEA B	\$91,810,229	\$109,845,112	\$124,447,238	\$129,730,534	\$129,433,211	41.0	22.9
Medicaid	\$1,348,388	\$1,621,386	\$4,374,360	\$6,448,422	\$10,770,868	698.8	596.5
Total	\$407,596,257	\$445,208,129	\$477,955,411	\$519,749,317	\$539,366,526	32.3	15.4

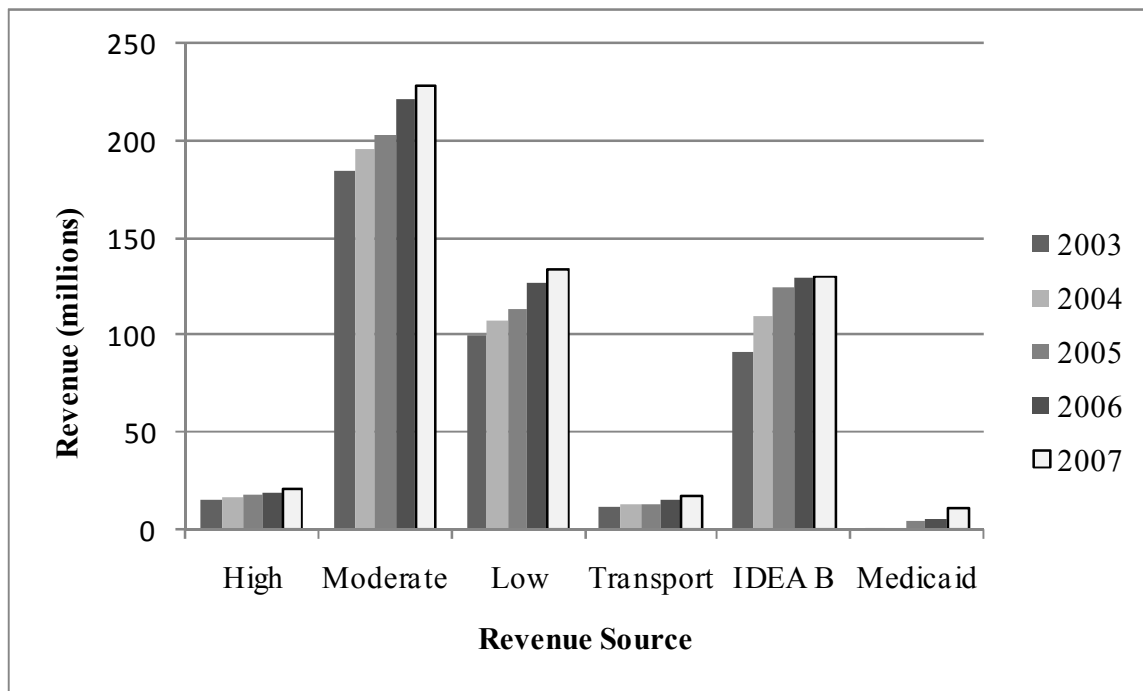
Note: *Adjusted for inflation in 2007 dollars.

Source: Staff compilation of KY Dept. of Ed. Annual Financial Reports, SEEK Final calculations, and federal grant allocations.

While Medicaid revenue has experienced the greatest rate of increase since FY 2003, it still only accounts for about 2 percent of all special education revenue.

In 2003, over half of all districts did not receive any Medicaid funding. By 2007, only 19 percent of districts were not receiving any Medicaid funding. Consequently, Medicaid revenue grew by 699 percent between FY 2003 and FY 2007. As Figure 3.B shows, in terms of aggregate dollars, Medicaid makes up a small percentage of all special education revenue.

Figure 3.B
Special Education Revenue by Source, FY 2003-FY 2007



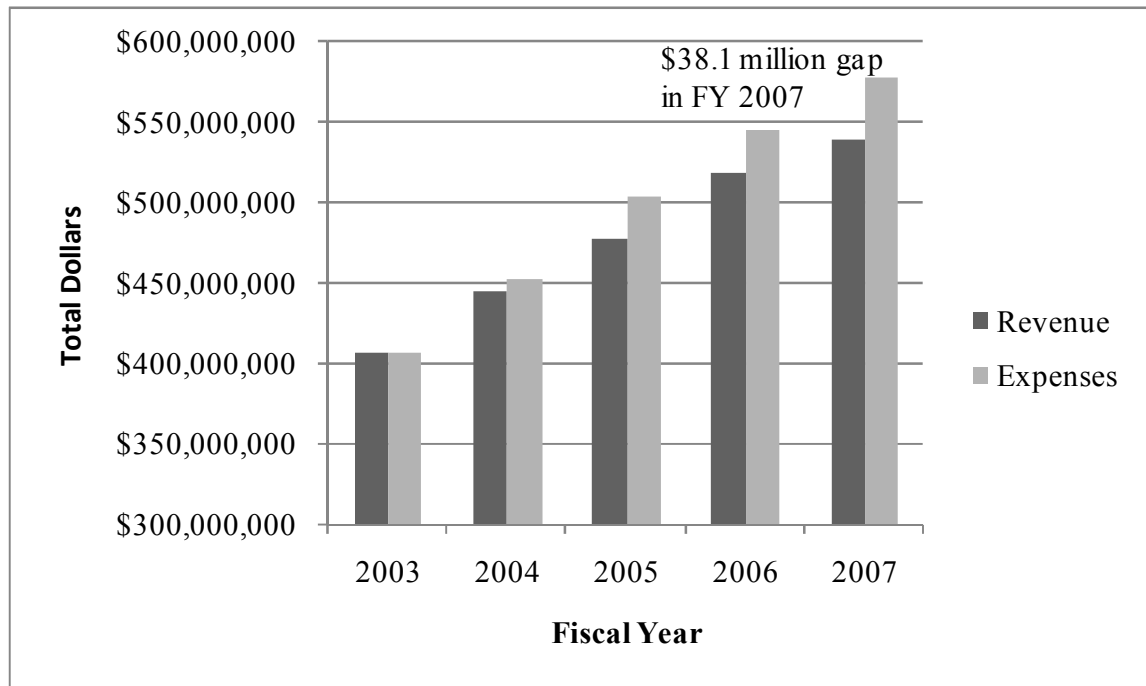
Source: Staff compilation of KY Dept. of Ed. Annual Financial Reports, SEEK Final calculations, and federal grant allocations.

Special Education Revenue and Expenditures

Special education expenditures have grown by 42 percent since FY 2003. Beginning in FY 2004, special education expenditures exceeded special education revenue. The gap between expenditures and revenue has increased over time.

Figure 3.C compares special education revenue to expenditures from FY 2003 through FY 2007. In FY 2003, the balance between revenue and expenditures was about even. Since FY 2003, though, special education expenditures have exceeded revenue. At the same time, special education revenue has grown by 32 percent and expenditures by 42 percent. In FY 2007, the gap between revenue and expenditures grew to \$38.2 million.

Figure 3.C
Special Education Revenue and Expenditures
FY 2003-FY 2007



Source: Staff compilation of KY Dept. of Ed. Annual Financial Reports, 2003-2007; SEEK Final calculations; and federal grant allocations.

As Table 3.3 shows, the number of special education students enrolled in Kentucky schools increased by 10 percent between FY 2003 and FY 2007. Full revenue and expenditure data are included.

Table 3.3
Revenue and Expenditures, FY 2003-FY 2007

Variable	Fiscal Year					% Increase	
	2003	2004	2005	2006	2007	2003-2007	Adj.*
Revenue (millions)	\$408	\$445	\$478	\$520	\$539	32.3	15.4
Expenditures (millions)	\$407	\$454	\$504	\$546	\$578	41.8	23.7
Students	87,393	88,946	91,570	94,172	96,161	10.0	—

Note: *Adjusted for inflation using 2007 dollars.

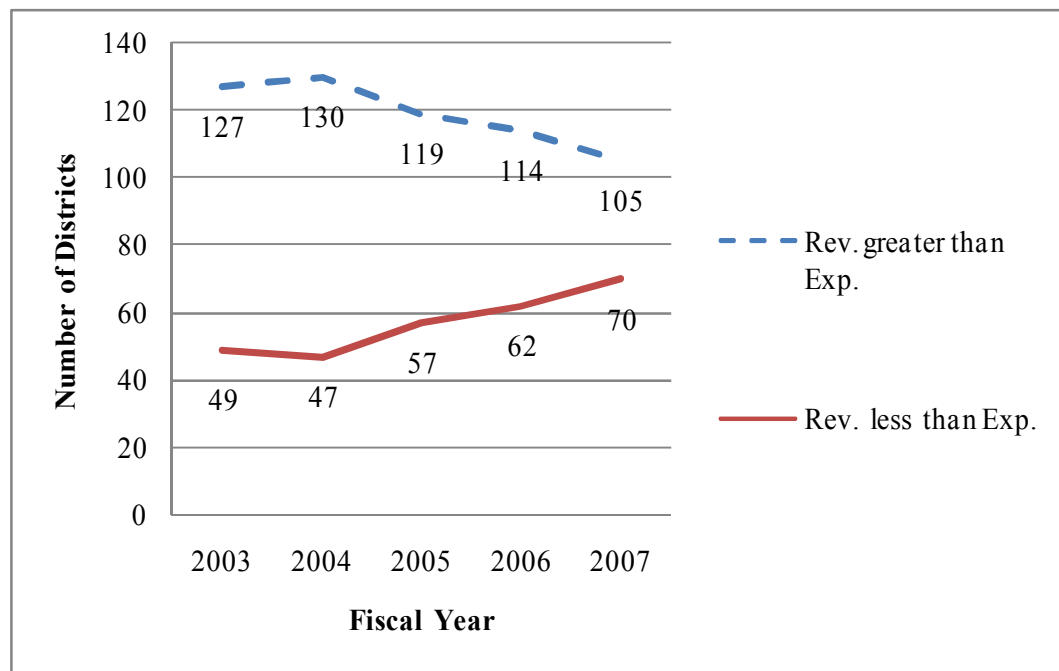
Source: Staff compilation of KY Dept. of Ed. Annual Finance Reports, 2003-2007; SEEK Final calculations; and federal grant allocations.

Trends in Special Education Revenue and Expenditures

The number of districts reporting more in special education expenditures than revenue grew from 49 in FY 2003 to 70 in FY 2007.

As Figure 3.D. shows, a total of 70 districts spent more on special education than they received in state and federal revenue in FY 2007, up from 49 districts in FY 2003. However, the majority of districts in Kentucky receive more in special education revenue than they report in expenditures.

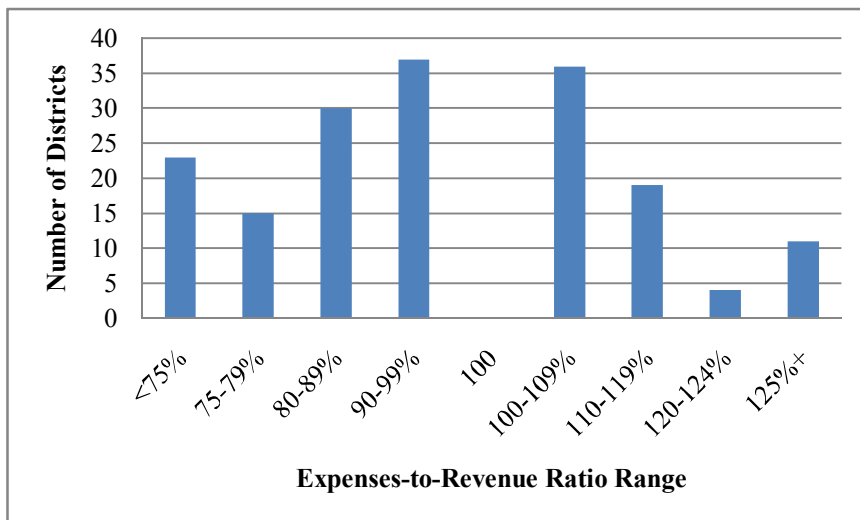
Figure 3.D
Trends in District-level Revenue and Expenditures
FY 2003-FY 2007



Source: Staff compilation of KY Dept. of Ed. Annual Financial Reports, 2003-2007; SEEK Final calculations; and federal grant allocations.

Figure 3.E further highlights the district-level differences by analyzing expenses-to-revenue ratios in FY 2007. The number of districts receiving more revenue than expended is shown on the left-hand side of the chart. For instance, 37 districts reported expenditures within 90 to 99 percent of total special education revenue. The right-hand side of the chart shows the total number of districts spending more on special education than they receive in revenue. Eleven districts spent more than 125 percent of the revenue they received. Overall, 73 districts fall within the 90-109 percent range.

Figure 3.E
Special Education Expenses-to-Revenue Ratios by District
FY 2007



Source: Staff compilation of KY Dept. of Ed. Annual Financial Reports, SEEK Final calculations, and federal grant allocations.

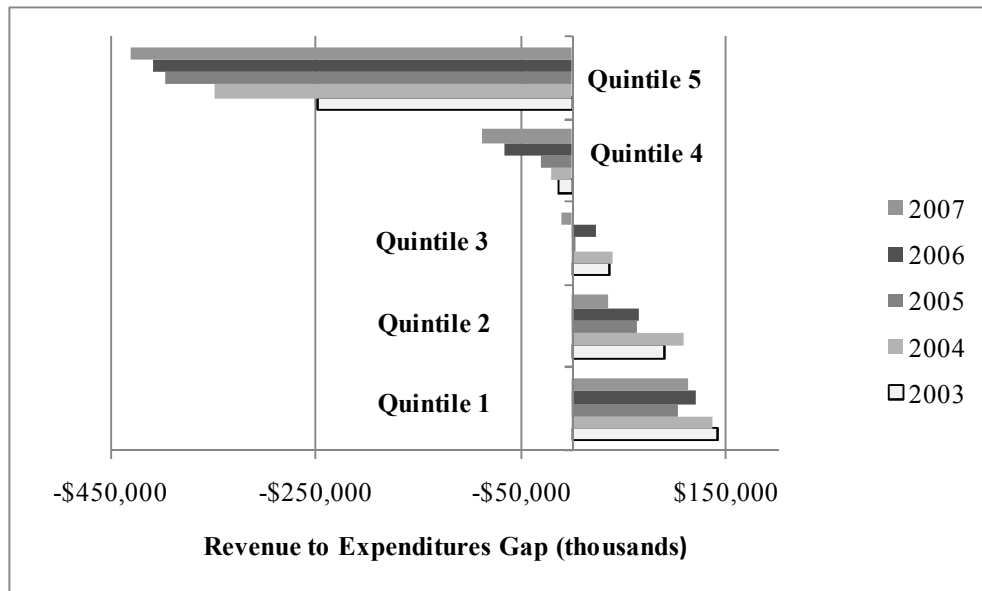
Revenue and Expenditures by District Wealth Quintile

In general, special education expenditures correlate positively with district wealth. On average, the most affluent districts, Quintile 5, report expenditures that are much greater than revenue; whereas, the least affluent districts, Quintiles 1 and 2, report special education revenue that are greater than expenditures.

Figure 3.F shows the per-quintile difference in revenue and expenditures for the FY 2003 through FY 2007 period. While both have consistently risen during this 5-year period in all quintiles, expenditures have typically outpaced revenue, leading to a growing imbalance between the two.

The most notable trend is in the two highest wealth quintiles, Quintile 4 and Quintile 5, where the difference between revenue and expenditures is most evident. This gap almost doubled in Quintile 5 between FY 2003 and FY 2007. In Quintiles 1 and 2, the two lowest wealth quintiles, revenue exceeded expenditures for special education; however, the difference between revenue and expenditures is narrowing in Quintile 2. It is important to point out that not all districts in Quintiles 1 and 2 receive more in revenue than they spend. As a group, lower-income districts are more likely than more affluent districts to receive more in special education revenue than they expend.

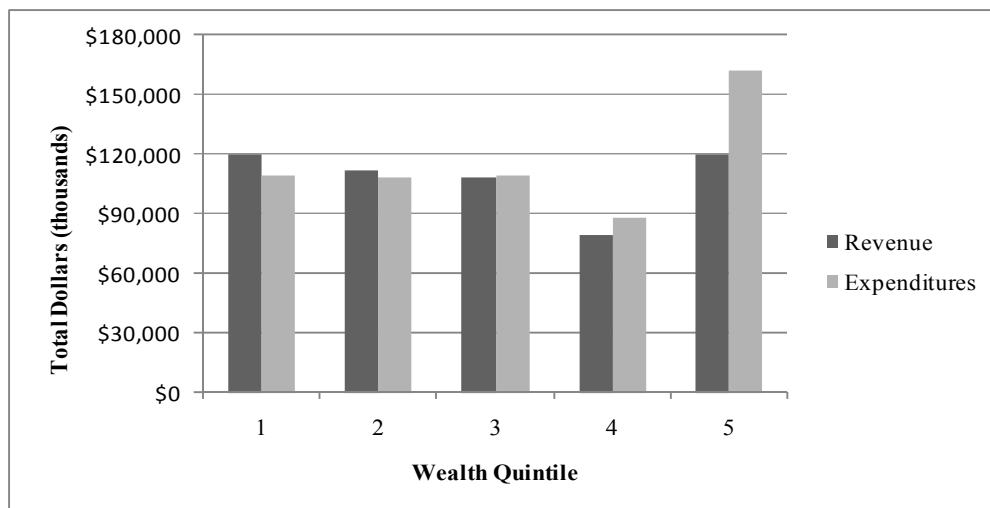
Figure 3.F
Difference in Special Education Revenue and Expenditures by Quintile
FY 2003-FY 2007



Source: Staff compilation of KY Dept. of Ed. Annual Financial Reports, SEEK Final calculations, and federal grant allocations.

Figure 3.G provides a 1-year snapshot of the imbalance in expenditures and revenue by quintile for FY 2007. The pattern of special education expenditures exceeding revenue in the wealthier quintiles is most pronounced in the wealthiest districts.

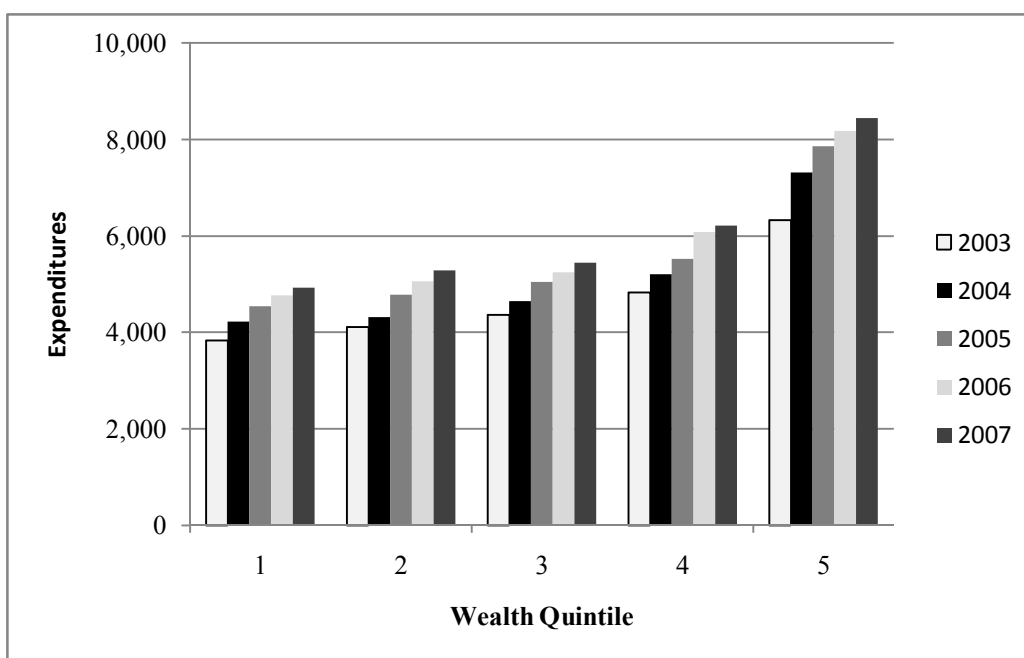
Figure 3.G
Comparison of Revenue and Expenditures by Quintile
FY 2007



Source: Staff compilation of KY Dept. of Ed. Annual Financial Reports, SEEK Final calculations, and federal grant allocations.

All quintiles experienced simultaneous increases in revenue and expenditures for special education between FY 2003 and FY 2007. The rate of growth in expenditures and revenue exceeded the rate of growth in the number of special education students in all quintiles. Figure 3.H shows the growth in per-pupil expenditures between FY 2003 and FY 2007. The per-pupil analysis controls for differences in the number of students per quintile. The pattern is clear that expenditures, either in total dollars or by pupil, are rapidly increasing.

Figure 3.H
Changes in Per-pupil Expenditures by Wealth Quintile
FY 2003-FY 2007



Source: Staff compilation of KY Dept. of Ed. Annual Financial Reports.

In all district wealth quintiles, the same patterns repeat. While growth in the special education population has been moderate, expenditures for special education continue to escalate.

The pattern of revenue and expenditures exceeding special education student enrollment growth is further reflected in Table 3.4. Revenue in Quintile 1 grew by 30 percent, expenditures grew by 39 percent, and the number of students grew by 8.4 percent between FY 2003 and FY 2007. In Quintile 5, expenditures grew by 41 percent, while the number of students grew by almost 6 percent. In all cases, the rate of growth in revenue and expenditures exceeded the rate of growth in special education students. The expenditures associated with providing special education services have escalated rapidly over the last 5 years.

Table 3.4
Percent Change in Revenue, Expenditures, and Special Education Students by Quintile, FY 2003-FY 2007

Quintile	Percent Change FY 2003-FY 2007		
	Revenue	Expenditures	Students
1	30.3	39.3	8.4
2	30.9	41.6	10.1
3	33.7	41.3	13.4
4	35.5	46.9	14.1
5	32.5	41.3	5.9

Source: Staff compilation of KY Dept. of Ed. Annual Financial Reports, SEEK Final calculations, federal grant allocations, and Superintendent's Annual Attendance Report.

The revenue-to-expense ratio shows that districts are spending more on special education than they are allotted in revenue. This trend is most evident in affluent quintiles but is occurring throughout the state.

Another way to examine the quintile data is by calculating an expenses-to-revenue ratio. As Table 3.5 shows for FY 2003, the statewide ratio was about 1.00, which means expenditures and revenue were equivalent; however, over time the expenses-to-revenue ratio has increased to 1.07 in FY 2007. This means that for each dollar of revenue, a corresponding \$1.07 in special education expenses is incurred in the state.

From FY 2003 to FY 2007, Quintiles 1 and 2 had expenses-to-revenue ratios below one, meaning that special education revenue exceeded expenses. In Quintiles 1 through 3, the expenses-to-revenue ratio is growing over time. This means that expenditures are growing faster than revenue.

In Quintile 4 and Quintile 5, the expenses-to-revenue ratio greatly exceeds 1.00. For every \$1 in special education revenue in Quintile 5, \$1.36 in expenses was incurred in FY 2007. This trend reflects the continuing increase in special education expenses relative to increases in special education revenue. It also reflects consistently higher ratios of expenditures to revenue in higher wealth districts. The Chambers and Duenas analysis of financial data from FY 1993 also found higher ratios of expenditures to revenue in higher-wealth districts.³

³ The analytic methods used in the Chambers and Duenas analysis of the relationship between district wealth and expenditure/revenue ratios are slightly different from the methods used in OEA's current analysis.

Table 3.5
Expenditures to Revenue by District Wealth Quintile
FY 2003-FY 2007

Quintile	Expenditures-to-Revenue Ratio				
	2003	2004	2005	2006	2007
1	0.85	0.87	0.91	0.90	0.91
2	0.90	0.88	0.94	0.94	0.97
3	0.96	0.95	1.00	0.98	1.01
4	1.02	1.03	1.04	1.09	1.11
5	1.28	1.36	1.38	1.36	1.36
Statewide Ratio	1.00	1.02	1.05	1.05	1.07

Source: Staff compilation of KY Dept. of Ed. Annual Financial Reports, SEEK Final calculations, and federal grant allocations.

