

Legislative Research Commission

Appropriate Identification and Service of Students With Disabilities: Special Education Eligibility, Funding, and Personnel Training

Research Report No. 393

Prepared by

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Foreword

In December 2010, the Education Assessment and Accountability Review Subcommittee directed the Office of Education Accountability to update legislators on issues identified in its 2008 *Review of Special Education in Kentucky*. This report describes actions taken by the Kentucky Department of Education to address concerns in the 2008 report about identification of students for special education. This report also presents data indicating continuing need for attention to this issue and connections between appropriate identification of students for special education, training of personnel, and methods of funding special education in the Commonwealth.

The Office of Education Accountability would like to thank the Kentucky Department of Education, school district staff, and special education cooperative staff for their assistance with this report.

Robert Sherman Director

Legislative Research Commission Frankfort, Kentucky November 2011

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Summary

The process of determining a student's eligibility for special education—referred to as identification in this report—has substantial educational consequences for students and fiscal consequences for states and districts. This report describes recent actions taken by the Kentucky Department of Education (KDE) to address concerns about appropriate identification in the Commonwealth and presents data indicating the need for continued attention to this issue. The report also suggests that concerns about appropriate identification are linked to concerns with personnel training and funding methods for special education in Kentucky.

At the preschool level, apparent differences among districts in the way that students are identified with disabilities raise concerns about the equitable allocation of preschool funding to districts and to individual children. Reliable identification of young children with particular disabilities is challenging, especially in broadly defined categories such as developmental delay. KDE has taken steps to improve identification practices at the preschool level. Further attention may be needed to ensure that preschool eligibility requirements are applied consistently.

At the elementary and secondary levels, it is likely that some students with learning difficulties are identified as special education students when they might be assisted more effectively and efficiently through additional or modified instruction in general education. KDE is addressing this concern by supporting districts in implementation of research-based interventions and through monitoring of district eligibility determinations. The department could supplement these efforts with documents that clarify specific terms used in determining disability and the level of training recommended for those evaluating students for special education.

Whether students with disabilities or learning difficulties are assisted through special education services or supports in general education, they need access to personnel who are trained to recognize and address their specific needs. Special education teachers do not necessarily learn these specific skills in preservice training. Districts should ensure ongoing training of personnel to provide additional or modified instruction to students with learning difficulties or disabilities whether through special or general education. The Education Professional Standards Board and KDE might offer guidance on recommended training through professional development or ongoing education for rank change.

Districts are required to ensure that students with disabilities receive necessary services, regardless of costs. Districts may need additional funding to educate students with disabilities whose needs can only be met through special education programs, especially those students who require unusually intensive supports. However, districts should also be encouraged to examine special education expenditures—which have increased steadily at the state level, despite recent drops in the number of student identified— to ensure that funded services are targeted directly at the needs of students. It is possible that by providing additional or modified instruction in general education, districts may reduce the need for special education and serve students more effectively and efficiently. Wealthy districts may have greater fiscal flexibility than less wealthy districts to invest in general education supports for students with learning difficulties or disabilities.

This report identifies several issues associated with the methods used to fund special education through the Support Education Excellence in Kentucky (SEEK) system and preschool. These include lack of alignment between weights at which students with disabilities are funded in preschool and costs of educating some students, and possible fiscal incentives to identify students for special education. At the preschool level, in particular, the funding method may lead to inequities in the distribution of funds among districts; uncertainty in funding from year to year; and unwieldy processes required for district staff, parents, and children in the determination of preschool eligibility. The General Assembly may wish to request further study of both SEEK and the preschool funding systems.

The report includes seven recommendations.

Recommendation 1.1

The Kentucky Department of Education should provide guidance documents to be used by admissions and release committees and parents in determining whether a suspected disability has an adverse effect on educational performance. These documents should be incorporated by reference in 707 KAR 1:002 Section 1(2).

Recommendation 1.2

The Kentucky Department of Education should clarify 707 KAR 1:300 Section 3(3) by providing expectations and additional clarification for use of research-based interventions in determinations of eligibility for special education. Clarification should include disability categories for which research-based interventions are required and standards to be used in determining whether a child is considered responsive to an intervention.

Recommendation 1.3

In accordance with 707 KAR 1:380 Section 6(5)(e,) the Kentucky Department of Education should continue to include unusual child count data, including but not limited to district identification rates in excess of 15 percent, in the criteria it uses to identify districts for onsite and desk audits.

Recommendation 1.4

The Kentucky Department of Education should consider including in its audits of district eligibility requirements, when appropriate, an analysis of the qualifications and training of admissions and release committee members and of staff conducting comprehensive evaluations. When necessary, district corrective action plans should include recommendations for districts to hire or consult with staff qualified to address deficiencies identified in audits.

Recommendation 1.5

The Kentucky Department of Education should consider providing documents that specify when admissions and release committees or evaluation teams should include members not specifically required by 707 KAR 1:320 Section 3.

Recommendation 2.1

In choosing districts for general monitoring required by 707 KAR 1:380 Section 1, the Kentucky Department of Education should consider including unusual staffing data as one selection criterion.

Recommendation 2.2

The Kentucky Department of Education and the Education Professional Standards Board, in collaboration with relevant subject area groups, should consider developing best practice documents regarding school and district staff training and continuing education in the following areas:

- identifying and supporting students with reading difficulties or disabilities;
- identifying and supporting students with mathematics difficulties or disabilities; and
- administering and interpreting diagnostic assessments.

Chapter 1

Special Education Identification

Introduction

This report examines connections among special education identification, personnel, and funding in the Commonwealth, focusing on recent efforts to distinguish between students that require special education services and those who might be supported effectively in general education programs.

Concerns about appropriate identification and service of special education students merit attention even if they apply to only a small percentage of the state's schools and districts.

States and districts take different approaches to identifying students for special education, especially in broadly defined categories. As mandated by the federal Individuals With Disabilities Education Act (IDEA), students with disabilities are entitled to the services necessary to ensure a free and appropriate public education. Thus, the determination of student eligibility for special education—referred to as identification in this report—has substantial educational consequences for students and fiscal consequences for states and districts. This report examines connections among special education identification, personnel, and funding in the Commonwealth, focusing on recent efforts to distinguish between students who require special education services and those who might be supported effectively in general education programs. The report also provides state assessment and graduation data for special education students.

The report focuses on concerns related to appropriate identification and service of special education students. Data collected for the report were not sufficient to determine the degree to which these concerns apply to Kentucky's many districts and schools; many or most districts and schools may already have practices in place to ensure appropriate identification and service of special education students. Because of the large number of students and substantial expenditures associated with special education programs, concerns about appropriate identification and service merit attention even if they apply to only a small percentage of the state's schools and districts.

Major Conclusions

The report has seven major conclusions.

 Differences among states and districts in percentages of students identified for special education are not likely caused by disability prevalence alone. Variation in identification rates reflects differences in the practices used by states and districts to identify students for special education. These different approaches have policy implications given the funding and legal entitlements associated with students identified for special education. Broad definitions in several disability categories can make it difficult for educators and parents to distinguish between students whose learning difficulties can be addressed in general education and those who require special education.

Recent attention to eligibility requirements among students ages 3 through 5 has resulted in substantial drops in the number of children identified. Further attention may be needed to ensure that eligibility requirements are applied consistently, with the minimum amount of stress and expense.

The Kentucky Department of Education (KDE) in 2010 identified concerns about identification of individual students and district practices in 38 districts. Afterward, the number of students identified for special education dropped substantially, resulting in an overall decrease of 3 percent in funds allocated to exceptional children through Support Education Excellence in Kentucky (SEEK) between 2011 and 2012.

- 2. Federal definitions in several disability categories permit broad interpretation. In some cases, these broad definitions can make it difficult for educators and parents to distinguish between students whose learning difficulties can be addressed appropriately through support in general education programs and those who require special education services. Following guidance from the United States Department of Education, the Kentucky Department of Education (KDE) has urged and assisted districts to provide research-based interventionscommonly known as response to intervention (RTI)-in general education programs. In theory, RTI should help to prevent misidentification of students with a disability while also providing support to all students with learning difficulties. Implementation of RTI in the Commonwealth has been associated with substantial drops in the percentage of students identified for special education. However, eligibility criteria still permit broad interpretation in several common disability categories. Kentucky's regulations might be clarified further to provide districts with clearer guidance in making eligibility determinations for students in broadly defined categories.
- 3. Kentucky identifies students ages 3 through 5 with a disability at nearly twice the national rate. In the Commonwealth, children in this age group are eligible for state-funded preschool if they have been identified with a disability or are considered at risk because of family poverty. KDE has taken steps to prevent misidentification of preschool students with a disability by requiring districts to provide children with RTI prior to identification. This process has been associated with substantial drops in the number of preschool students identified with a disability. The intervention process has also caused emotional stress for some families and educators and can be expensive for districts. Further attention may be needed to ensure that preschool eligibility requirements are applied consistently, with the minimum amount of stress and expense.
- 4. In 2010, audits conducted by KDE identified concerns about identification practices in 38 districts. Through corrective action plans, districts were required to address concerns with individual students as well as systemic concerns about district practices.¹ Following the audits, the number of students identified for special education in the state dropped substantially. In 2012, these drops will result in an overall decrease of 3 percent statewide in Support Education

¹ Unless otherwise noted, years referenced in this report refer to school years. The 2010 audits were conducted during the 2009-2010 school year.

Special education teachers may not always be intensively prepared with the specific skills necessary to identify and address student learning needs in all disability categories or content areas.

Special education expenditures have reached record highs in the Commonwealth. Districts are responsible for ensuring that special education students have free and appropriate public education, regardless of cost. However, it is possible that some of the funds currently spent on special education services might be spent more efficiently and effectively in general education programs.

Costs associated with some special education students can be up to 14 times greater than average special education costs. The state has no provision for extremely high-cost students. Excellence in Kentucky (SEEK) revenue allocated to exceptional children and a drop of 11 percent in exceptional child revenue in audited districts. According to Kentucky regulations, identification rates in excess of 15 percent can be considered unusual child count data and can prompt an audit. In 2011, the year after KDE's audits, 67 districts continued to meet or exceed this criterion. While KDE did not conduct additional audits in 2011, the department plans to incorporate a focus on eligibility requirements in its monitoring of districts in 2012.

- 5. Students are identified for special education under the assumption that they will receive instruction and support that is not available in general education. However, special education teachers may not always be intensively prepared with the specific skills necessary to identify and address student learning needs in all disability categories or content areas. In some cases, staff with education degrees or endorsements in areas other than special education may be better prepared to address the needs of students with disabilities than special education teachers.
- 6. Special education expenditures at the state level have continued to climb despite recent drops in the number of students identified. Districts are responsible for ensuring that special education students have free and appropriate public education, regardless of cost. However, it is possible that some of the funds currently spent on special education services might be spent more efficiently and effectively by supporting students with learning difficulties in general education. Wealthy districts may have greater fiscal flexibility than less wealthy districts to invest in general education supports for students with learning difficulties or disabilities. Districts that reduce special education identification rates lose SEEK exceptional child add-on funding but do not receive any additional funding to support students with learning difficulties in general education.
- 7. Costs associated with some special education students can be up to 14 times greater than average special education costs. While the state provides differential funding for students based on disability category, it has no provision for extremely highcost students. Thirty states have special funding provisions for high-cost students.

In December 2010, the Education Assessment and Accountability Review Subcommittee directed the Office of Education Accountability (OEA) to update legislators on issues identified in OEA's 2008 Review of Special Education in Kentucky.

The report analyzed state and federal data related to identification of students for special education, personnel servicing special education students, special education expenditures, and the academic outcomes of special education students.

Description of This Study

In December 2010, the Education Assessment and Accountability Review Subcommittee directed the Office of Education Accountability (OEA) to update legislators on issues identified in OEA's 2008 *Review of Special Education in Kentucky*. The 2008 report highlighted concerns about accurate identification and appropriate assessment of special education students as well as wide variation among Kentucky districts in special education expenditures.

This report draws from a variety of data sources. It analyzes recent state and federal data related to identification of students for special education, personnel servicing special education students, special education expenditures, and the academic outcomes of special education students. The report also includes data from KDE's 2010 audits of 39 districts and Education Professional Standards Board data on coursework in degree programs leading to special education certification. Trends emerging from these data are interpreted in light of national special education research and interviews with special education staff in the Commonwealth.

OEA conducted interviews with special education cooperative directors; KDE special education staff; and superintendents, special education directors, and finance officers in six Kentucky districts. Site visit districts were chosen based on a purposive sample of districts that met one or both of two criteria: substantial reductions in identification rates between 2009 and 2011, and high per-pupil spending relative to revenue received. All six site visit districts identified students for special education at rates that were at or below the state average. Two of the six districts had student poverty rates at or above the state average.

Organization of the Report

The remainder of this chapter reviews trends in percentages of students identified for special education overall and in particular disability categories. The chapter describes concerns about the process used to identify students for special education and concludes by describing KDE's role in monitoring identification rates and eligibility requirements.

Chapter 2 identifies links between identification concerns raised in Chapter 1 with concerns about certification requirements and ongoing training of special education personnel. Chapter 3 reviews recent trends in state special education revenue and expenditures in light of concerns raised by site visit districts and by education researchers. The chapter also includes fiscal data for state-funded preschool.

Chapter 4 reviews graduation rates and outcomes of special education students on reading and mathematics tests. The chapter also includes data on testing and instructional accommodations for students with disabilities.

Identification Trends in Elementary and Secondary Education

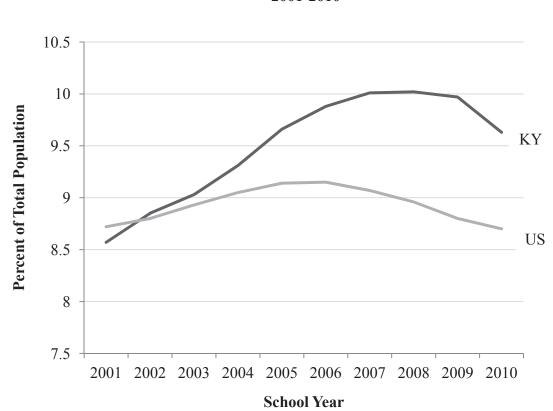
State and Federal Reporting Categories

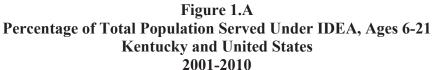
The federal government uses different age groups to report students eligible for special education than does the Commonwealth. When comparing identification trends in Kentucky and the US, this report uses federal categories that include children ages 3-5 and 6-21. In looking at trends over time within the Commonwealth and differences among Kentucky districts, the report uses state reporting categories of students ages 5-20 and preschool students.

Identification of Total Population Ages 6-21, Kentucky and US

Figure 1.A shows the percentage of the total population ages 6 through 21 identified for special education in Kentucky and the US between 2001 and 2010. Kentucky identified at a rate that was less than that of the US in 2001. Since then, it has identified at a rate that exceeds the nation's. In 2001, Kentucky's identification rate of 8.6 percent was less than the national rate of 8.7 percent. By 2010 Kentucky's identification rate of 9.6 percent was almost a full percentage point higher than the national rate of 8.7 percent. Identification rates began to decline in the US in 2006 and in Kentucky in 2009.

In 2010, Kentucky identified students ages 6 through 21 for special education at a rate that exceeded the nation's by almost a full percentage point. Identification rates in Kentucky and the nation have dropped in recent years.





Note: Identification rates in this figure are based on the number of students identified divided by the total population estimates of children ages 6 through 21 based on census data. Percentages are lower than those calculated by dividing numbers of students identified by public school enrollment. Source: Staff analysis of IDEA B data from the United States Department of Education.

In 2010, Kentucky ranked 16th highest of the 50 states in the percentage of students identified for special education.

At 9.6 percent, Kentucky ranked 16th highest of the 50 states in identification rates in 2010. State identification rates ranged from 6.6 percent in Idaho to 11.7 percent in New Jersey. Compared to surrounding states, Kentucky identified at lower rates than did West Virginia, Indiana, Illinois, and Ohio and at higher rates than did Missouri, Virginia, and Tennessee. Appendix A contains identification rates and poverty rates for all 50 states in 2010.

Prior to 2001, identification rates were substantially lower in both Kentucky and the US. In 1994, Kentucky identified at a rate of 7.5 percent, lower than the national rate of 8.2 percent.

Kentucky data show recent substantial drops in the numbers of students identified for special education. These drops have followed changes to the federal and state regulatory requirements for eligibility and KDE's 2010 audits of districts with high

Beginning in 2007, the percentage of students identified for special education in Kentucky began to decline. Statewide, 5,325 fewer students were identified for special education in 2011 than in 2007 despite increases in total membership during those same years.

Identification of Kentucky Students Ages 5-20

Table 1.1 shows the total number of students identified for special education in school years 2007 through 2011; total public school membership ages 5 through 20 in the fall of each year; and special education students as a percentage of membership. Kentucky identification rates reported in this table are higher than those reported in Figure 1.A because they are calculated as a percentage of public school membership rather than as a percentage of the total population through age 21. Beginning in 2007, the percentage of students identified for special education in Kentucky began to decline.² Statewide, 5,325 fewer students were identified for special education in z011 than in 2007 despite increases in total membership during those same years.

identification rates. Both will be described later in this chapter.

Table 1.1 Special Education Students, Fall Membership, and Percentage Identified for Special Education Elementary and Secondary 2007-2011

	2007	2008	2009	2010	2011	Percent Change 2007-2011
Special Education Students	96,950	96,953	96,129	95,041	91,625	-5.5%
Fall Membership	646,544	648,221	650,008	651,810	654,670	+1.3
Percent Special Education		14.96	14.79	14.58	14.00	-1.0

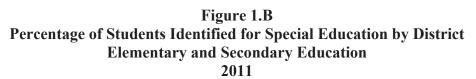
Notes: Count of special education students taken from SEEK exceptional child forecasts based on Dec. 1 child counts of students ages 5-20. Fall membership is taken from fall growth factor membership. Source: Staff analysis of data from the Kentucky Department of Education.