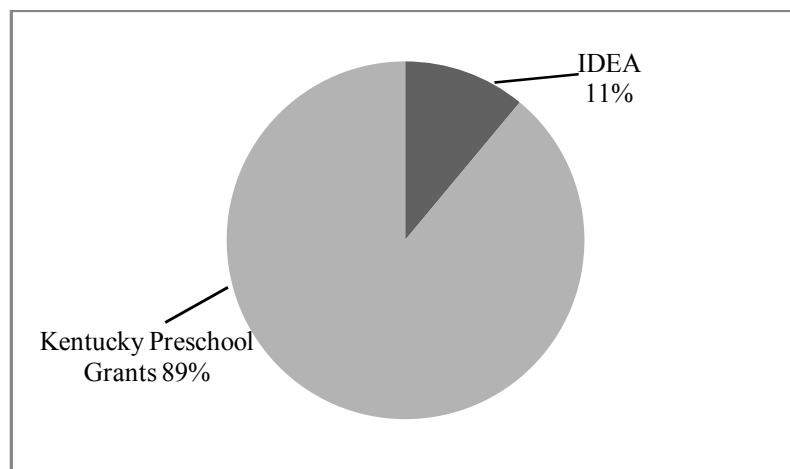
Preschool Funding

Preschool special education funds come from Kentucky preschool grants and the federal government. In FY 2007, grants to special education by Kentucky accounted for 89 percent of all preschool revenue.

The Kentucky preschool program funds both special education and at-risk students. The funding weight for at-risk preschool children is lower than the funding weight for special education preschool children. In this analysis, FY 2007 is presented to provide a recent snapshot of funding levels.

Total preschool funding in FY 2007 totaled \$83.2 million, about \$4,095 per pupil. Kentucky provided \$73.8 million, or 89 percent of the total revenue, through state preschool grants, while IDEA B contributed \$9.4 million, or 11 percent of the total revenue, as Figure 3.I illustrates.

Figure 3.I
Preschool Funding by Source, FY 2007



Source: Staff compilation of KY Dept. of Ed. federal and state budget allocation.

The preschool per-child funding rates are higher for students identified as developmentally delayed than they are for students identified as speech/language or at risk.

Services for students with disabilities under Kentucky's statewide preschool program are funded under a different mechanism than are special education services for students in grades kindergarten through 12. KRS 157.8175 specifies that 3-, 4- and 5-year-old children with disabilities and at-risk children, defined as those who meet 150 percent of the federal poverty definition, are eligible to enroll in Kentucky's statewide preschool program. State funding is awarded to districts based on per-child preschool rates established each spring by the Kentucky Board of Education.

Per-child funding rates for students with disabilities are based on three different disability types—speech/language, developmental delay, and severe/multiple disabilities. At-risk students constitute a separate preschool eligibility classification. Table 3.6 shows funding rates established by the Kentucky Board of Education for FY 2007 and FY 2008, and the proposed rates for FY 2009.

Table 3.6
Kentucky Preschool Per-child Funding Rates, FY 2007-FY 2009

Classification	FY 2007	FY 2008	FY 2009*
At-risk	\$3,168	\$3,304	\$3,140
Speech/Language	\$3,327	\$3,469	\$3,297
Developmental Delays	\$4,436	\$4,626	\$4,396
Severe/Multiple Disabilities	6,020\$	\$6,278	\$5,966

Note:*The funding rates for FY 2009 are proposed rates as of April 2008.
Source: Commonwealth. Dept. of Ed. Staff Note, *Preschool Funding*.

Education of preschool students with disabilities is subject to the regulatory requirements of IDEA, which were described in Chapter 1.⁴ In FY 2007, preschool expenses exceeded revenue by about \$10.8 million. Almost half—87— of Kentucky's school districts spent more for preschool special education than they received in revenue.

The trends in preschool are slightly different than in K-12. Both less affluent and more affluent districts report expenditures in excess of revenue.

Table 3.7 shows revenue and expenditures per wealth quintile, the ratio of expenditures to revenue, per-pupil expenditures, and the breakdown of the preschool population by identification. Every quintile except Quintile 2 recorded expenditures that exceeded revenue in FY 2007.

In Quintile 5, 60.5 percent of the children were identified as at-risk rather than special education. The funding formula allocates more

⁴ Additional information related to the statutory requirements of the program and to preschool participation and funding rates over time is available in OEA's report *A Review of the Flexible Focus Fund Program*.

money for special education students than for at-risk students. The wealthier districts in Quintile 5 spend more per pupil than districts with higher percentages of special education students.

Table 3.7
Preschool Revenue and Expenditures by Quintile, FY 2007

Quintile	Total \$		Ratios		Identification	
	Revenue	Expenses	Exp/Rev	Per-pupil Exp.	At Risk	Special Ed
Q1	\$17,431,763	\$18,559,037	1.06	\$4,518	37.8%	62.2%
Q2	\$15,510,392	\$15,410,596	0.99	\$4,071	38.0%	62.0%
Q3	\$18,938,906	\$21,375,561	1.13	\$4,604	35.1%	64.9%
Q4	\$13,038,248	\$13,159,080	1.01	\$3,980	37.9%	62.1%
Q5	\$18,300,842	\$25,482,444	1.39	\$5,689	60.5%	39.5%
Total	\$83,220,151	\$93,986,718	1.13	\$4,625	42.2%	57.8%

Source: Staff compilation of KY Dept. of Ed. Annual Financial Reports and federal grant allocations.

Provision of Special Education Services and Finance

As part of this research, staff gathered feedback from several district finance officers to gain insights into the issues related to special education revenue and expenditures. A formal, scientific survey was not conducted. However, the discussions highlighted areas of concern and the need for potential future research related to the efficient provision of special education services.

One issue of concern to finance officers is identification. Some seem to think that identification is an inexact science and that the process of identification is divorced from financial cost-benefit analysis. Given NCLB pressure to move all children forward, some finance officers think that demands for services from parents and special education coordinators are rarely challenged. This varies, most likely, from district to district depending upon the special education coordinator and his or her interpretation of special education needs.

Sources consulted for this study agreed that schools must meet regulatory mandates. As a result, costs tend to be ignored. One finance director pointed out that perhaps wealthier quintiles are not spending too much; rather, lower-income districts may be spending too little on special education services. Some districts reported that they go beyond the minimum statutory requirements to deliver high-quality special education programs. The costs of these services are reflected in high per-pupil costs and large gaps

between special education expenditures and revenue. For instance, some districts have lower student/teacher ratios, extra professional assistants, diagnosticians, professionally staffed parent-teacher resource centers, and extensive transition services not always found in less-wealthy districts.

All of these concerns have policy implications for Kentucky's special education program. However, these issues have not been duly studied. Future research projects could be designed to delve more deeply into some of the concerns expressed by finance officers.

Special Education Funding in Other States

Weight-funding measures like Kentucky's are common. Some states are moving toward census-based mechanisms that provide districts with flat grants for special education based upon total district enrollment.

States use different mechanisms to fund special education. The mechanisms used to fund special education in Kentucky and its surrounding states are described in Appendix G. Weight-funding mechanisms similar to Kentucky's are used by more states than any other type to fund special education. According to Parrish et al., advantages of the pupil weight-funding mechanism include its equitability and close ties to districts' resource needs based on their specific population of students with disabilities (State).

A recent trend among states is to use a "census based" mechanism that provides districts with flat special education grants based on the total count of students per district rather than on the number of special education students. West Virginia, for example, will begin its transition to the census-based funding mechanism during the 2008-2009 school year. The census type of funding mechanism is favored by some states because of its simplicity and the belief that it may reduce the financial incentive for districts to identify students for special education.

A study by Augenblick and DeCesare found that Kentucky's funding weights are generally lower than those identified in adequacy studies in other states.

Due to differences in the mechanisms used to fund special education, it is not possible to make valid comparisons of state special education allocations. Previous studies have identified concerns regarding the pupil weights used to fund special education in Kentucky. In their review of the SEEK system for KDE in 2006, Augenblick and DeCesare noted that the weights that Kentucky uses to fund special education are generally lower than those identified in adequacy studies conducted in other states. However, there is as yet no consensus among states about the actual costs of educating students with different disabilities. Ohio's special education funding mechanism is similar to Kentucky's. Ohio assigns pupil weights to students with different

disabilities in its basic aid formula. While pupil weights assigned to high-incidence disabilities such as speech and language impairment are similar in Kentucky and Ohio, the weights assigned to students with moderate and severe disabilities differ. The weights assigned to emotional behavior disorder, hearing impairment, and visual impairment are twice as high in Kentucky as they are in Ohio, whereas the weights assigned to traumatic brain injury, autism, and deaf-blind are twice as high in Ohio as they are in Kentucky. These differences illustrate the lack of consensus among states about the actual costs of educating students with different disabilities.

Chapter 4

Special Education Student Outcome Data

Introduction

This chapter summarizes regulations and data related to the assessment of students with disabilities. Graduation rates and postschool outcome data are also reported.

This chapter describes academic outcome and attainment data for special education students in Kentucky. It begins with a description of state and federal requirements related to the assessment of students with disabilities and the inclusion of students with disabilities in accountability systems. Next, the chapter describes trends in the performance of students with disabilities over time. Students with and without disabilities are compared with respect to reading and mathematics performance in 2007. The chapter concludes with an analysis of graduation, dropout, and postschool outcome data for special education students.

Academic proficiency and graduation rates for students with disabilities have improved steadily over time. Significant gaps remain, however, between the academic performance and graduation rates of students with and without disabilities.

Data reported in this chapter show steady progress in the academic achievement of students with disabilities in reading and mathematics and in the graduation rates of special education students. However, the data also describe significant gaps in the academic performance of students with and without disabilities. These gaps increase through the middle and upper grades. Data also show that, in the overwhelming majority of schools, students with disabilities are not achieving proficiency at the rates required to make adequate yearly progress (AYP) for No Child Left Behind. Special education students continue to graduate at lower rates than other students.

Federal and State Assessment and Accountability Requirements for Students With Disabilities

Commonwealth Accountability Testing System

The Commonwealth Accountability Testing System (CATS) requires that all students with disabilities participate in the state's assessment and accountability systems. State regulations permit a limited number of students with disabilities to take alternate assessments.

Participation in Assessments. 703 KAR 5:070 requires that all students with disabilities participate in the Commonwealth Accountability Testing System (CATS). Regulations permit a limited number of students with disabilities to participate in the alternate assessment program. Students with disabilities participating in the alternate assessment program should be those with moderate or severe cognitive disabilities and should represent approximately 1 percent of the total student population. Participation in the alternate assessment should be determined by

students' Admissions and Release Committees and described in their IEPs.

State regulations permit students with disabilities to use a variety of testing accommodations. These accommodations are designed to allow students with disabilities to demonstrate their knowledge of academic content.

Assessment Accommodations. Accommodations are tools and procedures that are intended to allow students with disabilities or limited English proficiency to demonstrate their knowledge of academic content. Kentucky administrative regulations for assessment accommodations are contained in 703 KAR 5:070. (Currently this regulation is undergoing review and change by KDE.) These regulations include the following requirements:

- Accommodations permitted for individual students along with evidence supporting the need for those accommodations must be specified on a student's IEP.
- Accommodations must be a regular and ongoing part of a student's instructional program.
- Accommodations should not inappropriately impact content that is being assessed.
- Accommodations should be considered temporary strategies that will not be needed as students gain knowledge and skills.

Any accommodations approved by the Admissions and Release Committees and described on students' IEPs may be used during assessments, assuming the accommodations are used regularly during the school year. These accommodations include but are not limited to extended time, readers, scribes, paraphrasing, prompting, interpreters, manipulatives, technology, and special equipment.

Accommodation practices are not standardized among states. For example, Kentucky allows reading tests to be read aloud to students, an accommodation not allowed in all states.

States vary considerably in the testing accommodations allowed for students with disabilities. Particularly controversial, for example, is the use of the reader accommodation to orally administer reading tests. This practice is allowed in Kentucky but not in all states (National Center. *State*).

CATS requires that the performance of students with disabilities be included in the aggregated average performance of all students.

Accountability. Under 703 KAR 5:020, CATS requires that schools be held accountable for the aggregated average of the performance on state-required assessments of all students—including students with disabilities—who have been enrolled in a school for 100 days. Schools are assigned an accountability index that rates their progress on these assessments and on nonacademic measures such as attendance and graduation rates. Schools are rated on their progress toward the goal of 100 percent student proficiency by 2014.

No Child Left Behind

NCLB focuses attention on the academic performance of students with disabilities.

The No Child Left Behind Act of 2001 increased school-level accountability for the performance of students with disabilities and students from other subgroups. Under NCLB, 95 percent of all students with disabilities must be assessed annually in mathematics and reading in grades 3-8 and at least once in high school.¹

NCLB permits but does not require states to use alternate assessments for a subset of special education students. Up to 1 percent of all students in a grade may be tested with an alternate assessment based on alternate achievement standards. This assessment is intended for the most severely cognitively disabled students. Beginning in 2007, states were also permitted to assess up to 2 percent of all students with an alternate assessment based on modified achievement standards. This assessment is intended for those “students with disabilities who can make significant progress, but who may not reach grade-level achievement in the time frame covered by their IEP” (U.S. Dept. of Ed. *Modified 12*). Kentucky’s alternate assessment system currently includes the assessment based on alternative achievement standards but does not include the assessment based on modified achievement standards. Thus, while NCLB permits up to 3 percent of all students to be assessed with an alternate assessment, less than 1 percent of students in Kentucky are assessed with an alternate assessment.

Under NCLB, schools are held accountable for ensuring that students with disabilities meet the same performance targets as students without disabilities.

Accountability for Student Subgroups. In order to make AYP under NCLB, schools must ensure that students with disabilities and students in other subgroups meet annual performance goals in reading and mathematics. In high school, students must also meet graduation rate targets. States set their own annual goals for proficiency in order to meet the required goal of 100 percent proficiency for all students by 2014. Proficiency targets are the same for students with and without disabilities. Kentucky’s annual goals for reading and mathematics are contained in 703 KAR 5:020. Annual goals increase more steeply in the 2008-2014 school years than in the 2002-2007 school years. Kentucky is one of 23 states that have “backloaded” the improvements in annual proficiency rates required to meet the goal of 100 percent proficiency by 2014 (Hoff).

¹ By the end of the 2007-2008 school year, testing also will be required in science once during grades 3-5, 6-9, and 10-11. However, student performance on science assessments is not included in NCLB’s accountability provisions.

Title I schools that do not make adequate yearly progress (AYP) for students with disabilities face sanctions that increase over time.

NCLB requires states to report the AYP of students with disabilities and other student subgroups in all schools. However, only Title I schools face sanctions if they fail to make AYP due to the performance of one or more student subgroups. Schools may be designated as Title I when the percentage of students receiving free or reduced-price lunch exceeds 35 percent. Schools are required to be designated Title I when that percentage exceeds 75 percent (Baker).

Sanctions facing Title I schools under NCLB can be severe. Each year that a school fails to meet AYP, it moves to a higher tier of sanctions and consequences. The severity of sanctions increases as the school fails to meet established goals. According to 703 KAR 5:020 Section 10, districts must implement alternative governance plans if a Title I school fails to make AYP for 5 years.

States set their own standards for the minimum enrollment in student subgroups required for the performance of these students to be included in determinations of AYP.

N size. The N size is the minimum number in a student subgroup that allows the group to be counted separately in the calculations to determine a school's and district's AYP. States are permitted to set their own N size requirements. This aspect of NCLB has been criticized for the latitude it has given states to exclude calculation of student subgroup scores in many schools (Olson).

In Kentucky, the performance of students with disabilities is calculated separately in schools that enroll a minimum of 10 students with disabilities in each assessed grade.

State N sizes range from a low of 5 to a high of 75 (Klein). The N size for Kentucky, as established in 703 KAR 5:001, is 10 students for each grade assessed under NCLB. In addition, the total subgroup population for all NCLB-assessed grades combined must be 60 students or 15 percent of the total population. In 2007, 438 schools met Kentucky's N size requirements; however, the performance of students with disabilities is included in the calculation of schools' overall proficiency rates even in those schools in which the performance of students with disabilities does not constitute a separate calculation.

Difference Between NCLB and CATS

The academic performance of students with disabilities in all subject areas is included in schools' accountability indexes for CATS. NCLB holds Title I schools accountable for student performance in reading and mathematics only.

Kentucky's state accountability system holds all schools accountable for the performance of students in all content areas. However, NCLB holds Title I schools accountable for the performance of students in reading and mathematics only.² The performance of students with disabilities in subjects other than reading and mathematics is included in the aggregated

² IDEA requires that all states include students with disabilities in their assessment and accountability systems.

performance of all students used to calculate schools' accountability indexes for CATS.³

In CATS, the high performance of some students may offset the low performance of other students. Under NCLB, schools can only meet AYP if students from every subgroup meet proficiency targets.

In contrast to NCLB, CATS is a compensatory system in which a school may meet accountability targets if the low performance of some students is balanced by the high performance of others. Under NCLB, schools can only make AYP if all student subgroups meet proficiency targets. Thus, a school in which the majority of students are high performers will not make AYP if students with disabilities or other subgroups do not meet proficiency targets. While CATS does not hold schools accountable for the performance of students with disabilities as a subgroup, KRS 158.6453(13) does require that the school-level performance of students with disabilities be reported to parents and to the public in school report cards.

Students with disabilities who graduate with certificates of completion are included in the calculation of schools' graduation rates for CATS. These students are not included in the calculation of graduation rates under NCLB.

CATS and NCLB use different methods to calculate graduation rates. CATS includes students with disabilities who graduate with certificates of completion (described below). NCLB does not permit these students to be included in the calculation of graduation rates. In order to be considered graduates under NCLB's calculation, students with disabilities must graduate in 4 years with a regular diploma, unless more years of instruction are described on their IEPs (Commonwealth. Dept of Ed. *2008 NCLB* 15).

Kentucky's Alternate Assessment System

Beginning in 2007, KDE administered a new type of assessment system for those students requiring an alternate assessment. This new system includes three types of alternate assessments that fulfill state and federal requirements: the portfolio assessment, the attainment tasks assessment, and the transition attainment record. Kentucky's alternate assessment package is described in greater detail in Appendix H.

³ While NCLB does not require accountability for subjects other than reading and math, Kentucky has chosen to include schools' CATS classifications in its calculation of AYP for elementary and middle schools. CATS classifications are used to calculate the "other academic indicator" required by NCLB. Graduation rates are used as the "other academic indicator" in high schools (Commonwealth. Dept of Ed. *2008 NCLB*).

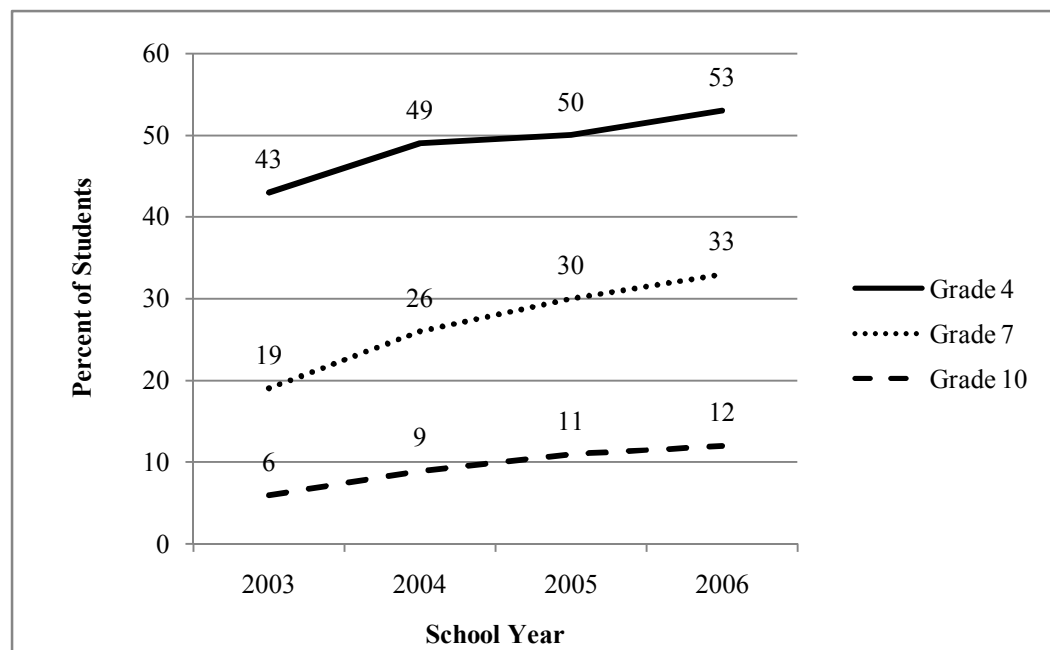
Academic Performance of Students With Disabilities

Achievement Trends in Reading and Mathematics for Students With Disabilities, 2003-2006

Reading proficiency rates for students with disabilities have increased steadily. Gains have been greater at the 4th- and 7th-grade levels than they have been at the 10th-grade level.

As illustrated by Figure 4.A, there was a steady increase in the percentage of students with disabilities deemed proficient or distinguished on the reading Kentucky Core Content Test (KCCT) between 2003 and 2006. Gains have been greater at the 4th- and 7th-grade levels than at the 10th-grade level, however. Proficiency rates in grades 4 and 7 increased by 10 and 14 percentage points, respectively, compared to an increase of only 6 percentage points in grade 10. As described in Chapter 1, the term “students with disabilities” includes both special education students and Section 504 students; however, the overwhelming majority of students with disabilities (approximately 96 percent) are special education students.

Figure 4.A
Students With Disabilities
Proficient or Distinguished
KCCT Reading, 2003-2006

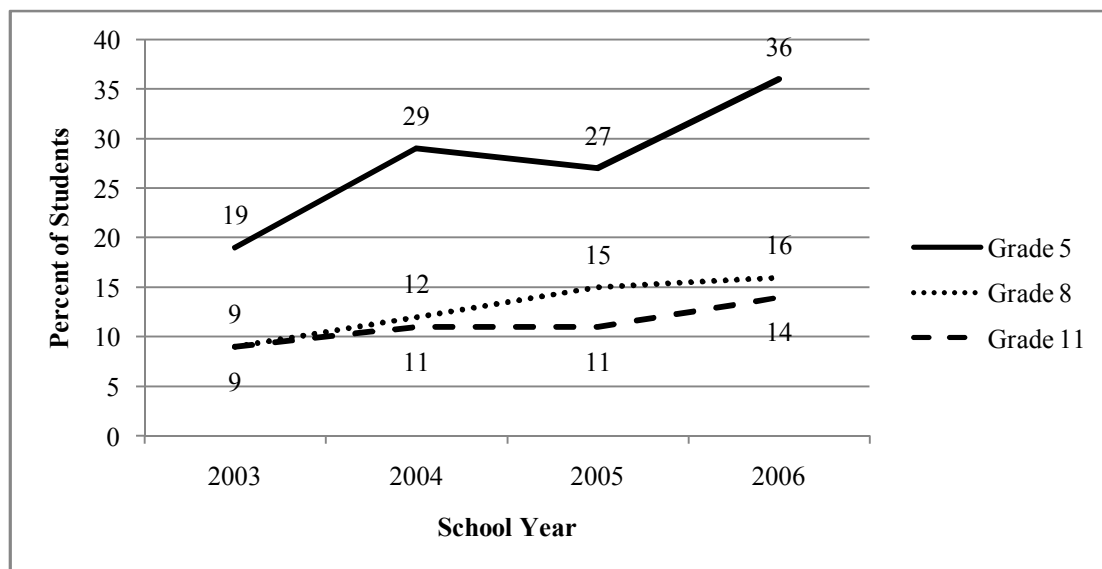


Note: Due to significant changes to the KCCT reading assessment in 2007, the 2007 data are not included in this figure. Longitudinal data for reading are available only for grades 4, 7, and 10.
Source: Commonwealth. Dept. of Ed. *Kentucky*.