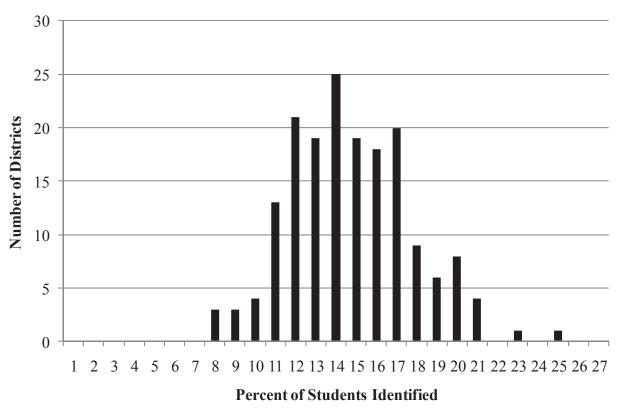
² Decline in the percentage of students enrolled in public schools identified for special education in the Commonwealth predates the decline in percentage of total population identified for special education in the Commonwealth as reported in Figure 1.A, because enrollment in Kentucky public schools has increased at a faster rate than has the total population of children ages 6 through 21.

In 2011, identification rates in Kentucky districts ranged from 8 to 25 percent. Identification rates in excess of 15 percent are among several criteria that can be used by KDE to select districts for child count audits. In 2011, 67 out of 174 districts had identification rates in excess of 15 percent.

Kentucky District Special Education Identification Rates

State averages mask substantial differences in identification rates of elementary and secondary students among Kentucky districts. As shown in Figure 1.B, district identification rates in 2011 ranged from 8 percent to 25 percent. Identification rates in excess of 15 percent are among several criteria that can be used to select districts for KDE child count audits described later in this chapter. In 2011, 67 out of 174 districts had identification rates in excess of 15 percent; 14 districts had identification rates of 20 percent or greater.





Note: Percentage of students identified for special education was calculated by dividing SEEK exceptional child forecasts based on Dec. 1 child counts of students ages 5-20 by fall growth factor membership.

Source: Staff analysis of data from the Kentucky Department of Education.

Students are only eligible for special education if they meet the specific criteria required for identification in 1 of 14 disability categories. Categories are defined in Kentucky regulations but based on categories established in federal regulations associated with the Individuals With Disabilities Education Act.

Students with disabilities are only eligible for special education if the nature of their disability requires specially designed instruction to provide them with access to education. Students with disabilities that do not require specialized instruction are ensured access to public education programs under Section 504 of the Americans With Disabilities Act.

Students with speech or language impairments form the single largest category of special education students. These students are believed to require relatively less intensive services.

Students in the eight lowincidence categories are believed to require more intensive services. These students are only 19 percent of all special education students.

Identification for Special Education by Disability Category

Students are only eligible for special education if they meet the specific criteria required for identification in 1 of 14 disability categories defined in Kentucky administrative regulations 707 KAR 1:002, 1:290, and 1:300. Kentucky's disability categories are based on categories established in federal regulations associated with IDEA. In Kentucky, these categories also determine eligibility of students with disabilities for state-funded preschool and the amount of additional funding that districts receive for each special education student identified in elementary and secondary education.

Section 504 Students. Students with disabilities are only eligible for special education if the nature of their disability requires specially designed instruction to provide them with access to education. Students with disabilities that do not require specialized instruction are ensured access to public education programs under Section 504 of the Americans With Disabilities. Students covered under Section 504 may require adaptations or modifications in the regular classroom or school building. However, these students are not funded separately through the SEEK formula described in Chapter 3.

Identification Rates by Disability Category. Table 1.2 shows Kentucky students ages 6 through 21 identified with particular disabilities in 2011 who were eligible for special education services. The table also shows the disabilities included in each of the funding categories used to calculate exceptional-child revenue in the SEEK funding formula. Students in the high-incidence category of speech or language impairments are funded at the lowest weight because they are believed to require relatively less intensive services. At 29 percent, these students are the single largest category of special education students.

Students in the eight low-incidence categories are funded at the highest weight because they are believed to require more intensive services. Together, students in this category are only 19 percent of all special education students. The categories of visual impairment, hearing impairment, deaf/blindness, orthopedic impairment, and traumatic brain injury each constitute less than 1 percent of special education students. The majority of special education students are identified in the five categories believed to require moderate services. The categories of other health impairment, developmental delay, and specific learning disability are of special interest because the criteria used to identify students in these categories are broad. The majority of special education students are identified in the five categories believed to require moderate services. The categories of other health impairment, developmental delay, and specific learning disability are of special interest as the criteria used to identify students in these categories are broad. Concerns about accurate identification of these students will be discussed later in this chapter.

Table 1.2Percentage of Kentucky Special Education Students Ages 6-21by Disability Category2011

Abbreviation	Disability Category	Percent			
SEEK Funding Category: High Incidence					
SLI	Speech or Language Impairment	23.65%			
	SEEK Funding Category: Moderate Incidence				
OHI	Other Health Impairment				
	(can include children with attention deficit disorder, asthma, diabetes)	17.34			
SLD	Specific Learning Disability (can include children with dyslexia, dyscalculia, and many other disorders)	16.62			
MMD	Mild Mental Disability	14.62			
DD	Developmental Delay (up to age 8 only)	8.43			
ΟΙ	Orthopedic Impairment*	0.54			
SEEK Funding Category: Low Incidence					
EBD	Emotional-behavioral Disability	6.02			
AUT	Autism	4.15			
FMD	Functional Mental Disability	3.66			
MD	Multiple Disabilities	3.38			
HI	Hearing Impairment	0.74			
VI	Visual Impairment	0.57			
TBI	Traumatic Brain Injury	0.27			
D/B	Deaf/blindness	0.02			

*Although students with orthopedic impairment are included in the moderate-incidence category for purposes of funding, they constitute less than 1 percent of students identified for special education. Source: Staff analysis of data from the Kentucky Department of Education.

The total percentage of students identified for special education is higher in the elementary grades than it is in the middle and upper grades. **Differences in Disability Identification by Age Group.** The total percentage of students identified for special education is higher in the elementary grades than it is in the middle and upper grades. In 2010, approximately 15 percent of 1st-grade students were

identified for special education, compared to 12 percent of 8th-grade and 11 percent of 12th-grade students.

The percentage of students identified in each category also varies by age group. Percentages of special education students identified with speech language impairments are greatest in the early grades. In 2010, 40 percent of students ages 6 to 11 were identified with speech or language impairment compared to only 4 percent of students ages 12 through 17. Students cannot be identified with developmental delay after age 8. The percentages of students identified in categories other than developmental delay and speech language impairment are greater in older age groups. For example, 25 percent of students ages 12 to 17 are identified with other health impairment compared to only 11 percent of students ages 6 to 11. In each age group, however, the majority of students who receive special education services are in the moderate incidence categories. Appendix B shows the percentage of students identified in each category by age group.

Differences Between Kentucky and US in Identification by Disability. Kentucky data reflect national data in the relatively low percentage of special education students identified in categories likely to require intensive services. Kentucky differs markedly from the US, however, in the percentage of students identified for special education in particular categories. In 2010, for example, Kentucky identified students with other health impairments at a rate that was almost twice as high as the nation's but identified students with specific learning disabilities at a rate that was less than half the national rate. Some of these differences are caused by the way particular disabilities are defined in Kentucky compared to other states. Appendix C compares identification rates in Kentucky and the US in particular categories and describes a few differences in the way disabilities are defined.

Changes Over Time. As shown in Appendix D, the growth in Kentucky's identification rates between 1994 and 2008 is explained primarily by increases in the number of students identified with developmental delays and other health impairments. The category of developmental delay did not exist in 1994 but is now a common identification category. While identification rates of autism have increased dramatically, from 0.01 percent in 1994 to 0.3 percent in 2008, autistic children still represent a relatively small percentage of special education students.

Recent drops in special education identification are accounted for primarily by students in the developmental delay, mild mental

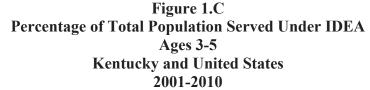
Kentucky data reflect national data in the relatively low percentage of special education students identified in categories likely to require intensive services. However, Kentucky identifies students with other health impairments at almost twice the national rate and identifies students with specific learning disabilities at less than half the national rate.

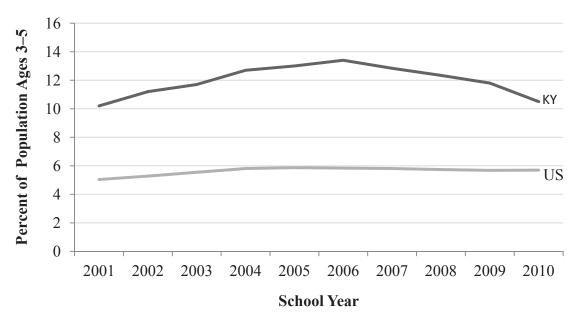
Growth over time in Kentucky's identification rate is explained primarily by increases in the number of students identified with developmental delays and other health impairments. While identification rates of autism have increased dramatically, autistic children still represent a relatively small percentage of special education students. disability, speech/language, and other health impairment categories. The number of students identified with specific learning disabilities and autism has increased.

Early Childhood Identification Trends

Identification of Children Ages 3-5, Kentucky and US

Figure 1.C shows percentages of children ages 3 through 5 identified for special education in Kentucky and the US. Kentucky's identification rate has been historically much higher than the rate in the US and has remained high despite recent decreases. Kentucky's 2010 identification rate of 10.5 percent was nearly twice the national rate of 5.7 percent.





Source: Staff analysis of IDEA data from the United States Department of Education.

Kentucky's higher identification rate among children ages 3 through 5 might be explained, in part, by the fact that students in Kentucky are more likely to attend preschool and to be evaluated for special education than are students in other states. According to the National Institute for Early Education Research, 19.5 percent

Kentucky's identification rate for children ages 3 through 5 has been historically much higher than the rate in the US and has remained high despite recent decreases. Kentucky's 2010 identification rate of 10.5 percent was nearly twice the national rate of 5.7 percent. of Kentucky children ages 3 and 4 attend state preschool programs compared to 15.3 percent of children ages 3 and 4 nationally. This is a rate of 1.3 times greater in Kentucky than the nation (Barnett. *The State* 12). However, the rate at which Kentucky exceeds the nation in preschool enrollment is substantially less than the rate of 1.8 at which it exceeds the nation in percentage of students ages 3 through 5 identified for special education. This suggests differences between Kentucky and the nation in identification practices in this age group.

In the Commonwealth, students ages 3 through 5 who are identified for special education are entitled to enrollment in district-run preschool programs. This may provide a possible incentive to identify students with a disability. Identification with a disability is not linked with preschool funding in all states. Nationally, family poverty is the most common criterion used to determine eligibility for state-funded preschool (Barnett. *Improving*).

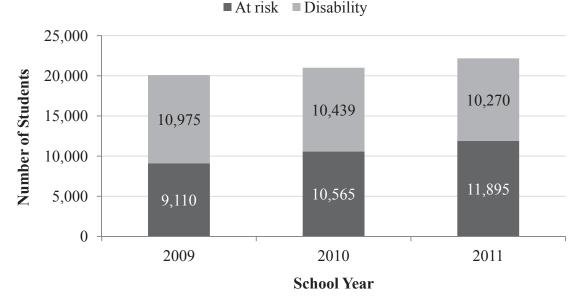
Identification of Kentucky Preschool Students

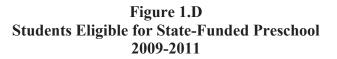
Kentucky students are eligible for state-funded preschool if they are identified in one of three disability categories—speech or language impairment, developmental delay, or severe disability or if they are identified at risk because of family poverty. Of all students eligible for preschool because of disability in 2011, 49 percent were identified with speech or language impairments, 46 percent with developmental delays, and 4 percent with severe disabilities.

As shown in Figure 1.D, the number of preschool students identified with a disability decreased by 705 between 2009 and 2011. This decrease is associated with attention to eligibility requirements at the preschool level that will be described later in this chapter. While the number of preschool students with disabilities decreased between 2009 and 2011, the total number of students eligible for state-funded preschool grew by 2,080 because of increases in the number of students eligible in the at-risk category.

Identification with a disability can determine eligibility for statefunded preschool in the Commonwealth but does not in all states. This may provide a possible incentive to identify students with a disability.

Kentucky students are eligible for state-funded preschool if they are identified in one of three disability categories or if they are identified at risk because of family poverty. Between 2009 and 2011, the number of preschool students identified with a disability decreased while the number eligible because of family poverty increased.





Source: Staff analysis of data from the Kentucky Department of Education.

In 2011, the percentage of preschool students eligible because of disability ranged from 19 to 92 percent in Kentucky districts.

Districts also varied considerably in the percentage of preschool students with disabilities identified in the three preschool eligibility categories. **Variation Among Districts in Percentage of Preschool Students Eligible by Category.** Districts vary considerably in the percentage of preschool students determined to be eligible for state funding in different categories.³ Staff compared percentages of students eligible in different categories in 2011 in districts that had at least 50 preschool students.⁴ Of students eligible for state funding in these 111 districts, the percentage of students eligible because of disability ranged from 19 to 92.⁵

Districts also varied considerably in the percentage of preschool students with disabilities identified in the three preschool eligibility categories. Of the 111 districts with more than 50 preschool students, 9 districts identified 75 percent or more of students with disabilities in the developmental delay category and 16 districts identified 25 percent or less of students with disabilities in the

³ Staff did not compare overall district preschool identification rates as precise total population estimates were not available for this study.

⁴ Staff omitted districts with fewer than 50 preschool students from the analysis because of expected variations in smaller districts.

⁵ Percentages of students identified for being at risk might be expected to vary based on family income status of children ages 3 through 4 in each district. These income data were not available for this study. However, staff found no relationship between percentages of students found eligible for preschool based on poverty in 111 districts and approximate measures of district poverty based on percentages of K-12 students eligible for free or reduced-price lunch.

Because each eligibility category is funded at a different rate, variations among districts in percentages of students identified in each category are associated with variation in preschool funding

Student poverty does not appear to explain differences among states in the total percentage of students identified for special education in all categories.

provided to districts.

Within the Commonwealth, poverty explains only a small percentage of the variation in district identification rates. developmental delay category. Of these 111 districts, 24 did not identify a single student in the severe category whereas 9 districts identified more than 10 percent of students with disabilities in the severe category. In one district, all 48 students with disabilities were identified in the single category of speech or language impairment.

Because each eligibility category is funded at a different rate, variations among districts in percentages of students identified in each category are associated with variation in preschool funding provided to districts. This concern will be discussed further in Chapter 3.

Student Poverty and Identification Rates

One factor that might be associated with disability prevalence is poverty, a condition that affects the majority of Kentucky students. Student poverty is associated with indicators such as low birth weight or poor access to prenatal care that might also be associated with disability prevalence. While student poverty may be associated with increased prevalence of disability in certain categories, it does not appear to explain differences among states in the total percentage of students identified for special education in all categories. There is no significant relationship between state identification and poverty rates. States identifying at high levels include higher-poverty states such as West Virginia as well as lower-poverty states such as Massachusetts. Conversely, states with low identification rates include lower-poverty states such as Colorado as well as higher-poverty states such as Alabama. Appendix A shows identification and poverty rates by state.

Within the Commonwealth, poverty explains only a small percentage of the variation in district identification rates. The relationship between poverty and special education identification is strongest in the districts with the highest identification rates. In 2011, all but 1 of the 17 districts that made up the top 10 percent of districts ranked by identification rates exceeded the state poverty rate. Only 5 of the 17 districts in the lowest 10 percent of districts ranked by identification rates met or exceeded the state poverty rate. Appendix E shows district identification and poverty rates in 2011.

Although Tennessee and Kentucky both serve student populations that might be expected to have higher disability rates than the US, Tennessee's identification rate has fallen while Kentucky's has risen. According to the Annie E. Casey Foundation, both Kentucky and Tennessee exceeded the US percentage of low-birth-weight babies, infant mortality rates, and children living in poverty in 2000 and 2003. Tennessee exceeded Kentucky in the first two of these indicators (Annie E. Casey). In 2010, Tennessee identified students for special education at a rate of 8.1 percent, lower than the national rate of 8.7 percent and Kentucky's rate of 9.6 percent. Tennessee's identification rate has dropped substantially in the last decade. In 2001, Tennessee's rate of 9.1 percent exceeded Kentucky's rate of 8.6 percent and the national rate of 8.7 percent.⁶

Identification Process

Taken at face value, data reported in this chapter suggest great differences among Kentucky districts and among states in the prevalence of students with disabilities overall and in particular categories. Data also indicate dramatic fluctuations over time in the percentages of students with disabilities and among disability categories. There is little evidence, however, that differences in identification rates among states or districts are explained primarily by differences in student populations. This raises questions about the criteria used to identify students for special education in different states and districts.

District and state staff interviewed for this study noted variation among Kentucky districts in practices used to identify students for special education. They also indicated that students can be identified for special education for reasons other than a clearly defined disability or a need for instruction from special education staff. In some districts, special education might be the default option for students who are struggling in general education. In these cases, identification of students for special education may be more reflective of shortcomings in general education than it is of disability. District staff also described pressure from parents and teachers to identify students for special education for the primary purpose of providing eligibility for various services. Services can include testing accommodations for elementary and secondary

There is little evidence that differences in identification rates among states or districts are explained primarily by differences in student populations. This raises questions about the criteria used to identify students for special education in different states and districts.

In some cases, identification of a student with a disability might be more reflective of shortcomings in general education than it is of disability. In others, students may be identified with the primary purpose of providing eligibility for various services.

⁶ Staff contacted Tennessee Department of Education officials seeking explanations for substantial reductions in the state's special education population. According to these officials, reductions were associated not with changes in the student population but rather with specific efforts to strengthen and monitor the identification process in the state. This was accomplished through implementation of research-based interventions prior to identification and through review of districts with disproportionate identification of students in specific racial or ethnic groups (Long).

Districts are responsible for locating, identifying, and evaluating children with disabilities ages 3 through 21 who may need special education and related services.

School-level admissions and release committees (ARCs), composed of parents, teachers, and a representative of the district, are responsible for making decisions about a student's initial and continuing eligibility for special education.

The committee may also include other professionals such as school psychologists or diagnostic staff but is not required to do so. students, state funding for preschool, or Social Security benefits for children with disabilities.

In this section, the process used to identify students for special education in the Commonwealth is reviewed, followed by concerns about the variation among districts in the way this process is implemented.

Determination of Initial and Continuing Eligibility

According to 707 KAR 1:300, districts are responsible for locating, identifying, and evaluating children with disabilities ages 3 through 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.