Mathematics proficiency rates for students with disabilities have also increased steadily. Gains and achievement levels have been greater at the 5th-grade level than they have at the 8th- or 11th-grade levels.

As shown by Figure 4.B, math performance also improved for students with disabilities between 2003 and 2006. Gains and overall levels of achievement were greater at the 5th-grade level than they were at the 8th- and 11th-grade levels. The percentage of students with disabilities performing at proficient or distinguished levels in math increased by 17 percentage points for 5th grade, compared to only 7 and 5 percentage points for the 8th and 11th grades, respectively.

Figure 4.B
Students With Disabilities
Proficient or Distinguished
KCCT Mathematics, 2003-2006



Note: Due to significant changes to the calculation of proficiency rates in the KCCT mathematics assessment in 2007, the 2007 data are not included in this figure. Longitudinal data for mathematics are available only for grades 5, 8, and 11.

Source: Commonwealth. Dept. of Ed. *Kentucky*.

Achievements trends for students with disabilities on the National Assessment of Education Progress indicate steady progress in Kentucky and the nation.

NAEP Trends Mirror KCCT Trends. Results from the National Assessment of Educational Progress (NAEP) also indicate growth in overall levels of achievement for students with disabilities in both reading and mathematics. With the exception of 8th-grade reading, there were steady increases between 2003 and 2007 in the percentages of Kentucky’s students with disabilities achieving a

score of basic or above.⁴ Appendix I contains NAEP reading and mathematics trend data for students with and without disabilities.

Performance of Students With and Without Disabilities in Reading and Mathematics, 2007

Wide gaps remain between the performance of students with and without disabilities in both reading and mathematics.

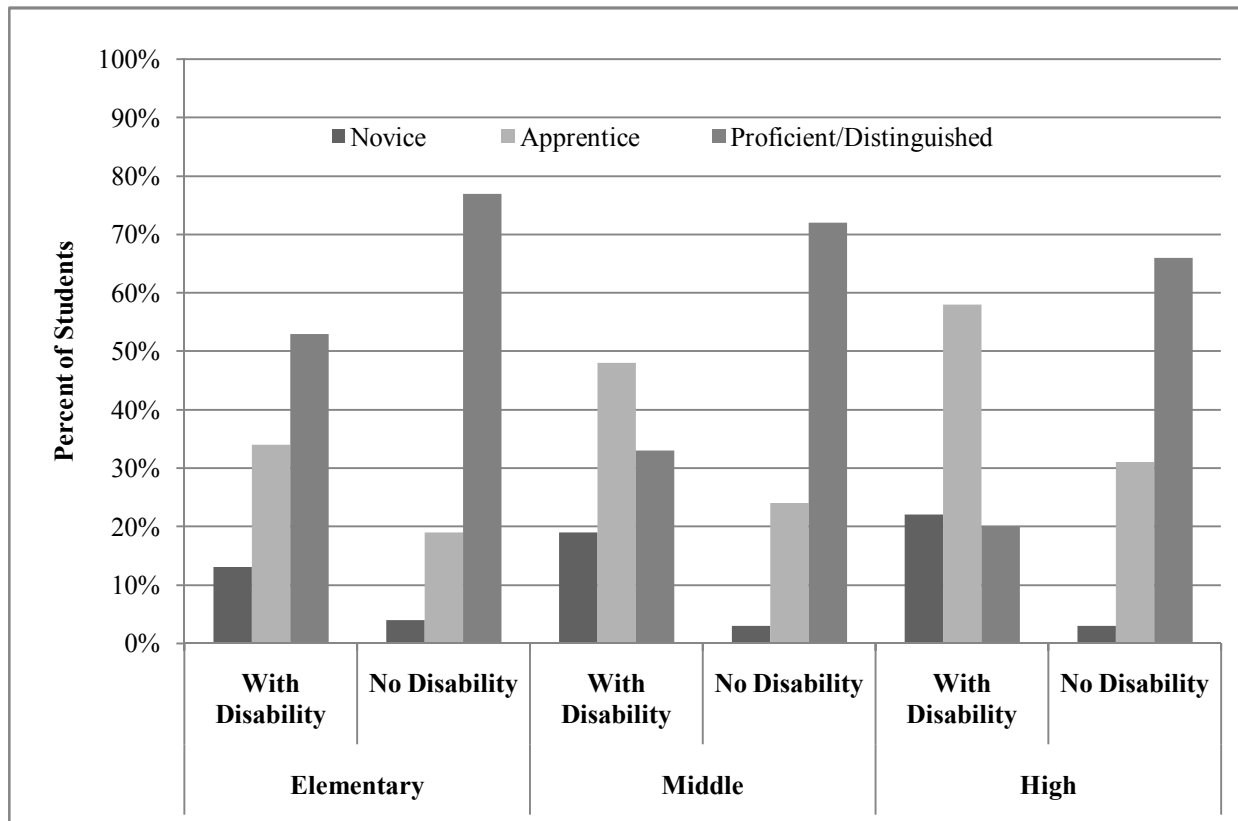
Despite the progress made by students with disabilities over time, significant gaps remain between the performance of students with and without disabilities in both reading and mathematics. Figures 4.C and 4.D show proficiency rates for students with and without disabilities at the elementary, middle, and high school levels on KCCT reading and mathematics assessments in 2007. These data aggregate the performance of students with disabilities on both the regular and alternate assessments. Appendix J reports the performance of students with disabilities on the alternate assessment of reading and mathematics alone.

Reading proficiency rates for students with disabilities are lower in the middle and upper grades than they are in the elementary grades. In 2007, only 20 percent of students with disabilities received a score of proficient or distinguished at the 10th-grade level.

As illustrated by Figure 4.C, proficiency rates in reading for students with disabilities are lower in the middle and upper grades than they are in the elementary grades. In 2007, the proficiency rate was 53 percent for elementary school students with disabilities, compared to only 20 percent in the 10th grade. While this trend mirrors achievement trends for students without disabilities, the gap between the achievement of students with and without disabilities widens from elementary to middle to high school. There is a gap of 24 percentage points in the proficiency rates of students with and without disabilities at the elementary level. At the high school level, that gap nearly doubles, to 46 percentage points.

⁴Since proficiency levels are lower on NAEP than on KCCT and most other state tests, researchers recommend that analyses examine basic and above instead of proficient and above (Mosquin). NAEP and KCCT use different scoring labels. The NAEP “basic” scoring category corresponds to the KCCT “apprentice” category.

Figure 4.C
Performance of Students With and Without Disabilities by School Level
KCCT Reading, 2007



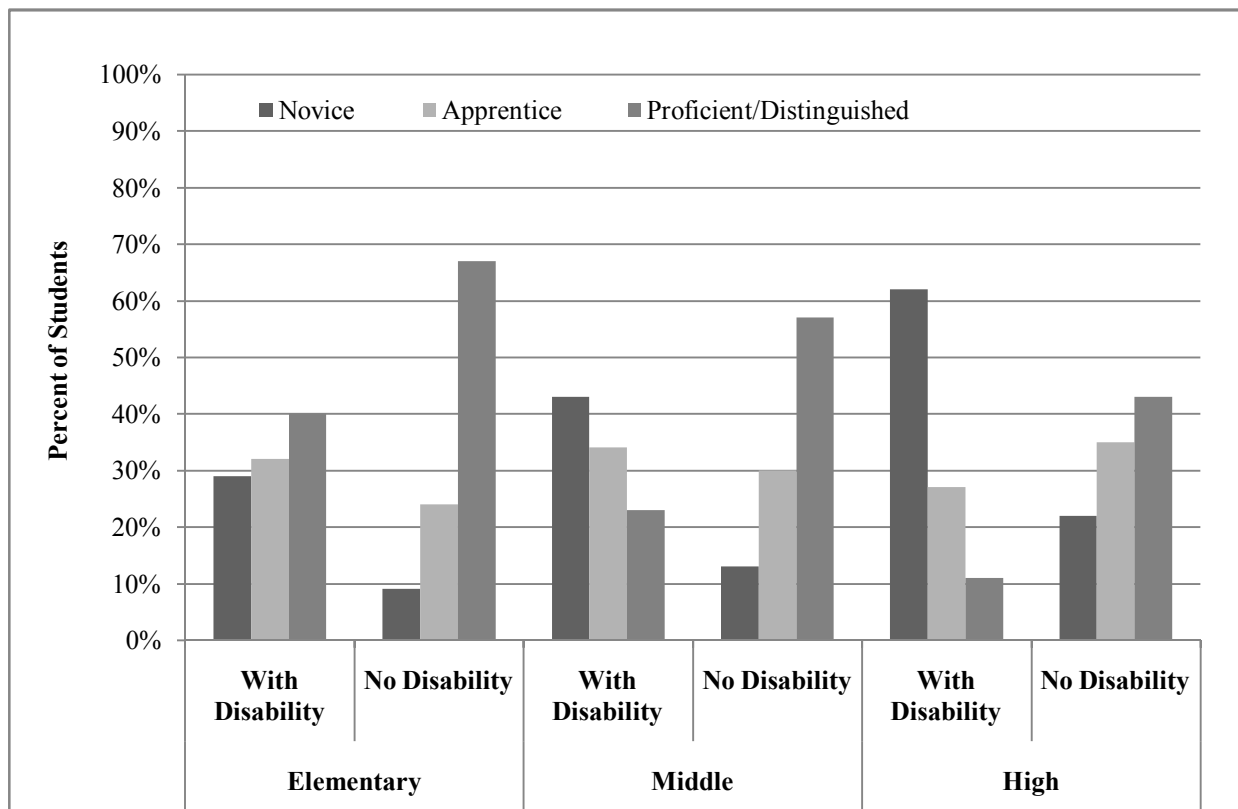
Note: The following grades are included in school-level calculations: grades 3 through 5 are counted as elementary; grades 6 through 8 are counted as middle; high school students take the KCCT reading test in grade 10.

Source: Staff calculation from KY Dept. of Ed. data.

Proficiency rates for students with disabilities in mathematics are also much lower in the middle and upper grades than they are in the elementary grades. In 2007, only 11 percent of 11th-grade students with disabilities were proficient in mathematics.

As illustrated by Figure 4.D, proficiency rates in mathematics for students with disabilities are also significantly lower in the middle and upper grades than they are in the elementary grades. In 2007, 40 percent of elementary school students with disabilities were proficient or distinguished, compared to only 11 percent in the 11th grade. The difference in the gap between the mathematics proficiency rates of students with and without disabilities at the elementary and high school levels (5 percentage points) is less pronounced in mathematics than it is for reading. This is due to the lower proficiency rates of nondisabled high school students in mathematics than in reading.

Figure 4.D
Performance of Students With and Without Disabilities by School Level
KCCT Mathematics, 2007

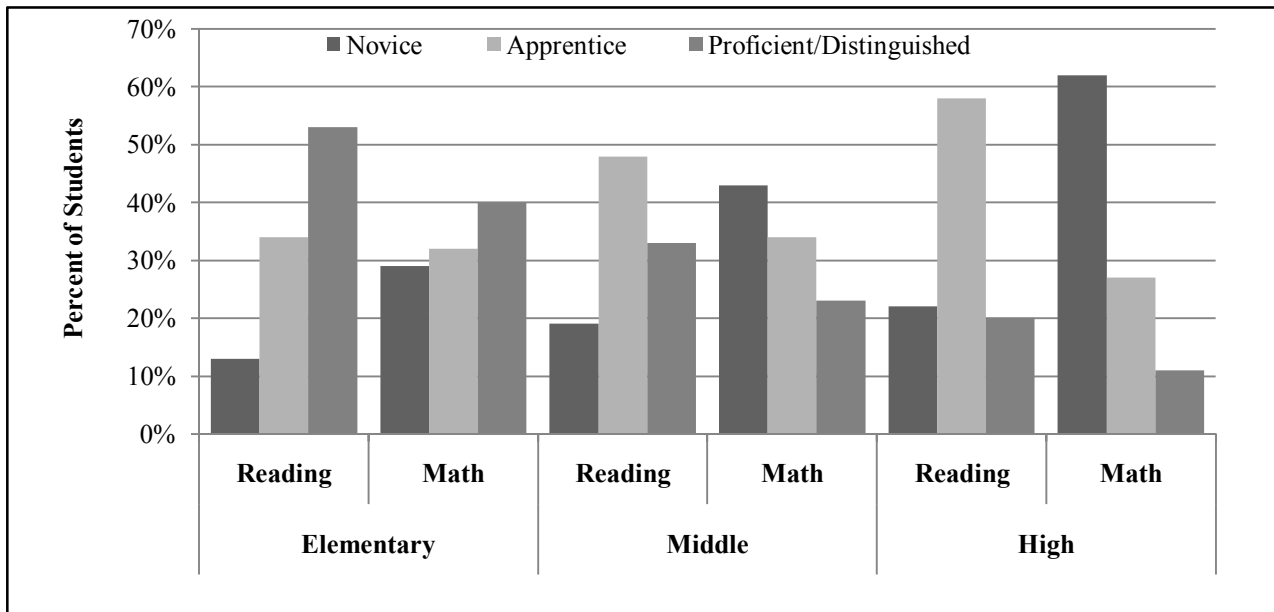


Note: The following grades are included in school-level calculations: grades 3 through 5 are counted as elementary; grades 6 through 8 are counted as middle; high school students take the KCCT mathematics test in grade 11.
Source: Staff calculation from KY Dept. of Ed data.

Achievement levels for students with disabilities are lower in mathematics than they are in reading at all levels.

Figure 4.E shows that achievement levels for students with disabilities are lower in mathematics than they are in reading at all school levels. The difference between the achievement of students with disabilities in reading and mathematics can be most easily seen in the percentages of students attaining scores of novice and apprentice. For example, 22 percent of high school students with disabilities received a score of novice in reading, compared to 62 percent in mathematics.

Figure 4.E
Performance of Students With Disabilities by School Level
KCCT Reading and Mathematics, 2007



Source: Staff calculation from KY Dept. of Ed. data.

Achievement Gaps in All Subjects

Kentucky academic indexes indicate performance gaps between students with and without disabilities at all grade levels, with the largest gaps in high schools.

The Kentucky academic index is a composite measure based on students' performance in all assessed areas. Table 4.1 shows that the gap between the academic indexes of disabled and nondisabled students is much greater at the high school level than it is at the elementary level.

Table 4.1
Kentucky Academic Index Performance Gaps
Students With and Without Disabilities, 2007

	Disability	No Disability	Gap
Elementary	72.7	95.0	22.3
Middle	58.1	89.2	31.1
High	45.1	80.6	35.5

Source: Commonwealth. Dept. of Ed. *Kentucky*.

Proficiency Rates for Students With Disabilities in Reading and Mathematics, by School, 2007

NCLB requires that schools be held accountable for the performance of students with disabilities according to the same performance targets used for students without disabilities. While NCLB has been praised for raising academic expectations for students with disabilities, it has also been criticized for setting unrealistic performance targets.

In 2007, 195 schools did not make AYP for students with disabilities. This number is likely to increase in coming years.

Schools Making AYP for Students With Disabilities. In 2007, only 438 schools met N size requirements for including students with disabilities as a separate subgroup in the determination of AYP. Of these 438 schools, a total of 195 schools did not make AYP for students with disabilities; 132 of these schools did not make AYP overall due exclusively to the performance of students with disabilities. The number of schools not making AYP due to the performance of students with disabilities is likely to increase in coming years.

Proficiency targets established by Kentucky regulations vary by subject and school level. Beginning in 2008, proficiency targets at all school levels will increase dramatically.

Table 4.2 shows the proficiency rates established by 703 KAR 5:020 in connection with the annual measurable objectives required to make AYP for NCLB. As the table shows, proficiency targets differ by subject and by school level. Beginning in 2008, proficiency targets will increase dramatically at all school levels.

Table 4.2
Annual Measurable Objectives Required for NCLB, 2007-2014

Fiscal Year	Elementary		Middle		High	
	Reading	Math	Reading	Math	Reading	Math
2007-2008	60.45	41.84	59.20	37.37	39.45	39.82
2008-2009	67.04	51.53	66.00	47.81	49.54	49.85
2009-2010	73.64	61.23	72.80	58.25	59.63	59.88
2010-2011	80.23	70.92	79.60	68.68	69.72	69.91
2011-2012	86.82	80.61	86.40	79.12	79.82	79.94
2012-2013	93.41	90.31	93.20	89.56	89.91	89.97
2013-2014	100.00	100.00	100.00	100.00	100.00	100.00

Source: 703 KAR 5:020

Table 4.3 shows the number and percentages of elementary, middle, and high schools in different proficiency ranges for students with disabilities in reading in 2007.⁵ This table includes the performance of students with disabilities in all schools for which their performance is disaggregated. Due to the N size provisions, not all of these schools will be held accountable for the performance of students with disabilities.

In 2007, only 15 percent of elementary schools and 3 percent of middle and high schools achieved reading proficiency rates of 60 percent or more for students with disabilities. The majority of high schools achieved proficiency rates of less than 20 percent for students with disabilities.

Table 4.3 also shows small percentages of schools at any level—15 percent of elementary schools and 3 percent of middle and high schools—achieved reading proficiency rates of over 60 percent for students with disabilities. The majority of high schools achieved proficiency rates of less than 20 percent for students with disabilities.

Table 4.3
Percentage of Students With Disabilities
Proficient or Distinguished By School
KCCT Reading, 2007

Proficiency Rate Ranges	Number of Schools			Percent of Schools		
	Elem	Mid	High	Elem	Mid	High
0-20	64	55	110	12%	25%	60%
21-40	176	107	60	34%	50%	33%
41-60	196	47	7	38%	22%	4%
61-80	71	7	6	14%	3%	3%
81-100	7	0	0	1%	0%	0%
Total	514	216	183	99%	100%	100%

Notes: Percents do not always add to 100 due to rounding. The following grades are included in school-level calculations: grades 3 through 5 are counted as elementary; grades 6 through 8 are counted as middle; high school students take the KCCT reading test in grade 10.

Source: Staff compilation based on KY Dept. of Ed data.

Only 5 percent of elementary schools, 1 percent of middle schools, and no high schools achieved mathematics proficiency rates of 60 percent or more for students with disabilities.

Table 4.4 illustrates similar school-level achievement patterns for students with disabilities in mathematics. Only 5 percent of elementary schools, 1 percent of middle schools, and no high schools achieved proficiency rates above 60 percent in 2007. There

⁵ Tables 4.5 and 4.6 display results for the 913 elementary, middle, and high schools for which proficiency rates for students with disabilities were reported in 2007. The 52 schools that serve students in other types of grade configurations are not included in this analysis. KCCT assessment results are not disaggregated for students with disabilities in those schools in which fewer than 10 students with disabilities are assessed in each grade. In 2007, assessment results for students with disabilities as a subgroup were not reported in 215 schools.

were also greater percentages of schools at all levels in lower proficiency ranges for mathematics than in reading. Twenty-seven percent of elementary schools, 57 percent of middle schools, and 84 percent of high schools had mathematics proficiency rates below 20 percent for students with disabilities.

Proficiency rates for students with disabilities are 50 percent or lower in the majority of schools. The gap between proficiency targets and current levels of achievement is greatest at the high school level.

As shown by Tables 4.3 and 4.4, proficiency rates for students with disabilities are 50 percent or lower in the majority of schools. This is true at the elementary, middle, and high school levels.

These data indicate that, based on 2007 proficiency rates, the majority of schools at all levels will be unlikely to meet proficiency targets for students with disabilities established in connection with NCLB for 2008 to 2014. The gap between proficiency targets and current levels of achievement is greatest at the high school level.

Data reported in Tables 4.3 and 4.4 suggest that, although schools may not meet NCLB's proficiency targets in coming years, large numbers of Kentucky schools at all levels might achieve significantly higher levels of proficiency for students with disabilities than they did in 2007.⁶ These data illustrate great variation among schools in proficiency rates for students with disabilities. For example, as shown in Table 4.4, 27 percent of elementary schools (139 schools) achieved proficiency rates of less than 20 percent for students with disabilities in mathematics. In contrast, 21 percent of elementary schools (109 schools) achieved proficiency rates of greater than 40 percent for students with disabilities in mathematics.

⁶ Variation in school-level proficiency rates for students with disabilities may reflect, in part, differences in the special education populations among schools. For example, some schools may be serving larger percentages of severely cognitively impaired students than others. School-level variation may also reflect differences among schools in the use of testing accommodations.

**Table 4.4
Percentage of Students With Disabilities
Proficient or Distinguished by School
KCCT Mathematics, 2007**

Proficiency Rate Ranges	Number of Schools			Percent of Schools		
	Elem	Mid	High	Elem	Mid	High
0-20	139	123	143	27%	57%	84%
21-40	237	76	22	46%	35%	13%
41-60	109	14	5	21%	6%	3%
61-80	27	3	0	5%	1%	0%
81-100	2	0	0	0%	0%	0%
Total	514	216	170	99%	99%	100%

Notes: Percents do not always add to 100 due to rounding. The following grades are included in school-level calculations: grades 3 through 5 are counted as elementary; grades 6 through 8 are counted as middle; high school students take the KCCT mathematics test in grade 11.
Source: Staff compilation based on KY Dept. of Ed. data.

**Participation and Accommodation Rates for
Students With Disabilities**

In 2007, 98 percent of students with disabilities participated in the regular or alternate assessment. Sixty-five percent of these students received at least one testing accommodation. This rate of accommodation is similar to national norms.

As shown in Table 4.5, Kentucky has exceeded federal requirements that 95 percent of students with disabilities participate in state assessments. In both reading and mathematics in 2007, 98 percent of Kentucky’s students with disabilities participated in the regular or alternate assessments. Sixty-five percent of students with disabilities who participated in the regular assessment were permitted at least one testing accommodation. This rate of accommodation is similar to the national rate of 61-65 percent of students with disabilities who use accommodations during assessments (Thurlow).

Table 4.5
Percentage of Special Education Students
Participating in Regular or Alternate Assessments
KCCT Reading and Mathematics, 2007

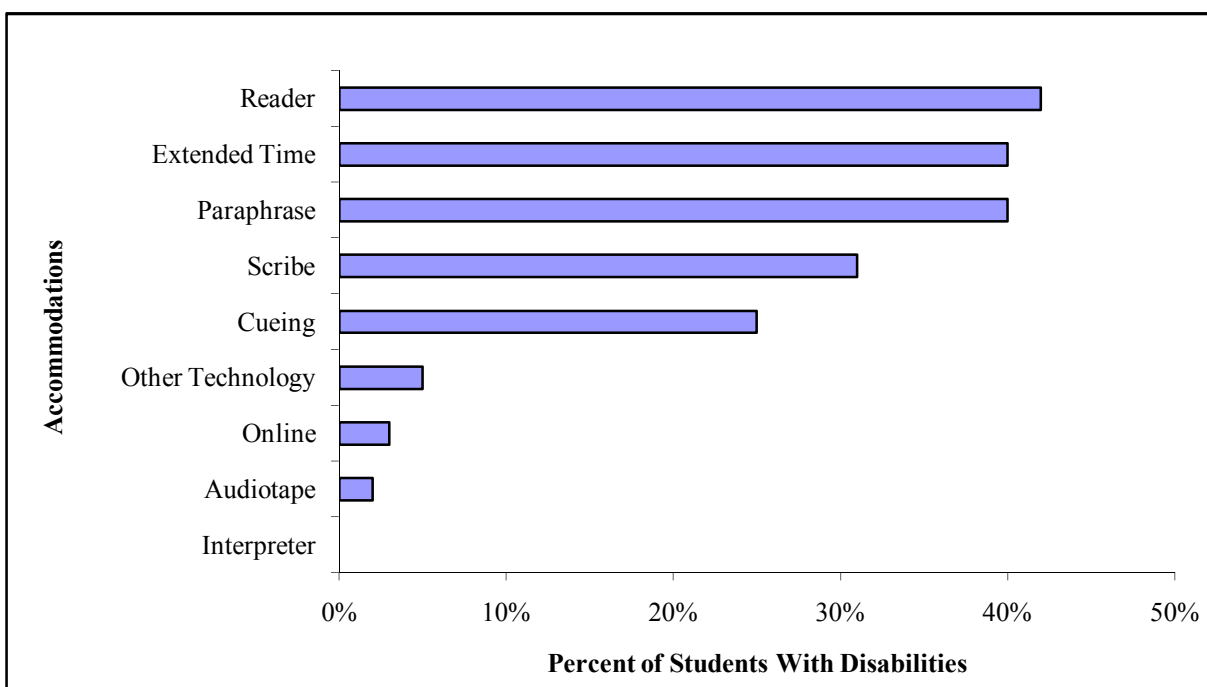
Regular Assessment With Accommodations	65%
Regular Assessment With No Accommodations	25%
Alternate Assessment	8%
Students Excluded*	3%
Total Assessed By Regular Or Alternate Assessment	98%

Notes: Percents of students assessed and excluded do not sum to 100 due to rounding. *Reasons that students can be excluded from assessments include but are not limited to medical exemption and expulsion. Because of the differences in when the two fiscal years begin, federal fiscal year data are not always taken from the same year as Kentucky fiscal year data.
Source: Commonwealth. Dept. of Ed. *FFY 2006*.