Admissions and Release Committees. School-level admissions and release committees (ARCs) are responsible for determining the initial and continuing eligibility of a student for special education services. They must also develop an individualized education program (IEP) that determines the specific services a student will receive. ARCs can also determine that a student is not eligible for special education services.

ARCs are required by 707 KAR 1:320 to include the following members:

- the child's parents,
- a regular education teacher (when students may be participating in the regular education environment),
- a special education teacher, and
- a representative of the district who is qualified to provide or supervise specially designed instruction (often but not always the principal).

ARCs must also include an individual qualified to interpret instructional implications of evaluation results (can be one of the already mentioned members) and, if appropriate, the child. The committee may also include other professionals such as school psychologists or diagnostic staff but is not required to do so. A child being referred for special education services should receive a comprehensive assessment in all areas related to a suspected disability. Kentucky regulations do not specify the staff that should participate in these evaluations, though some states do.

Teacher and administrator ARC members may not be fully prepared by their preservice training with the range of skills necessary to gather and evaluate evidence, administer and interpret assessments, and develop highquality individualized education programs.

Some districts are proactive in ensuring that ARC members and those who evaluate students receive ongoing training in relevant areas. There may be some districts in which little attention is paid to this ongoing training.

As will be discussed in Chapter 2, psychologists are more likely to be trained in the administration and interpretation of diagnostic assessments than are special education teachers. **Comprehensive Evaluation.** As required by 707 KAR 1:300 Section 4, a child being referred for special education services should receive a comprehensive assessment in all areas related to a suspected disability. When standardized tests are used, they should be administered by trained and knowledgeable personnel. Kentucky regulations do not specify the staff that should participate in these evaluations, though some states do. For example, Tennessee requires that a licensed medical provider and a school psychologist participate in the evaluation of a child for other health impairments.⁷

Variation in District Identification Practices

Ongoing Training of ARC Members. Superintendents, special education directors, and special education professional development providers interviewed for this study stressed the need for ongoing training of school and district personnel who participate in the identification process. Teacher and administrator ARC members may not be fully prepared by their preservice training with the range of skills necessary to gather and evaluate evidence, administer and interpret assessments, and develop high-quality IEPs. One professional development provider noted that newly certified special education teachers attending her trainings are often not familiar with the basic disability categories.

OEA interviews suggest broad variation among districts in attention to ongoing training of personnel. Some districts are proactive in ensuring that ARC members and those who evaluate students receive ongoing training in relevant areas. One superintendent explained that newly certified staff are not considered by the district to be fully prepared to handle all the duties of their job. The district ensures that staff receive ongoing training through the regional special education cooperative and other venues in a variety of areas related to identifying and assisting students. Interviewees also reported experiences working in districts in which little attention was paid to ongoing training of special education cooperative directors, districts vary in the degree that they take advantage of available training.

Use of Psychologists and Other Qualified Staff to Conduct Evaluations. Kentucky law requires that personnel administering standardized assessments for evaluation be fully trained but, unlike

⁷ Staff did not conduct a comprehensive review of evaluation requirements in all states. Participation of medical professionals and psychologists in evaluations for special education is common in Kentucky though not required by regulation.

Districts vary broadly in their regular use of psychologists in the identification process. In 2011, 30 districts did not employ a psychologist.

Oversight of ARC processes among individual schools varies among districts.

Several of the disability categories protected by federal law do not provide clear distinctions between students who need support in general education and students who require special education services. These categories include specific learning disabilities, other health impairments, and developmental delays. some other states, does not require participation of specific staff such as school psychologists or other trained diagnosticians in either the ARC or the evaluation process. As will be discussed in Chapter 2, psychologists are more likely to be trained in the administration and interpretation of diagnostic assessments than are special education teachers.

Interviews indicate variation among districts in the regular use of psychologists in the identification process. State personnel data also indicate variation. In 2011, the ratio of psychologists to special education students in Kentucky districts ranges from 1 in 10 to 1 in 1,000. Thirty districts employed no school psychologists.

District Oversight of ARCs. Some districts have addressed variations among identification practices in different schools and ARCs by employing district-level ARC facilitators. These facilitators monitor the standards used to identify students for particular disabilities and promote consistent practices among ARCs. In other districts, administrators acknowledge that ARC decisions are too often influenced by factors outside the needs of the specific child, including existing school practices, parent expectations, and personnel arrangements.

Concerns About Accurate Identification for Special Education in Broadly Defined Categories

Broad Definitions Based in Federal Law

Several of the disability categories protected by federal law are subject to broad interpretation. Eligibility requirements in some categories do not provide clear distinctions between students who need support in general education and students who require special education services. At the national level, attention has been focused on the category "specific learning disability" which, by the year 2000, had grown to include over half of the students identified for special education (Learning). Researchers suggested that students who lacked adequate support in general education might be misidentified with a disability (Lyon).

Unlike the nation, more Kentucky students are identified in the categories of other health impairment and developmental delay

than in specific learning disability.⁸ In Kentucky, the criteria required for identification in these categories may also make it difficult to distinguish between students with learning difficulties and those who have disabilities that require instruction through special education.

Criteria that determine eligibility in some categories might apply to students who have learning difficulties but do not necessarily have a disability that requires support through special education. Table 1.3 provides examples of evidence required to determine eligibility in the categories of specific learning disability, other health impairment, and developmental delay.⁹ The table focuses on those parts of the definitions that might capture a student who does have learning difficulties but does not necessarily have a disability that requires support through special education. The table does not describe all eligibility requirements. Complete eligibility requirements in each category are described on forms posted on KDE's website (Commonwealth. Department. *Special*).

⁸ States are not required to use the developmental delay category: 6 states do not this category for children ages 3 through 5, and 19 states do not use it for children ages 6 through 21.

⁹ These are not the only categories with definitions that might be subject to varying interpretation. They are of special interest, however, because of the large numbers of students determined to have these disabilities.

Table 1.3Illustration of Criteria Subject to Broad Interpretation
Kentucky Eligibility Requirements for Categories of
Developmental Delay, Other Health Impairment, and Specific Learning Disability

Disability Category Developmental Delay (ages 3-8)	 Criteria Subject to Broad Interpretation Student has not acquired skills commensurate with performance expectations Normed scores are inconclusive and the professional judgment of the ARC verifies the existence of significant atypical quality or pattern of development There is an adverse effect on educational performance
Other Health Impairment	 Existence of health impairment such as asthma, diabetes, or attention deficit disorder that affects strength, vitality, and alertness There is an adverse effect on educational performance
Specific Learning Disability	 Student does not achieve adequately in one or more areas as shown by multiple data sources Student fails to achieve a rate of learning to make sufficient progress to meet grade level standards aligned with the Kentucky Program of Studies in one or more of the areas identified above when assessed using a response to scientific, research-based intervention process There is an adverse effect on educational performance

Note: To identify a student in any of these categories, the ARC must document that the suspected disability has not resulted from lack of instruction in reading and math or from limited English proficiency. Source: Staff analysis of Kentucky Department of Education eligibility documents (Commonwealth. Department. *Special*).

The term "adverse effect on educational performance" is relevant to identification in all categories. However, there is no guidance in regulation on how to determine what level of performance constitutes adverse effect. The term "adverse effect on educational performance" appears in eligibility requirements for all three disabilities described in Table 1.3. According to 707 KAR 1:002 Section 1(2), adverse effect means "the progress of the child is impeded by the disability to the extent that the educational performance is significantly and consistently below the level of similar age peers." However, there is no guidance on how to determine what level of performance would meet this criterion. This ambiguity raises concerns about variation among districts in standards use to determine eligibility. It may also subject districts to legal challenges that arise when parents and other ARC members do not agree about the adverse effect of a suspected disability on educational performance.

Recommendation 1.1

The broad criteria used to identify students in some categories raise special concerns at the preschool level. Identification with a disability determines eligibility for statefunded preschool for those children who are not eligible because of family poverty. Also, preschool funding provided to districts varies considerably based on the number of students identified in each disability category.

Accurate identification of children with a particular disability is especially difficult in the early years because of challenges of using standardized instruments with young children and the wide range among children in the pace of normal development.

The category of developmental delay may not be suitable for determining eligibility for state preschool funding and for allocating different funding amounts for individual students identified.

Recommendation 1.1

The Kentucky Department of Education should provide guidance documents to be used by admissions and release committees and parents in determining whether a suspected disability has an adverse effect on educational performance. These documents should be incorporated by reference in 707 KAR 1:002 Section 1(2).

The broad criteria used to identify students in some categories raise special concerns at the preschool level. Identification with a disability determines eligibility for state-funded preschool for those children who are not eligible because of family poverty. Further, as will be described in Chapter 3, preschool funding provided to districts varies considerably based on the number of students identified in each eligibility category. In 2012, districts will receive more than \$1,000 more per student identified with developmental delay than they will per student identified with speech or language impairment. It is important, therefore, that districts use similar criteria in identifying students in particular disability categories.

Accurate identification of children with a particular disability is especially challenging in the early years because of limitations in the way that standardized instruments can be used with young children and the wide range among children in the pace of normal development. It may be especially difficult in the category of developmental delay to distinguish between a child who is developmentally delayed due to disability and a child whose development is delayed due to lack of learning opportunities. In fact, the category of developmental delay was introduced by IDEA to acknowledge problems in the use of standardized instruments to identify young children with disabilities and to prevent premature identification of young children with a particular disability.

KDE is currently working with district staff to identify and address concerns about eligibility determinations at preschool. Because of difficulties in using standardized measures in the identification of a student with developmental delay, it is likely that criteria used to determine eligibility for special education in this category will continue to vary considerably among districts. For this reason, the category of developmental delay may not be suitable for determining eligibility for state preschool funding and for allocating different funding amounts for individual students identified. In contrast, determination of eligibility in many low-

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Many of the students currently identified with developmental delay may already have access to preschool in the at-risk category. Should the threshold for family poverty in this category be extended beyond its current level, more of the students currently identified with developmental delay would be eligible in the atrisk category.

Adjustments to the categories that determine eligibility for statefunded preschool would require statutory and regulatory changes and would likely be linked with funding considerations.

In the 2004 reauthorization of IDEA, the federal government permitted data from scientific, research-based interventions to be used as one source of evidence to identify a student in the specific learning disability category.

The process of providing research-based interventions is now commonly called response to intervention (RTI). In theory, RTI should help to prevent misidentification of students for special education while also improving the quality of education for all students not meeting grade level expectations. incidence categories and in the at-risk category can be made using criteria that can be standardized across districts.

The category of developmental delay was introduced, in part, to provide access to services for those young children for whom identification with a particular disability might not be appropriate. Many of the students currently identified with developmental delay may already have access to preschool in the at-risk category.¹⁰ Should the threshold for family poverty in this category be extended beyond its current level of 150 percent of the federal definition of poverty, more of the students currently identified with developmental delay would be eligible in the at-risk category. Thus, it might be possible to provide preschool services for developmentally delayed students who are likely most in need of services—those living in poverty—even in the absence of a preschool eligibility category for developmental delay.

Adjustments to the categories that determine eligibility for statefunded preschool would require statutory and regulatory changes and would likely be linked with funding considerations. Chapter 3 identifies issues associated with the method used to fund preschool in the Commonwealth.

Research-based Interventions

In the 2004 reauthorization of IDEA, the federal government took steps to help distinguish between struggling students and special education students by introducing a new method for identifying students with a specific learning disability. Historically, eligibility was determined through the "discrepancy" method, which required demonstration of significant discrepancy between a child's IQ and academic achievement. IDEA now permits use of scientific, research-based interventions as one source of evidence in identifying a student with a specific learning disability (20 USC 1414(b) (6) (B)).¹¹

The process of providing research-based interventions is now commonly called response to intervention (RTI). While not specified by federal legislation, RTI is commonly understood as a

¹⁰ A student who is determined to be eligible in both the at-risk and the developmental delay categories will be reported only in the developmental delay category.

¹¹ The final regulations later clarified that evaluations of all suspected disabilities, including specific learning disability, "must include a variety of assessment tools and strategies and cannot rely on any single procedure as the sole criterion for determining eligibility" (Hale).

leveled approach to intervention in which struggling students are assessed frequently and provided with escalating amounts of intensive assistance directed at specific skill deficiencies. Within these parameters, there is no single prescribed model that must be used (National Center). In theory, RTI should help to prevent misidentification of students for special education while also improving the quality of education for all students not meeting grade level expectations.

Kentucky regulations were revised in 2007 to reflect federal emphasis on providing research-based interventions prior to special education referral. However, Kentucky regulations went beyond federal regulations by requiring rather than just allowing such interventions. Further, regulations require use of researchbased interventions prior to referral for special education in all categories, not just the specific learning disability. As required by 707 KAR 1:300 Section 3, all children must be provided "appropriate, relevant, research-based instruction and intervention in regular education settings" prior to or as part of special education referral.

Staff at KDE, educational cooperatives, and special education cooperatives have been assisting districts to implement researchbased interventions. According to most district staff interviewed for this report, these interventions have helped to distinguish between children with disabilities and those who have not been provided with learning opportunities. Staff in some districts reported benefits of research-based interventions for many students experiencing learning difficulties, not just those who might have been referred for special education evaluation.

Challenges in Use of Research-based Interventions for

Eligibility. While use of research-based interventions has introduced important elements into the identification process, it has also introduced ambiguity (Hale). Neither federal nor state regulations provide guidance on how to determine what level a child needs to reach, relative to peers, to be considered either responsive to an intervention or eligible for special education. This question has led to legal challenges in at least one Kentucky district. In this district, administrators had determined that a child being evaluated for a specific learning disability did not require specially designed instruction through special education. As one source of evidence, the district used the discrepancy method to demonstrate lack of significant difference between the child's IQ and academic performance. The child's parents have challenged this decision on the basis that the child did not respond sufficiently

Kentucky's regulations go beyond federal regulations by requiring rather than just allowing researchbased interventions. Further, they require research-based interventions for identification in all categories, not just the specific learning disability.

Staff at KDE and educational cooperatives have been assisting districts to implement researchbased interventions.

Use of research-based interventions has also introduced additional ambiguity into the identification process. It is not clear what level a child needs to reach, relative to peers, to be considered either responsive to an intervention or eligible for special education.

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Research-based intervention is more common in the early grades than it is in the middle and upper grades and more common specifically in reading than in math.

Several district administrators interviewed for this report suggested that the requirement for research-based interventions in determinations of eligibility might not be necessary for all disability categories.

Use of RTI for identification poses practical and fiscal challenges at the preschool level. RTI methods vary among districts. to intervention. Although two courts have found in favor of the district, the child's parents have continued to challenge the decision. The case is currently being considered by the Sixth District Court in Cincinnati.

The requirement to provide evidence of research-based intervention prior to identification of children in all disabilities categories may have come prior to a full understanding and capacity in all districts to implement research-based interventions. Interview data collected in this report as well as several previous OEA reports suggest wide variation among districts in implementation of research-based interventions and other supports for struggling students. Supports are most intensive in reading and at the elementary level and are less common in math and in middle and high schools (Commonwealth. Legislative. Office. Review; *Mathematics*). This reflects national trends. As noted by McLaughlin, the research base that supports RTI is "primarily limited to early elementary school children and to the area of reading. This limited coverage is of concern given federal initiatives to support RTI approaches for the identification of LD across grade levels and subject matter" (as cited in Chambers. An Independent 16). Districts attempting to implement RTI in the absence of guidance and support may resort to solutions that do not have a strong research base. The Kentucky Center for Mathematics has been working with special education cooperatives to assist districts in implementing RTI, but districts vary in the degree to which they take advantage of available training.

Several district administrators interviewed for this report suggested that the requirement for research-based interventions in determinations of eligibility might not be necessary for all disability categories. For example, children who have severe hearing or vision problems or severe cognitive disabilities will likely require special education services regardless of whether they have received research-based interventions.

Use of Research-based Interventions in Preschool. Districts are now required to provide children with research-based interventions prior to identification with a disability, even at the preschool level. While interviewees acknowledged the need for attention to preschool eligibility requirements, they also noted challenges and concerns about the implementation of RTI at the preschool level. Districts noted difficulty in providing research-based interventions to students who are not yet enrolled in preschool. Some districts meet this challenge by enrolling students in preschool temporarily and then removing them if they respond to intervention and are determined not to have a disability. These districts face fiscal challenges because the number of staff they must hire to accommodate all of the students in RTI sometimes exceeds the number necessary to serve students who are eventually found to be eligible. Districts receive funding only for students found to be eligible. Other districts implement RTI at alternative locations such as public libraries, children's homes, or summer camps. These data suggest possible variation in the types of interventions provided to students and in the criteria used to determine eligibility.

Interviewees also mentioned that the RTI process can be emotionally challenging for students, parents, and staff. Students enrolled in preschool for the purposes of RTI and then removed may feel rejected, and parents face scheduling and financial uncertainties. Teachers are sometimes in the position of determining that a child does not have a disability and is thus not eligible for preschool even if the teacher feels strongly that the child should have preschool in order to be prepared for kindergarten.

Clarification of Regulatory Requirements for Research-based Interventions. While Kentucky's requirement that all students be provided with research-based interventions prior to identification for special education has focused critical attention on distinguishing between students with disabilities and those who have not been provided with appropriate support, it has also introduced some uncertainty into the requirements for eligibility in the Commonwealth. Kentucky's special education regulations might be clarified to include research and practice guidelines related to research-based interventions that are sufficient to determine the appropriate application in all cases of referral and evaluation for special education. KDE's recent audits of district identification practices and legal issues surrounding identification of students for special education require districts to understand specific criteria that must be met to demonstrate that children have received research-based interventions and to determine whether they have been responsive to interventions. KDE might also wish to reconsider whether use of research-based interventions is necessary to determine eligibility in every category.

Recommendation 1.2

The Kentucky Department of Education should clarify 707 KAR 1:300 Section 3(3) by providing expectations and additional clarification for use of research-based interventions in determinations of eligibility for special education.

RTI at preschool can also be emotionally challenging for students, parents, and staff.

Recommendation 1.2

Clarification should include disability categories for which research-based interventions are required and standards to be used in determining whether a child is considered responsive to an intervention.

Kentucky Department of Education Role in Monitoring Identification Practices

KDE Monitoring Requirements

According to 707 KAR 1:380, KDE must monitor districts' special education programs to determine compliance with state and federal regulations. In the past decade, KDE's monitoring efforts have been focused primarily on the 20 indicators required by the federal Office of Special Education Programs for the state's Annual Performance Report. 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 (Commonwealth. Department. *Kentucky*). They do not include districts' overall identification rates.

KDE is, however, required by 707 KAR 1:380 Section 6 to validate exceptional child count data submitted by districts and to identify districts for audits, if needed. Section 6(5)(e) cites unusual child count data as one of several criteria that can trigger an audit. The regulation defines unusual child count data as more than 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 districts.

Focus on Eligibility Requirements in 2010 Audits

Prior to OEA's 2008 special education report, KDE was not selecting districts for audits based on identification rates in excess of 15 percent. In 2010, KDE included this indicator with other federally required indicators as criteria for selecting 39 districts for audits.¹² Ten of the districts received on-site visits, and 29 received desk audits. Districts were selected for audits based on high identification rates and IDEA-required indicators such as suspension rates or transition planning for graduating students. Examination of eligibility requirements in audited districts was

KDE is required to validate exceptional child count data submitted by districts and to identify districts for audits, if needed.

In 2010, KDE identified 39 districts for audits based on high identification rates, among other criteria.

¹² The Kentucky School for the Blind was also audited. KDE conducted a total of 40 audits.

The audits found widespread noncompliance in the collection of evidence and documentation required for eligibility; fewer than half of the 600 records examined included required evidence. In two districts, no student file reviewed contained required evidence.

High identification rates alone do not necessarily indicate inappropriate identification practices.

As a result of the audits, 38 districts were required to implement corrective action plans (CAPs). These included corrections of individual problems identified and ongoing training for staff. KDE staff have continued to monitor and support these districts.

Following the audits, KDE issued a policy letter notifying all districts of the department's concerns about eligibility requirements. KDE also developed guidance documents and standard forms to assist districts in meeting eligibility requirements. incorporated in broader auditing of district special education programs.

Results of the audits support concerns about the practices used to identify students for special education in Kentucky districts. As part of these audits, KDE staff reviewed more than 600 individual student records including evidence used to determine and document eligibility for special education in particular disability categories. The audits found widespread noncompliance in collection of the evidence and documentation; fewer than half of the records examined included required evidence. In two districts, no student file reviewed contained required evidence. Common areas of noncompliance noted in the audits included lack of sufficient, comprehensive assessment data or incorrect interpretation of assessment data; failure to document the adverse educational effect of a particular disability on a student's education; and failure to document use of research-based interventions prior to identifying students for special education.

High identification rates alone do not necessarily indicate inappropriate identification practices. KDE audited one district that identified 20 percent of its students for special education but was found to meet documentation and eligibility requirements in all folders examined during the audit.

Of the 39 audited districts, 38 were found not to have sufficient evidence and documentation of eligibility requirements in at least one instance. These districts were required to implement corrective action plans (CAPs) to address eligibility concerns in the specific records examined as well as systemic issues associated with determining eligibility in the district. CAPs for most districts required KDE-approved additional training for all district staff involved in eligibility determinations as well as ongoing review of student folders. In 2011, KDE staff continued to monitor and assist districts implementing CAPs. Audits conducted in 2010 did not address issues related to qualifications of staff involved in ARCs and evaluations. However, in response to an audit, one small district hired two psychologists. This district had previously employed no psychologists.

Following the audits, KDE issued a policy letter notifying all districts of the department's concerns about eligibility. The letter also indicated that districts with high identification rates could be audited. The department developed guidance documents and standard forms to assist districts in meeting eligibility requirements. These forms list the specific evidence required for

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KDE's 2010 audits and resulting guidance are associated with dramatic decreases in the number of students identified for special education in the Commonwealth and associated drops in the amount of revenue generated for exceptional children in the SEEK funding formula.

OEA conducted interviews with administrators in two audited districts. Despite challenges associated with these audits, administrators acknowledged the need for attention to eligibility requirements and value in the audit process. each disability as well as the standard assessment areas that should be addressed (Commonwealth. Department. *Special*).

KDE's 2010 audits and resulting guidance are associated with dramatic decreases in the number of students identified for special education in the Commonwealth. While Kentucky's identification rate began to decline in 2007, it dropped substantially in 2011, the year after KDE's audits and communication with districts. Between 2010 and 2011, the identification rate dropped by 0.58 percent—more than twice the rate by which it dropped between 2009 and 2010. Between 2010 and 2011, identification rates dropped by 1.1 percent in audited districts and by 0.5 percent in districts that were not audited. These reductions were also associated with decreases in the exceptional child revenue generated by districts in the SEEK formula. Following audits, SEEK exceptional child revenue dropped by 3 percent across the state and by 11 percent in audited districts.

OEA interviewed administrators in two districts that had received audits and subsequently reduced the number of students identified for special education. In one district, the identification rate dropped by more than 8 percent from 2010 to 2011. Administrators acknowledged that, as a result of the audit process, they were focusing more closely on eligibility requirements and IEP development than they had in the past. Following the reduction in identification rates, these districts lost substantial SEEK funding and had to reduce the number of special education teachers in 2012. In one district, the process had created strains among teachers, parents, and administrators. Despite these difficulties, administrators in both districts acknowledged value in the audit process. They described local teacher and parent populations that had grown accustomed to the idea that struggling students would receive assistance through special education whether or not they had a clear disability. One superintendent said a "culture of dependency" had developed among special education students, parents, and special educators in the district. He noted that ARC decisions were too often influenced by loyalty to personnel employed in the school. For example, in some buildings, aides might be retained whether or not they were strictly necessary. Both districts were in the process of building up supports in general education through RTI and other means.

It is also possible that, in response to audits, districts removed the special education designation from students who would actually be eligible for services, given correct documentation. Special education cooperative directors working with districts in corrective

It is also possible that, in response to audits, districts removed the special education designation from students who would actually be eligible for services, given correct documentation.

action noted uncertainty on the part of some district staff about the evidence required to identify students. One director suggested that identification rates in these districts might increase again once district staff became more familiar with required documentation.

Need for Continued Monitoring of Eligibility Requirements

KDE audits of eligibility criteria are important given high identification rates in many districts and concerns about eligibility practices identified in 2010 audits. In 2011, 67 districts had identification rates in excess of 15 percent. According to KDE, audits were not conducted in 2011 because of reductions in staff and dedication of current staff to monitoring and supporting existing CAPs. KDE states that the Division of Learning Services has six fewer staff members than were available when district audits were conducted in 2010. However, the Office of Next Generation Learners, which includes the Division of Learning Services, intends to continue its general supervision responsibilities under IDEA. The office has plans to develop a more consolidated approach to auditing districts in 2012 but will continue its focus on eligibility (Collett).

In districts found to have widespread noncompliance documenting eligibility requirements for identified students, KDE may wish to expand the scope of its audits to include qualifications of staff involved in ARC decisions and student evaluations. In addition to ongoing training of existing staff, CAPs might recommend that the district hire or work in consultation with personnel with specific qualifications. KDE might also provide guidance to districts about the types of staff that are considered qualified to administer and interpret different diagnostic assessments.

Recommendation 1.3

In accordance with 707 KAR 1:380 Section 6(5)(e), the Kentucky Department of Education should continue to include unusual child count data, including but not limited to district identification rates in excess of 15 percent, in the criteria it uses to identify districts for on-site and desk audits.

Recommendation 1.4

The Kentucky Department of Education should consider including in its audits of district eligibility requirements, when appropriate, an analysis of the qualifications and training of admissions and release committee members and of staff

According to KDE, audits of eligibility requirements were not conducted in 2011 because of reductions in staff and dedication of current staff to monitoring and supporting existing CAPs. In 2012, the department plans to continue its focus on eligibility as part of a more consolidated approach to auditing districts.

Recommendation 1.3

Recommendation 1.4

conducting comprehensive evaluations. When necessary,
district corrective action plans should include
recommendations for districts to hire or consult with staff
qualified to address deficiencies identified in audits.Recommendation 1.5The Kentucky Department of Education should consider
providing documents that specify when admissions and release
committees or evaluation teams should include members not
specifically required by 707 KAR 1:320 Section 3.

Chapter 2

Training Required for Special Education Personnel

Special education teachers are not always fully prepared with the skills necessary to identify and address the learning needs of students with learning difficulties and disabilities.

Whether students with disabilities are identified for special education or provided with other forms of extra support, they need access to educators trained to identify and address their learning difficulties.

Most special education students are now educated primarily in general education settings through the collaborative teaching model, in which special education teachers are placed in general education classrooms. Special education teachers are not always fully prepared with the skills necessary to identify and address the learning needs of students with learning difficulties and disabilities. Some of these students might be served more appropriately by personnel with other types of qualifications than by special education teachers. This question has educational and fiscal consequences. More than 90 percent of special education expenditures are associated with special education personnel; the effective use of special education revenue thus requires tight alignment between student needs and training of personnel.

Whether students with disabilities are identified for special education or provided with other forms of extra support, they need access to educators trained to identify and address their learning difficulties. Some of the concerns identified in this chapter can be addressed through ongoing training of special educators. Others might be addressed by training general educators to meet a broader range of student learning needs.

Relevant to questions about appropriate training of personnel is the fact that most special education students are now served primarily in general education classrooms. Most of these students are required to meet grade-level expectations both in the classroom and on state assessments. In 2010, nearly three-quarters of Kentucky special education students spent 80 percent or more of their time in regular classrooms. These students are most often served by special education collaborating teachers who work together with classroom teachers to adjust teaching methods and presentation of content.

Concerns About Preservice Preparation of Special Education Teachers

Most special education students are taught by teachers broadly certified to teach a number of different disabilities and all grade levels. Most special education students are taught by teachers broadly certified to teach a number of different disabilities and all grade levels. These teachers may not be fully prepared with the skills necessary to support students who have not been successful in general education. For example, teachers may not be prepared to administer and interpret diagnostic assessments or to assist students with specific disability areas such as dyslexia. While most special education students are required to meet grade-level expectations for mastery of content, special education teachers are not required to demonstrate content mastery themselves. Many teachers are entering through alternative routes and may have no previous supervised experience with students.

Certification Requirements by Disability Categories

Table 2.1 shows the certification types required by the Education Professional Standards Board (EPSB) to teach students in each disability category. As the table shows, only speech language impairments, visual impairments, and hearing impairments require special education personnel to have certification specific to the disability. Most students with other disabilities can be taught by teachers with more general special education certificates. With the exception of the certificate in interdisciplinary early childhood education, Kentucky's special education certificates allow teachers to teach all subjects in grades primary through 12.

Table 2.1					
Certificates Required to Teach Special Education Students					
by Disability Category					

Abbreviation	Disability Category	Certificate Required						
	SEEK Funding Category: High Incidence							
SLI	Speech or Language	Communication Disorders P-12						
	Impairment							
0.00	SEEK Funding Category: Moderate Incidence							
OHI	Other Health Impairment	Any relevant exceptional child degree						
DD	Developmental Delay	Learning and Behavior Disorders P-12						
SLD	Specific Learning Disability	Learning and Behavior Disorders P-12						
MMD	Mild Mental Disability Learning and Behavior Disorders P-12							
OI	Orthopedic Impairment Any relevant exceptional child degree							
	SEEK Funding Category: Low Incidence							
EBD	Emotional-behavioral	Learning and Behavior Disorders P-12						
	Disability	C C						
AUT	Autism	Any relevant exceptional child degree						
FMD	Functional Mental	Moderate and Severe Disorders P-12						
	Disability							
MD	Multiple Disabilities	Any relevant exceptional child degree						
HI	Hearing Impairment	Hearing Impaired P-12						
VI	Visual Impairment	Visually Impaired P-12						
TBI	Traumatic Brain Injury	Any relevant exceptional child degree						
D/B	Deaf-blindness	Any relevant exceptional child degree						
	Preschool							
	Preschool Students	Interdisciplinary Early Childhood Education						
	(Any Disability)	Birth to Primary						

Source: Staff analysis of 16 KAR 4:020.

The learning and behavior disorder (LBD) certificate that allows teachers to instruct most special education students is broad. The learning and behavior disorder (LBD) certificate is of special interest because it allows teachers to instruct students in the moderate-incidence categories that account for the majority of special education students as well as other categories such as emotional behavior disorder and autism. Preservice programs leading to LBD certification are broad by necessity because they must prepare teachers to instruct students in many disability categories, content areas, and grade levels.

District administrators interviewed for this study cited concerns about the inconsistent preparation of broadly certified special education teachers to carry out the variety of duties they are expected to perform, from ARC membership to instruction of students with very different disabilities. Teachers might ideally receive training specific to individual categories and content areas. This may not be practical given existing shortages of special education teachers.

While thorough examination of preservice preparation of special education teachers was outside the scope of this study, staff conducted a limited analysis of coursework in a sample of the state's preservice programs.

The analysis was based on a sample of programs in four postsecondary institutions.

Special education degree programs represent the minimum standard set for training of ARC members and those conducting students' comprehensive evaluations.

In one LBD program, diagnostic assessment constituted a portion of two courses that also included instructional methods. It does not appear that students in this program would have had supervised experience administering and interpreting a range of assessments. Teachers might ideally receive training specific to individual disability categories and content areas. However, given existing shortages of special education teachers, it may not be practical to require more specific preservice training.

Coursework Relevant to Appropriate Identification and Instruction

While thorough examination of preservice preparation of special education teachers was outside the scope of this study, staff conducted a limited analysis of coursework in a sample of the state's preservice programs looking for apparent relationships between course names, course descriptions, and the following specific skills relevant to appropriate identification and instruction of students with suspected disabilities:

- administration and interpretation of diagnostic assessments and
- identification and instruction of dyslexic children. These skills represent a small fraction of those required for appropriate identification and instruction but are directly relevant to concerns raised in this report about identification and instruction of special education students.

Staff examined coursework in programs leading to certification in five program areas: learning and behavior disorders, moderate and severe disorders, communication disorders, director of special education, and school psychology. The analysis was based on a purposive sample of EPSB-approved programs in two large state universities and two private universities, one of which provides the majority of its special education coursework through online programs.

Coursework Relevant to Diagnostic Assessments. Of the ARC members required by regulation, only special education teachers must have training relevant to identifying students with disabilities. Thus, special education degree programs represent the minimum standard set for training of ARC members and those conducting students' comprehensive evaluations in Kentucky. Some, but not all, districts routinely use psychologists and other diagnostic staff to participate in evaluations and ARC meetings.

Table 2.2 shows the program, of those sampled for this study, with the minimum number of courses that appeared relevant to administration and interpretation of diagnostic assessments. The table also provides an example of a program requiring a higher number of specifically relevant courses. The minimum number of relevant courses was found in an LBD program. In this program,

	diagnostic assessment constituted a portion of two courses that also included instructional methods. One of the courses focused on emotional-behavioral disorders, and one focused on specific learning disabilities. Both courses consisted of 11 blended online classes that included chat sessions and interactive video conferencing. Students from this program might be familiar with some of the assessments used to diagnose two particular disabilities but would not have had supervised experience administering and interpreting a full range of assessments.
In contrast, one school psychology program required four full courses relevant to administration and interpretation of assessments and	In contrast, the school psychology program described in Table 2.2 requires four full courses relevant to administration and interpretation of assessments. In addition, students are required to take two sources are dits of field experiences in which they

In р re in two course credits of supervised field experience.

take two course credits of field experience in which they administer and interpret assessments under supervision.

Table 2.2 Minimum and Maximum Amount of Coursework Relevant to Administration and Interpretation of Diagnostic Assessments Sample of Programs in Four Kentucky Postsecondary Institutions

	Minimum Number of Courses	Maximum Number of Courses
Certification	Learning and Behavior Disorders (master's degree)	School Psychology (master's degree)
Relevant Courses	 Assessment and Instructional Methods (focus on EBD) Introduction to 	 Clinical Diagnosis of Reading Assessment of Cognitive and Intellectual Functioning (includes a separate credit of supervised practicum in school settings)
	Learning Disabilities (focus on SLD)	3. Advanced Assessment in Educational Settings Functioning (includes a separate credit of supervised practicum in school settings)4. Psychoeducational Assessment

Source: Staff analysis of data from the Education Professional Standards Board for programs leading to certification in special education.

Special education teachers may not be fully prepared to carry out ARCs or evaluation functions associated with administering and interpreting assessments. Psychologists are more likely to be prepared with these skills, but they are not required ARC participants.

As the analysis above makes clear, special education teachers may not be fully prepared by preservice programs to carry out ARCs or evaluation functions associated with administering and interpreting assessments. Psychologists are more likely to be prepared with these skills but are not required ARC participants. It may not be practical or necessary to require participation of psychologists in

In recent years, there has been some concern that dyslexic children are not always identified and provided with relevant support in Kentucky schools. Whether they are supported through general or regular education, dyslexic children need access to staff with appropriate training.

In one LBD program, it appeared that a portion of two online classes might be devoted to dyslexia, though dyslexia was not mentioned in the course descriptions. Given the broad content covered in each course, it is unlikely that candidates would receive intensive preparation relevant to identification and treatment of dyslexia. ARCs and comprehensive evaluations for students of all disabilities types. However, as suggested by Recommendation 1.3, districts may need more guidance about when ARCs should include members beyond those required by regulation.

Coursework Relevant to Identification and Treatment of Dyslexia. In recent years, there has been some concern that dyslexic children are not always identified and provided with relevant support in Kentucky schools. Dyslexia is a neurologically based reading difficulty that is estimated to affect between 15 to 20 percent of students. It is just one of the disabilities that could make a child eligible for special education in the category of specific learning disability. Whether they are supported through general or regular education, dyslexic children need access to staff with appropriate training. In cases when children with reading difficulties are referred for special education evaluation, ARC members are responsible for identifying children with dyslexia and developing their IEPs.

Table 2.3 shows results of OEA's analysis of coursework that appeared relevant to identification and instruction of dyslexic children. The minimum number of relevant courses was found in an LBD program. In this program, it appeared that portions of two courses might be relevant to dyslexia. The first course addressed general reading theory and practice in P-12 education. The second course was an introductory course on learning disabilities. Both courses were offered in 11 online classes that also included chat sessions and videoconferencing. Neither course mentioned dyslexia in the course description. Given the broad content covered in each course, it is unlikely that candidates would receive intensive preparation relevant to identification and treatment of dyslexia in particular.