In 2007, reader, extended time, and paraphrase accommodations were each received by more than 40 percent of students with disabilities.

Figure 4.F shows the percentage of students with disabilities receiving different types of accommodations in KCCT reading and mathematics. In 2007, reader, extended time, and paraphrase accommodations were each received by 40 percent or more of students with disabilities.

Figure 4.F
Students With Disabilities Receiving Specific Accommodations
KCCT Reading and Mathematics Regular Assessment, 2007



Source: Staff calculation using KY Dept. of Ed. data.

Graduation and Dropout Rates for Special Education Students

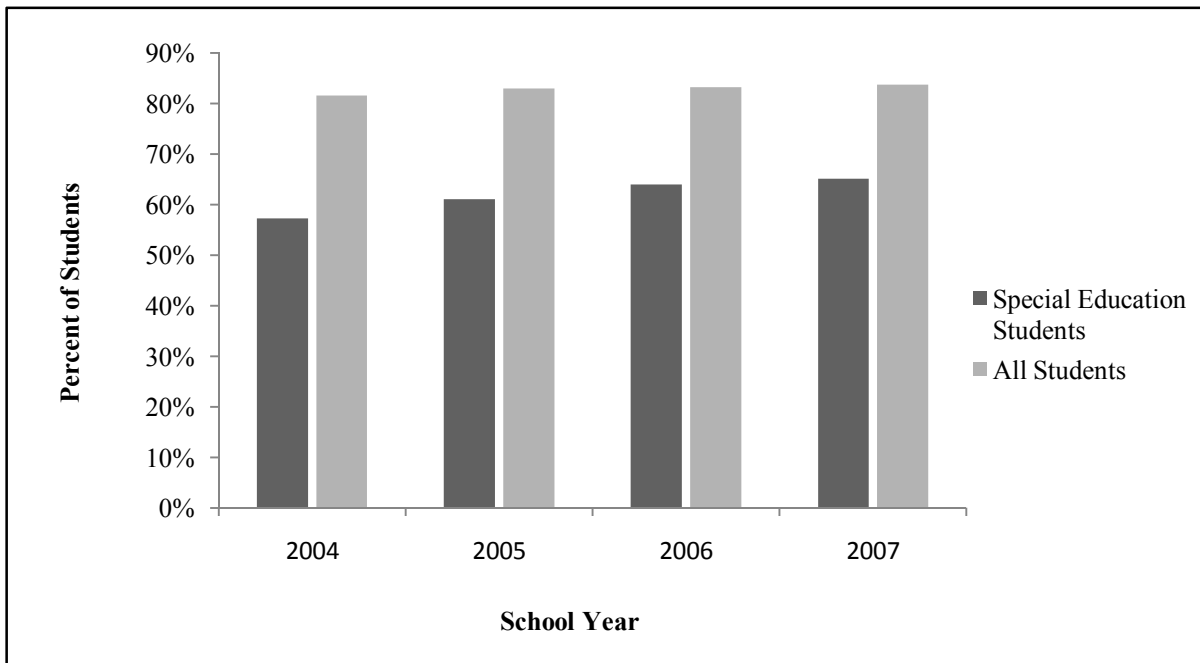
In order to earn a regular diploma, students with disabilities must meet the same course requirements as students without disabilities. However, 704 KAR 3:305 Section 3(2) permits students with disabilities to take alternative courses as substitutes for required courses. Alternative courses can be modified to allow for narrower breadth, depth, or complexity than required courses but must meet the same academic expectations as required courses.

According to 704 KAR 3:305 Section 8(1), students may be awarded certificates of completion if the severity of their disabilities precludes them from participating in the regular course of study. Certificates of completion should be linked to students' learning needs as specified on their IEPs.

Graduation rates for special education students increased steadily between 2004 and 2007. There continue to be gaps between the graduation rates of special education students and those of all Kentucky students.

As shown by Figure 4.G, graduation rates for special education students increased steadily between 2004 and 2007. The increase in the graduation rate of special education students (7.9 percentage points) exceeded the increase in the graduation rates of all students (2.2 percentage points). Figure 4.G also illustrates continuing gaps between graduation rates for special education students and all Kentucky students.

Figure 4.G
Special Education Students and All Students
Graduating With a Regular Diploma, 2004-2007



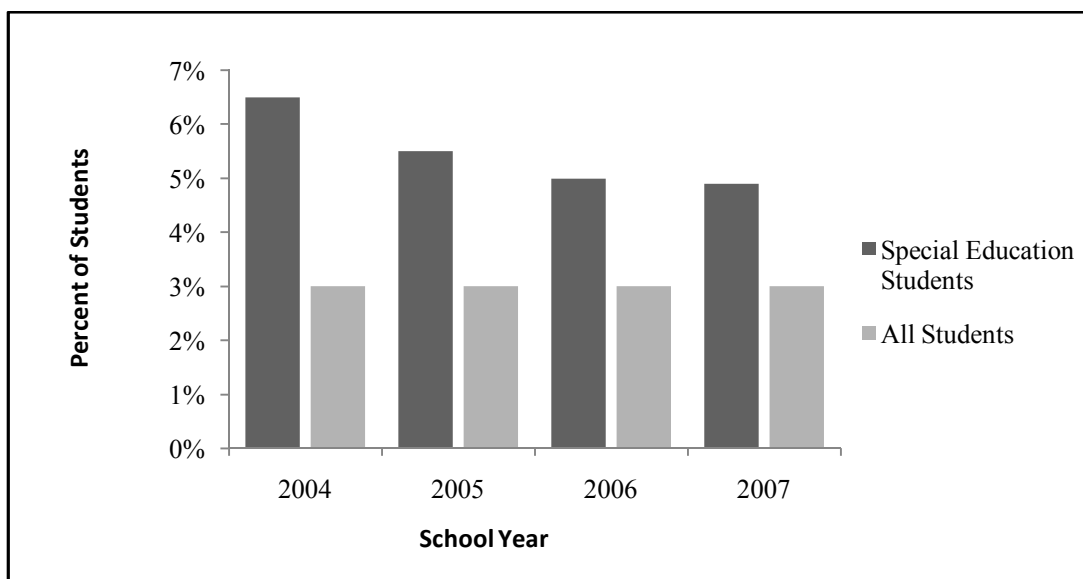
Note: In 2007, 411 special education students received certificates of completion. These students are not counted as graduates in the data reported in Figure 4.G. Special education students who are no longer eligible for special education services because they are over 21 and students who are deceased are also counted as nongraduates. It is not possible to disaggregate CATS nonacademic data for students with and without disabilities.

Sources: Graduation data for special education students from Commonwealth. Dept of Ed. *FFY 2006*; Graduation data for all students from Commonwealth. Dept. of Ed. *Kentucky*.

The dropout rates for special education students decreased steadily between 2004 and 2007. The dropout rate for special education students continues to be higher than it is for all Kentucky students.

As shown by Figure 4.H, dropout rates for special education students between 2004 and 2007 decreased steadily, though they remained higher than rates for all students. During these years, dropout rates for all students remained steady.

Figure 4.H
Special Education and All Students
Dropping Out of School, 2004-2007



Note: It is not possible to disaggregate CATS nonacademic data for students with and without disabilities.
Sources: Graduation data for special education students from Commonwealth, Dept. *FFY 2006*. Graduation data for all students from Commonwealth, Dept. of Ed. *Kentucky*.

Actual dropout rates may be higher than those reported in Figure 4.H.

Limitations of the Data

Special education graduation and dropout data are taken from exiting data reported to the federal Office of Special Education Programs for students ages 14 to 21. One of the reporting categories in these data is “moved, known to be continuing.” These students are included in neither the graduation nor the dropout rates reported above. In 2006, Kentucky’s special education students ages 14-21 reported as “moved, known to be continuing” was 37.8 percent, which exceeded the national rate of 31.1 percent. Audits conducted by Kentucky’s Auditor of Public Accounts have raised concerns about the accuracy of data related to student transfers. School staff members may enter students in this category before receiving required documentation. Also, these data may not capture students who make the decision to drop out over the summer (Commonwealth Auditor). Thus, actual dropout rates for students with disabilities may be higher than those reported in Figure 4.H.

Postschool Outcomes for Special Education Students

There are limited data available related to the postschool outcomes of students with disabilities in Kentucky.

Preparation of students with disabilities for further education, employment, and independent living is a central goal of IDEA. There is little information, however, related to the postsecondary outcomes for students with disabilities in Kentucky.

DEC is in the initial stages of collecting postschool outcome data required by IDEA for the state's Annual Performance Report.⁷ Postschool outcome data for special education students were first collected in 2007 from a representative sample of 19 percent of Kentucky districts. The remaining districts will be sampled over the course of the 2008-2011 school years. Data were collected from interviews conducted with students in sampled districts approximately 1 year after students left high school.

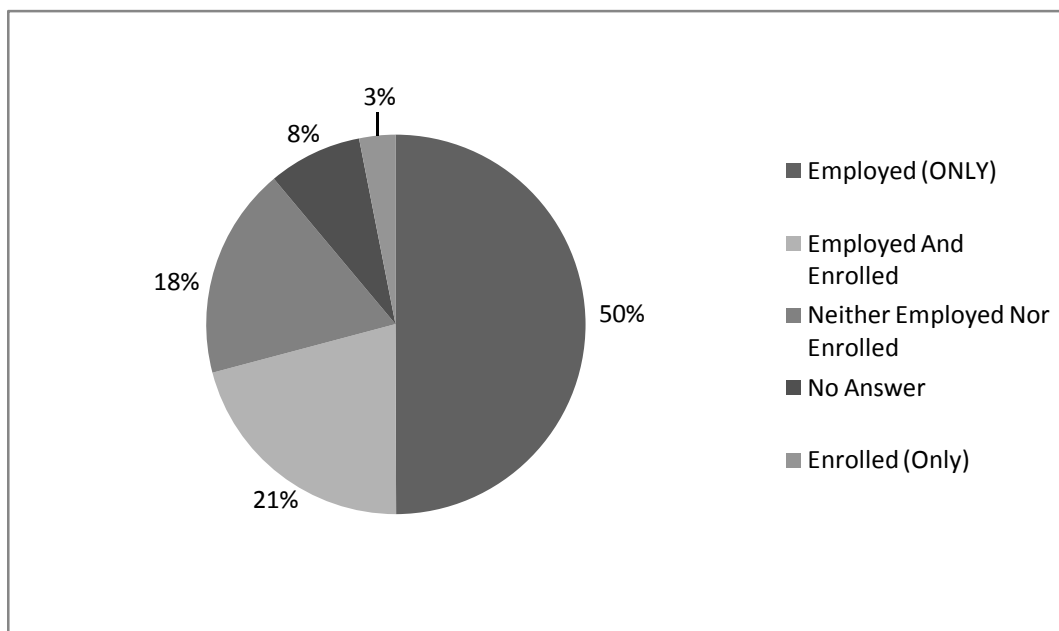
Initial data indicate that the majority of students with disabilities have been employed at some point since high school, and 24 percent have been enrolled in some type of postsecondary education.

Figure 4.I shows postschool outcome data for sampled special education students who left high school in 2006.⁸ Of those who responded to the 2007 postschool outcomes survey, 71 percent had been competitively employed at some point since high school. Of these, 21 percent had been both employed and enrolled in a postsecondary institution. A total of 24 percent were either enrolled or had been enrolled in some type of postsecondary institution. Eighteen percent were neither enrolled in a postsecondary institution nor employed at any point since high school.

⁷ The Kentucky Department of Education is in the process of revising CATS data reporting requirements for postsecondary outcomes to allow for disaggregation of data for students with disabilities.

⁸ Data include students who graduated, dropped out, received their GEDs, or left the system because they turned 21.

Figure 4.I
Percentage of Students With Disabilities Employed and/or Enrolled
in Postsecondary Institutions, 2006



Note: Students were asked whether they were enrolled or employed at any point since high school. Underrepresentation of dropouts in this study may have caused employment and enrollment rates to be overstated.

Source: University of Kentucky.

Limitations of the Data

Due to sample bias, the actual percentages of students enrolled or employed in postsecondary education may be lower than those reported in Figure 4.I.

Forty-eight percent of students included in the first sample of Kentucky's postschool outcome survey responded. It is important to note that students who dropped out of school were underrepresented among respondents. Since dropouts tend to have lower employment and postsecondary enrollment, the actual percentages of all students employed or enrolled in postsecondary education may be lower than those reported in Figure 4.I.

Rates of enrollment in postsecondary education for Kentucky students with disabilities may be lower than national rates for students with disabilities.

The 24 percent rate of enrollment in postsecondary education for special education students in Kentucky may be lower than that for students with disabilities in the nation. Data collected in 2003 through the National Longitudinal Transition Study-2 reported a postsecondary enrollment rate of 32 percent of students with disabilities (Wagner 4-3). However, Kentucky's employment rate of 70 percent for students with disabilities was similar to the nation's rate of employment for students with disabilities.

Transition Services Received

A large percentage of Kentucky's students with disabilities may not be receiving all transition services required by state and federal regulations.

Through the Kentucky Continuous Monitoring Process, districts are required by the federal government to review at least 10 percent of students' IEPs to determine whether they include required elements. Those data collected by districts indicate that only 67.6 percent of youth aged 16 and older had IEPs that included all required elements. The element that was most often missing was the requirement that representatives of state agencies likely to be providing services specified in students' IEPs be invited to IEP meetings. These data suggest that many of Kentucky's students with disabilities may not be receiving the transition services required by state and federal regulations.

Practitioners report that district, school, and state agency staff vary in their commitment to providing required transition services. Students with disabilities in rural areas reportedly have less access to services from state agencies than do students in urban areas.

Practitioners report variation in students' access to required transition services. One variation is the commitment of school, district, and state agency administrators to ensuring that students with disabilities receive required transition services. Also, practitioners report that students with disabilities in rural areas have less access to services from other state agencies, such as the Office of Vocational Rehabilitation, than students with disabilities in urban areas.

In assessed grades, NCLB-mandated alternate assessments consume a large percentage of special education teachers' time. These teachers may have less time available to devote to transition services.

Practitioners report that assessment requirements mandated by NCLB may be reducing the time that teachers and administrators have available to provide effective transition services. For example, the alternate assessment of reading and mathematics, described in Appendix J, requires teachers to develop individualized test items and work samples for every student. Assessment development and assembly consumes much of special education teachers' time.

Conclusion

This chapter reports steady progress in the achievement and attainment rates of students with disabilities in Kentucky. School-level data suggest the potential for continued improvement for students with disabilities in many schools.

Data reported in this chapter suggest that some students with disabilities are capable of performing at higher levels than were expected in the past. Reading and mathematics trend data show steady progress in the academic achievement of students with disabilities in Kentucky. School-level data indicate potential for continued improvement in proficiency rates for students with disabilities.

This chapter also documents great discrepancies between the current performance of students with disabilities and the academic expectations for students with disabilities under NCLB. This issue will be discussed further in Chapter 6.

However, great discrepancies remain between the current achievement of students with disabilities and the performance expectations for these students under NCLB. In 2007, the majority of schools achieved proficiency rates below 50 percent for students with disabilities. Not a single school in the Commonwealth achieved proficiency rates for students with disabilities that will be required by NCLB in 2014. There is, as yet, no proof that students with disabilities as a group can meet the same proficiency targets as students without disabilities.

Chapter 5

Gifted and Talented Program

Introduction

Kentucky's Gifted and talented (G&T) program provides districts with funds to support the education of G&T students. These students are recognized as a distinct category of exceptional children. Kentucky's G&T program is governed under different regulations than is special education. Funding allocated for G&T students is significantly less than funding allocated for special education students.

Kentucky's Gifted and Talented (G&T) program provides districts with grants to assist in the education of G&T students. These students are widely recognized as a distinct category of exceptional children who have special needs that are not always met in the regular curriculum; however, the G&T program in Kentucky is governed according to different regulations than is special education. Nationwide, as in Kentucky, funding levels for G&T students are significantly lower than those for special education students. The federal government does not provide states with funding for the education of G&T students.

Organization of the Chapter

This chapter begins with an analysis of financial data related to Kentucky's G&T program. This analysis includes revenue and expenditures and a comparison of G&T funding among Kentucky and its surrounding states. Next, regulatory requirements of Kentucky's G&T program are summarized. The chapter provides a summary of demographic, placement, service, and assessment data.

Data supporting the analyses in this chapter are taken from financial data provided by KDE on districts' annual financial reports, G&T student data provided within the Student Information System, assessment data from Kentucky Performance Reports, and Advanced Placement test data provided by the College Board.

Revenue and Expenditures for Gifted and Talented Education

Funds for G&T programs in Kentucky are distributed to local districts as grants based on districts' total populations. Appendix K contains the specific amounts awarded to districts in different population ranges. Unlike funding for special education services, funding for G&T programs are not linked to the number of students identified for services.

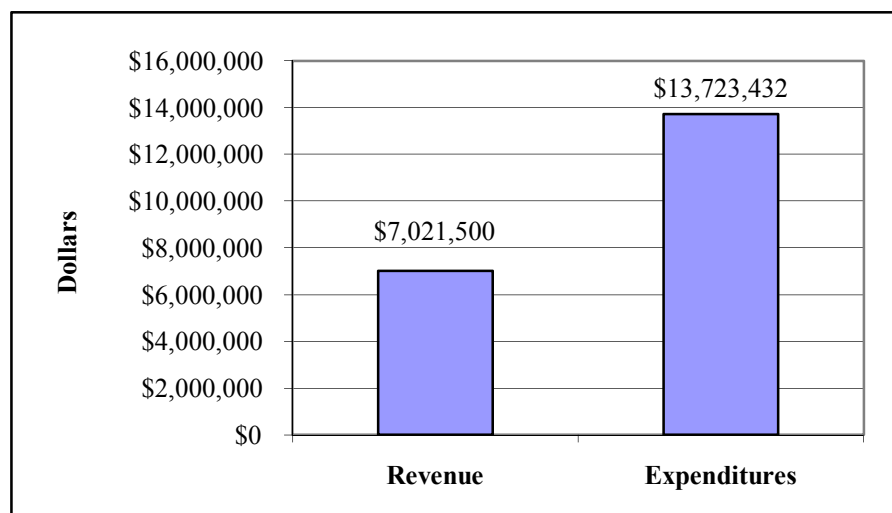
Kentucky's G&T program was funded at \$7,121,500 in FY 2007; this represents approximately \$62 per student identified as G&T in that year.

In FY 2007, the Kentucky General Assembly allocated \$7,121,500 for G&T programs. This amounts to approximately \$62 per student identified as G&T in FY 2007.¹ When adjusted for inflation, the FY 2007 allocation represents about a 24 percent decrease in funding since FY 1990. The approximately \$6 million that was allocated in FY 1990 would need to be \$9.4 million in constant FY 2007 dollars to have kept up with inflation.²

In FY 2007, districts spent almost twice as much on G&T services as they received through their G&T grants. Districts may have difficulty meeting regulatory requirements of the program with funding received from the state.

Districts likely have difficulty meeting the regulatory requirements of the program with state G&T funding alone. In 2007, approximately 62 percent of districts spent more on G&T services than they received through their G&T grants. Figure 5.A shows that, on average, districts spent almost twice as much on G&T programs in FY 2007 as they received through state funding.

Figure 5.A
Revenue and Expenditures for Gifted and Talented Programs
FY 2007



Sources: Revenue from KY Dept. of Ed.; expenditures from staff calculation based on districts' Annual Financial Reports.

In 2007, the ratio of G&T expenditures to revenue varied greatly among districts.

Districts vary greatly in the ratio of their G&T expenditures to their revenue. In 2007, approximately 15 percent of districts spent less on G&T services than they were allocated through their G&T grants, while approximately 19 percent of districts spent more than

¹ Per-pupil funding was calculated from funding distributed to districts. In FY 2007, KDE allocated \$100,000 from the G&T allocation to help fund the approximately \$250,000 worth of reimbursements associated with the Commonwealth Diploma program (Miller). The remaining \$7,021,500 was distributed to districts.

² Staff calculation using the Consumer Price Index to adjust funding data provided by KDE.

three times what they were allocated. These data suggest variation in the G&T services available to students in different districts. It is also possible that some districts are allocating resources to services that benefit G&T students but are not coding these services directly to the G&T program.

Support for Gifted and Talented Programs in Surrounding States

Only three of Kentucky's seven surrounding states provide direct funding for G&T students. Kentucky identifies a greater percentage of all students for G&T services than do surrounding states with G&T programs. Kentucky provides less per-pupil funding for G&T students than do Ohio and Virginia.

As illustrated by Table 5.1, of Kentucky's seven surrounding states, only three—Indiana, Ohio and Virginia—provide state funding directly for the education of G&T students. In 2007, G&T funding adjusted for total K-12 student enrollment was greater in Kentucky (\$11) than in Indiana (\$5), but less in Kentucky than in either Ohio (\$26) or Virginia (\$23). Kentucky identifies a greater percentage of all students for G&T services than do all three states. While funding available per G&T student in Kentucky (\$62) is greater than in Indiana (\$55), it is substantially less than in either Ohio (\$165) or Virginia (\$172).

Table 5.1
Support for Gifted and Talented Programs in Kentucky
and Surrounding States, FY 2007

State	FY 2007 Funding	Percent of Students Identified as G&T, 2007	Funding Per Student Enrolled in G&T Program	Funding Adjusted for Total K-12 Student Enrollment
Illinois	None	N/A	N/A	N/A
Indiana	\$5,836,340	10%	\$55	\$5
Kentucky	\$7,121,500	17%	\$62	\$11
Missouri	None	N/A	N/A	N/A
Ohio	\$47,200,000	16%	\$165	\$26
Tennessee	None	N/A	N/A	N/A
Virginia	\$27,685,985	13%	\$172	\$23
West Virginia	None	2%	N/A	N/A

Sources: Surrounding state funding and enrollment data compiled by staff from National Association for Gifted Children; Kentucky funding and enrollment data from KY Dept. of Ed.

Regulatory Requirements of the Gifted and Talented Program

Regulations governing Kentucky's G&T program are different from those governing special education.

G&T students are defined in KRS 157.200(1)(n) as those possessing

demonstrated or potential ability to perform at an exceptionally high level in general intellectual aptitude, specific academic aptitude, creative or divergent thinking, psychosocial or leadership skills, or in the visual or performing arts.