Staff did identify an LBD program that required a heavier course load in reading-related subjects. Of the courses listed, only one, *Language Arts for Exceptional Children*, appears likely to contain material directly related to reading disabilities.

Table 2.3Minimum and Maximum Amount of Coursework Relevant to
Recognition and Treatment of DyslexiaSample of Programs in Four Kentucky Postsecondary Institutions

	Minimum Number of Courses	Maximum Number of Courses
Certification	Learning and Behavior Disorders (master's degree)	Learning and Behavior Disorders (bachelor's degree)
Relevant Courses	1. Theories of Reading and	1. Foundations of Reading
	Educational Practices P-12	2. Language Arts for Early Elementary
		3. Reading for Early Elementary Teachers
	2. Introduction to	
	Learning Disabilities	4. Language Arts for Exceptional Children

Source: Staff analysis of data from the Education Professional Standards Board for programs leading to certification in special education.

The International Dyslexia Association recently raised concerns that neither general nor special education teachers are sufficiently prepared to identify and address dyslexia in children.

In some cases, staff with certification, endorsement, or a master's degree in a specific curriculum area may be better prepared to address the needs of some students with disabilities than are special education teachers. Concerns about the preparation of teachers to identify and instruct students with reading disabilities are not unique to the Commonwealth. In a review of preparation programs for both special and general education teachers, the International Dyslexia Association recently concluded:

The majority of practitioners at all levels have not been prepared in sufficient depth to prevent reading problems, to recognize early signs of risk, or to teach students with dyslexia and related learning disabilities successfully. Inquiries into teacher preparation in reading have revealed a pervasive absence of rich content and academic rigor in many courses that lead to certification of teachers and specialists (International 2).

In some cases, staff with certification, endorsement, or a master's degree in a specific curriculum area may be better prepared to address the needs of some students with disabilities than are special education teachers. For example, OEA identified three courses in a master's program in literacy instruction that appear relevant to the identification and treatment of dyslexia: *Diagnostic Reading Procedures for Classroom Teachers; Clinical Diagnosis of Reading Variability; and Reading Intervention.* The EPSB now offers an endorsement for reading as well as for literacy specialists. The literacy specialist endorsement is designed, in part, to prepare

teachers to identify and address reading difficulties. Literacy specialists may have more training than some special education teachers in identifying and instructing children with reading disabilities but are not currently qualified to provide special education instruction.

Because this analysis includes only a small sample of the state's LBD programs, it is not sufficient to raise concerns about the preparation of all LBD program graduates to identify and support dyslexic children. The analysis should raise concerns, however, about whether children with dyslexia are necessarily served most effectively through special education programs. The analysis suggests that more attention is needed to the specific training of education personnel, whether through general or special education. While staff did not review sampled programs for coursework related to other learning disabilities, the concern raised here about preparation of special education teachers to teach dyslexic children applies to any disability for which teachers have not been specifically trained.

Content Knowledge Not Required for Special Education Teachers

The majority of special education teachers work in collaboration with classroom teachers and are not required to demonstrate subject content knowledge through certification or assessment. In theory, these teachers work alongside content certified teachers, helping to adapt the content for special education students. However, it is unclear whether collaborating teachers can adapt content they have not mastered themselves. This concern applies especially to advanced content. Most high school math teachers interviewed for OEA's 2009 Mathematics Study expressed concerns about weak content preparation of many special education teachers and subsequent limitations in the collaborative model.¹

Concerns about the weak content preparation of special education teachers have also been raised nationally. The National Council of Teachers of Mathematics and the National Center for Learning Disabilities have both noted the importance of subject matter knowledge in the ability of special education teachers to modify content and provide interventions for students (National Council;

Because this analysis includes only a small sample of the state's LBD programs, it is not sufficient to raise concerns about the preparation of all LBD program graduates to identify and support dyslexic children. The analysis does suggest that more attention is needed to the specific training of education personnel, whether through general or special education.

Kentucky special education teachers working in collaborative classrooms are not required to demonstrate subject content knowledge through certification or assessment. It is unclear whether special education teachers can adapt content they have not mastered themselves.

Concerns about the weak content preparation of special education teachers have also been raised nationally. Only 16 states require special education teachers to be qualified in a core content area.

¹ Several teachers described positive relationships that had developed over time with special education collaborating teachers. In these cases, administrators ensured ongoing pairing of math teachers with specific personnel who had worked to develop content knowledge necessary to collaborate effectively.

Cortiella). According to a 2004 survey conducted by *Education Week*, only 57 percent of special education teachers reported that they were very familiar with the content they were required to teach (as reported in Cortiella 15). Only 16 states require special education teachers to be qualified in a core content area. Questions exist about whether these teachers should be considered highly qualified under guidelines established by No Child Left Behind (Walsh 11).²

The EPSB does offer a learning and behavior disorders endorsement for grades 8–12 that would permit content teachers to become certified to teach special education students. The LBD endorsement offers a way for districts to address special education teacher shortages by encouraging general education teachers to pursue endorsements. However, relatively few teachers pursue this endorsement (Carr. Personal).

Nonstandard Certificates

Far greater numbers of special education teachers are teaching with nonstandard alternative, probationary, and emergency certificates than are teachers of any other subject. Alternative certificates allow individuals to teach while taking coursework toward a degree. Unlike teachers with standard certificates, alternatively certified teachers can teach without having prior, supervised teaching experience. Of the 1,548 teachers teaching with alternative certificates in 2011, 40 percent were special education teachers, making them the largest single category of alternatively certified teachers. Probationary certificates are issued to certified teachers who are teaching out of their certified field while they take courses necessary for full certification in a different field. In 2011, 43 percent of the state's 202 probationary teachers were special education teachers, making them also the largest single category of probationary teachers. Emergency certificates are 1-year nonrenewable certificates that allow districts to hire noncertified staff to fill positions for which there are no certified applicants. The number of special education teachers teaching with emergency certificates has declined in recent years, following changes by EPSB to 16 KAR 2:120 preventing districts from renewing emergency certificates. Still, 50 special education teachers were teaching with emergency certificates in 2011.

Far greater numbers of special education teachers are teaching with nonstandard alternative, probationary, and emergency certificates than are teachers of any other subject.

² No Child Left Behind requires special education teachers to demonstrate content knowledge only if they are the sole teachers responsible for delivering content.

The use of emergency and probationary certificates is perhaps of greatest concern in the areas of visual impairment and hearing impairment.

Training opportunities for teachers of hearing and visually impaired children are limited in the Commonwealth. No institution is currently admitting candidates to teach visually impaired children.

District administrators interviewed for this study cited concerns about the preparation of alternatively certified teachers to work with special education students.

District staff cited challenges attracting and retaining special education teachers, especially in low-incidence categories such as visual impairment. Legislative Research Commission Office of Education Accountability The use of emergency and probationary certificates is perhaps of

greatest concern in the areas of visual impairment and hearing impairment. Students with these disabilities need support from specially trained personnel in order to have even the most basic access to educational opportunities. In 2011, four emergency certificates were issued for teachers of hearing-impaired children. As of the writing of this report, for the school year 2012, one emergency certificate had been issued each in the areas of hearing impairment and visual impairment, and four probationary certificates had been issued for visual impairment (Carr. "RE").

Training opportunities for teachers of hearing and visually impaired children are limited in the Commonwealth. Eastern Kentucky University is the only institution offering a program leading to certification for hearing impairment. Until 2012, the University of Louisville was the only institution offering a program leading to certification in visual impairment. Because of funding constraints and other issues, this program is no longer admitting students. Absent training opportunities in the Commonwealth, the number of visual impairment teachers with emergency and probationary certificates is likely to increase.

District administrators interviewed for this study cited concerns about the preparation of alternatively certified teachers to work with special education students. While acknowledging exceptions, administrators noted that alternatively certified teachers generally do not have sufficient preservice experience working with special education students and in-school settings. Alternative certification programs in subjects such as math and science require teachers to have subject-specific skills and experience, but there is no such subject-specific requirement for alternative certification programs in special education.

Attraction and Retention of Special Education Teachers

District staff interviewed for this report cited general challenges attracting and retaining special education teachers with the qualifications and the characteristics necessary to instruct special education students. Staff reported greatest difficulties recruiting teachers to serve students in lower-incidence categories such as functional mental disability, hearing impairment, and visual impairment. On average, special education teachers have less experience than do all Kentucky teachers.

Special education students are often served by aides. Statewide, there are more special education teachers than aides, but the ratio of teachers to aides varies among districts. In 2011, one large district employed almost twice as many aides as teachers.

Special education students are also commonly served by physical therapists, occupational therapists, interpreters, nursing staff, and other related personnel. Districts vary broadly in the number and types of related personnel they employ, with some employing six times as many as others.

Recommendation 2.1

Data also indicate higher rates of teacher attrition in special education than in other areas. On average, special education teachers have less experience than all Kentucky teachers. In 2011, 33 percent of special education teachers had less than 5 years of experience, compared to 27 percent of all teachers. This challenge is not unique to Kentucky. According to the National Center for Learning Disabilities, attrition rates for special education teachers outpace those for general education teachers leading districts to cope with teacher shortages by employing substitutes or uncertified teachers, raising caseloads, and increasing use of aides.

Other Special Education Personnel

Special education students are often served by aides. Schools employ almost as many special education aides as they do special education teachers. Statewide, the ratio of special education teachers to aides in 2011 was 1.25:1. District ratios of special education teachers to aides ranged from 0.5:1 to 8:1. In 2011, 41 districts employed more aides than special education teachers. One large rural district employed nearly twice as many aides as teachers. ARCs determine whether services will be provided by aides. KDE does not provide formal guidance on the appropriate use of aides.

Special education students are also commonly served by physical therapists, occupational therapists, interpreters, nursing staff, and other related personnel. Districts vary broadly in the number and types of related personnel they employ. In 2011, the ratio of special education students to related personnel in Kentucky districts ranged from 31:1 to 5:1. These numbers suggest troubling variation among Kentucky districts in the specialized services available to students with disabilities. Determinations of appropriate use of specialized staff or instructional aides can be made only in reference to the specific needs of identified students as described on their IEPs. When conducting its general monitoring of special education programs, KDE might include districts with unusual ratios of special education students to aides or other relevant personnel when selecting districts for audits.

Recommendation 2.1

In choosing districts for general monitoring as required by 707 KAR 1:380 Section 1, the Kentucky Department of Education should consider including unusual staffing data as one selection criterion. Administrators in some districts have recognized and taken steps to address training gaps of special and general educators. Administrators in other districts may be less aware of the need to systematically address these gaps.

Training gaps across the Commonwealth might be addressed largely by strategic use of time and funds available for teachers' professional development and continuing education.

Addressing Training Gaps

Administrators in some districts have recognized and taken steps to address training gaps of special and general educators. As described in Appendix F, for example, one Kentucky district has invested in extensive training of classroom teachers in behavior and reading difficulties and provided every school with access to a variety of personnel trained to identify and support students with particular disabilities. In another district, high school special educators are provided with content training, sent to the same professional development as classroom teachers, and placed in the same content area from year to year.

In other districts, administrators may be less aware of training gaps, assuming that a special education certified teacher is fully prepared to identify and address the needs of students in all disability categories covered by their certificate. Administrators might also assume that general educators are prepared by their preservice programs to teach nonstandard learners and to provide intervention to struggling students.

Ongoing Training Through Professional Development and Rank Change

Training gaps across the Commonwealth might be addressed largely by strategic use of time and funds available for teachers' professional development and continuing education. Teachers are required to continue their training through four professional development days annually and through coursework in advanced programs required for rank change. Through these mechanisms, district and school administrators might encourage or require teachers to develop skills that would improve their abilities to identify and support students with a wide range of learning difficulties.

Opportunities to develop skills relevant to identifying and assisting students with learning difficulties through continuing education for rank change include endorsements in LBD grades 8 through 12, elementary math, and the proposed literacy endorsement. Professional development relevant to these skills is also provided through many venues including educational cooperatives, special education cooperatives, the Kentucky Center for Mathematics, and the Collaborative Center for Literacy. In the future, professional development relevant to identifying and supporting students with learning difficulties might be provided through KDE's proposed Continuous Instructional Improvement Technology System, which

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In the Commonwealth, decisions about the content of teachers' professional development and the content of ongoing education associated with rank change are made at the local level.

KDE and the Education Professional Standards Board, in collaboration with subject area organizations, might play a greater role in providing guidance to local administrators about the types of training desirable for district and school staff.

Recommendation 2.2

"will connect standards, electronically stored instructional resources, curriculum, formative assessments, instruction, professional learning and evaluation of teachers and principals in one place" (Commonwealth. Department. *Continuous* 1).

In the Commonwealth, decisions about the content of teachers' professional development and the content of ongoing education associated with rank change are made at the local level. While the EPSB approves programs offered for ongoing education, it does not currently mandate specific content that must be provided in these programs. KDE requires schools and districts to develop professional development plans but does not mandate the content that must be addressed in these plans. This decentralized system allows districts and schools important flexibility in identifying training appropriate for their needs. It may also have limitations in cases of systematic training gaps such as those identified in this chapter.

KDE and EPSB, in collaboration with subject area organizations, might play a greater role in providing guidance to local administrators about the types of training desirable for district and school staff. This type of guidance could raise awareness among districts and providers about the types of training that could be developed or pursued. While not binding, this guidance might also be used in KDE's proposed audit system, its audits of lowachieving districts and schools, and its continued monitoring of special education programs to recommend the next steps in training for district or school staff.

KDE and EPSB guidance relevant to ongoing training of personnel might be helpful in multiple areas. For example, the Virginia Autism Council has issued guidelines on skills for personnel working with autistic children (Virginia). This report focuses special attention on the need for guidance in administration, interpretation of diagnostic assessments, and identification of and support for children with learning difficulties or disabilities.

Recommendation 2.2

The Kentucky Department of Education and the Education Professional Standards Board, in collaboration with relevant subject area groups, should consider developing best practice documents regarding school and district staff training and continuing education in the following areas:

identifying and supporting students with reading difficulties or disabilities;

- identifying and supporting students with mathematics difficulties or disabilities; and
- administering and interpreting diagnostic assessments.

Chapter 3

Special Education Finance

Special education revenue and expenditure trends reported in this chapter illustrate close relationships between identification practices and funding considerations.

This chapter identifies a number of issues associated with current methods of funding services for special education students through SEEK and state preschool funding.

Special education services for elementary and secondary students are funded by revenue from local, state, and federal sources. The majority of revenue comes from the SEEK formula.

SEEK exceptional child add-on funding provided to districts is based on the number and types of special education students identified in each district. Special education revenue and expenditure trends reported in this chapter illustrate close relationships between identification practices and funding considerations. Special education expenditures have reached record highs in the Commonwealth. Districts are responsible for ensuring that special education students have free and appropriate public education, regardless of cost. It is also important that special education revenue not be directed at students who can be educated more effectively and efficiently in general education. Districts should be encouraged to examine special education eligibility requirements and service models, but some may have less fiscal flexibility than others to do so.

This chapter identifies a number of issues associated with current methods of funding services for special education students through SEEK and state preschool funding. Among these are questions about the alignment between funds provided and services needed by students with different disabilities, possible incentives to identify students with a disability, and lack of provision for extremely high-cost students.

Methods of Funding Special Education Elementary and Secondary

SEEK Exceptional Child Add-on

Special education services for elementary and secondary students in the Commonwealth are funded by revenue from local, state, and federal sources. The majority of revenue comes from the Support Education Excellence in Kentucky formula, which comprises both state and local dollars. SEEK contains specific calculations for educating and transporting students with disabilities.

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.¹ The exceptional child funding is based on

¹ A guaranteed base amount of per-pupil funding is established by the General Assembly for each budget cycle.

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's December 1 child count by disability type. Disability types are grouped into three funding categories—high, moderate, and low incidences. Districts are not required to expend special education revenue dollar for dollar on identified students.

SEEK Add-on Weights for Students With Disabilities SEEK			
Funding Category	Add-on Weights	Disability Type	
High Incidence	0.24	Communication disorders of speech or language	
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, visual impairment, hearing impairment, emotional- behavioral disability, multiple disabilities, deaf-blind, autism, traumatic brain injury	

Table 3.1 SEEK Add-on Weights for Students With Disabilitie

Source: Kentucky Department of Education.

Staff in some districts indicated lack of alignment between funding weights and the costs of educating students in certain categories.

The weighted, per-pupil funding system used in Kentucky is the most common type used in the US but has been criticized for providing possible incentives to identify students for special education. In several Kentucky districts, staff indicated lack of alignment between funding weights and the costs of educating students in certain categories. As will be discussed later in this chapter, the funding weight of 2.35 does not generate enough revenue to cover the high costs of educating students with very intensive needs. Staff in one district suggested that the funding weight of 0.24 does not generate revenue sufficient to provide services for students with speech or language impairments. District staff did not raise concerns about the funding weight for students in moderate incidence categories.

Funding Mechanisms Used in Other States

States vary considerably in the way that they provide funding for special education students. Appendix G categorizes these systems into eight types. In this section, the weighted per-pupil system used in Kentucky and several alternative systems are discussed.

Per-pupil Funding Systems. The weighted, per-pupil funding system used in Kentucky is also used by 12 other states and is the most common type of system in the US, though specific weights vary among states. These systems have been criticized for providing possible incentives to identify students for special education. Using data collected in several states, researchers have

The federal government and 14 states have switched to funding models that do not link special education pupil counts with special education revenue.

Thirty states have special funding provisions for especially high-cost students. Kentucky has no such provision.

In addition to SEEK exceptional child revenue, districts receive funding for special education through IDEA, supplemented recently by substantial additional funding through the American Recovery and Reinvestment Act (ARRA). also noted weak links between funding weights and the actual costs of educating students with different disabilities. Disability categories alone explain only about 10 percent of the costs of educating students. This is due partly to the fact that the categories do not distinguish between levels of severity or the number of different disabilities (Chambers. *Educating*).

Funding Models Not Associated With Child Counts. The federal government and 14 states have switched to funding models that do not link special education pupil counts with special education revenue. Seven states provide funding for special education based on a district's total population rather than on the number of students identified for special education, and seven do not provide any specific special education funding.

High-cost Students. As of 2006, 30 states had special funding provisions for especially high-cost students. These students have been defined as the highest-cost 5 percent of special education students. They can cost 6 to 14 times as much to educate as the average special education student. The highest-cost students are generally those placed in special schools. States take three basic approaches to funding provisions for high-cost students: paying for a percentage of additional costs with a spending cap, paying for a percentage of additional costs without a spending cap, and reimbursing districts that request additional funding based on a rate prorated to the number of requests received (Griffith). Kentucky has no provision for very high-cost students.

The General Assembly may wish to request that studies be conducted, according to alternative scenarios, of changing funding for special education and the fiscal consequences to the state and individual districts.

Revenue and Expenditure Trends Elementary and Secondary

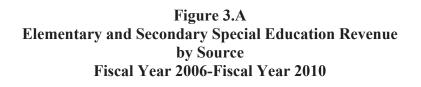
Elementary and Secondary Revenue Trends

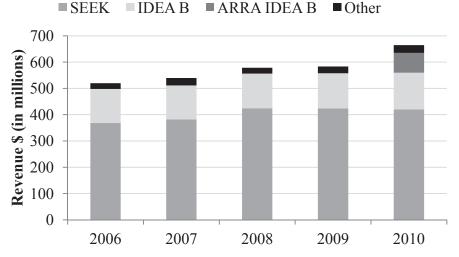
Special education services in the Commonwealth are funded primarily by SEEK exceptional child revenue. Substantial additional funding comes from the federal government through IDEA, supplemented recently by funds from the American Recovery and Reinvestment Act (ARRA). A small percentage of special education revenue comes from federal funding through Medicaid and state funding through SEEK transportation.

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Between 2006 and 2010, total special education revenue increased steadily with recent increases explained primarily by the addition of ARRA funding. Following a drop in the number of students identified for special education, SEEK exceptional child allocations decreased by \$3.8 million between 2009 and 2010. Figure 3.A shows revenue for special education by funding source between 2006 and 2010. Revenue for special education has increased steadily, with recent increases explained primarily by the addition of ARRA funding. Following a drop in the number of students identified for special education, SEEK exceptional child allocations decreased by \$3.8 million between 2009 and 2010.

Revenue allocated for special education constitutes a substantial portion of total SEEK revenue. At \$420 million, SEEK revenue for the exceptional child add-on was 19.1 percent of total SEEK revenue in 2010.





Note: Medicaid and SEEK transportation revenue for students with disabilities are grouped together in the "other" category.

Source: Staff analysis of data from the Kentucky Department of Education.

Revenue by Student Funding Category

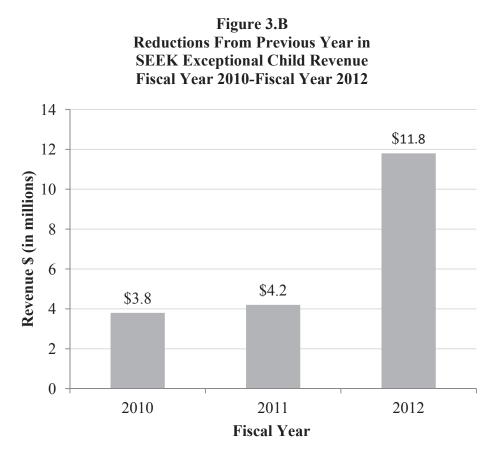
In 2010, 59 percent of SEEK exceptional child revenue came from funding generated by students in the moderateincidence category, 35 percent from students in the low-incidence category, and 6 percent from children with speech or language impairments. In 2010, 59 percent of SEEK exceptional child revenue came from funding generated by students in the moderate-incidence category. In 2010, 35 percent of SEEK exceptional child revenue was generated by students in the low-incidence category and 6 percent by students in the high-incidence category of speech or language impairments.

Recent reductions in SEEK exceptional child allocations highlight the relationship between special education identification and funding. The reduction of \$11.8 million in 2012 reflects substantial drops in the number of students identified for special education during the 2011 school year. These drops are likely associated with KDE's 2010 audits of districts with high identification rates and subsequent communication to all districts of concerns about eligibility requirements.

Fiscal Impact of Reducing Identification Rates

Recent reductions in SEEK exceptional child allocations highlight the relationship between special education identification and funding. Figure 3.B shows the reduction in funds allocated for special education through the SEEK exceptional child add-on between 2010 and 2012.² Reductions reported in each year are based on differences in SEEK exceptional child funding from the previous year. Reductions of \$3.8 million or 0.8 percent in 2010 and \$4.2 million or 1 percent in 2011 reflect drops in the number of students identified in the 2009 and 2010 school years. These drops are likely the result of new requirements for research-based interventions prior to special education identification. The additional reduction of \$11.8 million in 2012 reflects substantial drops in the number of students identified for special education during the 2011 school year. These drops are likely associated with KDE's 2010 audits of districts with high identification rates and subsequent communication to all districts of concerns about eligibility requirements. Following these audits, SEEK exceptional child revenue dropped by 3 percent across the state and by 11 percent in audited districts.

² 2012 SEEK revenue has been projected from the 2011 child count taken in December 2011.



Source: Staff analysis of data from the Kentucky Department of Education.

Despite recent statewide reductions in the number of students identified for special education, identification rates remain high in many Kentucky districts. In 2011, 67 out of 174 districts had identification rates in excess of 15 percent, 14 districts having identification rates of 20 percent or greater. Should KDE's continuing audits identify eligibility concerns similar to those identified in 2010, the number of students identified for special education in the Commonwealth might continue to drop. This would result in additional decreases in the amount of revenue allocated through the SEEK exceptional child add-on.

Differential Impact of SEEK Reductions Based on District

Wealth. In the 2012 year, districts that reduced the numbers of students identified for special education in 2011 faced substantial reductions in SEEK exceptional child revenue. OEA visited one relatively small, poor district that projected that as many as 14 special education positions would have to be eliminated because of loss of funding. District staff noted that, while the students removed from special education may not have disabilities that require instruction through special education, they do have learning needs that general education teachers may not be prepared

Should KDE's continuing audits identify eligibility concerns similar to those identified in 2010, the number of students identified for special education in the Commonwealth might continue to drop. This would result in additional decreases in the amount of revenue allocated through the SEEK exceptional child add-on. Loss of exceptional child revenue is likely to have a disproportionate impact on poor versus wealthy districts.

Questions about the relative capacity of poor versus wealthy districts to support students with learning difficulties in general education can be answered only with a deeper analysis of all funding sources. The General Assembly may wish to request that research be conducted to address these questions. to address. The district will not receive any added revenue to address the needs of these students. In contrast, OEA visited a relatively wealthy district in which the superintendent attempted to offset a school's loss of special education staff with increased funding for additional support staff such as a reading teacher.

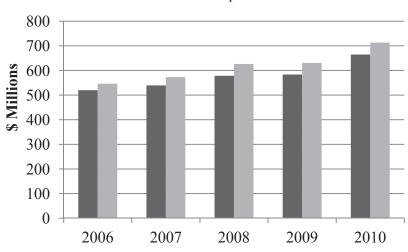
Loss of exceptional child revenue is likely to have a disproportionate impact on poor versus wealthy districts. Poor districts rely heavily on state funding and may not have funds for additional support staff in general education. In some poor districts, special education may have become the default option for students who are struggling simply because it is the only option linked with direct funding. OEA interview data indicate that some educators and parents view identification for special education as the only available option for assisting a student with learning difficulties. Interviewees acknowledged that special education is not always the most appropriate form of support but noted that support through special education is preferable to no support at all. For this reason, some poor districts may have a fiscal disincentive to examine special education eligibility requirements and service models.

Questions about the relative fiscal capacity of poor versus wealthy districts to support students with learning difficulties in general education can be answered only with a deeper analysis of all funding sources. For example, districts receive additional revenue for students living in poverty through the SEEK at-risk add-on and the federal Title I program. These funds might be used to support students with learning difficulties in general education. The General Assembly may wish to request that research be conducted to address these questions.

Special Education Expenditures Versus Revenue

Figure 3.C shows combined special education revenue compared to expenditures from 2006 to 2010. These expenditures include only those provided to special education services through special education programs and do not include the substantial general education expenditures associated with special education students. For example, special education expenditures include the cost of special education teachers assisting students in collaborative classrooms but do not include the cost of general education teachers providing instruction to special education students in collaborative classrooms or elsewhere. Special education expenditures have increased steadily, reaching \$713 million in 2010. While both revenue and expenditures have increased in recent years, expenditures have increased at a faster pace than revenue. As the figure shows, expenditures have increased steadily, reaching \$713 million in 2010. Expenditures have increased at a faster pace than revenue. Between 2006 and 2009, expenditures increased by 15.5 percent, whereas revenue increased by only 12.2 percent. Because of the substantial and temporary influx of ARRA funding, 2010 shows substantial increases in both revenue and expenditures.

Figure 3.C Elementary and Secondary Special Education Revenue and Expenditures Fiscal Year 2006-Fiscal Year 2010



Note: Revenue and expenditures do not include on-behalf payments, as these payments are not being coded consistently by all districts. Source: Staff analysis of data from the Kentucky Department of Education.

Notably, both revenue and expenditures have continued to increase despite declining numbers of special education students. Per-pupil expenditures for special education students rose from approximately \$5,700 in 2006 to \$6,600 in 2009.³ Increased expenditures reflect, in part, recent increases in costs associated with educating all students. These costs were driven primarily by increases in teacher salaries and benefits but also by increases in transportation costs.

With the influx of ARRA funding in 2010, districts spent relatively less on personnel and relatively more on other expenses than is

Per-pupil expenditures for special education students rose from \$5.700 in 2006 to \$6.600 in 2009.

■ Revenue ■ Expenditures

³ While Figure 3.C includes total revenue and expenditures through 2010, staff did not include 2010 data in calculation of per-pupil expenditures, as these data reflect short-term increases associated with ARRA funds.

typical. In 2010, 91 percent of special education expenses were coded to salaries or benefits for special education personnel, with the remaining coded to other expenses such as property, supplies, and purchased services. Personnel-related expenses are typically several percentage points higher. In 2010, districts spent about \$15 million more on property expenses such as new buses than they did in 2009. Because ARRA is short-term revenue that will not be available to districts after 2012, KDE encouraged districts to avoid investing in personnel and other continuing expenses.

Variation in Expenditures Among Districts

Districts vary considerably in special education expenditures relative to the special education revenue they receive. In 2010, 83 of Kentucky's 174 districts spent more on special education than they received in special education revenue from all sources, with 13 districts spending upward of 25 percent more than they received in revenue. In the same year, 91 districts spent less than they received, with 19 spending less than 75 percent of what they received in revenue.

OEA interviews with district staff in two higher-spending districts indicated that expenditures in these districts are driven largely by the high cost of teacher salaries and by the number of students requiring intensive services.⁴ Staff in these districts, known regionally for the high quality of their special education programs, reported systematic relocation to their districts of families with children who have intensive needs. In both districts, the ratio of related special education service providers such as physical therapists, occupational therapists, and medical staff to special education students was more than twice as high as the average ratio in all Kentucky districts.

Statewide, staff did not find systematic associations between district staffing ratios or other characteristics and the amount districts spent on special education relative to revenue. Districts on both the high and low end of special education expenditures show variation in characteristics such as district wealth, percent of students living in poverty, personnel ratios, and identification rates.

Districts vary considerably in special education expenditures relative to the special education revenue they receive. In 2010, 83 of Kentucky's 174 districts spent more on special education than they received in special education revenue.

⁴ SEEK exceptional child add-on revenue does not account for regional differences in teacher salaries. The low-incidence funding weight does not distinguish between students who require intensive services and unusually high-cost students.

District staff raised concerns about the cost of educating extremely disabled students relative to the SEEK funding associated with these students. In one small district, an extremely disabled student accounted for less than 1 percent of the special education population but 14 percent of the district's special education expenditures.

Expenditures associated with very high-cost students may pose a special challenge to small districts with limited special education revenue. Districts in which there are residential facilities serving special education students may also bear disproportionate fiscal burden for educating high-cost students.

Expenditure Concerns Raised by Site Visit Districts

High-cost Students. Superintendents, finance officers, and special education directors interviewed for this study raised concerns about the costs associated with educating extremely disabled students relative to the SEEK funding associated with these students. Of greatest concern are medically fragile students who require intensive individual medical and academic assistance throughout the day and students with extreme emotional and behavioral challenges. In some cases these students require individual attention from several different types of special education personnel. In others, students are placed in hospital settings to ensure that they do not endanger other students or themselves. In one such case, a district was paying \$146,000 annually to place a severely emotionally disturbed student in a private setting. In this small district, the student accounted for less than 1 percent of the special education population but 14 percent of the district's special education expenditures. According to the superintendent, the district would have to "close its doors" if required to bear the costs associated with these types of students over time, especially if the numbers increased.

Expenditures associated with very high-cost students may pose a special challenge to small districts with limited special education revenue. Of the state's 174 districts, 40 have student enrollments of 1,000 or less. A single high-cost student can consume a substantial portion of special education revenue in a small district.

Districts in which there are residential facilities serving special education students may also bear disproportionate fiscal burden for educating high-cost students. Residential facilities can include Department of Juvenile Justice facilities, hospitals for emotionally disturbed children, or residential treatment homes. Districts must bear the cost of educating children in residential homes even if these children are residents of other states.

The numbers of students who require costly services may be on the rise. Increasing numbers of students are being identified with autism, a disorder that can sometimes include extreme emotional and behavioral challenges. Special education cooperative directors cited anecdotal observations about increasing numbers of students with extreme emotional disturbances even at very young ages. Some cited closure of local hospitals or funding cuts that have placed students whose medical needs were being served in other settings back in the public schools.

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Legal protections through IDEA are critical to ensuring that students with disabilities are provided with necessary services.

The threat of legal action can also contribute to decisions that may result in unnecessary expenditures. In some cases, the cost of fighting a legal claim when parents dispute an ARC decision can be greater than the cost of providing a service requested by a parent. **Threat of Legal Action.** Through IDEA, parents are guaranteed the right to due process in settling disputes with a district about the services provided to their children. These protections are critical to ensuring that students with disabilities are provided with the services necessary to ensure access to education.

According to staff in most site visit districts, the threat of legal action can also contribute to decisions that may result in unnecessary expenditures. Upon a parent's request, a district may, for example, purchase specific technology even if the ARC has determined that the instructional needs of the child can be served with other less costly technology. In these cases, the cost of fighting a legal claim can be greater than the cost of providing the requested service. Districts must devote staff time and pay legal counsel to address threats of legal action when they arise, even if they believe their decisions are defensible. While anecdotal reports suggest that threat of legal action is driving expenditures in many districts, data collected for this study were not sufficient to determine the number of Kentucky districts for which this is a concern.

OEA visited one district that has taken systematic steps to reduce expenditures associated with threat of legal action. The district established ARC procedures to use in determining the appropriate services for students with particular disabilities that is consistent with the requirements of IDEA. When necessary, the district faced legal action to defend the services they were providing. District administrators noted a decrease over time in the number of parents they believed were requesting services that were not required for appropriate education of students with disabilities.

Preschool Revenue and Expenditures

State-funded Preschool

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 elementary and secondary education. KRS 157.8175 specifies that 3-, 4-, and 5-year-old children with disabilities and 4-year-old 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. In 2006, the eligibility requirement for students at risk was extended from 130 percent to 150 percent of federal criteria for living in poverty. State funding is awarded to districts based on

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 elementary and secondary education. Funding rates for preschool students with disabilities are based on three disability types speech/language, developmental delay, and severe/multiple disabilities. At-risk students are funded at a separate rate. The rates increased between 2006 and 2008. With the exception of 2010, rates have declined since 2008. Legislative Research Commission Office of Education Accountability

per-child preschool rates established each year by the Kentucky Board of Education.

Per-child funding rates for students with disabilities are based on three disability types—speech/language, developmental delay, and severe/multiple disabilities. At-risk students constitute a separate preschool eligibility classification.

Table 3.2 shows funding rates established by the Kentucky Board of Education for 2006 through 2012. These rates increased substantially between 2006 and 2008 but, with the exception of 2010, have declined since then.

Table 3.2Kentucky Preschool Funding RatesFiscal Year 2006-Fiscal Year 2012

Classification	2006	2007	2008	2009	2010	2011	2012
At-risk	\$2,150	\$3,168	\$3,304	\$3,094	\$3,293	\$3,085	\$2,863
Speech/Language	2,258	3,327	3,469	3,249	3,457	3,240	3,007
Developmental							
Delays	3,011	4,436	4,626	4,332	4,610	4,319	4,009
Severe/Multiple							
Disabilities	4,086	6,020	6,278	5,879	6,256	5,862	5,440

Source: Commonwealth. Department of Education. Staff.

Funding allocated to preschool increased from \$51 million in 2006 to \$76 million in 2008. Beginning in 2009, allocations decreased. In 2011, \$72 million was allocated to preschool.

Funding of services for preschool students with disabilities is also provided by IDEA, supplemented beginning in 2009 by ARRA funds.

Total preschool revenue increased sharply from 2006 to 2007 because of an increase in state preschool allocations. Total revenue has remained relatively flat since then. Preschool funding rates are calculated based on the amount allocated by the General Assembly each year and the number of students eligible for preschool. Funding allocated to preschool increased from \$51 million in 2006 to \$76 million in 2008. Beginning in 2009, allocations decreased. In 2011, \$72 million was allocated to preschool.

IDEA Funding for Preschool Students With Disabilities

State funding of services for preschool students with disabilities is supplemented with additional funding from IDEA for students ages 3 through 5 and, beginning in 2009, with additional funding through ARRA.

Preschool Revenue and Expenditure Trends

Figure 3.D shows the revenue for preschool through state funds, IDEA, and ARRA as well as the total expenditures for preschool between 2006 and 2010. Total revenue increased sharply from about \$59.5 million in 2006 to \$83.2 million in 2007 because of an

Preschool expenditures exceeded revenue in all years between 2006 and 2010. increase in state preschool allocations. Total revenue has remained relatively flat since then.

Figure 3.D also shows that preschool expenditures exceeded revenue in all years. Expenditures exceeded revenue by 20 percent in 2009 and by 11 percent in 2010. It is possible that in 2010 some districts used temporary ARRA funding to pay for services that they were not able to cover with existing preschool revenue, and that the gap between expenditures and revenue will increase once ARRA funds have been spent.

Figure 3.D Revenue and Expenditures for State-funded Preschool Fiscal Year 2006-Fiscal Year 2010

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Source: Staff analysis of data from the Kentucky Department of Education.