Districts are allowed flexibility in their implementation of G&T services. Regulatory requirements for districts include ensuring equal access to G&T services for all students, providing multiple service delivery options in each grade, and designating a G&T coordinator.

The G&T program is governed by 704 KAR 3:285 that defines the program's goals as helping students to excel by providing instruction tailored to their particular needs. Districts are allowed flexibility in the provision of G&T services. However, the regulation requires districts to provide equal access to students from different ethnic, racial, and economic groups; conduct continuous screening for G&T students; have a committee for the determination of eligibility and services; use at least three assessment options to identify students; provide multiple service delivery options in every grade; conduct annual program evaluations; and ensure the proper qualifications of personnel working with G&T students.³ The regulation also requires that 75 percent of a district's gifted education allocation be used to support direct instructional services provided by properly certified personnel and that the district designate a G&T coordinator.⁴

Students considered to be potentially G&T in grades K-3 become part of the primary talent pool.

The G&T regulation specifies different approaches to the selection and service of G&T students in the primary grades—K-3—and the middle and upper grades—4-12. In grades K-3, students are selected informally using a variety of measures to be part of the primary talent pool (PTP). Students identified for PTP stay in the program until the 3rd grade. The goal of the pool is to develop the talent of students who may have the ability to perform at high levels. Regulations emphasize that PTP services be provided within the regular primary classroom, though other options are permitted.

Beginning in the 4th grade, students are identified as G&T in specific areas.

Beginning in the 4th grade, students must be identified using formal measures specified in regulations. Identification measures vary

³ Teachers are required to have an endorsement in gifted education in accordance if they work “directly with identified gifted pupils in addition to the regularly assigned teacher; or for at least one-half (1/2) of the regular school day in a classroom made up only of properly identified gifted students” (704 KAR 3:285 Section 8(1)).

⁴ Due to funding constraints, most G&T coordinators have responsibilities other than the G&T program.

according to different G&T categories. Students identified as G&T in general intellectual ability or for academic aptitude in specific subject areas are commonly identified by scoring in the 9th stanine (the top 4 percent) of students on a norm-referenced achievement test in the 3rd grade. Service delivery options for all students include collaborative teaching, travel study options, independent study, extracurricular activities such as academic competitions, pull-out classrooms, self-contained classrooms or schools, and Advanced Placement or other honors courses.

Administration and Support of the Gifted and Talented Program at KDE

The G&T program is currently supported by one full-time KDE consultant and one KDE administrative assistant. District G&T coordinators are charged with local program administration. Many G&T coordinators have multiple administrative and/or teaching responsibilities. Thus, both state- and district-level G&T program oversight and support are likely to be limited in some schools.

Program Data and Evaluation

Student Information System (SIS) data allow KDE staff to determine whether districts appear to be compliant with some regulatory requirements. SIS data are of limited use for evaluating program quality.

G&T data submitted by districts to KDE through SIS include extensive student-level data such as category of identification, demographic characteristics, type of G&T service, and evidence used to identify students. G&T SIS data allow KDE staff to determine whether districts appear to be complying with certain regulatory elements such as the use of at least three sources of evidence for G&T identification and the provision of multiple service delivery options per grade. However, SIS data are of limited use for evaluating the quality of identification practices or of service delivery in G&T programs across schools and districts. Criteria for data entry are not clearly delineated in some fields. G&T program data are available upon request. KDE does not currently issue annual program reports.

Gifted and Talented Student Demographic Data

In 2007, 17 percent of students in Kentucky public schools were identified as G&T. Percentages were highest in the 4th through 8th grades.

As indicated by Table 5.2, 113,484 students were enrolled in the G&T program in 2007. This represents 17 percent of students enrolled in Kentucky public schools. Twenty percent of students were enrolled in grades 4-8, while 13 percent were enrolled in grades K-3. This may be explained by the fact that students are not formally identified for the program until 4th grade. The percentage of students identified as G&T is less in high school than in grades

4-8. Some high school students may decline G&T services because they elect not to take Advanced Placement and honors courses, which are a common service option at this level.

Table 5.2
Percent of Total Student Enrollment
Identified as Gifted and Talented, FY 2007

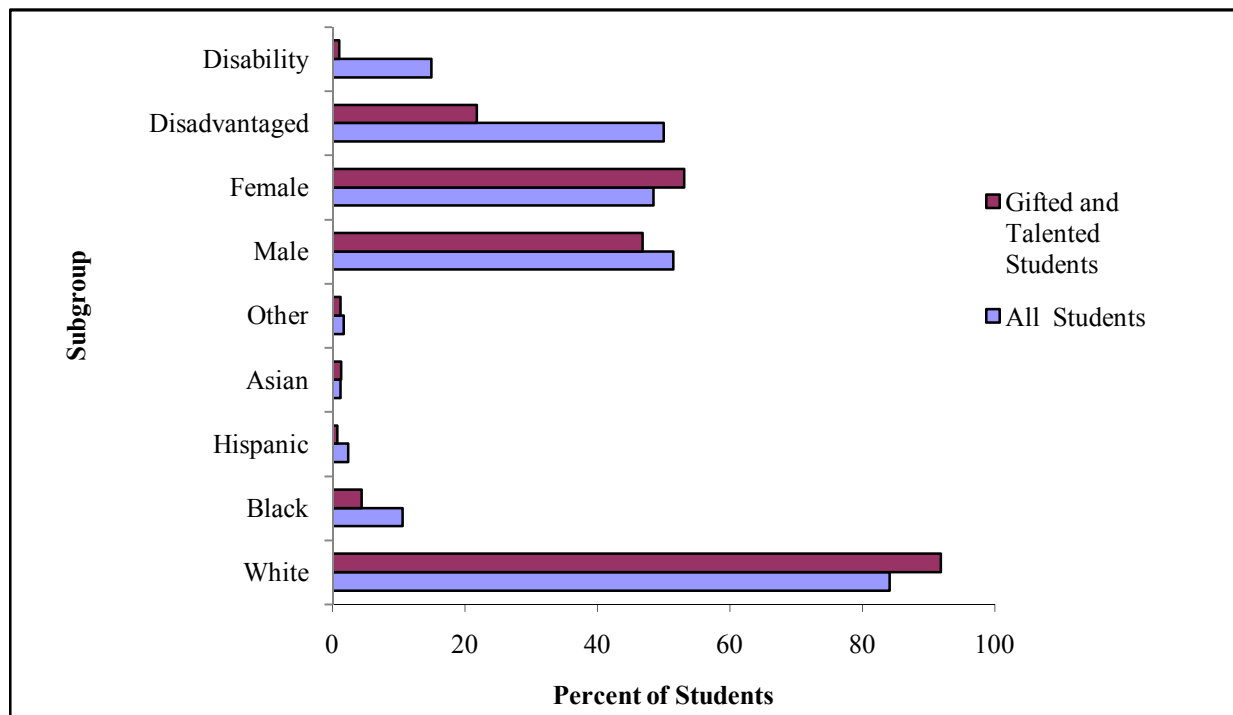
	Grades K-12	Grades K-3	Grades 4-8	Grades 9-12
Number of G&T Students	113,484	26,792	51,168	35,524
Percent of Total Enrollment	17%	13%	20%	17%

Source: Staff calculation using Student Information System data from the KY Dept. of Ed.

The percentage of G&T students who are black, Hispanic, or economically disadvantaged is less than half of the percentage of all students who are black, Hispanic, or economically disadvantaged. These gaps widen in high school.

704 KAR 3:285 requires districts to provide access to G&T services without regard to students' race and economic disadvantage. As indicated by Figure 5.B, however, the percentage of all G&T students who are black, Hispanic, or economically disadvantaged is less than half of the percentage of all students in those populations. This gap widens in high school. Appendix L provides G&T subgroup populations by grade level. Across all grades, the percentage of G&T students who are female is slightly higher than the percentage of G&T students who are male.

Figure 5.B
Gifted and Talented Students and All Students by Subgroups, FY 2007



Source: Staff compilation using Student Information System data from the KY Dept. of Ed.

Gifted and Talented Categories and Services

Gifted and Talented Categories

In grades K-3, students are enrolled in the primary talent pool but are not identified as G&T in specific categories.

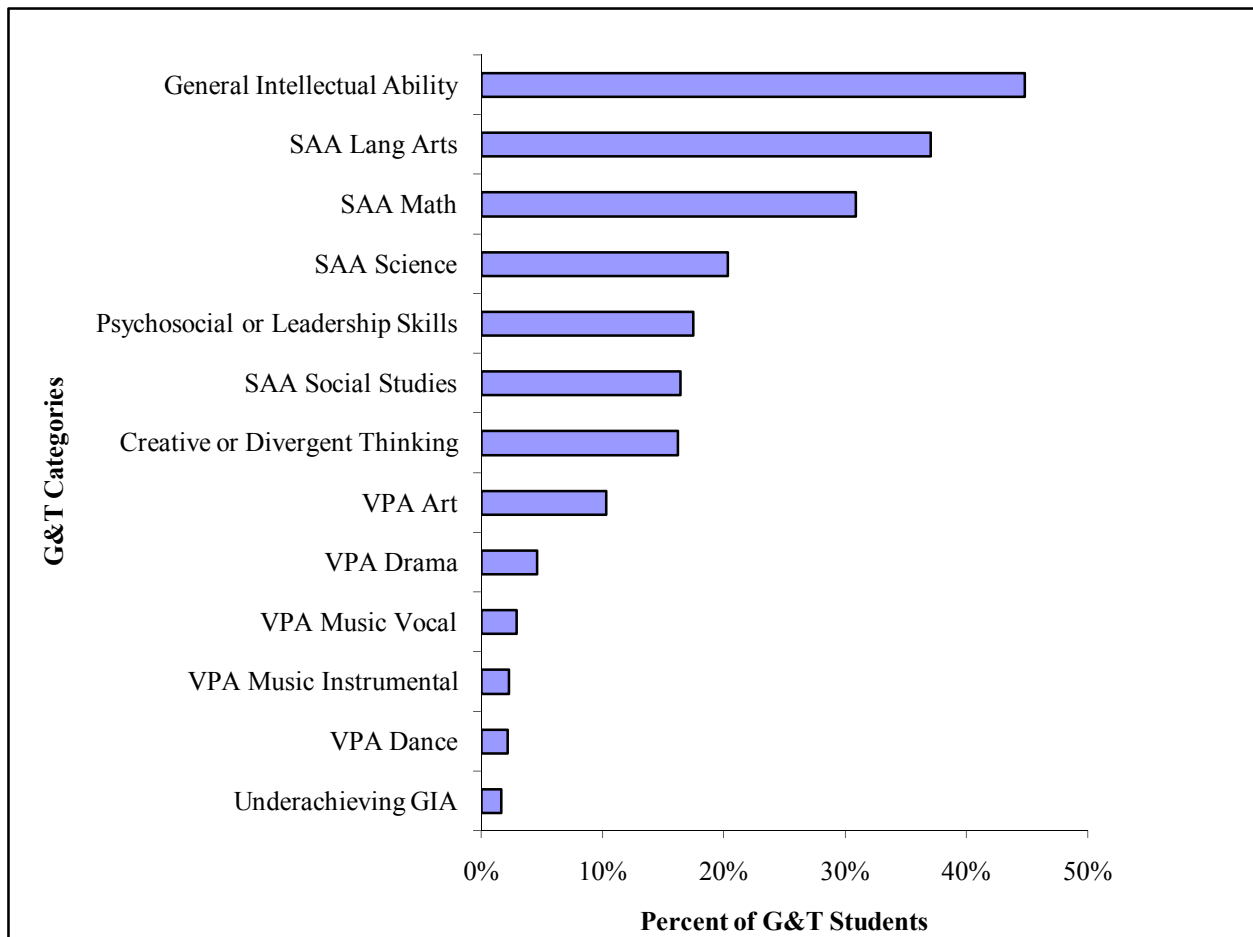
Students are formally identified as G&T beginning in the 4th grade. More students are identified in the category general intellectual ability than in any other category.

Students selected for G&T services in the early grades are not identified in specific categories.⁵ Instead, they become part of the primary talent pool. Students in the pool are considered to have the potential to perform at high levels.

Beginning in the 4th grade, students are formally identified as G&T in particular categories. Figure 5.C shows the percentage of G&T students in grades 4-12 identified in different categories. More students are identified in the category of general intellectual ability than in any other category. Many students are also identified for their specific academic aptitude, their creative or divergent thinking, and their leadership skills. Identification is less common in the categories of visual and performing arts.

⁵ A small percentage of students in grades K-3 were identified in specific categories in FY 2007. These identifications were made in error. Guidelines require that students in grades K-3 be enrolled in the primary talent pool.

Figure 5.C
Gifted and Talented Students Identified in Particular Categories
Grades 4-12, FY 2007



Notes: SAA refers to specific academic aptitude; VPA refers to visual and performing arts; GIA refers to general intellectual ability. Percents do not add to 100 as some students are identified in more than one category. Identification categories that constitute less than 2 percent of the population of G&T students are not reported in this figure. Source: Staff calculation from Kentucky Dept. of Ed. data.

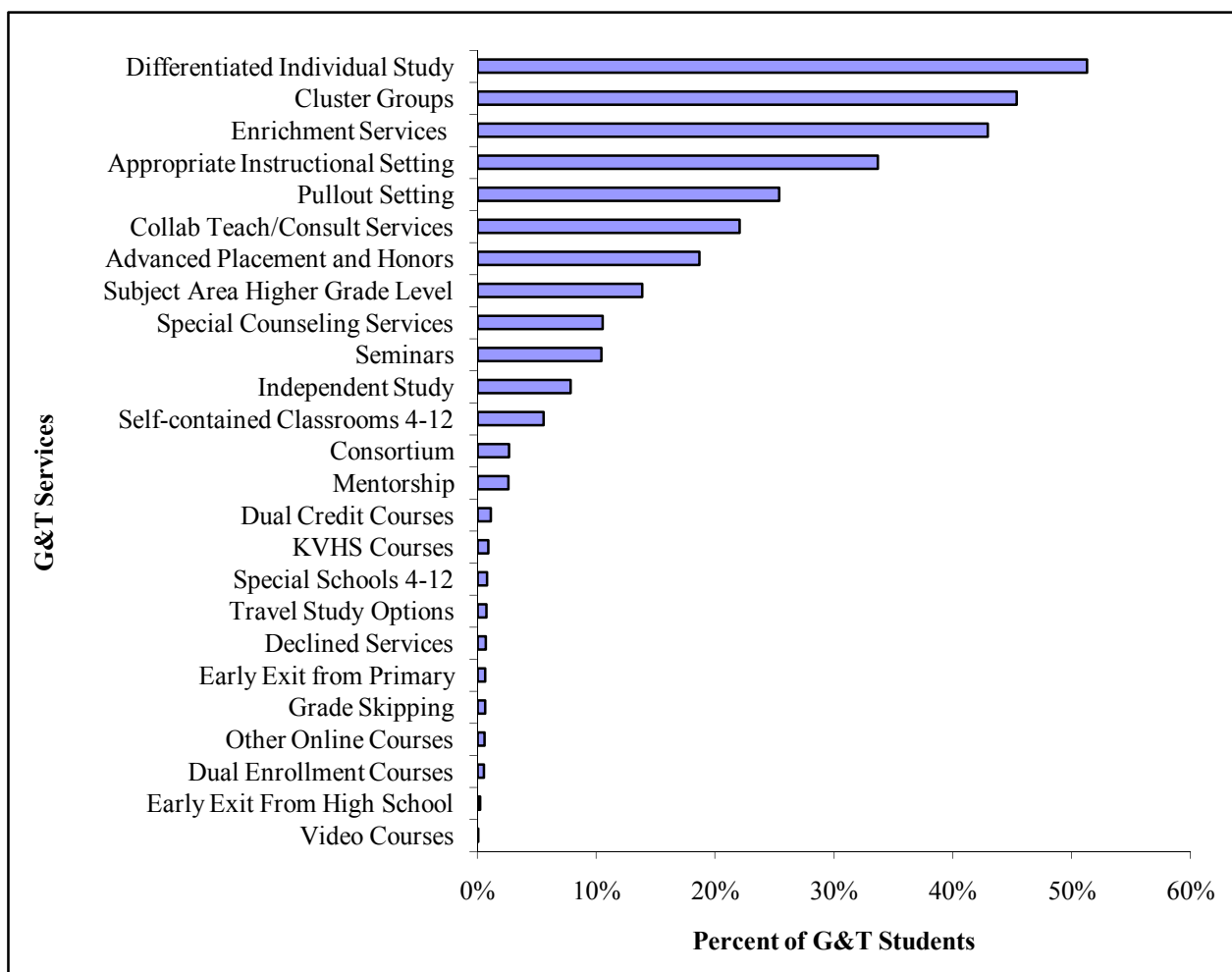
Students who are not performing at high levels but are considered to have the potential to excel in one of the gifted categories can be identified as underachieving in that category. Approximately 4 percent of students in grades 4 through 12 were identified as underachieving in FY 2007.

Gifted and Talented Services

The most common types of service delivery options across all grades are differentiated instruction, cluster grouping, and enrichment services. In high school, 49 percent of G&T students are enrolled in Advanced Placement or other honors courses.

Figure 5.D shows the most common G&T service delivery options across all grades. The most common types of instructional formats are differentiated instruction, cluster grouping, and enrichment services. These services are most commonly provided in pullout settings, other appropriate instructional settings, or in the regular classroom through collaboration between G&T teachers and regular classroom teachers.⁶

Figure 5.D
Services Received by Gifted and Talented Students
Grades K-12, FY 2007

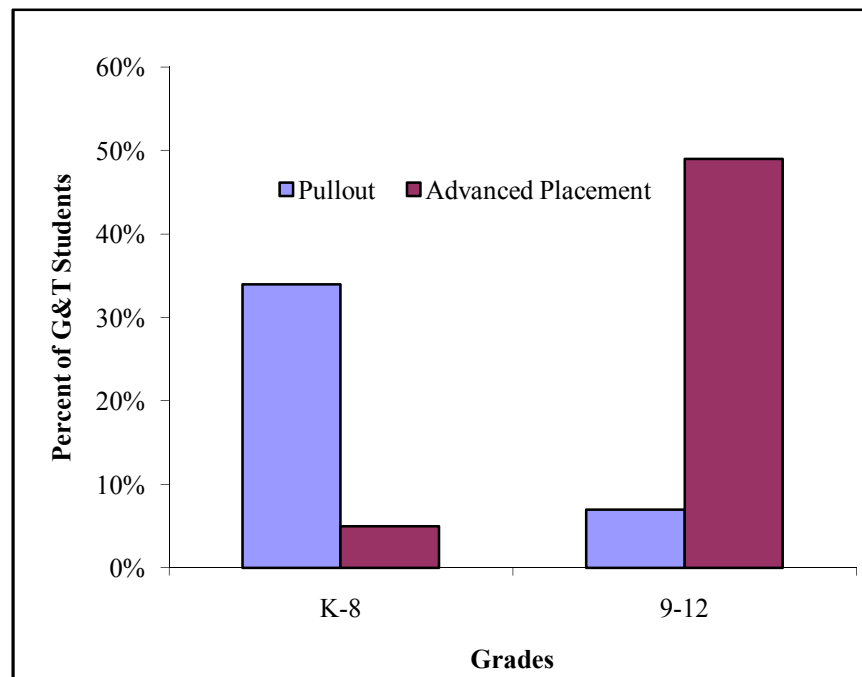


Note: Percents do not add to 100 due to the fact that students can receive more than one service delivery option.
Source: Staff calculation based on Kentucky Dept. of Ed data.

⁶ The guidelines provided by the Kentucky Department of Education in connection with Student Information System data for G&T students do not delineate clear criteria that distinguish different service options from each other.

The percentage of students instructed in pull-out settings and Advanced Placement or honors courses shifts beginning in 9th grade. This shift is illustrated in Figure 5.E. Thirty-four percent of G&T students receive pull-out services in grades kindergarten through 8, whereas only 7 percent of G&T students receive pull-out services in grades 9 through 12. In high school, 49 percent of G&T students are classified as taking Advanced Placement or honors classes. This option is rare in earlier grades.

Figure 5.E
Pullout and Advanced Placement Service Options
Grades K-8 vs. 9-12, 2007



Source: Staff compilation based on Kentucky Dept. of Ed. data.

Gifted and Talented Program Effects

SIS data collected in connection with the G&T program are not useful for rigorous program evaluation. Factors preventing evaluation of effects include the variety in types of services offered and lack of outcome data associated with G&T categories and service options.

Advocates believe that funding for G&T programs is essential to ensure that G&T students reach their potential (Kentucky Association). However, it is not possible to evaluate the effects of G&T services on student outcomes in Kentucky using program data collected through SIS. Factors preventing evaluation of effects include the variety in types of services offered to different students and the lack of valid and reliable outcome data associated with different G&T categories and service options.

The G&T program evaluation data submitted by district G&T coordinators to KDE provide some indication of the degree to which

districts are providing the services specified in regulations. Districts must conduct annual self-evaluations of their G&T programs. Districts can use the G&T SIS data to determine their compliance with certain regulatory requirements but must rely on their own measures and the expertise of their personnel to evaluate the quality of their G&T programs.

Districts' FY 2007 G&T program evaluation data indicate that many districts may not be providing all of the services specified in regulations. For example, out of 175 districts, only 81 reported differentiating services to match all students' needs; and 118 reported providing equitable screening, selection, and services to PTP students. Anecdotal reports indicate that some districts may have difficulty hiring personnel qualified to teach G&T students (Tackett). Appendix M contains a summary of G&T program evaluation data submitted by districts to KDE.

Gifted and Talented Student Outcome Data

This chapter reports overall achievement levels of G&T students in reading and mathematics. Outcome data are not available for many G&T categories.

This section summarizes data related to the overall academic performance of G&T students in reading and mathematics. As shown above, roughly one-third of G&T students are identified for aptitude in these areas. However, because KCCT assessment data do not include students' specific G&T classifications, it is not possible to disaggregate assessments scores for specific G&T categories.

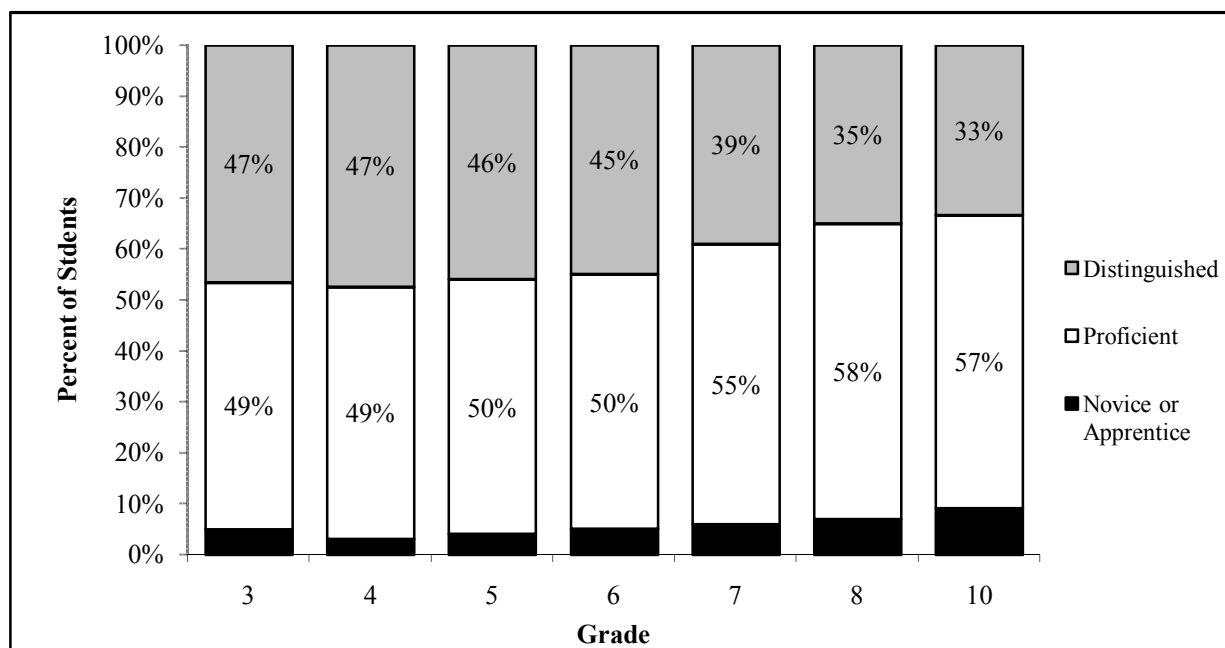
Assessment data reported here do not provide a complete picture of the performance of G&T students relative to their identified strengths. Many G&T students are identified in categories such as leadership ability or visual and performing arts for which no outcome data are available.