In 2010, preschool expenditures exceeded revenue in 83 districts; 33 exceeded revenue by more than 25 percent; and only 8 spent less than 75 percent of what they received in revenue.

In recent years, the preschool revenue generated by students with disabilities has decreased relative to the revenue generated by at-risk students. Preschool spending versus revenue also varies by district. In 2010, preschool expenditures exceeded revenue in 83 districts and exceeded revenue by more than 25 percent in 33 districts. Only 8 districts spent less than 75 percent of what they received in revenue.

Changing Proportion of Preschool Children With Disabilities and At Risk. In recent years, the preschool revenue generated by students with disabilities has decreased relative to the revenue generated by at-risk students. In 2011, approximately 52 percent of preschool funding was generated by students with disabilities, less than the 60 percent that was generated by students with disabilities in 2010. During these years, the number of students identified with disabilities in this age group has decreased while the number of students found eligible because of family poverty has increased.

As the relative proportion of students with disabilities in the preschool population has decreased, the number of students educated per preschool dollar expended has increased. Expenditures dropped by \$3.9 million between 2009 and 2010 despite an increase of 1,091 students served in preschool.⁵ Data collected for this study were not sufficient to determine why preschool expenditures dropped in 2010.

Preschool Funding Issues

Unlike SEEK funding for exceptional children, the total amount of state revenue allocated for preschool children with disabilities does not vary based on the number of students identified each year. Instead, the General Assembly determines a specific dollar amount to be allocated for state-funded preschool in each biennial budget. This total dollar amount is divided by the number of students determined to be eligible each year in each category and reflected in specific funding rates. Thus, the total number of students identified for preschool in the state directly influences the funding rates that determine the amount received by districts for children in each category. This means that funding rates vary from year to year based on total revenue allocated and number of students identified rather than the presumed cost to districts of providing preschool services.

Also unlike SEEK funding for exceptional children, state allocations of preschool funding to districts do not vary based on district wealth. Poor and wealthy districts receive the same amount of funding per preschool child identified in each eligibility category.

Difficulties in many cases distinguishing between the needs of atrisk children versus developmentally delayed children raise questions about whether the rates associated with each disability category are reflective of the costs of educating individual children. In some cases, services provided to at-risk children may be very similar to those provided to developmentally delayed children with both being met through the regular preschool program and by teachers with Interdisciplinary Early Childhood

Preschool funding rates vary from year to year based on total revenue allocated and number of students identified rather than the presumed cost to districts of providing preschool services.

Unlike SEEK funding for exceptional children, state allocations of preschool funding to districts do not vary based on district wealth.

It is possible that variation among districts in the way that students are identified for preschool leads to inequities in the distribution of preschool funds.

⁵ The total number of students eligible for state-funded preschool increased by 814, and the number of students served on a space available basis increased by 277.

Education certificates. Adding to this concern are apparent variations among districts in the criteria used to identify students in particular categories. It is possible that the current funding categories and rates might lead to inequities in the distribution of preschool funds based on the criteria used by individual districts to determine eligibility in each disability category.

Table 3.3 shows the fiscal consequences to two Kentucky districts associated with differences in the percentage of children determined to be eligible in each of the four preschool eligibility categories. In District A, the overwhelming majority-79 percent—of preschool students were determined to be eligible because of family poverty, compared to only 8 percent in District B. In contrast, 73 percent of preschool students in District B were eligible because of identification with developmental delay, compared to only 8 percent in District A. Because districts are provided with more than \$1,000 more funding per student identified with developmental delay compared to at-risk students or students with speech or language impairments, District B received substantially more funding per preschool student than did District A. In 2012, District B received approximately \$3,731 per eligible preschool student compared to \$2,972 received by District A.

Data collected for this report were not sufficient to determine demographic differences among the population of preschool-age children in each district. However, student poverty data for K-12 students in Districts A and B suggest that the districts might serve similar student populations. In District A, 47 percent of K-12 students were eligible for free or reduced-price lunch in comparison to 51 percent of K-12 students in District B. Given similarities in poverty rates among K-12 students in each district, it is surprising that nearly 10 times more preschool students were eligible because of poverty in District A than in District B.

Districts that take a more permissive approach to identifying students with developmental delay will receive substantially more funding per preschool student identified than other districts.

Table 3.3
Differences in Preschool Identification Patterns in 2011
and Per-pupil Allocations in 2012
Two Kentucky Districts

	Percent	Percent Preschool Students by Eligibility Category 2011					
	At-risk	Develop- mental Delay	Speech or Language Impair- ment	Severe Disabi- lities	Total Number of Preschool Students	State Per- pupil Funding 2012	Percent K-12 Students in Poverty 2011
District A	79%	8%	14%	0%	154	\$2,972	47%
District B	8	73	18	0	83	3,731	51

Notes: Preschool enrollment data are based on child counts submitted in December 2010. Preschool enrollments and per-pupil funding for 2012 reported in this table are approximate. They are subject to adjustments based on actual enrollments in 2012. State per-pupil funding is based only on children eligible for state funding and does not include additional children enrolled in preschool.

Source: Staff analysis of data from the Kentucky Department of Education.

Consideration of Alternative Preschool Funding Methods

This report has raised a number of issues related to the method currently used to fund preschool in the Commonwealth:

- Eligibility categories that determine preschool funding for students with disabilities may be difficult to apply consistently.
- Depending on the revenue allocated by the General Assembly in each budget cycle and the number of students eligible each year, annual funding rates established by the Kentucky Board of Education may not always reflect the costs of educating preschool students.
- Districts that take a more permissive approach to identifying students with disabilities receive a greater share of state preschool funding than do other districts.
- Unlike SEEK, preschool funding does not reflect differences among districts in the ability to generate local revenue.

There may be advantages to alternative methods of determining eligibility and funding for preschool. Alternative methods might provide a more stable source of revenue for districts, reduce possible inequities in the way that funding is currently distributed, and reduce time and expense associated with providing RTI at preschool. A recent report by the National Institute for Early Education Research suggests limitations in the methods used to fund preschool in many states and calls for greater attention to preschool funding methods across the nation (Barnett. *Improving*).

Alternative methods of providing state funding for preschool might provide a more stable source of revenue for districts, reduce possible inequities in the way that funding is currently distributed, and reduce time and expense associated with providing RTI at preschool. Legislative Research Commission Office of Education Accountability

> The General Assembly may wish to request that additional research be conducted to identify alternative methods of determining eligibility and funding for preschool and to identify the consequences of using alternative methods to the state, districts, and students.

Chapter 4

Outcomes for Special Education Students

Special education students have made steady gains in reading and mathematics achievement and impressive gains in high school graduation rates. Despite these improvements, large gaps remain between the academic expectations for and performance of many special education students. Implementation of Senate Bill 1 of 2009, which requires a new assessment system linked with the state's challenging new standards in language arts and math, will present new challenges. High school end-of-course assessments will likely prove especially challenging for special education students, especially in Algebra II.

Testing Requirements for Special Education Students

Federal Guidelines

Assessment of special education students in Kentucky's new assessment and accountability system must follow guidelines established by the federal government in connection with IDEA and No Child Left Behind (NCLB). IDEA requires that students with disabilities be included in all state assessments used for purposes of accountability and that students' scores be reported publicly. Accordingly, students with disabilities must participate in the state's new assessment system, which will be linked with rigorous standards in reading and mathematics and implemented in 2012. At the high school level, this system will include end-ofcourse exams in English II, algebra II, biology, and US history.

For purposes of assessment, the term "students with disabilities" includes both special education students and students with 504 plans. The overwhelming majority of students with disabilities are special education students.

NCLB permits up to 1 percent of all students to be tested in an alternate assessment format that contains alternate achievement standards of grade-level content. It also permits that up to 2 percent of students be tested on modified achievement standards. Currently, only the alternative achievement test of up to 1 percent of all students is administered in the Commonwealth.

Students with disabilities must be included in all state assessments used for purposes of accountability. These assessments will be linked with new standards in reading and mathematics and will include high school end-of-course exams.

Currently, up to 1 percent of all students in the Commonwealth can be tested in a format that contains alternate achievement standards of grade-level content. Kentucky's alternate assessment system has been adjusted for the 2012 school year. Alternate gradelevel standards are now set at the state level by KDE consultants in collaboration with teachers.

Students with disabilities are permitted testing accommodations intended to allow students to demonstrate knowledge of academic content regardless of disability.

Kentucky's Alternate Assessment System

KDE is currently making changes to the format of the alternate assessments to be implemented in 2012. The portfolio system previously used for the Kentucky Core Content Test exams provided teachers with some discretion in the way grade-level standards were adjusted for individual students. Beginning in 2012, alternative grade-level standards were determined at the state level rather than adjusted by teachers for each individual student. KDE low-incidence consultants and content experts in collaboration with Kentucky teachers have modified language in six standards for use in the alternate assessment. Standards will be assessed by the Attainment Tasks format that is a multiple choice of performance tasks.

These changes follow concerns raised by teachers about the paperwork associated with the portfolio system and by an independent evaluation raising questions about test reliability (Dickinson). KDE staff were also concerned about unusually large jumps in the percentage of students scoring proficient or distinguished on portfolio assessments (Draut). For example, the percent of students scoring proficient or distinguished in third grade reading jumped from 2.8 percent in 2007 to 50.2 percent in 2010.

The EXPLORE, PLAN, and ACT exams will continue to be assessed by the Transition Attainment Record, which is a checklist to be completed by teachers as students demonstrate understanding of the alternative standards.

Testing Accommodations

Students with disabilities are permitted testing accommodations as deemed appropriate by a student's ARC or 504 plans. Accommodations are tools and procedures that are intended to allow students with disabilities or limited English proficiency to demonstrate their knowledge of academic content, regardless of disability. Accommodations include extended time, readers, scribes, paraphrasing, prompting, interpreters, and technology.

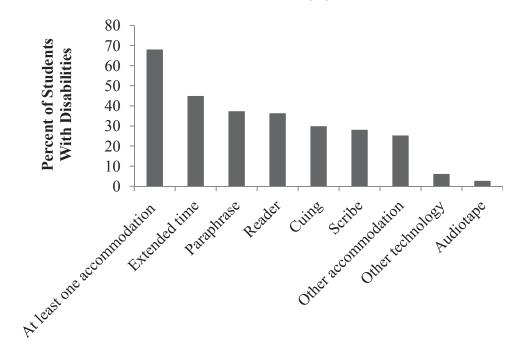
According to 703 KAR 5:070, testing accommodations should be a regular and ongoing part of instruction that do not inappropriately impact the content being tested. They should also be considered temporary strategies to be removed when students gain knowledge and skills needed to perform independently.

Regulations specify that accommodations be incorporated in daily instruction, not impact the content being tested, and be removed when students are able to perform independently.

Legislative Research Commission Office of Education Accountability

Sixty-eight percent of students with disabilities received some type of testing accommodation in 2010. More than one-third received the paraphrase and reader accommodations. Data in Figure 4.A show that 68 percent of students with disabilities received some type of testing accommodation in 2010. More than one-third of students received the paraphrase and reader accommodations. The reader accommodation is particularly controversial as an accommodation permitted for reading tests because it might compromise the validity of the assessments as a test of reading skills.

Figure 4.A Students With Disabilities Receiving Testing Accommodations 2010



Source: Staff analysis of data from the Kentucky Department of Education.

Most states do not permit the reader accommodation on reading tests.

Most states do not permit the reader accommodation on reading tests. It is likely that Kentucky may be required to discontinue the reader accommodation if it adopts assessments currently being developed by federally funded testing consortia in connection with the common core standards in reading and mathematics. Proposed changes to 703 KAR 5:070 and associated guidance documents reflect an approach to testing accommodations that is better aligned with national practice.

Some assessments, such as EXPLORE, PLAN, and ACT, have test accommodation rules that are much more stringent than those in Kentucky. Scores of students who use accommodations that exceed thresholds set by test developers are reported to the state but are not reportable to colleges, scholarship agencies, and other entities.

Some assessments, such as EXPLORE, PLAN, and ACT, have test accommodation rules that are much more stringent than those in Kentucky.

Under Kentucky's new accountability system, districts and schools will be rated, in part, on how students with disabilities and other student subgroups perform relative to a goal of 100 percent proficiency. Unlike No Child Left Behind, however, Kentucky's accountability system will not regard students with disabilities as a subgroup distinct from other student subgroups.

KDE will still be monitoring the performance of individual student subgroups, reporting subgroup performance, and requiring consequences for schools with substantial achievement gaps.

Between 2008 and 2010, proficiency rates for students with disabilities improved in all grades and subjects, with greater gains at the 8th-grade level and in high school than in the early grades.

School Accountability for Performance of Students With Disabilities

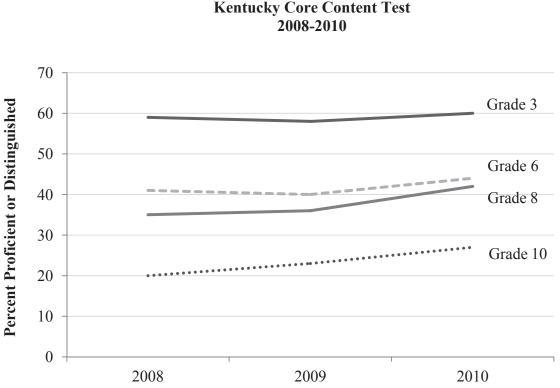
Under Kentucky's new accountability system, districts and schools will be rated, in part, on how students with disabilities and other student subgroups perform relative to a goal of 100 percent proficiency. As described in the proposed amendments to 703 KAR 5:200, districts and schools will be credited for increasing the number of proficient students from defined subgroup categories. Unlike NCLB, however, Kentucky's accountability system will not regard students with disabilities as a subgroup distinct from other student subgroups such as students living in poverty, minority students, or students with limited English proficiency. Rather, scores from a student belonging to any subgroup will be counted once, regardless of the number of subgroups in which the student fits.

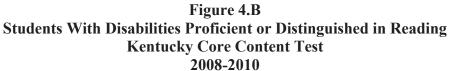
KDE will still be monitoring the performance of individual student subgroups and reporting subgroup performance. According to the proposed amendments to 703 KAR 5:220, schools in which particular student subgroups perform three or more standard deviations below the state average will face state consequences.

Achievement Trends in Reading and Mathematics

Figures 4.B and 4.C show achievement trends for students with disabilities by grade in reading and math between 2008 and 2010.¹ Proficiency rates for students with disabilities have improved in all grades and subjects with greater gains in 8th grade and in high school than in the early grades. Tenth-grade reading proficiency rates for students with disabilities increased from 11 percent to 18 percent between 2008 and 2010. During these same years, 11th-grade math proficiency rates for student with disabilities continue to be substantially lower in high school and middle school grades than in elementary school grades.

¹ Long-term trends for students with disabilities are difficult to report because of changes in the way assessment scores have been determined. These changes include 2006 adjustments to the cut scores applied to different performance categories and changes in the methods used to administer and report performance for students with disabilities on the alternate assessment.





Note: Students tested on alternate assessment not included in trend data due to unusual fluctuations in the data. Source: Staff analysis of data from the Kentucky Department of Education.

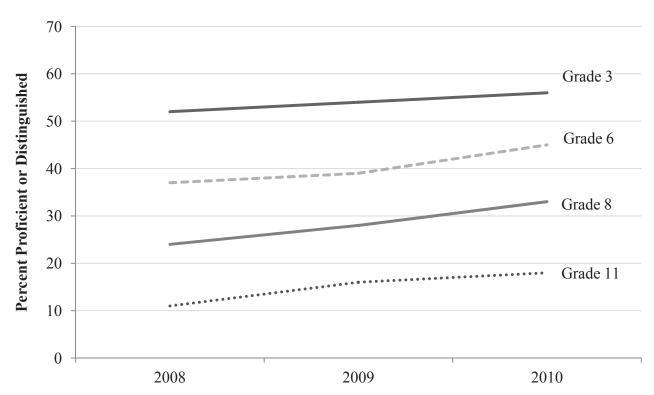


Figure 4.C Students With Disabilities Proficient or Distinguished in Mathematics Kentucky Core Content Test 2008-2010

Note: Students tested on alternate assessment not included in trend data due to unusual fluctuations in the data. Source: Staff analysis of data from the Kentucky Department of Education.

In 2010, proficiency rates for students with disabilities were far lower in the 10th and 11th grades than they were in the 3rd grade. A greater percentage of elementary school students are identified with relatively mild disabilities than are high school students.

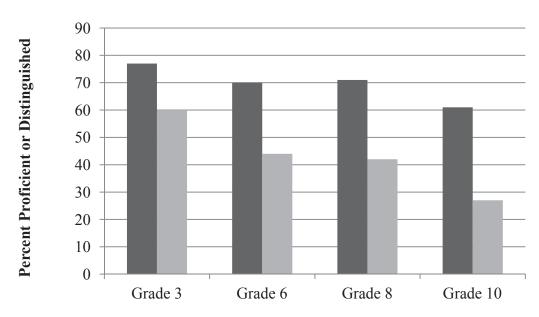
Substantial gaps remain between the proficiency rates of students with disabilities and all students. Figures 4.D and 4.E contrast 2010 proficiency rates of all students and students with disabilities in reading and mathematics. Proficiency rates for students with disabilities were far lower in the 10th and 11th grades than they were in 3rd grade. These data mirror data for all students but also suggest that students with disabilities experience increasing challenges meeting grade-level standards through the middle and upper grades. Performance differences by grade likely reflect differences in the population of students with disabilities. A greater percentage of elementary school special education students are identified with relatively mild disabilities such as speech or language impairment than are high school students.

Figures 4.D and 4.E also show substantial gaps between the proficiency rates of students with disabilities and all students.² In

² Schools will be held accountable not for closing the gap between student subgroups and all students but for increasing the number of proficient students from defined subgroup categories.

reading, achievement gaps between all students and students with disabilities were greater in the higher grades. The gap of 34 percentage points between students with disabilities and all students in 10^{th} grade is twice as great as the gap of 17 percentage points in 3^{rd} grade. In math, achievement gaps remain at approximately 20 percent at all grade levels.

Figure 4.D Percentage Proficient or Distinguished in Reading All Students and Students With Disabilities Kentucky Core Content Test 2010



■ All students ■ Students with disabilities

Source: Staff analysis of data from the Kentucky Department of Education.

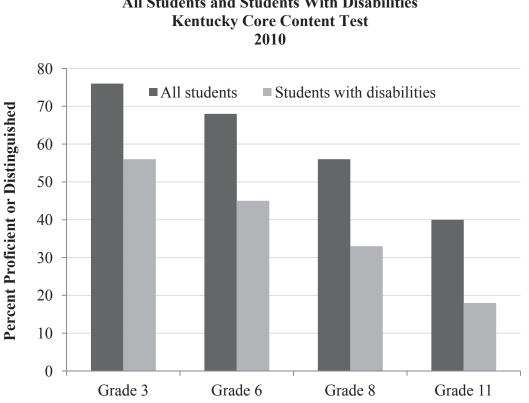


Figure 4.E Percentage Proficient or Distinguished in Mathematics All Students and Students With Disabilities

Source: Staff analysis of data from the Kentucky Department of Education.

In 2010, 59 percent of 11th-grade students with disabilities and 39 percent of 8th-grade students with disabilities scored in the novice range on the math Kentucky Core Content Test.

Fewer students with disabilities score in the novice range in reading than in math. In 2010, 21 percent of 10th-grade students with disabilities attained a score of novice in reading.

Data showing the percentage of students with disabilities scoring in the novice range highlight the challenges faced by these students in math. Novice is the lowest of Kentucky's four performance categories. In 2010, 59 percent of 11th- grade students with disabilities and 39 percent of 8th-grade students with disabilities scored in the novice range on the math Kentucky Core Content Test.³ These data raise concerns about the degree to which many students with disabilities are prepared for and benefit from high school math courses as they are currently structured.

Fewer students with disabilities score in the novice range in reading than in math. In 2010, 21 percent of 10th-grade students with disabilities attained novice scores in reading. It is possible that a greater percentage of high school students are able to benefit from high school reading courses than from math courses.

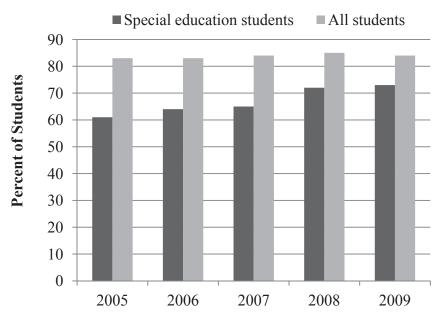
³ These figures do not include the most severely disabled students, who took the alternate assessment.

Differences in reading and math novice scores might also reflect differential impacts of testing accommodations such as reader or paraphrase in reading versus math.

Graduation Rates

Figure 4.F shows substantial increases in the graduation rates of special education students from 61 percent in 2005 to 73 percent in 2009. During these same years, the graduation rate for all students increased only slightly, from 83 percent in 2005 to 84 percent in 2009. Thus the gap in the graduation rate between special education students and all students decreased substantially, from 22 percent in 2005 to 11 percent in 2009. KDE attributes recent gains in the graduation rates of special education students to systematic implementation by districts of dropout prevention programs that included positive behavioral supports and mentoring or tutoring. KDE also cites increased accountability for districts and schools for increasing the rate of students who leave high school prepared for college or careers (Commonwealth. Department. *Kentucky*).

Figure 4.F Graduation Rates Special Education Students and All Students 2005-2009



Source: Staff analysis of data from the Kentucky Department of Education.

Between 2005 and 2009, graduation rates for students with disabilities increased from 61 percent to 73 percent.

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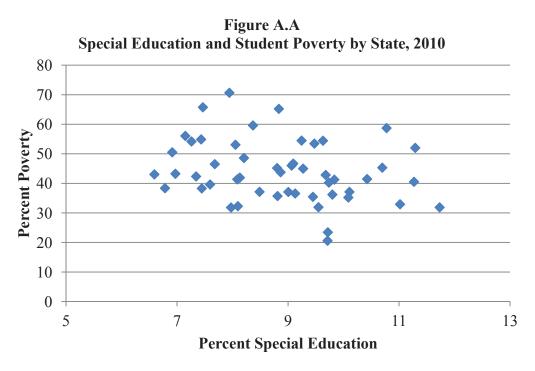
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Appendix A

State Special Education and Poverty Rates

Figure A.A shows the special education identification rates of individual states relative to the percentage of the state's public school students considered to be living in poverty as indicated by eligibility for free or reduced-price lunch. There is a weak negative correlation of -0.26 between special education identification and student poverty. High poverty rates are associated with slightly lower special education identification rates but explain less than seven percent of the variation in state identification rates.



Note: Special education rates are calculated as a percentage of total population ages 6-21 eligible for special education.

Source: Staff analysis of IDEA B and Common Core data from the United States Department of Education.

Table A.1 shows the percentage of students ages 6 through 21 identified for special education and the percentage of each state's public school students eligible for free or reduced-priced lunch.

State	% Special Education	% Free or Reduced-price Lunch
New Jersey	11.7%	32%
Maine	11.3	41
West Virginia	11.3	52
Massachusetts	11.0	33
Oklahoma	10.8	59
Indiana	10.7	45
Rhode Island	10.4	41
Pennsylvania	10.1	37
Wyoming	10.1	35
Alaska	9.8	36
Nebraska	9.8	41
Illinois	9.7	43
New Hampshire	9.7	23
New York	9.7	21
Ohio	9.7	40
Kentucky	9.6	54
Florida	9.5	53
Vermont	9.5	32
Minnesota	9.4	35
Michigan	9.3	45
South Carolina	9.2	54
Delaware	9.1	46
Iowa	9.1	37
Oregon	9.1	47
Wisconsin	9.0	37
Missouri	8.9	44
Kansas	8.8	45
New Mexico	8.8	65
Virginia	8.8	36
South Dakota	8.5	37

Table A.1Special Education and Student Poverty by State, 2010

Continued on next page.

	% Special	Free or Reduced-price
State	Education	Lunch
Arkansas	8.4	60
North Carolina	8.2	49
North Dakota	8.1	32
Tennessee	8.1	53
Utah	8.1	42
Washington	8.1	41
Connecticut	8.0	32
Mississippi	7.9	71
Arizona	7.7	47
Montana	7.6	40
Louisiana	7.5	66
Alabama	7.4	55
Maryland	7.4	38
California	7.3	54
Nevada	7.3	42
Georgia	7.1	56
Hawaii	7.0	43
Texas	6.9	51
Colorado	6.8	38
Idaho	6.6	43
~ ~ ~ ~		

Table A.1 (continued)

Source: Staff analysis of data from the United States Department of Education. Special education rates are taken from IDEA B data and poverty rates from National Common Core Data.

Appendix B

Percentage of Special Education Students in Each Disability Category by Age Range

Table B.1 shows the percentage of special education students identified in each category by age range. Speech language impairment and developmental delay are the most prevalent categories in younger age ranges. Other health impairment, specific learning disability, and mild mental disability are the most prevalent categories in the older age ranges.

Percentage of Kentucky Special Education Students By Disability Category and Age 2011						
Category	3-5	6-11	12-17	18-21		
Speech or language impairment	54.68%	39.93%	4.40%	0.56%		
Other health impairment	0.73	11.39	25.35	17.61		
Developmental delay*	39.35	15.41				
Specific learning disability	0.04	10.69	23.74	24.04		
Mild mental disability	0.22	8.88	21.23	24.23		
Emotional-behavioral disability	0.05	3.60	9.41	5.04		
Autism	2.37	4.07	4.12	5.21		
Functional mental disability	0.17	2.23	4.61	11.86		
Multiple disability	0.72	1.90	4.70	8.93		
Hearing impairment	0.66	0.68	0.81	0.61		
Visual impairment	0.45	0.50	0.67	0.46		
Orthopedic impairment	0.48	0.53	0.57	0.46		
Traumatic brain injury	0.05	0.15	0.37	0.68		
Deaf/blindness	0.03	0.02	0.01	0.07		

Table B.1

*Students can be identified with developmental delay only up to age 8.

Source: Staff analysis of data from the Kentucky Department of Education.

Appendix C

Kentucky Versus US in Particular Disability Categories

Figure C.A shows differences between Kentucky and the US in the percentage of the total population identified in particular disability categories. Some of these differences are explained, in part, by differences among states in the way particular categories are defined. For example, the category of "mental retardation" includes two of Kentucky's disability categories—functional mental disability and mild mental disability. The category of mild mental disability captures students who would not meet the criteria for mental retardation in some states. Also, the federal category of "emotional disturbance" is called "emotional behavioral disability" in Kentucky. Thus, it includes a behavioral component in its definition that is not included in some other states. Finally, states are not required to identify students in the category of developmental delay. In Kentucky, the developmental delay category can be used for children from ages 3 through 8. In 22 states, the category or similar nonspecific categories cannot be used after age 6 (Danaher 4).

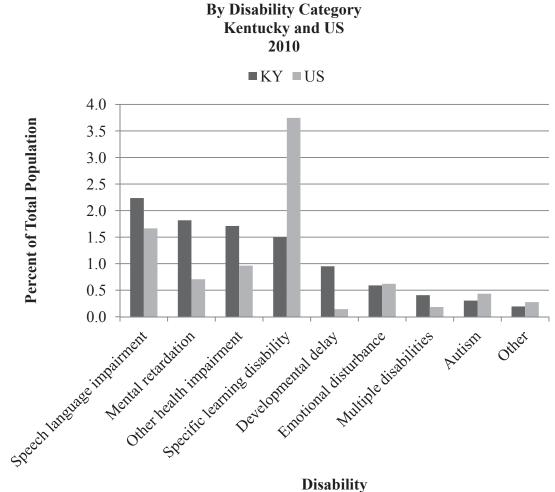


Figure C.A Percentage of Total Population of Students Ages 6-21

Notes: The categories of hearing impairment, visual impairment, orthopedic impairment, traumatic brain injury and deaf/blind each constitute less than 0.1 percent of the total population. These disabilities are grouped together in the "other" category.

Source: Staff analysis of IDEA B data from the United States Department of Education.

Appendix D

Changes Over Time in Percentage of Population By Disability Category

Table D.1 shows the percentage of the total population ages 6 through 21 identified with particular disabilities in Kentucky and the US in 2008 and 1994. The table also shows the difference between the percentage of students identified in each disability category in 1994 and 2008. In Kentucky, the increase in the total percentage of students identified between 1994 and 2008 was explained primarily by an increase of 1.69 in the percentage of students identified with developmental delay. The increase in the national identification rate was explained primarily by an increase of 0.83 in the percentage of students identified with other health impairment. During these years, the percentage of students identified with specific learning disability decreased in both Kentucky and the nation.

	KY 2008	KY 1994	US 2008	US 1994	KY 2008- 1994	US 2008- 1994
All	9.97%	7.52%	8.80 %	8.19%	2.45%	0.61%
Speech or language impairment	2.29	2.06	1.68	1.74	0.23	-0.06
Mental retardation	1.86	2.04	0.71	0.93	-0.18	-0.22
Other health impairment	1.75	0.06	0.97	0.14	1.69	0.83
Specific learning disability	1.54	2.58	3.77	4.19	-1.04	-0.42
Developmental delay	0.98		0.14		0.98	0.14
Emotional disorder	0.61	0.45	0.62	0.71	0.16	-0.09
Multiple disability	0.42	0.13	0.19	0.19	0.29	0
Autism	0.31	0.01	0.44	0.03	0.3	0.41
Hearing impairment	0.07	0.09	0.11	0.11	-0.02	0
Orthopedic impairment	0.05	0.04	0.09	0.1	0.01	-0.01
Visual impairment	0.05	0.05	0.04	0.04	0	0
Traumatic brain injury	0.03	0.01	0.04	0.01	0.02	0.03
Deaf/blindness	0	0	0	0	0	0

Table D.1Percentage of Population Ages 6-21 by Disability Category
Kentucky and United States1994 and 2008

Notes: Students can be identified with developmental delay only up to age 8. Deaf/blind students were less than 0.01 percent of the total population in 1994 and 2008.

Source: Staff analysis of data from the United States Department of Education.

Figure D.A shows the number of Kentucky students ages 3 through 21 identified by disability category in 2009 and 2011. In all categories but autism and specific learning disability, fewer students were identified in 2011 than in 2009. In the category of developmental delay, 2,685 fewer students were identified in 2011 than in 2009, making it the category with the greatest overall drop in the number of students identified. The number of students identified with autism increased by 784 or 25 percent between 2009 and 2011. According to site visit interviews, some of the students who would formerly have been identified with mild mental disability are now being identified with autism.

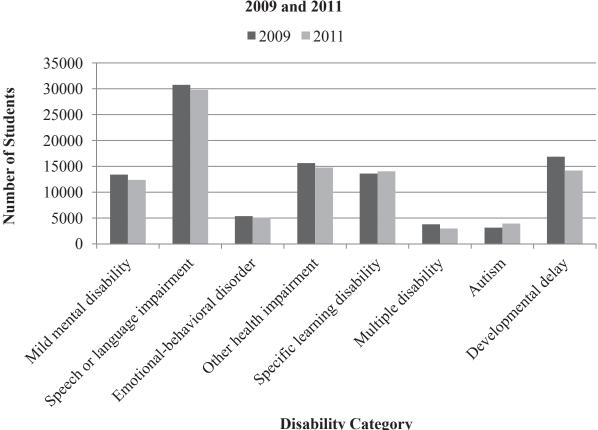


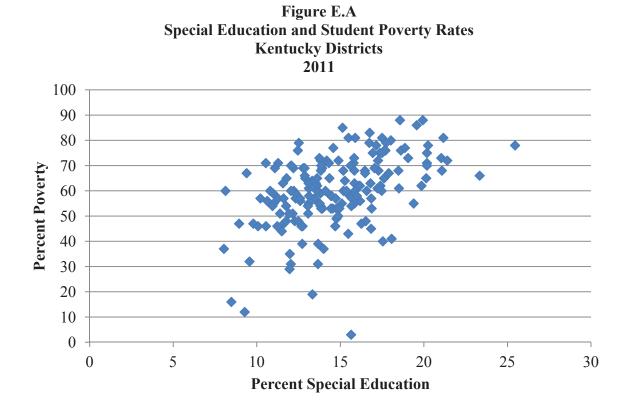
Figure D.A Kentucky Students Ages 3–21 Identified for Special Education By Disability Category 2009 and 2011

Source: Staff analysis of data from the Kentucky Department of Education.

Appendix E

Special Education Identification and Student Poverty Rates by District

Figure E.A shows the percentage of students identified for special education and the percentage of students eligible for free or reduced-price lunch in each Kentucky district. There is a moderate correlation of 0.47 between poverty and special education identification among Kentucky districts. However, poverty explains only 22 percent of the variation among districts in identification rates. The figure also shows substantial variation in identification rates among districts with similar poverty rates. The districts with the highest identification rates are all high-poverty districts, but there are also high-poverty districts with relatively low identification rates.



Note: Percent of students identified for special education calculated by dividing SEEK exceptional child forecasts based on December 1 child counts of students ages 5-20 by fall growth factor membership. Source: Staff analysis of data from the Kentucky Department of Education.

Appendix F

Supporting Student Needs in General Education Example from OEA Site Visit District

OEA visited one relatively large district that had increased the range of supports available to students with learning and behavior difficulties in general education. The district was in the process of shifting from a model of adaptation and modification through special education to assistance and intervention in general education. The shift in the district's approach—described by district staff as largely a shift in culture— began with a commitment to change by the district staff as well as the local school board.

The district's model was developed most fully in elementary schools but was expanding to the middle and high schools. The change in practice began with the development and piloting of RTI by district staff. The district's RTI program included assessments, instructional materials, and specific types of interventions associated with each level and skill deficit. District staff provided special and general education teachers with RTI training. The shift also included a focus on schoolwide behavior and on intensive training for general education teachers. Each school had a behavior interventionist who worked with any student experiencing behavioral challenges. Schools followed a comprehensive schoolwide behavior plan in which every teacher had been trained. In 2011, the district sponsored an additional 2 days or more of professional development for all teachers to improve their ability to address a wide range of student learning needs. Most teachers had been trained in a specific method for identifying and supporting dyslexic children. Finally, the district ensured that each school had weekly access to physical and occupational therapists who could help to identify and address some learning difficulties. The district also employed two full-time autism specialists to work with school staff.

According to district staff, the district attracts families of special education students with intensive needs. However, the district's 2011 identification rate of 12 percent was 2 percentage points lower than the state's.

Appendix G

Funding Formulas Used in Other States

Table G.1 shows Ahearn's analysis of the funding formulas used by other states as of 2009. The multiple student weights system used in Kentucky is used by 12 other states and is the single most common system. The table shows a variety of other funding mechanisms. Some, like the resource-based method, provide more funding if more students are served. In seven of the states using the census method or states with no separate funding for special education, districts do not receive additional funding based on the number of students identified.

Formula Type	Description	States
Multiple student weights	Funding (either a series of multiples of the general education amount or tiered dollar amounts) allocated per special education student that varies by disability, type of placement, or student need	Arizona, Colorado, Florida, Georgia, Indiana, Iowa, Kentuck New Mexico, Ohio, Oklahoma, South Carolina, Texas (n=12)
Census-based	A fixed dollar amount per total enrollment or average daily membership	Alabama, California, Idaho, Massachusetts, Montana, New Jersey, Pennsylvania (n=7)
Single student weights	Funding (either a single multiple of the general education amount or a fixed dollar amount) allocated per special education student	Louisiana, Maine, New Hampshire, New York, North Carolina, Oregon, Washington (n=7)
No separate special education funding	Funding to support special education is rolled into the overall funding levels	Arkansas, Connecticut, Hawaii, Missouri, North Dakota, Rhode Island, West Virginia (n=7)
Resource-based	Funding based on payment for a certain number of specific education resources (e.g., teachers or classroom units), usually determined by prescribed staff/student ratios that may vary by disability, type of placement or student need	Delaware, Kansas, Mississippi, Nevada, Tennessee, Virginia (n=6)
Combination	Funding based on a combination of formula types	Alaska, Illinois, Maryland, South Dakota, Vermont (n = 5)
Percentage reimbursement	Funding based on a percentage of allowable, actual expenditures	Michigan, Minnesota, Nebraska, Wisconsin, Wyoming (n = 5)
Block grant	Funding based on base-year or prior year allocations, revenues, and/or enrollment	Utah $(n = 1)$
Source: Ahearn 3		

Table G.1Funding Formulas Used in Other States

Source: Ahearn 3.