Performance of Gifted and Talented Students in Reading and Mathematics

In 2007, 90 percent of all G&T students achieved scores of proficient or distinguished in reading. Higher percentages of G&T students received scores of distinguished in the elementary grades than in the middle and upper grades.

As shown by Figure 5.F, more than 90 percent of G&T students at all grade levels performed at the proficient or distinguished levels in FY 2007. The percentages of G&T students scoring distinguished in reading are higher in the elementary than in the middle and upper grades. In the 3rd grade, nearly half of G&T students received distinguished scores whereas only one-third of 10th-grade G&T students did so.

Figure 5.F
Achievement of Gifted and Talented Students
KCCT Reading, FY 2007



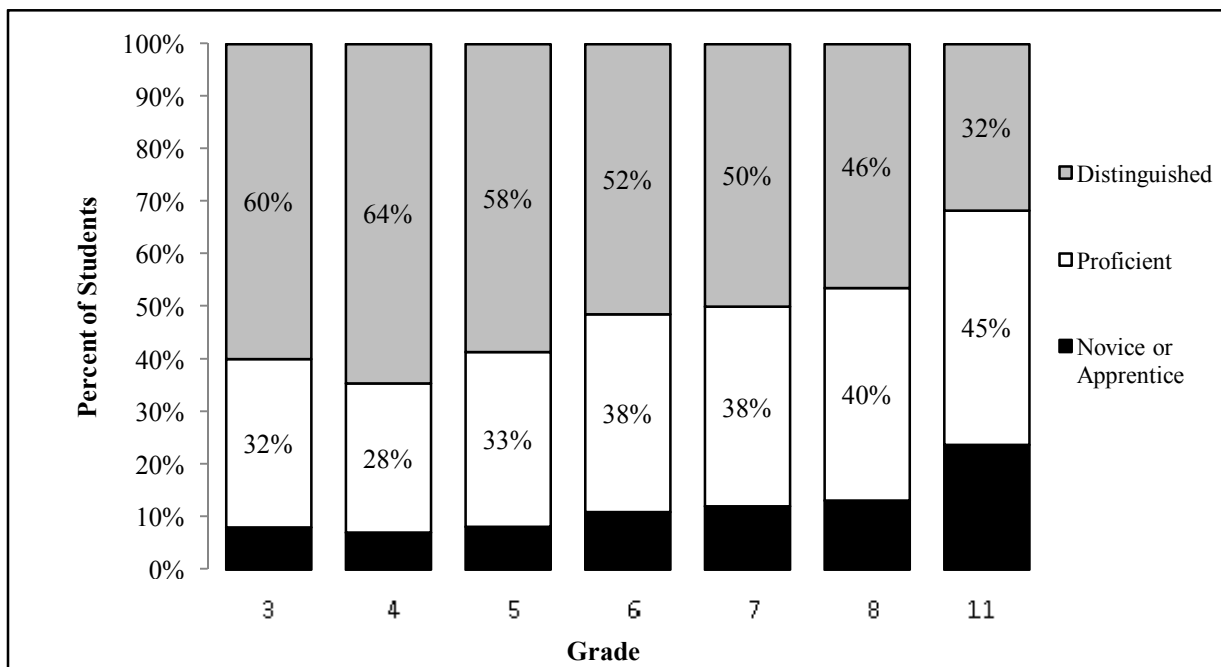
Note: Percents do not always add to 100 due to rounding.

Source: Commonwealth, Dept. of Ed. *Kentucky*.

In 2007, more than 75 percent of G&T students at all grade levels scored proficient or distinguished in mathematics.

As shown by Figure 5.G, more than 75 percent of G&T students at all grade levels scored proficient or distinguished in mathematics in FY 2007. As with reading, greater percentages of G&T students receive distinguished scores in the elementary than in the middle and upper grades. Sixty percent of G&T 3rd graders scored distinguished in mathematics compared to only 32 percent of G&T 11th graders. At all but the 11th grade, higher percentages of G&T students scored distinguished in mathematics than in reading.

Figure 5.G
Achievement of Gifted and Talented Students
KCCT Mathematics, FY 2007



Note: Percents do not always add to 100 due to rounding.
Source: Commonwealth. Dept. of Ed. *Kentucky*.

Advanced Placement

Advanced Placement tests provide some indication of how Kentucky students likely to be identified as G&T perform by nationally recognized standards of excellence.

Advanced Placement (AP) test data provide the closest available proxy for the performance of Kentucky’s G&T students by nationally recognized standards of excellence. Although it is not possible to disaggregate AP data for students identified as G&T in Kentucky, these data provide a broad measure of the performance of the Kentucky students likely to be identified as G&T in general intellectual ability or academic aptitude in specific subjects.

Nearly half—or 17,428—of Kentucky’s high school students identified as G&T in FY 2007 enrolled in Advanced Placement or other honors courses. However, not all of the students enrolled in AP courses elected to take AP exams.⁷ In FY 2007, 11,627 public school students took at least one AP exam.

⁷ Students may elect not to participate in AP exams if they do not anticipate earning a passing grade. Students must pay examination fees for each AP exam. Reimbursement for these fees is available only for students eligible for free or reduced-price lunch and/or students earning a score of 3 or higher on AP exams required for the Commonwealth Diploma.

Kentucky has made great strides in the percentages of high school students taking and passing AP exams but continues to lag behind the nation on both measures. In 2007, nearly 10 percent of Kentucky's high school seniors earned a passing grade on at least one AP exam.

In the last 5 years, Kentucky has made great strides in both the number of students taking AP exams and the number of students earning passing grades; however, the state still lags significantly behind the nation on both measures. As shown by Table 5.3, nearly 20 percent of Kentucky's high school seniors took an AP exam in high school. Of those students, approximately half attained a score of 3 or higher, which is considered a passing grade.

Table 5.3
High School Class of 2007
Taking and Scoring 3 or Higher on AP Exams in High School

	% of Students Who Took an AP Exam in High School	% of Students Scoring 3 or Higher on an AP Exam in High School
Kentucky	19.6%	9.7%

Source: College Board.

Black, Hispanic, and American Indian students are underrepresented among exam-takers scoring 3 or higher. Appendix N provides a detailed comparison of AP performance among Kentucky, its surrounding states, and the nation between FY 2002 and FY 2007. It also provides AP data for student subgroups in the Commonwealth.

In 2006, nearly half of the students who passed AP exams in Kentucky were concentrated in a small number—21—of high schools.

Analysis of FY 2006 AP data at the school level indicates that Kentucky high school students who achieve at nationally recognized standards of excellence are concentrated in a small number of high schools, of which the majority are in higher wealth, urban areas. Twenty-one, or 9 percent, of Kentucky's 233 high schools accounted for 37 percent of the students who enrolled in an AP exam in 2006 and 49 percent of the students who passed AP exams in 2006. The pass rate for students attending these schools was 63 percent, far higher than the 36 percent pass rate of students attending the remaining 212 schools.

Commonwealth Diplomas

Students who achieve at exceptionally high levels can be awarded extra distinction through the Commonwealth Diploma Program. In 2007, 1,564 students received Commonwealth Diplomas.

Students who achieve at exceptionally high levels as measured by AP exams and other indicators can be awarded extra distinction through Kentucky's Commonwealth Diploma Program. According to 704 KAR 3:340, Commonwealth Diploma recipients must

- complete at least 22 approved units of credit, including all those required for high school graduation by 704 KAR 3:305 and by local boards of education;

- complete all minimum requirements of the Pre-college Curriculum established by the Council on Postsecondary Education;
- receive a grade of C or its equivalent in four AP or International Baccalaureate (IB) courses, including at least one in each of the areas of English, science/mathematics, and foreign language; and
- complete AP or IB examinations in three of the four required courses.

•
A total of 1,564 Commonwealth Diplomas were issued in FY 2007. Commonwealth Diploma recipients are eligible for reimbursement of the costs of three AP exams if they achieve a minimum composite score of 8 on those three required exams.

Conclusion

As a result of the G&T program, 17 percent of Kentucky public school students are identified for their potential to achieve at high levels. It is unlikely that the educational needs of these students are met through G&T program funds alone.

Through the G&T program, approximately 17 percent of students in Kentucky public schools are identified for their potential to excel in a variety of categories. However, it is unlikely that funding provided by the G&T program alone is sufficient to ensure that these students receive the types of services required by regulation. G&T students in some schools and districts may have their needs met through rich, rigorous offerings in the regular curriculum or by G&T programs that are supplemented with local funds.

Data suggest continuing challenges in ensuring that opportunities to excel are available in the middle and upper grades and to students in all economic and racial groups.

Data reviewed in this chapter suggest that more can be done to ensure that G&T students reach their potential in the middle and upper grades and to ensure that G&T services reach students from all economic and racial groups. KCCT reading and mathematics assessments indicate that significantly higher percentages of G&T students achieve at distinguished levels in elementary schools than in high schools. In addition, opportunities provided through G&T funds are not currently distributed equally among students of all racial and economic groups. Disadvantaged and minority students are less than half as likely to be identified as G&T as white or nondisadvantaged students. AP test results indicate significant progress in the degree to which some G&T students are excelling according to nationally recognized standards of excellence; however, the opportunity for students to excel through AP coursework is much higher in a small number of select high schools than it is in high schools across the Commonwealth. Moving forward, policy makers and educators are faced with the

challenge of ensuring that, through G&T programs or other means, opportunities to excel are available to all Kentucky students.

Chapter 6

Conclusion

Introduction

This chapter reviews issues that emerge from data analyzed throughout this report. These issues are discussed in light of education research, national policy trends, and concerns raised by practitioners in the Commonwealth.

This chapter discusses issues that emerge from data analyzed throughout this report. These issues are discussed in light of education research, national policy trends, and concerns raised by special education practitioners in the Commonwealth. This report reviews data trends in special education but does not analyze the quality of special education services in districts and schools. However, the issues discussed have important implications for the provision of effective and efficient services to special education students in Kentucky. EAARS may choose to explore some of these issues in future research.

Previously discussed issues are summarized in this chapter and are grouped into the following categories:

- Indicators of Progress for Special Education
- Identification of Students for Special Education
- Funding of Special Education
- Assessment of and Accountability for Students with Disabilities
- Kentucky's Gifted and Talented Program

Indicators of Progress for Special Education

Student Outcomes

Students with disabilities have made substantial progress in reading and mathematics proficiency. Special education students are graduating at significantly higher rates than they have in the past. Great gaps remain between the proficiency and graduation rates of students with and without disabilities.

Students with disabilities have made substantial progress in reading and mathematics proficiency, especially in the elementary grades. Special education students are graduating at much higher rates than they have in the past. Progress on these indicators reflects improvement efforts on the part of administrators and staff at all levels. However, gaps remain between proficiency and graduation rates of students with and without disabilities.

Data Monitoring

Through the federally mandated Kentucky Continuous Monitoring Process, KDE's Division of Exceptional Children ensures that districts collect and analyze data related to 14 indicators of quality in special education programs. These include graduation rates, dropout rates, and the disproportionate representation of minority students in special education. Through the monitoring process, districts can compare indicators for their special education students to those without disabilities and to the performance of students in other districts. This process also introduces greater district-level accountability for the quality of certain aspects of special education programs than was present in the past.

Identification of Students for Special Education

Identification Rates Increasing

Kentucky's rate of identification for special education in the 3-5 age group has grown steadily. The current rate of identification in this age group is more than double the national rate.

Identification Rates Ages 3-5. Kentucky's rate of identification for special education in the 3-5 age group is growing steadily. In the fall of 2006, Kentucky's rate of identification in this age group was 12.8 percent—more than double the national rate of 5.8 percent. Kentucky's higher rates of identification in this age group can be explained, in part, by the fact that Kentucky provides children with greater access to state-funded preschool programs than do most states (National Institute). Thus, children with disabilities may be more likely to come to the attention of educators in Kentucky than in other states. It is also possible that the limited eligibility criteria for preschool provide an incentive to identify students for special education. Children are only eligible for state-funded preschool programs if they are considered at risk or if they are identified for special education.

The percentage of students ages 6-21 who are identified for special education in Kentucky has also grown. Kentucky's identification rate of 10.1 percent exceeds the national rate of 9.1 percent.

Identification Rates Ages 6-21. The percentage of Kentucky students identified for special education in the 6-21 age group has grown steadily, even as the percentage of students identified for special education in the nation has leveled off. In the fall of 2000, Kentucky identified a lower percentage of students for special education than did the nation. By the fall of 2006, Kentucky's identification rate of 10.1 percent was one percentage point higher than the nation's identification rate of 9.1 percent.

In the 6-21 age group, Kentucky's increasing rates of identification are accounted for primarily by students classified with a developmental delay or other health impairment. Percentages of students classified with autism and multiple disabilities have also grown.

Kentucky's increasing rates of identification for special education in the 6-21 age group are accounted for primarily by students classified with developmental delays and other health impairments. These disabilities are considered "moderate" in Kentucky's funding mechanism. While identification rates for students with the most severe disabilities have remained relatively consistent over time, identification rates in the "low incidence" categories of autism and multiple disabilities have increased.

Disproportionate Identification of Male and Black Students

Male and black students are disproportionately represented among special education students.

Male and black students in the 6-21 age cohort are identified for special education at rates that exceed their representation among all students. They are also disproportionately identified with certain types of disabilities such as emotional behavior disorder. DEC is monitoring the issue of disproportionate identification of black and all minority students through the Kentucky Continuous Monitoring Process. However, the federal government does not require state education agencies to monitor or address the disproportionate identification of males for special education.

Variation in Identification Rates

Special education identification rates vary widely among Kentucky districts. On average, lower-wealth districts identify students for special education at higher rates than do higher-wealth districts.

Identification rates vary significantly among Kentucky districts. In FY 2007, identification rates in Kentucky districts ranged from 8.4 percent to 25.5 percent. Identification rates exceeded 15 percent in the majority of districts and exceeded 20 percent in 20 districts. On average, lower-wealth districts identify students for special education at higher rates than do higher-wealth districts.

707 KAR 1:380 Section 6 requires KDE to conduct child count audits in districts with unusual child count data such as identification rates in excess of 15 percent. Of 11 districts issued corrective action plans between FY 2006 and FY 2008, 5 were cited for violations associated with identification practices and none received sanctions.

Kentucky's rates of identification in particular disability categories are strikingly different from national rates, especially in the categories of developmental delay and specific learning disability.

Kentucky's rates of identification for particular disabilities are strikingly different from those of the nation in several categories. The rate of identification for developmental delay is more than seven times as high in Kentucky as it is in the nation. Kentucky identifies students for specific learning disabilities at a rate that is less than half the national rate. The great variation in identification rates among Kentucky districts and the discrepancies between identification rates for particular disabilities in Kentucky and the

nation raise questions about the criteria used to identify students for special education and how these criteria are applied.

Criteria for Identification Not Standardized in All Categories

Students are identified for special education by school-level Admissions and Release Committees. The criteria for identification are not standardized in all categories.

Decisions regarding identification for special education are made by school-level Admissions and Release Committees. This process is guided by disability definitions provided in administrative regulations. The specificity of evidence required for identification varies by disability category, and the criteria for identification in some categories are broad. For example, the identification of students as developmentally delayed in preschool can be based on anecdotal evidence provided by parents. Until recently, identification criteria in the category of specific learning disability required complex statistical analyses. Percentages of students identified as developmentally delayed have increased dramatically, whereas percentages of students identified with specific learning disabilities have decreased.

Access to Diagnostic and Evaluative Staff Varies

Many districts do not employ specialists such as psychologists and diagnosticians who are qualified to accurately identify students with particular disabilities. Kentucky's ratio of these types of staff to special education students is 42 percent higher than the national ratio.

Kentucky districts vary in their employment of staff such as school psychologists and diagnosticians who are qualified to make technical diagnoses. IDEA staffing data summarized in Appendix E indicate that, in FY 2006, the last year for available data, the ratio of students to related service providers such as school psychologists and diagnostic staff was 42 percent higher in Kentucky than the national ratio.

Concerns Related to Accurate Identification

In some cases, accurate identification of a student's particular disability is necessary to ensure that the student receives appropriate services. In other cases, students identified for special education may be better served through systematic intervention in the regular classroom.

Appropriate Services. The accurate identification of students for special education is important to ensure that students receive appropriate and effective services. When ARCs lack access to qualified diagnostic staff, they may not identify students' disabilities with the precision necessary to provide appropriate special education services.

In other cases, students who are experiencing academic difficulty may be identified for special education because they have not received adequate instruction in the classroom. Some of these students may not have a particular disability. Assistance for these students may be more effectively and efficiently provided through systematic intervention and support in the regular education program.

Children's eligibility for preschool may be determined by identification for special education. Preschool eligibility criteria should be standardized across districts and schools.

Importance of Accurate Identification in Preschool. Accurate identification presents unique challenges at the preschool level due to the difficulty of using standardized assessments with young children. The possibility that identification criteria may vary among districts and schools raises two distinct concerns at the preschool level. First, children's eligibility for preschool education may be determined by identification for special education; thus, the identification process must be, to the extent possible, standardized across districts and schools. Second, children who are inappropriately identified for special education at the preschool level may enter kindergarten as special education students. The goal of the federal Response to Intervention (RTI) initiative, described in the following section, may be more difficult to meet if large numbers of students enter kindergarten identified for special education.

Special Education Versus Intervention in Regular Classrooms

Practitioners believe that the Response to Intervention initiative will result in reduced rates of identification for special education.

The federal government has directed state education agencies to address the issue of appropriate identification of special education students through an initiative known as Response to Intervention. The initiative is based on research suggesting that a subset of students identified for special education may not have disabilities that require special education services. The learning needs of this student group may be met most effectively through regular assessment and tiered intervention in regular education. For this reason, teachers should refer students to special education only after attempting these sustained interventions. Practitioners cite RTI as an important means of reducing the number of students who are referred to special education.

There is as yet little research on the effects of RTI on identification rates. The RTI process requires resources that are not available in all schools.

As RTI is in the initial stages of large-scale implementation, little is known about its effects on identification rates. However, researchers have identified a number of challenges associated with successful implementation of RTI. The RTI process requires resources that are not available in all schools. More resources and tools are available for use in connection with RTI at the elementary level, especially in reading, than there are for older students and for students who are struggling in mathematics (Duffy). Further, there is little consensus on what constitutes scientific research-based intervention in all academic subjects (Hale). In addition, teachers may lack the expertise necessary to implement scientifically based instructional strategies and assessments. Thus, RTI, in itself, is unlikely to address all concerns related to the appropriate identification of students for special education.

Funding of Special Education

Revenue and Expenditures

State and federal allocations for special education grew from approximately \$408 million in FY 2003 to approximately \$539 million in FY 2007; this represents an increase of 32 percent.

The growth in district expenditures for special education has outpaced the growth in allocations for special education. This trend is especially marked in higher wealth districts.

There is substantial variation among Kentucky districts in expenditures for special education. On average, higher-wealth districts spend more on special education than do lower-wealth districts.

Variation in districts' expenditures raises concerns about the comparability of special education services in different districts. Data indicate that students in some districts may not be receiving all of the specialized services necessary for their particular disabilities.

Substantial Increases in Revenue. Revenue for special education grew from a total of \$408 million in FY 2003 to a total of \$539 million in FY 2007, an increase of 32 percent. This growth was driven by increases in federal funding, rising numbers of students identified for special education in Kentucky, and increases in the guaranteed per-pupil base used to calculate the SEEK exceptional child add-on funding.

Special Education Expenditures Exceed Revenue. Beginning in FY 2004, special education expenditures in Kentucky exceeded special education revenue; by FY 2007, district expenditures on special education exceeded special education revenue by \$38.2 million. The gap between expenditures and revenue has increased steadily in recent years. This trend holds true for all wealth quintiles but is most marked in the state's higher-wealth districts. Data collected for this study do not explain the underlying causes of this trend.

Special Education Expenditures Vary Among Districts. Variation in the ratio of expenditures to revenue among Kentucky districts is substantial. In FY 2007, 15 districts spent more than 120 percent of their special education revenue on special education services, whereas 23 districts spent less than 75 percent of their special education revenue on special education services. Special education expenditure-to-revenue patterns vary by district wealth. On average, districts in lower-wealth quintiles spend less on special education services than they receive in revenue, whereas districts in higher-wealth quintiles spend more on special education services than they receive in revenue.

Districts are not required by law to spend all of their SEEK exceptional child add-on funding on special education services. However, these data raise concerns about whether special education students in districts with lower levels of expenditures for special education are receiving required services.

Possible Relationships Between Expenditures and Student Services. Previous studies have suggested that variation in expenditures may be driven, in part, by differences in the costs of providing special education services in districts with different characteristics (Augenblick). It is also possible, however, that students in some districts may not be receiving all of the services necessary to provide specialized instruction and related services for

their particular disabilities. Districts in rural areas may have difficulty recruiting specialists such as audiologists and occupational therapists. Only 73 of Kentucky's 174 districts have elected to provide students with job coaching available through the Community Based Work Transition Program.

Other Sources of Variation in Special Education Services.

Practitioners report additional sources of variation in the quality of special education services. These sources may not be reflected in special education expenditures. In some cases, district and school administrators may not ensure that proper attention and resources from regular education are devoted to special education students and teachers. Practitioners report a two-tiered system in which special education students and teachers are viewed by some administrators as separate from regular education students and teachers. For example, special education teachers may not be included in content-related professional development at the district or school level. The quality of transition services can also vary by district and region due to differences in students' access to services provided by other state agencies, such as the Office of Vocational Rehabilitation.

Kentucky's Special Education Funding Mechanism

Previous studies have suggested that the pupil weights assigned to some students with disabilities in Kentucky are low. Further analysis would be needed to determine the relationships between special education costs and revenue.

Pupil Weights. Studies have suggested that some of the pupil weights assigned to special education students in Kentucky are low. Given the revenue and expenditure patterns discussed earlier, further analysis would be needed to determine whether revenue for students in different disability categories reflect the costs of educating those students. Further analysis would also need to examine possible differences in the costs of educating students with disabilities in districts with different characteristics.

Tension Between RTI and Kentucky's Special Education Funding Mechanism. The federal government uses a different mechanism to fund special education through IDEA than does Kentucky through the SEEK exceptional child add-on. These mechanisms have different consequences for districts that achieve RTI's goal of reducing special education referrals through systematic assessment and intervention in the regular classroom.

IDEA funding is not linked to the number of students identified for special education. Up to 15 percent of IDEA funds can be used to support intervention in regular classrooms. This portion of IDEA funding does not need to be linked to students identified for special education. Thus, a district that manages to reduce the number of

students identified for special education through, for example, an early reading intervention program, will not face reduced special education revenue through IDEA. Further, the district can use up to 15 percent of IDEA funding to support that early reading intervention program.

Districts will lose some of their SEEK exceptional child add-on funding if they are successful at reducing the number of students referred to special education. When state funding declines, the less-wealthy districts' pro rata share of the reduction is greater than that of the more-wealthy districts' share.

Under Kentucky's funding mechanism, however, districts stand to lose some of their SEEK exceptional child add-on funding if they reduce the number of students identified for special education. The financial impact of reducing special education identification rates could differ depending on district wealth. When state funding declines, the less-wealthy districts' pro rata share of the reduction is greater than that of the more-wealthy districts' share. The SEEK exceptional child add-on funding mechanism provides some districts with a financial disincentive to reduce the number of students identified for special education.

Assessment of and Accountability for Students With Disabilities

Some contend that academic expectations for students with disabilities in the past were too low. Others cite conflicts between the standardized performance expectations for students with disabilities under NCLB and the individualized goals for students with disabilities required by IDEA.

Federal regulations require that students with disabilities participate in all state and district assessments. Further, NCLB holds schools accountable for ensuring that students with disabilities achieve the same performance goals as students without disabilities. Advocates of new testing and accountability requirements contend that in the past, expectations for the performance of students with disabilities were too low. They argue that new assessment and accountability requirements have been critical in raising academic expectations and increasing learning opportunities for students with disabilities. However, the new requirements are controversial. Critics cite conflicts between the standardized expectations of students with disabilities under NCLB and the individualized goals for students required by IDEA (National Center. *Rewards*).

Special education programs serve students with a broad range of disability types. Disability classifications range from mild disabilities such as speech language impairments to severe disabilities such as functional mental disability. It is likely that the effects of current testing and accountability requirements vary, in part, according to the nature of students' disabilities.

Substantial Gains for Some Students With Disabilities

Achievement trend data suggest that many students with disabilities are capable of performing at higher levels than were expected in the past.

Achievement trend data reported in Chapter 4 suggest that many students with disabilities are capable of performing at higher levels than were expected in the past. In recent years, students with disabilities have made substantial gains in both reading and mathematics. This is especially true at the elementary level. School-level data suggest continued potential for improvement in the performance of students with disabilities in many of Kentucky's schools.

Significant Achievement Gaps Remain

There is no evidence, however, that students with disabilities, as a group, can meet the same performance expectations as students without disabilities.

Despite recent achievement gains, significant gaps remain between the performance of students with disabilities and the performance of students without disabilities. School-level data reported in Chapter 4 indicate that the performance targets expected for schools to meet adequate yearly progress in the year 2014 are not currently being met for students with disabilities, even in the state's highest performing schools. While new testing and accountability requirements may have spurred improved outcomes for a subset of students with disabilities, there is no evidence that these performance targets can be met for students with disabilities as a group.

Adapting Advanced Content for Students With Disabilities

Practitioners report difficulty on the part of some special and regular education teachers in adapting advanced academic content for some students with disabilities.

Practitioners report difficulty on the part of some special and regular education teachers in adapting advanced academic content for some students with disabilities. Special education teachers may be required to provide instruction in advanced content with which they have little or no teaching experience. This may be especially difficult for special education teachers who are required to provide instruction in advanced content to students with severe disabilities.

Most special education students spend the majority of their time in regular education classrooms; thus, regular education teachers, in collaboration with special education teachers and aides, are responsible for teaching large numbers of special education students. Practitioners report that, in some cases, regular education teachers may not have access to the types of training and instructional materials necessary to help them adapt academic content for students with disabilities.

Subject and grade-level instructional materials relevant to students with different types of disabilities are not readily available in many content areas.

Practitioners report the need for instructional materials and alternative courses that would help them to make advanced academic content relevant and accessible to students with disabilities. Subject and grade-level instructional materials relevant to students with different types of disabilities are not readily available in many content areas. These types of materials may be especially important in subjects such as Algebra I, which students are required to take in order to graduate with a regular diploma.¹

Unintended Consequences Associated With Increased Testing and Accountability

In some cases, pressure to increase the proficiency rates for students with disabilities may result in unintended consequences.

Teachers and administrators are currently under great pressure to ensure that students with disabilities achieve proficiency at the same rate as students without disabilities. This is especially true in Title I schools that face severe consequences for failure to meet adequate yearly progress. Many teachers feel that the new performance expectations for some students with disabilities are unrealistic. In some cases, pressure to increase the proficiency rates for students with disabilities may result in unintended consequences. Some of these consequences are discussed in the section that follows.

The majority of students with disabilities in Kentucky and the nation receive at least one testing accommodation.

Testing Accommodations. Testing accommodations are designed to allow students with disabilities to demonstrate their knowledge of academic content. Sixty-five percent of students with disabilities who took the KCCT regular assessment in FY 2007 received at least one testing accommodation. Kentucky's accommodation rate for students with disabilities on state assessments is similar to those reported by other states.

This study does not include data related to the appropriateness of accommodation practices in Kentucky districts and schools. However, accommodation data raise concerns related to the quality of instruction for special education students and the reliability and validity of assessment data for students with disabilities.

This study does not include data related to the appropriateness of accommodation practices in districts and schools. However, given the many students with disabilities who receive testing accommodations, special attention must be paid to the effects of these accommodations on the quality of students' daily instruction. It is also important to consider the effects of accommodation practices on the validity and reliability of assessment data.

¹ As described in Chapter 1, Kentucky's special education cooperatives provide assistance to districts and schools in topics that include data analysis, literacy, and transition to adult life. Personnel development grants to state universities, described in Appendix E, are promoting development and dissemination of practices related to behavior management, transition, and instruction and management of autistic children. While important sources of guidance, these resources do not provide teachers with concrete strategies and instructional materials at all grade levels and in all content areas.

Effects of Accommodations on Instruction. Regulations require that accommodations used during assessments be incorporated into students' daily instruction. ARCs are not permitted to approve accommodations for the sole purpose of improving students' performance on assessments. Regulations also specify that accommodations be considered temporary strategies that should be removed from students' IEPs when students gain knowledge and skill and can perform without the accommodation.

Due to current performance expectations for students with disabilities, students may be permitted accommodations even when they are capable of independent work.

There may be tension between the regulatory goal of phasing out unnecessary accommodations and the current performance expectations for students with disabilities. In some cases, pressure for students with disabilities to perform on assessments may provide ARCs with a disincentive to remove accommodations from students' IEPs. Students who are capable of independent work may perform at higher levels on assessments with the assistance of one or more accommodation.

Regulations state that accommodations must not inappropriately alter the nature of academic content assessed. This provision is necessary to ensure the validity of assessment data.

Effects of Accommodations on the Validity and Reliability of Assessments. Regulations state that assessment accommodations must not inappropriately alter the nature of academic content being assessed. When assessment accommodations alter the nature of content assessed, the validity of assessment data are threatened. Further study would be necessary to determine whether ARC members are provided with the information and training necessary to make decisions about the appropriateness of different accommodations in assessment settings.

In response to increased performance expectations for students with disabilities, some staff may use testing accommodations to provide students with assistance that goes beyond what is acceptable under testing protocol.

In response to increased performance expectations for students with disabilities, some staff may be tempted to utilize assessment accommodations and modifications to assist students during the assessment process. In some cases, they may provide assistance that goes beyond what is acceptable under testing protocol. OEA staff have received anecdotal reports of inappropriate use of assessment accommodations for students with disabilities in some districts.

Inappropriate use of testing accommodations would threaten the reliability and validity of assessment data. Regulations do not require the Office of Assessment and Accountability to monitor outliers in district and school assessment data for students with disabilities.

Inappropriate use of testing accommodations would threaten the reliability and validity of assessment data for students with disabilities. KDE accepts and investigates allegations of testing violations. Investigations generally result from complaints by school districts and others. According to KDE, the Office of Assessment and Accountability has contacted DEC in the past regarding outliers in district and school assessment data for students with disabilities; however, this process is informal and is not currently required by regulation (Draut).

As a result of new assessment requirements, special education teachers may have less time to address goals related to employment and independent living.

Practitioners report that some students and teachers are demoralized by what they perceive as unfair academic expectations.

It is unlikely that G&T grants alone are sufficient to cover the costs of G&T services required by regulation. Data suggest variation among Kentucky districts and schools in the services provided to G&T students.

Data suggest that opportunities to excel through G&T services are not currently provided equally to students in different demographic groups and at different school levels.

Tension between Academic and Nonacademic Goals. It is also possible that, as a result of assessment requirements under IDEA and NCLB, teachers may have less time to address the employment and/or independent living goals specified in IEPs for students with more severe disabilities. Practitioners report substantial demands on special education teachers' time associated with development and administration of alternate assessments. These demands may not always be met with increased staffing or support.

Teacher and Student Morale. Practitioners report instances of demoralization on the part of students with disabilities and special education staff who are having difficulty meeting new assessment and performance requirements. In some cases, students and staff may not be receiving the support necessary to assist them in meeting these new requirements. In others, the requirements may go beyond what can be reasonably expected for certain students.

Kentucky's Gifted and Talented Program

Revenue and Expenditures for Gifted and Talented Programs

It is unlikely that G&T program funding alone covers the costs of G&T services specified in regulations. Revenue for the program provided \$62 per G&T student identified in FY 2007. According to KDE, districts spent approximately twice as much on Gifted and Talented programs in FY 2007 as they received through G&T grants. Districts expenditures for the program vary widely.

Access to Gifted and Talented Services

Many students are identified as being gifted and talented in Kentucky. However, data suggest continuing challenges in ensuring that opportunities to excel through G&T services are distributed equally among students in different demographic groups and at different school levels. Disadvantaged students, students with disabilities, and black students are identified as G&T at much lower rates than are other students. Higher percentages of G&T students perform at distinguished levels in elementary school than in middle and high school. AP data indicate significant progress in the achievement of nationally recognized standards of excellence by Kentucky students likely to be identified as G&T. However, successful AP test-takers are concentrated disproportionately in a small number of high schools.

Program Evaluation

Districts are required to submit extensive data in connection with the G&T program. These data do not support rigorous evaluation of program quality.

KDE requires districts to submit extensive G&T program data annually. Reporting categories are not clearly related to program quality and, in some cases, lack clear criteria. Districts are required to submit annual G&T evaluations. The quality of these evaluations is dependent on the ability of district G&T personnel to be rigorous and objective in their collection and interpretation of local data.

Implications for Future Research

Data presented in this report highlight a number of issues that may be important in providing efficient and effective services for special education students in the Commonwealth. These data raise questions about the relationships among special education regulations, funding mechanisms, district and school practices, and student services. The Education Assessment and Accountability Review Subcommittee might choose to explore some of these issues in future research. OEA has identified three areas of special concern: appropriate identification of special education students, sources of variation and increases in special education expenditures, and assessment of and accountability for special education students.

Appropriate Identification of Special Education Students

Appropriate identification of special education students is critical to ensuring that students with disabilities receive necessary services and to ensure that special education services are reserved for students who have disabilities. Students who are struggling in regular classrooms but do not have identifiable disabilities may be more effectively and efficiently educated in regular classrooms. Additional research is necessary to understand the influences of the following factors on special education identification rates: federal and state regulations, Kentucky's special education funding mechanisms, and school and district practices.

Sources of Variation and Increases in Special Education Expenditures

This report highlights two findings related to special education finance:

- 1) On average, high-wealth districts spend more to educate special education students than do low-wealth districts. This raises questions about the costs of educating students in different districts and the nature of services provided to students in different districts.

- 2) Over time, special education revenue has covered less and less of the cost of educating special education students. If this trend continues, special education expenses will place great strains on district budgets.

Data collected for this study do not explain these findings. Additional research is necessary to understand changes over time in the nature and costs of special education services, differences among districts in the nature and costs of special education services, and costs associated with educating students with different types of disabilities.

Assessment of and Accountability for Special Education Students

Recent changes in assessment and accountability policies appear to have spurred improvement in educational outcomes for some students with disabilities. At the same time, these changes have been implemented without full attention to their potential impact on all students with disabilities. This report highlighted great discrepancies between current academic expectations for students with disabilities and the achievement of these students as a group, even in the state's highest performing schools. OEA identified a number of concerns related to possible unintended consequences of new assessment and accountability policies. Additional research is necessary to understand the relationship between current assessment and accountability policies and staffing issues; assessment practices; and classroom instruction, including the use of accommodations.

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Appendix A

Data Sources for Practitioner Concerns

OEA staff consulted a number of data sources to identify practitioner concerns related to special education in the Commonwealth. These sources are listed below.

Interviews

In semi structured interviews, practitioners were asked to comment on the following topics: factors affecting variation among districts in identification of students for special education, issues affecting the quality of services in districts and schools, the effect of current assessment practices on teachers and students, and resources available to support special education program improvement. Interviews were conducted with representatives from the following groups:

Kentucky Council for Administrators of Exceptional Children, Director
Kentucky Council for Exceptional Children, Director
Kentucky Department of Education, Division of Exceptional Children, Director and Staff
Special Education State Transition Coordinator

E-mail Survey

An e-mail survey was sent to all 11 special education cooperative directors. The e-mail survey focused on the same issues identified in the preceding paragraph. Only two directors submitted responses.

Appendix B

Summary of Annual Performance Report for Federal Fiscal Year 2006

Table B.1 provides a summary of data on the federal fiscal year 2006 Annual Performance Report submitted by DEC to Office of Special Education Programs (OSEP). The table also contains a summary of DEC comments relevant to certain indicators. Because of the different start dates, federal fiscal year data are not always taken from the same year as the state fiscal year.

Table B.1
Summary of Annual Performance Report for Federal Fiscal Year 2006
for Students With Disabilities

Indicator		Actual 2006 Data	Target	Target Met	Summary of DEC Comments
1	Graduation rate	65.2%	66.7%	NO	Steady increase in graduation rate, 2001-2007
2	Dropout rates	4.94%	4.6%	NO	
3a	KY districts meeting AYP for students with disabilities	N/A	45%	N/A	Actual data unavailable in 2007 due to changes in assessment system and noncomparability of assessment data from 2006 and 2007.
3b	Rate of participation in state assessments	97.6%	100%	In compliance	There was a 7% increase in participation rates from 2006 to 2007.
3c	Percent proficient or above on state assessment	N/A	55%	N/A	Actual data unavailable in 2007 due to changes in assessment system and noncomparability of assessment data from 2006 and 2007
4	Number of districts with discrepancy in number of students with disabilities suspended for 10 days or more versus nondisabled students	4%	8%	YES	DEC reported concerns about the integrity of discipline-related data for all students and has taken steps to correct the problem. However, DEC is confident about data documenting reduction in discipline rates for students with disabilities.
5a	Percent students 6-21 spending 80% or more of instructional day in general education program	66.83%	63%	YES	

Continued on next page.

Table B.1, continued

	Indicator	Actual 2006 Data	Target	Target Met	Summary of DEC Comments
5c	Number of students receiving special education services in public and private residential day schools	2.24%	2.2%	No	Indicator similar to previous year.
6	Percent of preschool students receiving services in settings with typically developing peers	N/A	N/A	N/A	OSEP did not require states to report on indicator 6 due to revisions in data collection requirements.
7	Preschool outcomes	N/A	N/A	N/A	Target not yet required.
8	Percent of parents reporting schools' facilitation of parent involvement	29%	28.5%	Met	Parent survey response rate was 12.9%. Data reported may not be representative of the general parent population.
9	Percent of districts with disproportionate representation of racial and ethnic groups in special education due to inappropriate identification	3.4%	0%	NO	Percents may be lower pending investigation of districts' identification practices.
10	Percent of districts with disproportionate representation of racial and ethnic groups in specific disability categories due to inappropriate identification	14.94%	0%	NO	African Americans were the racial group most frequently over identified. The categories in which they were most commonly overidentified are mental disabilities and behavior disorders. Percents may be lower pending investigation of districts' identification practices.
11	Percent of children evaluated for special education within 60 days	94.48%	100%	NO	DEC believes it is in substantial compliance with this indicator as parent factors were the most commonly reported reasons for delay, followed by transfer of students. Federal regulations state that districts will not be regarded as noncompliant as a result of parental factors and transfer of students.

Continued on next page.

Table B.1, continued

	Indicator	Actual 2006 Data	Target	Target Met	Summary of DEC Comments
13	Percent of youth aged 16 and older with an IEP that includes coordinated, measurable annual IEP goals and transition services	67.6%	100%	NO	
14	Postschool outcomes	N/A	N/A	N/A	DEC is in the initial stages of collecting and analyzing data required for this indicator.
15	Percent of noncompliances identified through the general supervision system that are corrected within 1 year	64.92%	100%	NO	There was a great increase in the degree of noncompliance due to inclusion of Kentucky Continuous Monitoring Process data as possible areas of noncompliance. The majority of noncompliance was related to indicators 8, 12 and 13.
16	Percent of signed, written complaints with reports issued that were resolved within 60-day or extended timeline	100%	100%	YES	Responsibility for written complaints has been relocated from the Office of Legal and Legislative Services to the Division of Exceptional Children. DEC has established an electronic database to monitor complaints.
17	Percent of fully adjudicated due process hearing requests that were fully adjudicated within 45 day or extended timeline	33%	100%	NO	These data represent only three cases, two of which involved the same student and district. DEC believes these data reflect mistakes made by the hearing officer related to timeline extensions.
18	Percent of hearing requests that went to resolution sessions that were resolved through resolution session settled agreements	80%	70%	YES	
19	Percent of mediations held that resulted in mediation agreements	75%	61%	YES	
20	State data reported to OSEP are timely and accurate	100%	100%	YES	

Source: Commonwealth. Dept. of Ed. *FFY 2006*.

Appendix C

Data Required To Identify Students With Specific Learning Disability, Developmental Delay, and Other Health Impaired

Identification trends described in Chapter 2 illustrate decreases over time in the rates of students identified with a specific learning disability (SLD) and increases in the rates of students identified as developmentally delayed (DD) and other health impaired (OHI). These trends may reflect, in part, differences in the criteria and Admissions and Release Committee (ARC) membership required for identification in these categories.

Administrative regulations are more specific about the evidence and ARC membership required to identify students for SLD than for DD or OHI. These differences hold true for both the regulations revised August 4, 2008, and for previous regulations. In the past, ARCs were permitted to use “professional judgment” in identifying a child with DD and OHI but were required to consult individual diagnostic regression data to identify a child with SLD. Current eligibility criteria continue to be more restrictive for SLD than for DD or OHI. Eligibility requirements for these disabilities are summarized in the section that follows.

Specific Learning Disability

707 KAR 1:280 Section 1 (59) defines SLD as a disorder that adversely affects the ability to acquire, comprehend, or apply reading, mathematical, writing, reasoning, listening or speaking skills...(the SLD) may include dyslexia, dyscalculia, dysgraphia, developmental aphasia, and perceptual/motor disabilities.

707 KAR 1:310 Section 2 states that ARCs evaluating children for SLD “shall also include other professionals, relative to the area(s) of concern, such as a school psychologist, speech-language pathologist, or educational specialist.” ARC members must be qualified to conduct individual, diagnostic assessments and must present extensive evidence of the disability. Required evidence includes both assessment and classroom observation data.

Developmental Delay

According to 707 KAR 1:280 Section 1 (22) developmental delay means that a child within the ages of three (3) through eight (8) has not acquired skills, or achieved commensurate with recognized performance expectations for his age in one (1) or more of the following developmental areas: cognition, communication, motor development, social-emotional development or self-adaptive behavior.

A student may be identified as developmentally delayed if there is a discrepancy between the child’s age and level of performance as evidenced by a norm-referenced test or “the professional judgment of the ARC that there is a significant atypical quality or pattern of development.”

Other Health Impairment

707 KAR 1:280 Section 1 (42) defines other health impairment as a condition of limited strength, vitality or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment, that (a) Is due to a chronic or acute health problem, such as acquired immune deficiency syndrome, asthma, attention deficit disorder, attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, Tourette's syndrome, or tuberculosis; and (b) adversely affects a child's educational performance.

Kentucky regulations do not explicitly require that ARCs include members with medical expertise. ARC members are not required to consult specific forms of evidence related to students' health status to determine eligibility in this category. For example, ARCs are not required to obtain medical diagnoses of students' health conditions (Goff).

Appendix D

Summary of District Violations of Regulations, FY 2006-FY 2008

Table D.1 summarizes the specific regulations violated by districts receiving corrective action plans in FY 2006-FY 2008.

**Table D.1
Regulations Violated by Districts
Receiving Correction Action Plans, FY 2006-FY 2008**

Summary of Regulation Violated	# of Districts
707 KAR 1:290. Free, appropriate education (FAPE). Provide FAPE to a child with a disability.	2
707 KAR 1:300, Section 2. Child Find, Evaluation and Reevaluation. Follow policies and procedures for child find, including action on a referral.	4
707 KAR 1:310 Evaluation. Determine the need for an individual evaluation to determine eligibility for special education services.	1
707 KAR 1:320, Section 1. Develop and implement an appropriate IEP.	5
707 KAR 1:320, Section 1. Ensure that specific accommodations, modifications, and supports are provided.	1
707 KAR 1:320, Section 1. Individualized Education Program. Section 1. Make the student's IEP available to every general education teacher, special education teacher, related service provider and other service providers responsible for its implementation.	2
707 KAR 1:320, Section 2. IEP. Ensure that the IEP is revised to address any lack of progress in the general curriculum.	1
707 KAR 1:320, Section 4. IEP. Provide prior notice of an ARC meeting, ensure the meeting is scheduled at a mutually agreeable time and place, notify parents of the purpose of the meeting, and notify the parents who should be in attendance.	2
707 KAR 1:320, Section 5. IEP; consider the student's strengths and weaknesses in the development of the IEP.	3
707 KAR 1:340 Procedural safeguards: follow procedural safeguards with regard to the student including scheduling of ARC meetings at a mutually agreeable time, allowing parent participation and conducting appropriately constituted ARC meetings.	2
707 KAR 1:340, Section 2. Procedural Safeguards and State Complaint Procedures. Independent evaluation. Provide an independent evaluation at the request of the parent.	1
707 ARC 1:350. Placement decisions. Follow appropriate procedures with regard to student placement and service decisions through the ARC process.	3
707 KAR 1:360, Section 8. Confidentiality of information. Protect the confidentiality of personally identifiable information.	1

Source: Atwood.

Appendix E

Staffing Data, Kentucky and Nation

Table E.1 provides a comparison of overall student-to-staff ratios for different categories of special education staff between Kentucky and the nation. As the table illustrates, the ratios of special education students ages 6-21 to special education teachers and of special education students ages 3-21 to special education aides are similar in Kentucky and the nation.

There is, however, a substantial staffing difference between Kentucky and the nation in the ratio of special education students to related services providers such as school psychologists, audiologists, and diagnostic and evaluation staff. The ratio of special education students ages 3-21 in Kentucky per related service provider is 34.7, significantly higher than the national ratio of 24.4.

The most striking difference evident in Table E.1 is between the ratio of 65.3 special education students ages 3-5 in Kentucky per special education teacher and the national ratio of 15 special education students ages 3-5 per special education teacher. As described in Chapter 2, a significantly higher percentage of children ages 3-5 are identified as special education in Kentucky versus the nation. Data reported in Table E.1 indicate that these children are not being taught by special education teachers at the same rate as children ages 3-5 in the nation. According to DEC staff, this discrepancy is explained by the fact that the interdisciplinary early childhood education certificate for preschool teachers in Kentucky, as described in 16 KAR 2:040, qualifies regular preschool teachers to complete IEPs and instruct students with disabilities.

Table E.1
Student-to-Staff Ratios for Kentucky and Nation, Fall 2006

	Students Ages 3-5 Per Teacher	Students Ages 6-21 Per Teacher	Students Ages 3-21 Per Aides	Students Ages 3-21 Per Related Service Provider
Kentucky	65.3	13.7	20.1	34.7
Nation	15.0	14.3	17.2	24.4

Source: Staff compilation using IDEA B staffing data from the U.S. Department of Education's Office of Special Education Programs.

Table E.2 shows differences that the ratio of special education students to most types of related services providers is higher in Kentucky than the nation. However, the ratio of special education students per speech pathologist, work study coordinator, and rehabilitation counselor in Kentucky is actually lower than the nation's.

Table E.2
Students and Staff, Numbers and Ratios
Kentucky and Nation, Fall 2006

	KY Staff	KY Student-to-Staff ratio	Nation Staff	Nation Student-to-Staff ratio
Speech Pathologists	1053	103.3	47,001	143.0
Non-professional staff	551	197.0	44,767	150.0
Psychologists	346	314.4	30,533	220.1
Other professional staff	264	412.1	58,511	114.9
Counselor	238	457.1	17,668	380.4
Occupational Therapist	203	536.0	16,474	407.9
Physical Therapist	109	998.1	7,588	885.7
Diagnostic Evaluation Staff	103	1,056.3	9,228	728.3
Interpreters	102	1,066.6	6,840	982.5
Work-Study Coordinators	52	2,092.3	2,400	2,800.1
Vocational Education Teachers	41	2,653.6	4,817	1,395.1
Social Workers	23	4,730.3	19,342	347.5
Physical Education Teachers	16	6,799.9	8,302	809.5
Audiologist	15	7,253.2	1,460	4,603.0
Rehabilitation Counselor	11	9,890.7	253	26,562.8
Recreation Specialist	5	21,759.6	379	17,731.9
Total Numbers of Special Education Students				
	Kentucky		Nation	
Ages 3-21	108,798		6,720,400	
Ages 3-5	21,317		698,938	
Ages 6-21	87,481		6,021,462	

Source: Staff calculation using data from U.S. Department of Education's Office of Special Education Programs.

Appendix F

Kentucky Districts by Wealth Quintile

OEA often analyzes data by district wealth quintile. Districts are broken by average daily attendance into five groups based on district property wealth. Quintile 1 represents the districts with the lowest property wealth per pupil. Quintile 5 represents the districts with the highest property wealth per pupil. Table F.1 indicates wealth quintile for Kentucky districts in FY 2007.

Table F.1
Districts by Wealth Quintile, FY 2007

Quintile	Districts
1	Adair, Allen, Barbourville Independent, Bath, Bell, Berea Independent, Bracken, Breathitt, Butler, Carter, Casey, Clay, Cloverport Independent, Corbin Independent, Dawson Springs, Dayton, East Bernstadt Independent, Edmonson, Elliot, Eminence, Estill, Fairview Independent, Fleming, Green, Harlan, Harlan Independent, Hart, Hazard, Jackson, Jackson Independent, Jenkins Independent, Johnson, Knox, LaRue, Leslie, Letcher, Lewis, Lincoln, Ludlow, Magoffin, Mayfield, McCreary, Meade, Menifee, Metcalfe, Monroe, Monticello, Morgan, Muhlenberg, Nicholas, Ohio, Owsley, Pineville, Powell, Providence, Raceland, Robertson, Rockcastle, Russellville Independent, Science Hill Independent, Todd, West Point Independent, Whitley, Williamsburg Independent, Williamstown Independent, Wolfe
2	Ashland Independent, Barren, Bowling Green Independent, Caldwell, Carlisle, Christian, Clinton, Crittenden, Cumberland, Elizabethtown Independent, Floyd, Frankfort Independent, Fulton, Fulton Independent, Garrard, Grant, Graves, Grayson, Greenup, Harrison, Henry, Hickman, Hopkins, Laurel, Lawrence, Logan, Martin, McLean, Middlesboro Independent, Montgomery, Murray Independent, Owen, Paris Independent, Pendleton, Perry, Pike, Russell, Taylor, Trimble, Union, Washington, Wayne, Webster
3	Anderson, Ballard, Bellevue, Bourbon, Boyd, Boyle, Breckinridge, Bullitt, Campbellsville, Caverna Independent, Daviess, Erlanger-Elsmere Independent, Gallatin, Glasgow, Hancock, Hardin, Henderson, Knott, Madison, Marion, Mason, Mercer, Nelson, Newport Independent, Owensboro Independent, Paducah Independent, Paintsville Independent, Pulaski, Rowan, Russell Independent, Silver Grove Independent, Simpson, Spencer, Trigg, Walton Verona Independent,
4	Bardstown Independent, Beechwood Independent, Burgin Independent, Calloway, Carroll, Clark, Covington Independent, Danville Independent, Fort Thomas Independent, Franklin, Jessamine, Kenton, Livingston, Lyon, Marshall, McCracken, Oldham, Pikeville Independent, Scott, Shelby, Somerset, Warren, Woodford,
5	Anchorage Independent, Boone, Campbell, Fayette, Jefferson, Southgate

Source: Staff analysis of KDE data

Appendix G

Special Education Funding Mechanisms

Table G.1 describes the central mechanisms used to fund special education in elementary and secondary schools in Kentucky and surrounding states using categories described by Parrish et al. (*State*). The table does not include descriptions of funding mechanisms for services such as transportation, private schools, special state facilities or special provisions for very severely disabled. The authors describe these mechanisms in greater detail.

Table G.1
Mechanisms Used To Fund Special Education in Kentucky
and Surrounding States

State	Mechanism	Type*
Illinois	Distributes funds to school districts for reimbursement of salaries of special education personnel based on a fixed rate for different categories of personnel, with spending caps.	Reimbursement
Indiana	Distributes flat amounts to districts based on a modified unduplicated count of special education students in different categories, as follows: <ul style="list-style-type: none"> • \$8,246 for each special education student identified as “severe” • \$2,238 for each identified as “mild” or “moderate” • \$531 for each student identified as “communication disordered” Counts of students with communication disorders can be duplicated if the student is also in another category.	Pupil weights (set dollar amount)
Kentucky	Pupil counts of students with different disabilities are used to modify the per-pupil base guaranteed through the state’s basic funding mechanism. The following pupil weights are used to calculate add-ons for students with disabilities: <ul style="list-style-type: none"> • high incidence (0.24 weight) • moderate incidence (1.17 weight) • low incidence/severe (2.35 weight) 	Pupil weights (adjustment to basic aid)
Missouri	The majority of funds for special education services are included in the state’s per-pupil basic aid funding, which is based on average daily attendance for all students not on specific counts of special education students. When the percent of special education students in a district exceeds the annual thresholds established in the basic aid formula, districts receive additional funding through adjustment of the per-pupil basic aid amount by a special education pupil weight of 0.75. This is a single weight applied to special education students in all disability categories. The threshold in 2006-2007 is 14.9%.	Census-based and pupil weight (adjustment to basic aid)

Continued on next page.

Table G.1, continued

Ohio	<p>Pupil counts of students with different disabilities are used to modify the per-pupil base guaranteed through the state's basic funding mechanism. The following pupil weights are used in the state's basic aid calculations:</p> <p>1-speech only (0.28 weight) 2-learning disability, cognitive disability and other health impairment (minor) (0.37 weight) 3-hearing impairment, visual impairment, and emotional disturbance (1.7 weight) 4-other health impairment (major), orthopedic impairment (2.4 weight) 5-multi-handicapped (3.1 weight) 6-traumatic brain injury, autism, deaf-blind (4.7 weight)</p> <p>The weights assigned to students with different disabilities were adjusted in 2002 based on revised calculations of actual costs associated with different types of disabilities.</p>	Pupil weights (adjustment to basic aid)
Tennessee	<p>Funds portions of 10 different kinds of staff positions based on pupil counts. Very high-cost students are funded under a different mechanism.</p>	Resource based
Virginia	<p>Funds special education staff based on pupil counts in different disabilities and staffing standards established by the Board of Education for those disabilities. State share determined by a composite index of local ability to pay.</p>	Resource based
West Virginia	<p>There is no categorical funding for special education. Funds for special education services are included in the state's per-pupil basic aid funding.</p>	Census based

Note:* Funding types based on categories described in Parrish. *State*.

Source: Staff compilation from Parrish. *State*; and information from surrounding states' departments of education.

Appendix H

Alternate Assessments for Students With Disabilities

The Kentucky Department of Education administers three types of alternate assessments: the portfolio assessment, the transition attainment record (TAR), and the attainment task (AT). Together, they fulfill the testing requirements of NCLB and IDEA. The portfolio assessment fulfills requirements of NCLB that all students be assessed on grade-level content standards in reading and mathematics in grades 3-8 and once in high school. The AT and TAR fulfill requirements of IDEA that students with disabilities be included in all general state- and districtwide assessments. The AT assesses subjects that are not included in the Alternate Portfolio but are included in KCCT. The TAR assesses students on content that mirrors the PLAN, EXPLORE, and ACT exams.

Table H.1 describes which alternative assessments align with different components of the state assessment system.

Table H.1
CATS 2007-2008 Alternate Assessment Components

Grade	Mirror for KCCT							Mirror for EXPLORE/PLAN/ACT
	Reading	Math	Science	Social Studies	Arts & Humanities	Practical Living/ Voc. Studies	Writing	English, Math, Science, Reading
End of Primary (grade 3)	P	P						
4	P	P	P			AT	AT	
5	P	P		AT	AT		AT	
6	P	P				ILP begins		
7	P	P	P			AT	AT	
8	P	P		AT	AT	ILP continues	AT	Transition Attainment Record in English, Math, Science, Reading
9						ILP in place		
10	P					AT		Transition Attainment Record in English, Math, Science, Reading
11		P	P	AT	AT	ILP maintained		Transition Attainment Record in English, Math, Science, Reading
12						ILP maintained	AT	

Note: ILP=Individual Learning Plan. P=Portfolio. AT=Attainment Tasks.

Source: Commonwealth. Dept of Ed. *CATS*.

Appendix I

NAEP Achievement Trends for Students With Disabilities

National Assessment of Educational Progress (NAEP) achievement trends shown in Table I.1 parallel KCCT achievement trends discussed in Chapter 4. With the exception of 8th-grade reading, there have been steady increases in the percentages of Kentucky's students with disabilities achieving a score of basic or above. Table I.1 also confirms the growing gap—in Kentucky as well as the nation— between the performance of students with disabilities and those without disabilities after the elementary grades. This trend is especially pronounced in mathematics. In 2007, for example, the gap between the percentage of Kentucky's disabled and nondisabled students scoring basic or above in mathematics was nearly twice as great in 8th grade as it was in 4th grade.

NAEP data also provide some measure of how students with disabilities in Kentucky perform compared to students with disabilities across the nation. In most years, the performance of the two student groups has not been statistically significantly different. In 2007, however, students with disabilities in Kentucky performed significantly better than students with disabilities in the nation on the 4th-grade reading assessment.

Table I.1
Percent At or Above Basic, Students With Disabilities and
Students Without Disabilities, NAEP 2003-2007

	Students With Disabilities			Students With No Disabilities		
	KY	U.S.	Statistical Significance	KY	U.S.	Statistical Significance
Reading Grade 4						
2003	33%	29%	=	66%	65%	=
2005	40%	33%	=	67%	66%	=
2007	44%	36%	>	71%	69%	=
Reading Grade 8						
2003	37%	32%	=	81%	77%	>
2005	33%	33%	=	78%	75%	>
2007	35%	34%	=	76%	76%	=
Math Grade 4						
2003	40%	50%	<	76%	79%	<
2005	52%	56%	=	78%	83%	<
2007	63%	60%	=	82%	84%	<
Math Grade 8						
2003	17%	29%	<	70%	71%	=
2005	25%	31%	=	68%	72%	<
2007	35%	33%	=	72%	74%	=

Notes: Differences between the U.S. and Kentucky were tested for statistical significance at the 90 percent confidence level. Since results for students with disabilities have smaller sample sizes and greater variation than results for students without disabilities, statistical tests are less likely to find significant differences.

> indicates that Kentucky is significantly higher than the U.S., = indicates Kentucky is not significantly different from the U.S., and < indicates that Kentucky is significantly lower than the U.S.

Source: U.S. Dept. of Ed. National.

Exclusion and Accommodation Rates

Variation among states in identification, exclusion, and accommodation rates of students with disabilities has raised questions about the interpretation of NAEP data. Table I.2 illustrates the differences in identification, exclusion, and accommodation rates between Kentucky and the nation in 2007.

Kentucky's rates of identification of students with disabilities on the NAEP assessment are similar to the national average. However, in most grades, Kentucky's rates of exclusion are higher than the national average. Students with disabilities can be excluded from the NAEP exam if they do not take the regular state assessment or if their IEP specifies an accommodation that is not permitted on NAEP. In 4th-grade reading and 8th-grade reading and mathematics, Kentucky excluded 2 percent more than the national average; in 4th-grade mathematics, Kentucky excluded 1 percent less than the national average. In 2007, the percentage of Kentucky

students with disabilities assessed on NAEP that received accommodations was less than the percentage of students with disabilities assessed on NAEP that received accommodations at the national level.

**Table I.2
NAEP Identification, Exclusion, and Accommodation Rates of
Students With Disabilities as a Percentage of All Students, 2007**

	Reading			Math		
	Identification	Exclusion	Accommodation	Identification	Exclusion	Accommodation
KY Grade 4	15	7	3	15	2	7
Nation Grade 4	14	5	6	14	3	8
KY Grade 8	13	7	3	13	6	5
Nation Grade 8	13	5	6	13	4	

Source: U.S. Department of Education. National.

Variation in exclusion and accommodation rates has been attributed, in part, to lack of consistency in decision-making criteria and practices related to assessment of students with disabilities among schools and states (Stancavage 19). For example, 38 percent of Kentucky students with disabilities who took KCCT reading and mathematics assessments in 2007 were allowed a reader accommodation. This accommodation is not permitted on the NAEP reading assessment. The National Assessment Governing Board is in the process of attempting to standardize identification, exclusion, and accommodation practices and to document potential relationships between identification, exclusion, and accommodation rates and states' achievement levels on NAEP.

Initial studies have compared states' actual NAEP scores with full population estimates that incorporate estimated scores of excluded students. In most cases, these studies suggest that Kentucky's exclusion rates have not had a statistically significant impact on the state's NAEP performance trends (U.S. Dept. *Investigating*).

Appendix J

Performance of Students With Disabilities on Alternate Assessments

Tables J.1 and J.2 show results from Kentucky's alternate assessment in reading and mathematics in FY 2007. In both reading and mathematics, at all grade levels, the majority of students taking the alternate assessment received an apprentice score. Few students received a score of proficient or distinguished. In reading and mathematics, a greater percentage of students received a novice score at the high school level than at the elementary level. As illustrated in the tables, the percentage of students with disabilities tested on the alternate assessment increases steadily through the middle and upper grades. In both reading and mathematics, the percentage of students who take the alternate assessment is more than double in high school than it is in the 3rd grade.

Table J.1
Performance and Number of Students With Disabilities Taking
Alternate Reading Assessment, 2007

Grade	Percent Novice	Percent Apprentice	Percent Proficient or Distinguished	Total Number Tested on Alternate Assessment	Percent of Disabled Students Tested on Alternate Assessment
3	26%	71%	3%	423	4.7%
4	23%	76%	3%	499	6.1%
5	21%	75%	4%	513	6.6%
6	28%	69%	3%	535	7.4%
7	24%	72%	4%	559	7.9%
8	31%	65%	4%	628	9.0%
10	34%	63%	3%	578	9.7%

Sources: Staff calculation using data from Commonwealth, Dept. of Ed. *Kentucky*; and Commonwealth, Dept of Ed. *FFY 2006*.

Table J.2
Performance of and Number of Students With Disabilities Taking
Alternate Mathematics Assessment, 2007

Grade	Percent Novice	Percent Apprentice	Percent Proficient or Distinguished	Total Number Tested on Alternate Assessment	Percent of Disabled Students Tested on Alternate Assessment
3	22%	74%	4%	423	4.7%
4	21%	74%	5%	499	6.1%
5	16%	74%	10%	513	6.6%
6	17%	80%	3%	535	7.4%
7	19%	75%	6%	559	7.9%
8	25%	69%	6%	628	9.0%
11^t	29%	62%	9%	494	10.6%

Source: Staff calculation using data from Commonwealth. Dept. of Ed. *Kentucky*; and Commonwealth. Dept. of Ed. *FFY 2006*.

Alternate assessment scores must be interpreted with caution because the assessment formats and administrative procedures on the alternate assessment are not standardized. Assessment items are developed by individual teachers and administered to students under conditions appropriate to the nature of students' disabilities; these conditions vary widely. Assessment results are, thus, not reliable enough to permit comparisons among students, schools, or districts. Special educators and psychometricians, as a group, are in the initial stages of collecting data and refining expectations related to academic performance for the most significantly cognitively disabled students. Also, the method used to score alternate assessment portfolios includes a measure of the degree to which the supports provided to students during the assessment are appropriate to the students' needs. This measure is intended to assess the quality of instruction rather than student learning and is also not standardized.

Appendix K

Gifted and Talented Program District Grants

KDE awards districts with G&T grants that are based on the district's total average daily attendance. KDE uses the following formula:

A district with a population of 0-175 (1 district) receives \$11,450. A district with a population of 176-500 (1 district) receives \$11,445 and a district with a population of 501-1,950 (57 districts) receives \$22,650. A district with a population of 1,951-2,000 (5 districts) receives \$28,300 and a district with a population of 2,001-4,500 (68 districts) receives \$45,250. A district with a population of 4,501-8,000 (22 districts) receives \$67,850; a district with a population of 8001-10,000 (4 districts) receives \$73,500; and a district with a population of 10,001-15,000 (7 districts) receives \$79,150; a district with a population of 30,001-35,000 students (1 district) receives \$102,550; and a district with a population of 90,001-95,000 + (1 district) receives \$172,750.

Source: Commonwealth. Dept. of Ed. *Report*.

Appendix L

Gifted and Talented Identification Rates by Student Subgroup

As illustrated by Table L.1, the gap between the percentage of G&T students in these subgroups and the percentage of the total population in these subgroups widens in high school. In grades 4 through 8, 23.1 percent of G&T students are economically disadvantaged, compared to only 16.2 percent in grades 9 through 12.¹ The percentage of black students who are gifted and talented drops from 4.8 percent in grades 4 through 8 to 3.9 percent in grades 9 through 12. The percentage of G&T students who are Hispanic drops from 1.2 percent in grades kindergarten through 3 to 0.9 percent in grades 4 through 8 and to 0.7 percent in grades 9 through 12.

Table L.1
Percent of Gifted and Talented Students and All Students
By Student Subgroups and Grade Levels, 2007

	All Students K-12	G&T Grades k-12	G&T Grades K-3	G&T Grades 4-8	G&T Grades 9-12
Racial Group					
White	84.2%	91.9%	91.3%	91.5%	93.4%
Black	10.6%	4.4%	4.2%	4.8%	3.9%
Hispanic	2.4%	0.8%	1.2%	0.9%	0.7%
Asian	1.3%	1.4%	1.4%	1.4%	1.4%
Other	1.7%	1.3%	1.9%	1.5%	0.7%
Gender					
Male	51.5%	46.9%	46.0%	47.6%	46.6%
Female	48.5%	53.1%	54.0%	52.4%	53.4%
Other					
Disadvantage	50.0%	21.8%	26.9%	23.1%	16.2%
Disability	15.0%	1.1%	0.6%	1.3%	1.2%

Note: Percents do not always add to 100 due to rounding.

Source: Staff calculation using Student Information System data from the KY Dept. of Ed.

¹ The decrease in high school of the percentage of gifted students who are economically disadvantaged reflects, in part, a decrease in the percentage of all high school students who report being economically disadvantaged.

Appendix M

Gifted and Talented Program District Evaluation Data

The following data were reported by districts to KDE as part of their required annual G&T program evaluations. The following practices were reported to KDE by 175 districts in FY 2007:

- 118 districts report equitable screening, selection & services for all PTP students.
- 111 districts report equitable identification for all students in all categories
- 66 Districts report regularly using grouping options at all levels, in all content areas, in all schools
- 81 Districts report differentiating services to match all PTP/G&T students' needs
- 104 districts report including multiple services options and interventions for special populations (i.e.: disadvantaged, disabilities, underachieving)
- 119 districts report offering a range of service options for PTP/G&T students, in all categories, in all levels
- 39 districts report having ongoing, appropriate professional development in gifted education
- 97 districts report meeting requirements of parent communication
- 155 districts report having policies & procedures for G&T available for public inspection
- 80 districts report meeting requirements relating to curriculum
- 120 districts report having a G&T coordinator in collaboration with district and building leadership implementing services to students
- 119 districts report having a G&T coordinator collaborating with district and building leadership to monitor services to students

Source: Ellis.

Appendix N

Advanced Placement Exams

Advanced Placement (AP) exams offered by the College Board provide students the opportunity to be assessed on advanced content and earn college credit in 34 subject areas. These exams are the nation’s most commonly accepted standardized measure of students’ mastery of challenging content in specific subject areas. AP exam scores range from a high of 5 to a low of 1. Most colleges allow credit for a score of 3 or higher. In the last decade, many states have enacted policies to increase the number of AP courses available to students. This trend has been spurred by research suggesting relationships between students who score well on AP exams and those who succeed in postsecondary education.

Table N.1 shows increases in Kentucky and all surrounding states in the percentages of graduating seniors who took AP exams and who took AP exams and scored 3 or higher between 2002 and 2007. Nationwide, the percentage of high school students taking AP exams increased by 6.8 percentage points between 2002 and 2007. The percentage of students scoring 3 or higher on AP exams during this same time period increased at a slower pace, however, by 3.5 percentage points. Between 2002 and 2007, Kentucky demonstrated slightly greater gains than the nation in the percentage of students who took an AP exam in high school; however, Kentucky gained slightly less than the nation in the percentage of students scoring 3 or higher on an AP exam in high school.

Table N.1
Students Taking and Scoring 3 or Higher on AP Exams in High School
Kentucky, Nation, and Surrounding States, 2002-2007

Kentucky and Surrounding States	% of Students Who Took an AP Exam in High School			% of Students Scoring 3 or Higher on an AP Exam in High School		
	2002	2007	Change 2000-2007	2002	2007	Change 2000-2007
Illinois	16.2	22.0	5.8	11.7	14.9	3.2
Indiana	13.5	19.0	5.5	7.3	9.7	2.4
Kentucky	12.6	19.6	7.00	6.5	9.7	3.2
Missouri	7.2	10.6	3.4	4.7	6.7	2.0
Ohio	13.3	18.0	4.7	8.3	11.0	2.7
Tennessee	11.9	18.3	6.4	7.2	10.0	2.8
Virginia	26.9	34.4	7.5	16.9	21.5	4.6
West Virginia	10.7	15.2	4.5	5.2	7.0	1.8
Nation	18.1	24.9	6.8	11.7	15.2	3.5

Source: College Board 52.

Accompanying increases in the number of AP courses being offered nationwide come questions about standards of quality in AP courses and the conditions necessary to ensure high performance of students on AP exams. In response, the College Board now conducts an AP audit program that requires schools to verify that AP courses meet its course-specific requirements for curriculum, student resources, school resources, and resources required to take AP exams. The College Board also stresses the importance of teachers' professional development and the alignment of expectations for advanced work through the middle and high school years as important components of states' efforts to implement AP programs (College 4).

The College Board and policy makers in many states have also focused on increasing enrollment of ethnic and racial minorities in AP classes. Great gaps remain, however, between percentages of African American, Latino, and American Indian students in enrolling in AP courses and performing well on AP exams versus percentages of these groups in the general population.

Table N.2 shows gaps in Kentucky and the nation between the percentage of AP exam-takers scoring 3 or higher who are African American, Hispanic, or American Indian versus the percentage of those students of the total population.

Table N.2
Minority Students Scoring 3 or Higher on AP Exams in High School
Kentucky and Nation, 2007

Ethnic Group	Black or African American Students		Hispanic or Latino Students		American Indian or Alaska Native	
	% of Student Population	% of Students Scoring 3 or Higher	% of Student Population	% of Students Scoring 3 or Higher	% of Student Population	% of Students Scoring 3 or Higher
Kentucky	9.1%	2.5%	3.3%	1.7%	0.5%	0.2%
Nation	14.0%	3.3%	14.6%	13.6%	1.1%	0.4%

Source: College Board 52.